Appendix A

SAN JOAQUIN COUNTY
Greatness grows here.

Community Development Department

Planning · Building · Code Enforcement · Fire Prevention · GIS

Jennifer Jolley, Director

Eric Merlo, Assistant Director
Tim Burns, Code Enforcement Chief
Corinne King, Deputy Director of Planning
Jeff Niemeyer, Deputy Director of Building Inspection

December 20, 2024

County of San Joaquin

Notice of Preparation of an Environmental

Impact Report and Notice of Scoping Meeting

Pacific Gateway Project

NOTE: The Pacific Gateway applicants, in response to community and staff feedback, filed new applications on September 27, 2024, for a 1,577-acre site located generally south of the lands that were part of the previous application – see attached maps. The applicants indicated their primary intent in relocating the project was to address concerns about potential for extensive truck traffic along Durham Ferry Road and also with respect to addressing potential land use compatibility questions.

The Pacific Gateway applicant has now formally withdrawn the previous application.

The Pacific Gateway project continues to propose a range of warehousing, office, limited industrial and commercial uses, along with the private university and VFW Hall uses, as discussed in the attached notice.

Date: December 20, 2024

To: All Interested Agencies, Organizations, Persons and State Clearinghouse

From: San Joaquin County

Subject: Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meeting for the Pacific Gateway Project:

- General Plan Text Amendment No. PA-2400364;
- General Plan and Zoning Map Amendments No. PA-2400363;
- Specific Plan No. PA-2400365;
- Zone Compliance (Site Plan Level Entitlements). PA-2400369, 2400371, and 2400372;
- Subdivision application Nos. PA-2400367 and PA-2400368;
- Development Agreement. PA-2400366; and
- Williamson Act Contract Cancellations. PA-24-00500

The development of the 1,576.7-acre Project site is divided into five development areas that will result in up to 24,675,000 square feet (sf) of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 76.3-acre University campus, a Veterans of Foreign Wars of the U.S. (VFW) post, and open space, park, pedestrian, and bicycle facilities. The initial development phase will consist of approximately four million sf of Limited Industrial uses in four buildings, a 25,000-sf University building, and the VFW post, as well as associated utilities to serve the Initial Phase. Subsequent development will be done consistent with the Specific Plan based on market demands.

Project Title: Pacific Gateway

Project Address: Located north and east of Interstate 580 (I-580) and north of State Route 132 (SR 132).

Project Applicant: Ridgeline Property Group

Lead Agency/Contact: County of San Joaquin Community Development Department

Brian Millar, Contract Planner
Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
(209) 468-0291
bmillar@sjgov.org

Comment Period: December 20, 2024 – January 21, 2025

Public Scoping Meeting:

Date and Time: Thursday, January 9, 2025, 6:00pm – 7:00pm

Location: Tracy Transit Station, 50 E. Sixth Street, Tracy, CA

Notice of Preparation: This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that the County of San Joaquin (County), as Lead Agency, is commencing preparation of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Section 21080.4) and CEQA Guidelines (14 California Code of Regulations [CCR] Section 15082). The purpose of the NOP is to provide sufficient information about the Pacific Gateway Project (the "Project"), described below, and its potential environmental effects to allow public agencies, organizations, and interested members of the public the opportunity to provide a meaningful response related to the scope and content of the EIR, including feasible mitigation measures and project alternatives that should be considered in the EIR (CEQA Guidelines, 14 CCR Section 15082[b]).

The County is requesting input from interested individuals, organizations, and agencies regarding the scope and content of the environmental analysis to be included in the upcoming Draft EIR.

EIR Scoping Comments: All comments must be received in writing by 5:00 p.m. on January 21, 2025, which marks the end of the 30-day public comment period on the scoping of the Draft EIR. All written comments should indicate an associated contact person for the agency or organization, if applicable, and reference the Project name in the subject line. Pursuant to CEQA, responsible agencies are requested to indicate their statutory responsibilities in connection with the Project when responding. Please mail or email comments and direct any questions to the following contact person:

Brian Millar, Contract Planner
County of San Joaquin Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
(209) 468-0291
bmillar@sjgov.org

Public Scoping Meeting: A public scoping meeting will be held on **Thursday, January 9, 2025, from 6:00pm – 7:00pm at the Tracy Transit Station at 50 E. Sixth Street, Tracy, CA.** The meeting will provide a forum for community and agency input for the scope of the environmental review including content of the environmental information to be included for analysis in the Draft EIR, mitigation measures, or Project alternatives to reduce potential environmental effects. *The Scoping Meeting is not a public hearing, and no decisions about the Project will be made at the Scoping Meeting. Separate public hearings for entitlement requests will be scheduled after the completion of the Draft EIR.*

Access: This NOP and Project information, including the draft Specific Plan, may be accessed electronically at the following link:

Community Development | San Joaquin County (sjgov.org)

A hard-copy of the NOP is also available for review at the San Joaquin County Community Development Department on Monday through Thursday 8:00 a.m. to 5:00 p.m. and Friday from 8:00 a.m. to 12:00 p.m. (except during office closures and holidays):

San Joaquin County Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205

Project Background: The Pacific Gateway Project ("Project") has been redesigned in response to valuable input received since submitting the original application to San Joaquin County, including input from the County Staff, local community members, and other important stakeholders. The Project is a reconfiguration of the originally proposed project, as defined by nine (9) new entitlement applications filed with the County on September 27, 2024. The new applications supersede and replace the original applications submitted to the County on January 17, 2023 (PA- 2100188 through PA-2100191 and PA-2300091 through PA-2300095) and define the new Project.

Substantially all the original project's proposed industrial zoning north of the Delta Mendota Canal (DMC) (over 900-acres) has been relocated south of the DMC to separate the Project from homes and ranchettes along Durham Ferry Road and Bird Road. As a result, all the Project's Limited Industrial zoning is now situated between the DMC to the north, and the California Aqueduct or SR-132 to the south. To minimize traffic and noise impacts upon the surrounding community, the Project is oriented toward I-580 and SR-132, and centered on Chrisman Road, a designated Surface Transportation Assistance Act (STAA) route, to facilitate efficient motor vehicle movement south to the I-580/SR-132 interchange ushering traffic westbound on I-580 to the Bay Area, or eastbound to Modesto and California State Highway 99 ("SR-99") or to Interstate Highway 5 ("I-5"), north or southbound. Furthermore, the DMC serves as a physical barrier, providing a separation of Limited Industrial land uses from the University Center land uses.

Project Location and Setting: The approximately 1,576.7-acre Project site is mostly contiguous acreage, generally located north of I-580 and SR-132, approximately two miles west of I-5 in San Joaquin County, California. The revised site is bound by Bird Road to the east; the Delta Mendota Canal to the north; Tracy Boulevard to the west; and the southern boundary is formed by the California Aqueduct, west of Chrisman Road, and SR-132, east of Chrisman Road (see Figure 1 and Figure 2).[1] Chrisman Road, a designated

[1] The project site is outside the Tracy City Limits and Sphere of Influence boundaries. A portion of the project site is

STAA route, provides north/south circulation access through the Specific Plan area. East/west access is limited to private, unimproved farm roads. The Project site is currently developed with active agricultural land, including almond and cherry orchards and grapes, and an agricultural machinery manufacturing facility (A.B. FAB. Inc.).

The Project site, at its nearest point, is approximately one mile from the southern boundary of the City of Tracy; yet the site is nonetheless generally located in an existing agricultural area with agricultural uses located to the north (e.g., orchards, Crown Nut almond processing plant), to the south between the Aqueduct and I-580, and to the east of Bird Road. Several established surface mining operations are located to the northwest of the Project area. Finally, within the Project site, two existing single-family homes front Chrisman Road and one parcel with three homes front on MacArthur Drive. The Tracy Municipal Airport is located approximately one mile northwest of the Project site.

General Plan and Zoning: The County's General Plan Land Use Map designates the Project site as General Agriculture (A/G).

Project Description: The Project includes the implementation of a Specific Plan that would result in up to 24,675,000 sf of Limited Industrial use, 160,000 sf of General Commercial use, 93,000 sf of Industrial Park use, a 66.50-acre University campus plus 9.8 acres for future expansion, VFW post, and various open space areas, parks, a new fire station, stormwater management basins, and pedestrian and bicycles facilities within a 1,576.7-acre Project site. The proposed Project includes site plan level entitlements at this time to allow development of an Initial Phase subsequent to EIR certification and Specific Plan approval.

The following is a brief description of the entitlements being requested from San Joaquin County:

- General Plan Text Amendments for policies related to infrastructure development, agriculture development, and the provision of community services within the context of new employment-generating uses;
- General Plan Map Amendment from 1,576.7 acres of Agriculture to 18.5 acres of General Commercial; 4.3 acres of Industrial Park; 1,375.8 acres of Limited Industrial; 76.3 acres of University Campus, and 61.8 acres of Public Facilities for open space and parks;
- Rezone from AG-40 to ensure conformance with the amended General Plan land use designations;
- Pacific Gateway Specific Plan adoption;
- Major Subdivisions: The first would subdivide the entire Project site into 27 lots to create a master lotting configuration that will facilitate orderly development of the overall property; and the second would comprise the Initial Phase area and create nine parcels to facilitate the initial phase of the Limited Industrial area (comprised of 181.26 net acres), as well as the acreage required for backbone infrastructure;
- Administrative Use (Site Approval) Permits for Phase 1 development of the 181.26-acre Industrial Phase 1 area and the University Campus Phase 1 area and VFW facility;
- Development Agreement; and
- Williamson Act Contract Cancellations. Approximately 789.85 acres of the Project are subject to Williamson Act contracts. Notices of Nonrenewal have been filed for the Williamson Act Parcels, and a Williamson Act Contract cancellation application was filed separately on November 8, 2024.

Specific Plan – Development Areas

The Specific Plan area is divided into five distinct development areas: University Center, Pacific Gateway

within the Planning Area boundary for the City of Tracy.

West, Pacific Gateway Central, Pacific Gateway East, and Gateway Center, as further described below (see Figure 3). Each development area would be connected by a network of roads, and pedestrian and bike paths, which would provide alternatives to vehicle trips. In addition to the below-described development areas, the Project also includes a 40-acre drainage basin and potable water well approximately two miles north of the Project site. Both are allowable uses in the Agricultural Zone, and so no Zone Change is requested for this parcel.

University Center

The University Center would include the parcels located north of the DMC to provide for a new university campus, which would expand access to education and research opportunities in the Central Valley. The Center would also include a small business park (Industrial Park zone), a new home for the VFW, and small commercial services and uses that would front Chrisman Road. These ancillary uses would provide service uses focused on the University staff and students.

Pacific Gateway West

Pacific Gateway West is located south of the DMC, north of the California Aqueduct, and between Tracy Boulevard and MacArthur Drive. This area makes up one of three predominantly industrial development areas in the Project. This region would be developed primarily with industrial uses and also include mini-park uses, and the necessary road improvements, and utility infrastructure.

Pacific Gateway Central

Pacific Gateway Central is also located south of the DMC, with MacArthur Drive to the west, Chrisman Road to the east, and the California Aqueduct to the south. This area makes up the second of three industrial development areas in the Project. This development area would also include mini-park uses, and the necessary road improvements and utility infrastructure. There is an 11.87-acre Central Park at the intersection of Chrisman Road and proposed A Street that would include community amenities such as open space gathering areas, picnic areas, sport courts (e.g., pickleball and basketball), and parking spots for food trucks.

Pacific Gateway East

Pacific Gateway East includes the area east of Chrisman Road, between the DMC and SR-132. This area makes up the final industrial development area for the Project. This development area would also include mini-parks and the necessary road infrastructure improvements. The Initial Phase of Limited Industrial development would be located within the Pacific Gateway East development area, including the backbone infrastructure needed to serve the Project (e.g., water, wastewater, fire protection, and improvements for the construction of treatment facilities and storage tanks). These treatment and storage facilities have been sized to serve the Initial Phase, including the proposed University and VFW sites. As development progresses, these facilities would be expanded to accommodate future development.

Gateway Center

The Gateway Center development area is south of the California Aqueduct and east of Chrisman Road at the SR-132 interchange. This development area would consist of general commercial and retail uses, smaller industrial and warehouse uses, a truck and auto EV charging area, and a mini-park. Gateway Center would provide services to Pacific Gateway employees and University students, as well SR-132 commuters and travelers.

Specific Plan – Land Use Plan

The Pacific Gateway Specific Plan would include zoning designations for General Commercial, Industrial Park, Limited Industrial, and Public Facilities use types (see Figure 4). Each designation is discussed in further detail below.

Limited Industrial (I-L)

Limited Industrial (I-L) designation provides for warehouse, distribution, fulfillment center, e-commerce and other limited industrial uses requiring large format buildings essential to the supply chain, as well as buildings that accommodate light impact manufacturing (such as assembly) and advanced manufacturing, including for the development and manufacturing of robotics or electric vehicle components. Building types in this zone would include standard industrial structures limited to 100 feet in height west of Chrisman Road within the Tracy Airport Land Use Compatibility Plan ("TALUCP"), and otherwise limited to 120 feet east of Chrisman Road, which are beyond the TALUCP Zone 8. The Pacific Gateway West, Central, East areas of the Project, as well as the Gateway Center area, are predominately zoned I-L.

General Commercial (C-G)

The General Commercial (C-G) designation provides for a variety of retail commercial uses and business services designed to serve those working and learning within the Specific Plan area. Priority would be given to restaurants, goods and services that support those utilizing the industrial and warehouse facilities, as well as the University. Commercial zoning immediately north of the University consists of approximately 5.88 acres of commercial, including the 2.88-acre VFW site. The Gateway Center development area, fronting SR 132 at the south end of the Specific Plan area and the east side Chrisman Road, is comprised of approximately 11.5 acres of commercial zoning at the southern entry to the Project to provide convenient access to restaurants, services, a gas station, and hotel. Typical retail building designs would include single-story commercial structures with walk up storefronts, while the hotel is anticipated to be three to five floors depending upon demand.

Veterans of Foreign Wars

The VFW of the United States is a nonprofit veteran's service organization comprised of eligible veterans and military service members from the active, guard, and reserve forces. The VFW provides a variety of programs and services that work to support veterans, service members and their families, as well as the community. The Project includes a parcel for a new building and associated parking for the future home of Tracy Post 1537. The facility would provide a meeting space and offices for the administration of services and outreach to support the Veterans. The facility would be available for community events and gatherings, including weddings, receptions, and school dances. The site would accommodate recreational vehicles for Veterans traveling through the area, providing a safe and secure location for short-term parking.

Industrial Park (I-P)

The Industrial Park (I-P) zoning designation is intended to provide a business park environment consisting of smaller buildings to be used for combined office/warehouse uses including research and development, light impact manufacturing (such as assembly), HVAC contractors, electricians, plumbing contractors and window installation and other service-related businesses, such as janitorial service and supply vendors. User spaces would typically include limited warehouse area mostly serviced by grade level doors for delivery vehicles access.

Public Facility (P-F)

The Public Facility (P-F) designation applies to a variety of land uses that would serve the Specific Plan area generally or the greater public, including the University Campus, open space, a central park, a network of mini-parks, a new fire station, and stormwater management basins.

University

The University would expand access to higher education in the County and Central Valley regions, which are historically underserved areas. The University would curate an educational program and curriculum suited to the specific needs of the community. Over time, the University is anticipated to offer studies and degrees in Artificial Intelligence (AI), robotics, computer science, nursing and Allied Health, and business, including logistics and supply chain management. The "University Campus" is designed to accommodate indoor and outdoor sports facilities as well as student housing offering 1,000 beds. Student housing would be constructed in phases over time depending on the needs of the campus population. At full build out, the University Campus is designed to accommodate a population of 5,000 students. The first University building would encompass approximately 25,000 sf of space to accommodate up to 400 students. The building would include classrooms, administrative offices, as well as a student resource center, and offer indoor and outdoor gathering areas, including a covered roof-top atrium. The Specific Plan incorporates an additional 9.8 acres of P-F zoning to the north and adjacent to the University Campus for "Expansion Area" to afford the University an opportunity for future growth. The Expansion Area would accommodate an additional 115,000 sf of facilities and another 600 beds of student housing.

Open Space

The Project incorporates open space areas, some of which would have recreational amenities. Storm basins would be strategically located to capture storm runoff, provide flood control, and water treatment. Some of these basins would be co-located with public amenities such as exercise stations, picnic areas, sitting areas, concession/food truck service areas, natural areas, and trails. The parks and open spaces would be integrated throughout the Specific Plan area and connected via pedestrian and bicycle networks.

Overall Development Potential

As shown in Table 1 below, full buildout of the Specific Plan is anticipated to result in up to 24,675,000 sf of limited industrial use, 160,000 sf of general commercial use, and 93,000 sf of industrial park use. Additional components of Specific Plan buildout would include the University, VFW Post, and several parks and detention basins.

Table 1 Pacific Gateway Land Use Table			
Zoning Districts & Utilities	**Gross Acres**	**Max Coverage**	**Building Square Feet**
Industrial Limited (I-L)	1375.8	60%	24,675,000
Industrial Park (I-P)	4.3	50%	93,000
General Commercial (C-G)	18.5	30%	160,000
Public (P-F)	138.1	50%	--
University (including Expansion)	76.3		1,379,150[1]
Parks/Detention Basins and Roads	51.7		--
Utilities/Water and Sewer Treatment Facilities/Fire Station	10.1		--
Agriculture (AG) Off-Site Stormwater Basin	40		
Total Net Acres	**1576.7**		**26,307,150**
Notes: [1] University Beds = 1,000 with additional 600 beds for Expansion.			

Infrastructure Improvements

The Project has been designed and would be developed with infrastructure improvements to serve both the initial stages of development and full Project buildout (see Figure 6). In addition, long-term operation and maintenance of Project infrastructure would be supported by a site-specific Community Service District (CSD) and related financing mechanisms formed in accordance with a Project-wide public facilities financing plan developed in accordance with state planning laws and regulations.

Water and Wastewater Infrastructure

The Project would include dedicated stand-alone water and wastewater systems sized to serve the Project's site-specific needs. With respect to water, the Project's domestic water needs would be met through a combination of groundwater from up to four wells, constructed in accordance with the State's standards, and potential supplemental surface water supplied by Byron-Bethany Irrigation District (BBID). Treated water would be provided by a new public water system created to serve the Project and permitted through the State of California, or through County Service Area 16 (CSA-16), if it is feasible to administratively consolidate with that existing system. CSA-16 currently serves a residential and golf course community immediately west of Interstate 580; consolidation with CSA-16 would require amendment of the CSA-16 service area to include the Project.

With respect to sewer, the Project would be centered around a packaged membrane bioreactor wastewater treatment system. The Project's wastewater would be collected from each parcel through a traditional wastewater gravity flow collection system that would be supplemented with lift stations as needed. Wastewater would be routed to the Project's wastewater treatment plant (WWTP), located at the southeastern portion of the Project.

The Project would also incorporate the use of recycled water for beneficial, on-site landscaping uses. Further, all Project's on-site water and wastewater infrastructure has been designed and will be permitted

in full compliance with all applicable local, state, and federal laws and regulations.

Circulation Infrastructure
The Project is situated near major transportation corridors, with primary access off of South Chrisman Road, a state designated STAA route. South Chrisman Road provides direct connectivity west to the Bay Area via I-580, east to I-5 via SR-132, and south to I-5 via I-580, providing north and southbound connectivity with the California highway transportation system.

All Project circulation infrastructure has been designed and would be developed consistent with County transportation standards. Additionally, the Project incorporates integrated bicycle and pedestrian improvements to ensure access within and between the Project's various industrial, commercial, educational, and recreational uses.

Storm Water Infrastructure
The Project incorporates comprehensive storm water management infrastructure, including storm water basins sized and located to independently serve each of the five Development Areas as each phase of the Project proceeds. The Pacific Gateway East development area is designed to function independent of the other development areas, although it may be connected to Central area should final design capacity require such. The West, Central and University areas would be served by individual retention basins that are constructed and linked together to meet the needs of each successive phase. Once the capacity of the linked basins is met, the Off-Site Basin would be constructed to facilitate the most economically and hydrodynamically efficient stormwater management system. In addition to capturing project-generated stormwater runoff, the Project would capture stormwater runoff from the hills to the south of the Project area.

Public Services Infrastructure
In addition to necessary wet and dry utilities, the Project has also been designed to address Project-specific public services, including fire, emergency medical, and law enforcement services.

With respect to fire and emergency medical services (EMS), the Project is located within the jurisdiction of the South San Joaquin County Fire Authority with fire and non-transport EMS services provided by the Tracy Rural Fire Protection District and ambulance service provided by American Medical Response. In conjunction with these services, the Project also incorporates dedicated groundwater wells and water storage infrastructure to meet the fire water quantity and pressure needs for all phases of Project development. Additionally, the Project has been designed to include land for the construction of a new fire station centrally located within the Project to meet the project's fire response needs.

Finally, law enforcement services would be provided by the San Joaquin County Sheriff's Department.

Phasing
The proposed Specific Plan would be developed with the Initial Phase land uses and then subsequent development based on market demand, as further discussed below. This demand would guide buildings' size and site configuration at the time of development and follow Specific Plan and existing San Joaquin County requirements. In addition, subsequent development would expand upon the Initial Phase development street network and utility systems to ensure vehicle access and utilities for the development of individual parcels. The overall objective of the Project is to ensure that development proceeds in an

orderly and organized manner, consistent with County General Plan policies, to ensure that community needs are adequately addressed for all phases of Project development through full buildout. Additional description is provided below.

Initial Development Phase

Development of the Initial Phase of industrial buildings would consist of four Class "A" facilities totaling approximately four million sf, ranging in size from approximately 157,000 sf to 1.3 million sf situated on 181.26 net acres, immediately east of Chrisman Road, within the Pacific Gateway East Development Area (see Figure 5). The Initial Phase would be comprised of rear-loading and cross dock facilities, with the appropriate auto and truck trailer parking stalls. The Initial Phase is anticipated to be developed over five to six years based on market demand.

The Initial Phase of the Specific Plan would also include a 25,000 sf University facility within the University Center Development Area, which would serve as Phase 1 of the University Campus. The VFW facility would be developed concurrent with the Industrial and University Campus initial phases. The Project would include a parcel for a new building and associated parking for the new home of Tracy Post 1537.

The Initial Phase would also include construction of the necessary backbone infrastructure to serve the proposed Initial Phase development. Generally, this would include improvements to Chrisman Road as well as the following utilities improvements: installation of a potable groundwater well and treatment facilities, construction of a pre-packaged WWTP, and construction of a large stormwater retention basin. The water and wastewater facilities would be designed to serve the Project at full buildout by incorporating appropriate expansion land and system capacity.

Subsequent Development/Long-Term Buildout

Based on historic industrial demand in Northern California and the Central Valley, it is anticipated that full buildout of the Industrial portion of the Project would occur over a twenty-five (25) to thirty (30) year period. The University Campus is anticipated to be developed over an estimated twenty (20) year period based on student demand. Finally, the Industrial Park and General Commercial zones would be developed based on demand generated from the Industrial and University Campus, anticipated to occur over a ten (10) to twelve (12) year period and expected to commence around completion of the Industrial Initial Phase.

With respect to full infrastructure improvements, buildout of the Specific Plan would require additional roadway, water, sewer, and storm drainage improvements, including but not limited to, widening of Chrisman Road to a four-lane major arterial, installation of on-site water, sewer, stormwater, and dry utility backbone infrastructure, and construction of an off-site stormwater detention basin and associated storm drain pipe, north of the Specific Plan boundaries. Wastewater treatment capacity would be added to the package plant, as necessary, to accommodate additional phases. Similarly, additional potable wells and associated wellhead treatment, if necessary, would be installed to accommodate additional phases. Treated wastewater would provide an on-site source for recycled water for use in landscape irrigation. Recycled water would be made available through installation of "purple pipe" infrastructure.

The Specific Plan would also include functional, interconnected bicycle and pedestrian networks as part of the proposed street system. In most cases the internal streets would include a separated 5-foot sidewalk on one side, and a 12-foot Class I bike path on the opposite side to provide for pedestrian and bicycle safety.

Lead Agency Approval: The applicant is requesting approval of the following entitlements as part of the Project:

- General Plan Text Amendment No. PA-2400364;
- General Plan and Zoning Map Amendments No. PA-2400363;
- Specific Plan No. PA-2400365;
- Zone Compliance (Site Plan Level Entitlements) No. PA-2400369, 2400371, and 2400372;
- Subdivision application Nos. PA-2400367 and PA-2400368;
- Development Agreement PA-2400366; and
- Williamson Act Contract Cancellations PA-24-00500

Responsible Agencies: For the purposes of CEQA, the term "Responsible Agency" includes all public agencies (other than federal agencies) beyond the Lead Agency that have discretionary approval power over the Project (CEQA Guidelines Section 15381). Discretionary approval power may include such actions as issuance of a permit, authorization, or easement needed to complete some aspect of the Project. Responsible Agencies may include, but are not limited to, the following:

- U.S. Army Corps of Engineers
- California Department of Transportation
- State Water Resources Control Board
- Central Valley Regional Water Quality Control Board
- San Joaquin Valley Air Pollution Control District
- San Joaquin Council of Governments
- San Joaquin County Local Agency Formation Commission
- Byron-Bethany Irrigation District

Potential Environmental Impacts of the Project: Based on the primary scope of the Project, the County has determined that the Project could have a potentially significant environmental effect. Pursuant to CEQA Guidelines Section 15063, the County has determined that preparation of an EIR will be required, which will focus on the significant effects of the Project. The Project's potentially significant environmental effects will be addressed in the forthcoming Draft EIR. The potential environmental effects to be addressed in the Draft EIR will include, but may not be limited to the following:

- **Aesthetics**
- **Agricultural Resources**
- **Air Quality and GHG Emissions (including Energy)**
- **Biological Resources**
- **Cultural and Tribal Cultural Resources**
- **Geology and Soils**
- **Hazards and Hazardous Materials**
- **Hydrology and Water Quality**
- **Land Use and Planning**
- **Noise**
- **Population and Housing**
- **Public Services/Utilities and Service Systems**
- **Transportation**
- **Urban Decay**
- **Wildfire**

The EIR will also address other CEQA-mandated topics, including cumulative impacts and alternatives to the Project.

Attachments:

Figure 1: Regional Location Map
Figure 2: Project Location
Figure 3: Land Use/Initial Development Phase Plan
Figure 4: Development Districts Plan
Figure 5: Conceptual Site Plan, Initial Phase
Figure 6: Project Buildout Utilities

Figure 1
Regional Location Map

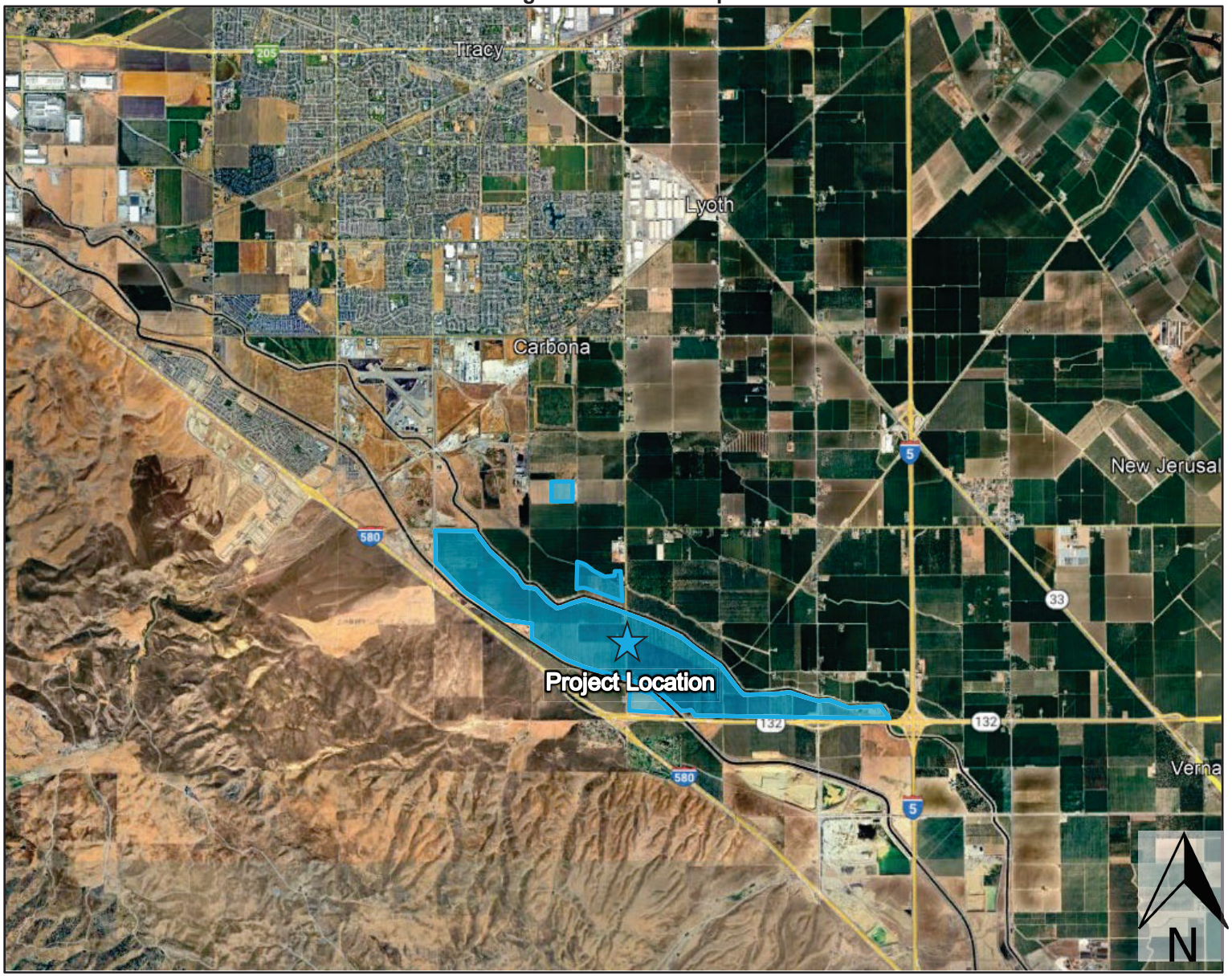

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Figure 2
Project Location

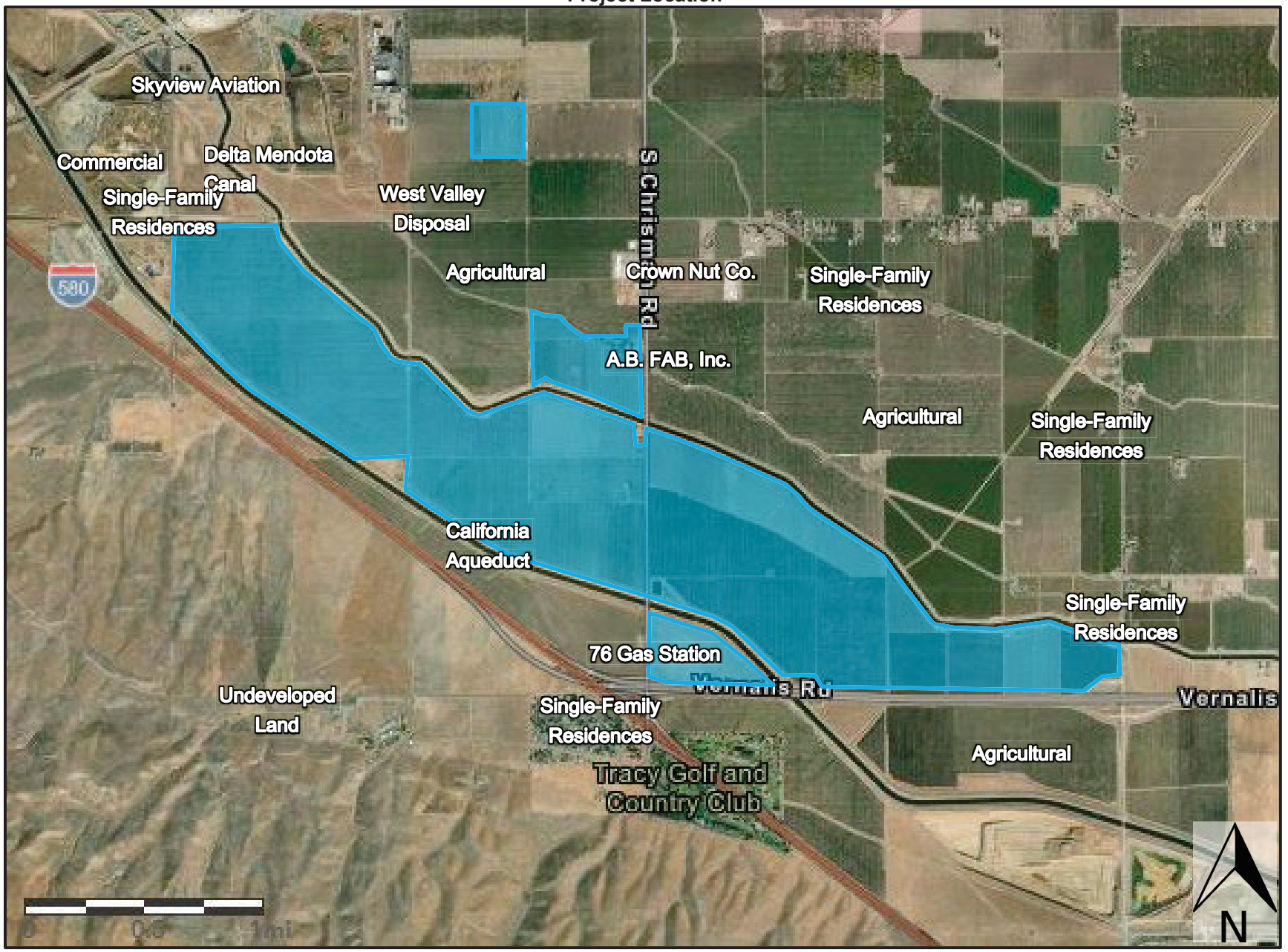

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Figure 3
Development Areas/Initial Phase Development Plan

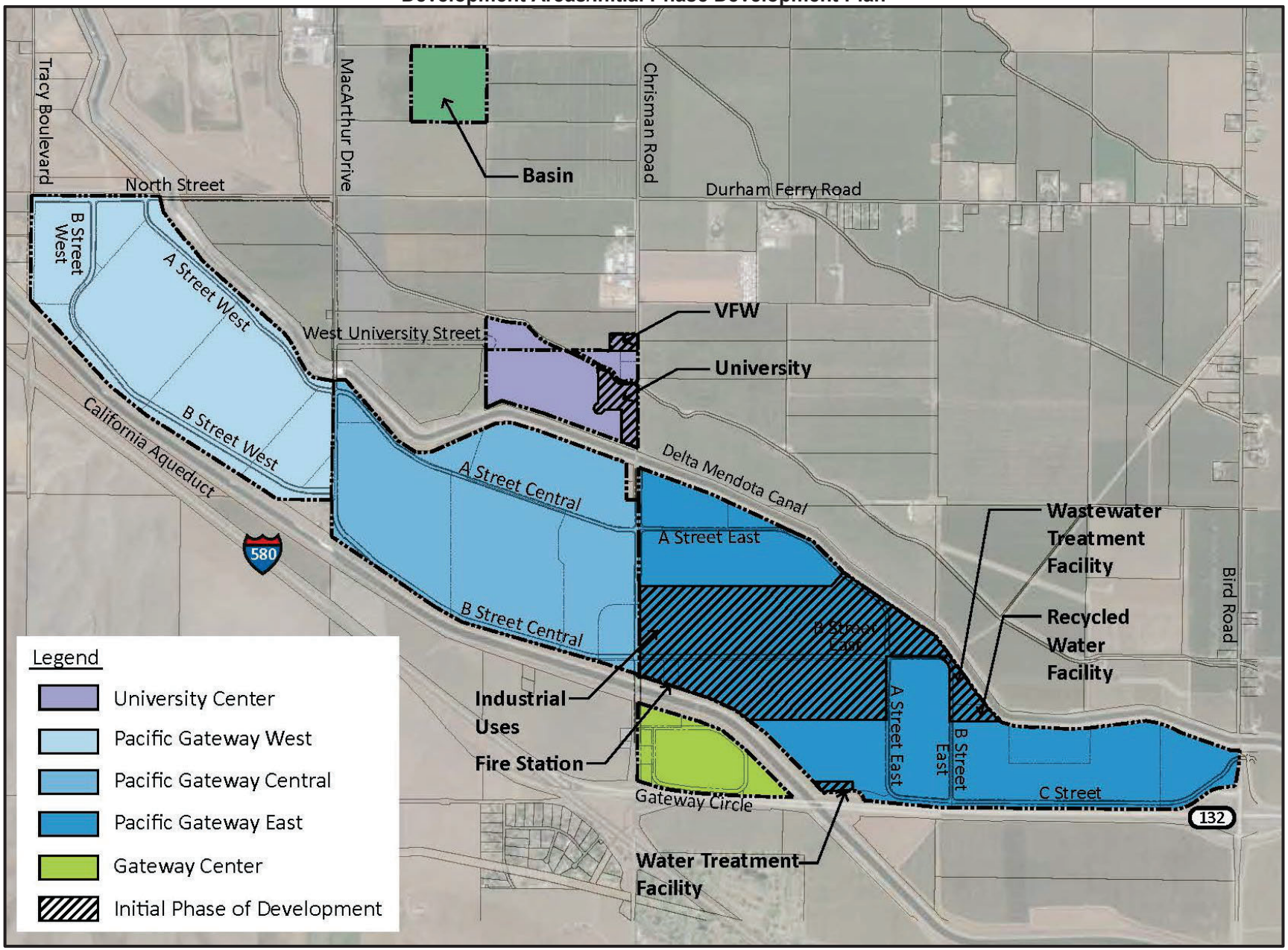

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Figure 4
Land Use Plan

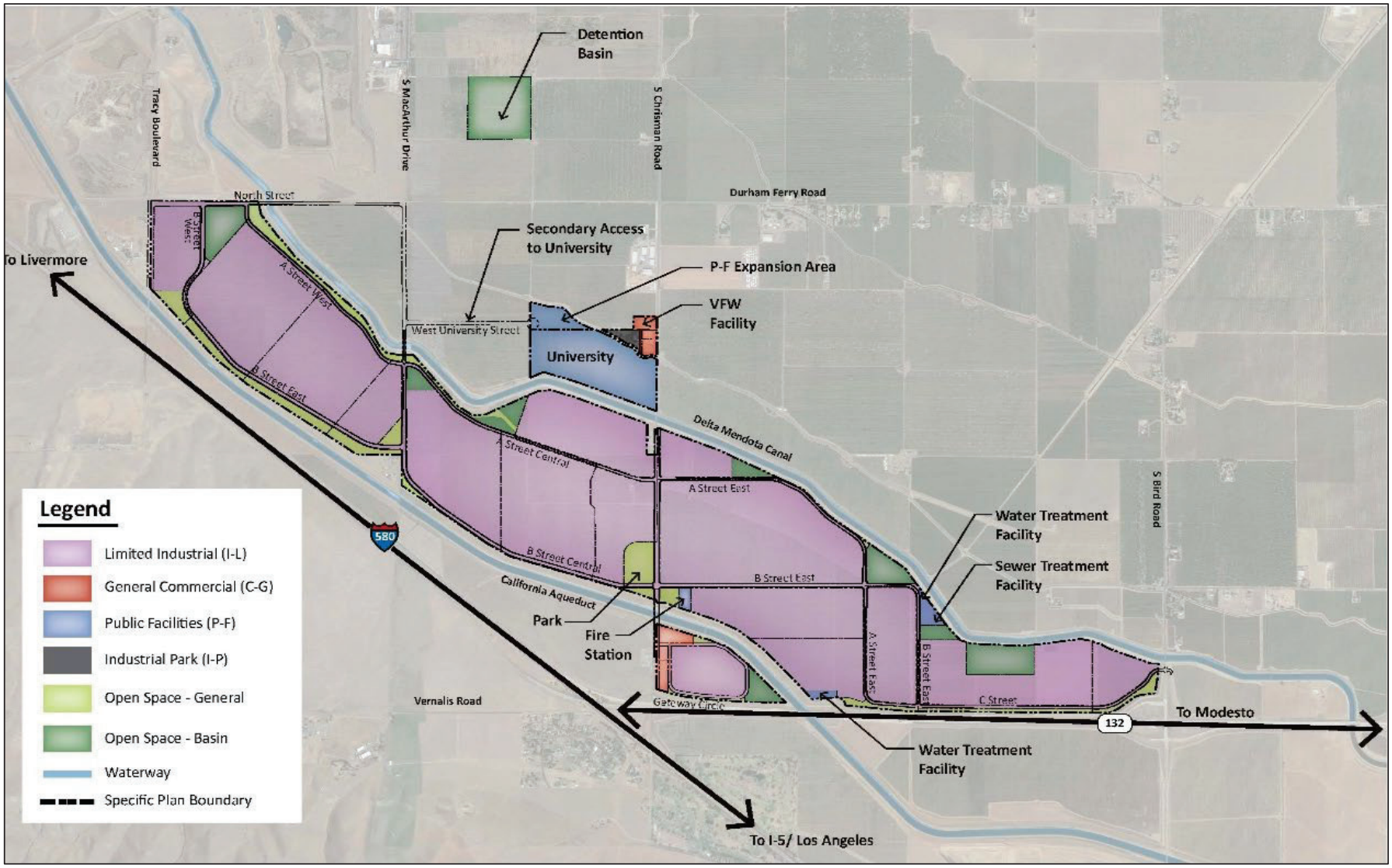

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Figure 5
Conceptual Site Plan, Initial Phase

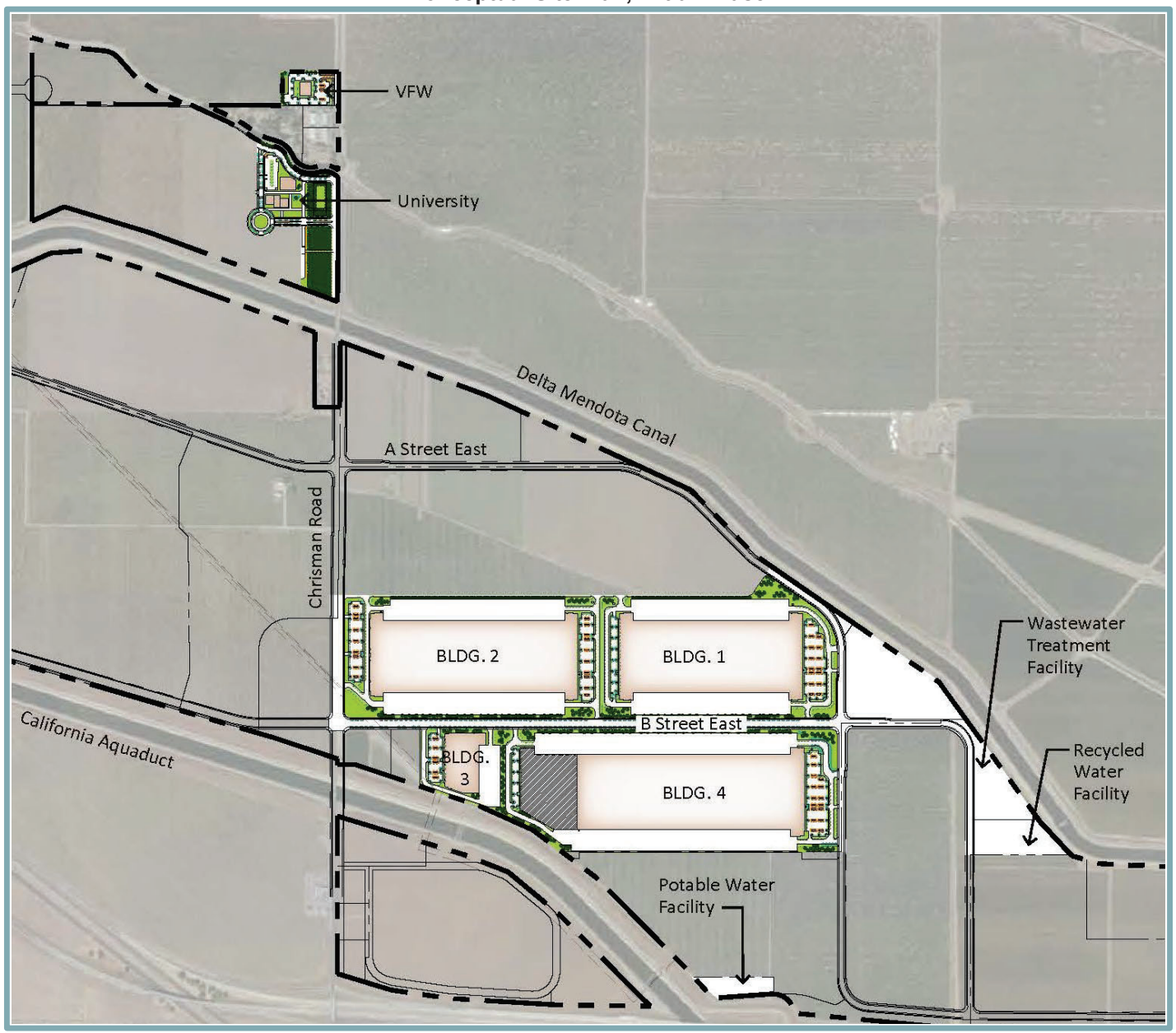

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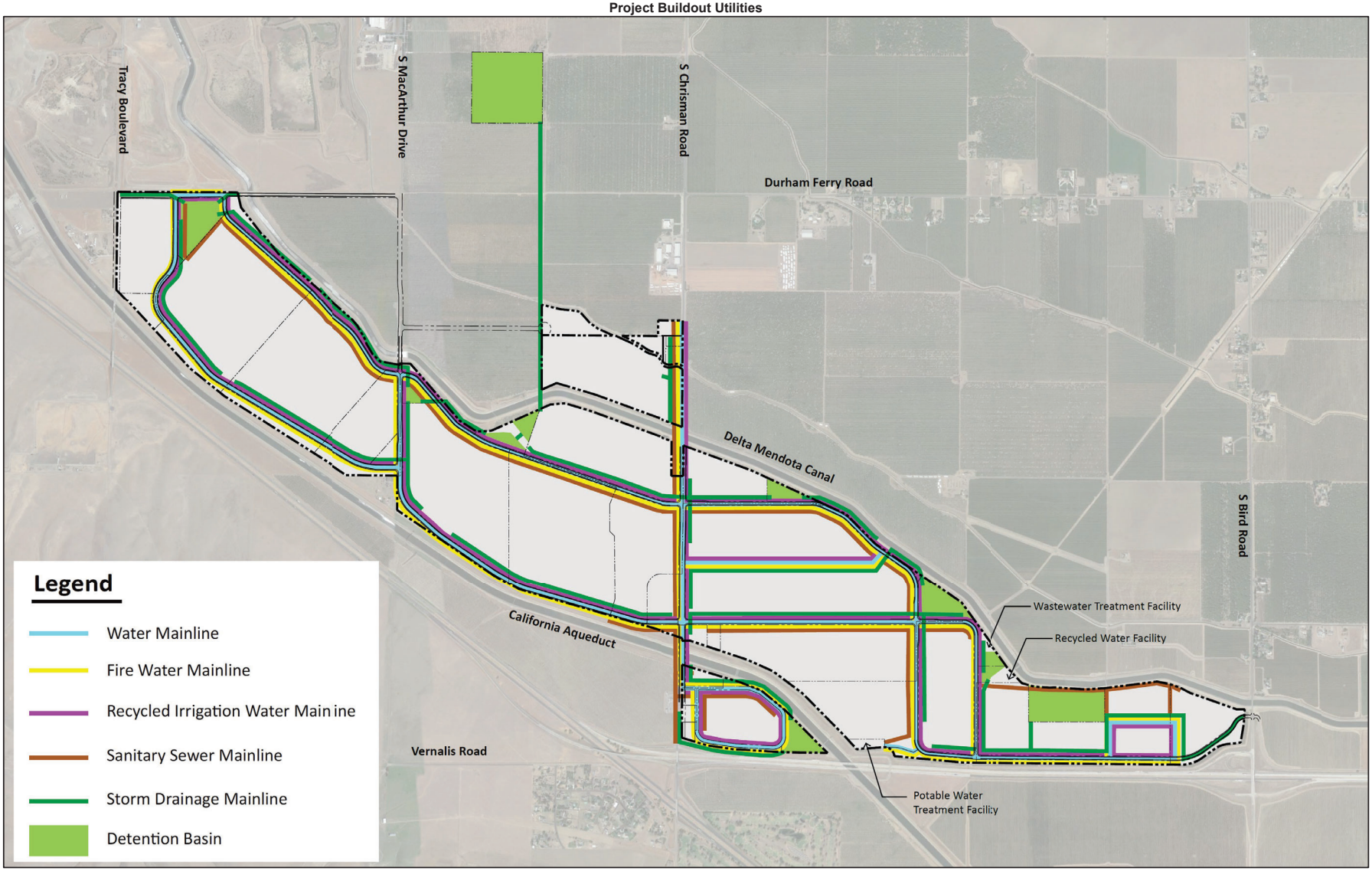
Figure 6
Project Buildout Utilities



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Appendix B

January 9, 2025

Via E-Mail

Brian Millar, Contract Planner
Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
E-mail: bmillar@sjgov.org

Re: Notice of Preparation of an Environmental Impact Report - Comments

Dear Mr. Millar:

The San Luis & Delta-Mendota Water Authority (SLDMWA) appreciates the opportunity to comment in response to the County of San Joaquin's Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meeting for the Pacific Gateway Project. The Pacific Gateway Project (Project) proposes development that encroaches upon and/or is adjacent to the Delta-Mendota Canal (DMC) and its right-of-way (ROW). The DMC is an integral part of the federal Central Valley Project, conveying water for agricultural, municipal, industrial, and environmental uses. The continued safe and reliable operation of the DMC is critical to the communities and ecosystems that it serves.

The DMC and the DMC ROW are owned by the U.S Bureau of Reclamation (Reclamation). SLDMWA operates and maintains (O&M) the DMC under a transfer agreement with Reclamation. Reclamation and SLDMWA work together to ensure that any infrastructure improvements and/or development activities on or near the DMC ROW will not have a negative impact on the DMC or on SLDMWA's ability to operate and maintain the DMC.

15990 KELSO ROAD
BYRON, CA
94514
209 832-6200
209 833-1034 FAX

1. Project Planning and Design Must be Consistent with Reclamation's Guidelines

Development and construction that encroaches upon and/or is adjacent to the DMC must be consistent with Reclamation's Engineering and O&M Guidelines for Crossings, April 2008 (Reclamation's Guidelines).[1] Applicants requesting to encroach

[1] Reclamation Guidelines available at https://www.usbr.gov/gp/mtao/canal_crossing_guidance.pdf.

upon Reclamation's land, such as the DMC ROW, must obtain a written land use authorization from Reclamation (Reclamation's Guidelines, Section 2.0; 43 C.F.R. § 429). It has been SLDMWA's experience that the most efficient way for applicants to ensure consistency with Reclamation's Guidelines is to proactively involve SLDMWA and Reclamation during a project's design and planning phase and for approving entities to require SLDMWA and/or Reclamation's approval as a condition of their approval.

Below is a non-inclusive list of requirements from Reclamation's Guidelines typically encountered by applicants during the plan review process that the developer must consider during planning and design activities and that the approving entities must require as a condition of their approval. Applicable sections from Reclamation's Guidelines are noted in parenthesis.

- The applicant shall not utilize the DMC ROW in any way without express approval by a land use agreement through Reclamation (Section 2.0), or temporary access permit from SLDMWA, where applicable (Section 3.2.6).

- All storm drainage shall be conveyed away from the DMC ROW (Sections 3.2.12, 3.2.13, and 4.4).

- Full compliance with NEPA is required for any improvements occurring within the DMC ROW.

- Fencing around the ROW boundaries shall be designed to protect the DMC from trespassers and vandalism. Proper fencing must be installed 1 foot outside of Reclamation's ROW and maintained by the new development (Section 4.5.3 and 4.5.8).

- At all roadway intersections, gates shall be designed and installed to prevent unauthorized access to DMC roadways (Section 4.1.10).

- Bridge crossings with public walkways must be designed to prevent unwanted debris from being discharged into the canal (Section 3.2.13).

- The modification of existing bridges, or the construction of new bridges shall take the existing O&M roads into consideration. American Association of State Highway and Transportation Officials (AASHTO) criteria for sight distances at the intersection of the O&M roads and roadways at new bridges shall be met to allow O&M vehicles to cross them safely (Section 4.1.4). Where existing or new proposed bridge crossings exceed 2 lanes of travel in either direction, additional

requirements may be necessary to provide safe crossings. The proposed crossing modifications shall be reviewed and approved by Reclamation and SLDMWA.

- All new crossings shall be full span. No supports are allowed within the canal prism, and power poles shall be located outside of the ROW (Sections 4.6.2-2, 4.6.3.2).

- Subsidence is a wide spread issue on the DMC, and all new construction shall take subsidence impacts into consideration for the design life of the structure (Section 4.1.3). Consultation with SLDMWA and Reclamation will be required to discuss subsidence rates and future predicted elevations.

- All utility crossings of the DMC ROW shall be reviewed and approved by SLDMWA and Reclamation (Section 4.6).

- Existing drain inlets are to be plugged to the satisfaction of SLDMWA and Reclamation (Section 4.4.12). Refer to SLDMWA drawing No. 2202033 '*DRAIN INLET ABANDONMENT STANDARD PLAN*'. Note: All work required within the canal prism will be completed by SLDMWA staff at the applicant's expense. All other abandonment requirements will be responsibility of the applicant. Applicable fees shall apply.

- Existing turnouts are to be either plugged, or protected in place to the satisfaction of SLDMWA, Reclamation, and the appropriate water district (Section 4.4.12). Refer to SLDMWA drawing No. 2202034 '*TURNOUT ABANDONMENT STANDARD PLAN*'. Applicant will be required to work directly with the appropriate water district for all activities related to the turnouts. Note: All work required within the canal prism will be completed by SLDMWA staff at the applicant's expense. All other abandonment requirements will be the responsibility of the applicant. Applicable fee shall apply.

2. Impacts of the Project on the DMC That Affect the Environment Must Be Analyzed in the Draft EIR

The Project's potential impact on the DMC may affect the environment in a way that must be considered in the Draft EIR. For example, Project construction may lead to an increase in erosion and, thus, sediment discharge into the DMC, and the existence of the Project in the long-term may lead to an increase in trash being discarded into the DMC. Both of these examples could negatively affect the water quality of the water

that is conveyed through the DMC for municipal, agricultural, and environmental uses. Such impacts must be analyzed and properly accounted for in the Draft EIR.

Lastly, please include the Reclamation Lands Division in Fresno on all future notices. Notices should be addressed to the following:

Bureau of Reclamation; Lands Division
Attn: Michael Inthavong
1243 N Street
Fresno, CA 93721-1813

Conclusion

Thank you for this opportunity to submit these comments. SLDMWA looks forward to working with the County to ensure that the Project is consistent with Reclamation's Guidelines and to reviewing the Draft EIR.

Any questions for SLDMWA can be sent to the Engineering Department at 15990 Kelso Rd, Byron, CA 94514. I can be reached for questions at (209) 832-6221 or through email at jaime.mcneil@sldmwa.org.

Sincerely,

Jaime McNeil, P.E.
Engineering Manager

ROB BONTA
Attorney General

State of California
DEPARTMENT OF JUSTICE

1300 I STREET, SUITE 125
P.O. BOX 944255
SACRAMENTO, CA 94244-2550

E-Mail: EJ@doj.ca.gov

January 7, 2025

Brian Millar, Planner
San Joaquin County
1810 East Hazelton Avenue
Stockton, CA 95205

RE: Pacific Gateway Project, SCH #2024120847

Dear Mr. Millar:

Thank you for the opportunity to provide comments on the Notice of Preparation for the Pacific Gateway project. While the logistics industry is an important component of our modern economy, warehouses can bring various environmental impacts to the communities where they are located. For example, diesel trucks visiting warehouses emit nitrogen oxide (NO_x)—a primary precursor to smog formation and a significant factor in the development of respiratory problems like asthma, bronchitis, and lung irritation—and diesel particulate matter (a subset of fine particular matter that is smaller than 2.5 micrometers)—a contributor to cancer, heart disease, respiratory illnesses, and premature death.[1] Trucks and on-site loading activities can also be loud, bringing disruptive noise levels during 24/7 operation that can cause hearing damage after prolonged exposure.[2] The hundreds, and sometimes thousands, of daily truck and passenger car trips that warehouses generate can contribute to traffic jams, deterioration of road surfaces, traffic accidents, and unsafe conditions for pedestrians and bicyclists. Depending on the circumstances of an individual project, warehouses may also have other environmental impacts.

To help lead agencies avoid, analyze, and mitigate warehouses' environmental impacts, the Attorney General Office's Bureau of Environmental Justice has published a document containing best practices and mitigation measures for warehouse projects. We have attached a

[1] California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health (NOx); California Air Resources Board, Summary: Diesel Particular Matter Health Impacts, https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts; Office of Environmental Health Hazard Assessment and American Lung Association of California, Health Effects of Diesel Exhaust, https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf (DPM).

[2] Noise Sources and Their Effects, https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm (a diesel truck moving 40 miles per hour, 50 feet away, produces 84 decibels of sound).

copy of this document to this letter, and it is also available online.[3] We encourage you to consider the information in this document as you prepare the draft environmental impact report for this project.

Priority should be placed on avoiding land use conflicts between warehouses and sensitive receptors and on mitigating the impacts of any unavoidable land use conflicts. However, even projects located far from sensitive receptors may contribute to harmful regional air pollution, so you should consider measures to reduce emissions associated with the project to help the State meet its air quality goals. A distant warehouse may also impact sensitive receptors if trucks must pass near sensitive receptors to visit the warehouse.

The Bureau will continue to monitor proposed warehouse projects for compliance with the California Environmental Quality Act and other laws. We are available to discuss as you prepare the draft environmental impact report and consider how to guide warehouse development in your jurisdiction. Please do not hesitate to contact the Environmental Justice Bureau at ej@doj.ca.gov if you have any questions.

Sincerely,



CHRISTIE VOSBURG
Supervising Deputy Attorney General

For ROB BONTA
Attorney General

[3] https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf.

Central Valley Regional Water Quality Control Board

16 January 2025

Brian Millar
County of San Joaquin
Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
bmillar@sjgov.org

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, PACIFIC GATEWAY, SCH#2024120847, SAN JOAQUIN COUNTY

Pursuant to the State Clearinghouse's 18 December 2025 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Pacific Gateway, located in San Joaquin County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has

adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:

http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter G. Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

Ridgeline Property Group, sa@ridgelinepg.com

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Gabe Tiffany, Acting Director
715 P Street, MS 1803
Sacramento, CA. 95814
T: (916) 445-5986

01/13/2025

County: San Joaquin - Department of Planning and Community Development
Brian Millar
bmillar@sjgov.org

Construction Site Well Review (CSWR) ID: 1013152

Assessor Parcel Number(s): 253140090

Property Owner(s): Ridgeline Property Group

Project Location Address: Bird Rd to the east and Tracy Blvd to the west Tracy, California 95304

Project Title: Pacific Gateway

Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project dated 1/10/2025. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

The project is located in San Joaquin County, within the boundaries of the following fields:

N/A

SCH# 2024120847

Our records indicate there are no known oil or gas wells located within the project boundary as identified in the application.

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Projected to Be Built Over or Have Future Access Impeded by this project: 0

- Number of wells Not Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

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- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

The Division categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.

There are no guarantees a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. It always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandonments will not leak.

The Division advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations should be provided to the Division in Latitude and Longitude, NAD 83 decimal format. The Division expects any wells found leaking to be reported to it immediately.

Failure to plug and reabandon the well may result in enforcement action, including an order to perform reabandonment well work, pursuant to PRC § 3208.1, and 3224.

PRC § 3208.1 give the Division the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible. Responsibility for re-abandonment costs may be affected by the choices made by the local

permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for reabandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be reabandoned, or to follow the advice of the supervisor or district deputy not to undertake the construction, then the person or entity causing the construction over or near the well shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the reabandonment.

No well work may be performed on any oil, gas, or geothermal well without written approval from the Division. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. The Division also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR §1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from the Division is required before work can start.

The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements

near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Northern district office, and file for Division review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

Should you have any questions, please contact me at (916) 203-7734 or via email at Erwin.Sison@conservation.ca.gov.

Sincerely,

Erwin Sison
Senior Oil & Gas Engineer (Supervisor)

cc: Brian Millar - Plan Checker

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Gabe Tiffany, Acting Director
715 P Street, MS 1803
Sacramento, CA. 95814
T: (916) 445-5986

01/13/2025

County: San Joaquin - Department of Planning and Community Development
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Project Location Address: Bird Rd to the east and Tracy Blvd to the west Tracy, California 95304

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Public Resources Code (PRC) § 3208.1 establishes well reabandonment responsibility when a previously plugged and abandoned well will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near oil, gas, and geothermal wells.

The California Geologic Energy Management Division (CalGEM) has received and reviewed the above referenced project dated 1/10/2025. To assist local permitting agencies, property owners, and developers in making wise land use decisions regarding potential development near oil, gas, or geothermal wells, the Division provides the following well evaluation.

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- Number of wells Abandoned to Current Division Requirements as Prescribed by Law and Not Projected to Be Built Over or Have Future Access Impeded by this project: 0

The Division categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure.

There are no guarantees a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. It always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. The Division acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantees that such abandonments will not leak.

The Division advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations should be provided to the Division in Latitude and Longitude, NAD 83 decimal format. The Division expects any wells found leaking to be reported to it immediately.

Failure to plug and reabandon the well may result in enforcement action, including an order to perform reabandonment well work, pursuant to PRC § 3208.1, and 3224.

PRC § 3208.1 give the Division the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment, or if the well is not accessible or visible. Responsibility for re-abandonment costs may be affected by the choices made by the local

permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for reabandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future problem, then the owner of the property on which the well is located shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be reabandoned, or to follow the advice of the supervisor or district deputy not to undertake the construction, then the person or entity causing the construction over or near the well shall obtain all rights necessary to reabandon the well and be responsible for the reabandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the reabandonment.

No well work may be performed on any oil, gas, or geothermal well without written approval from the Division. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. The Division also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR §1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below grade. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from the Division is required before work can start.

The Division makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements

near oil or gas wells, the Division recommends that information regarding the above identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. The Division recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

As indicated in PRC § 3106, the Division has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to the Division's authority to order work on wells pursuant to PRC §§ 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC §§ 3236, 3236.5, and 3359 for violations within the Division's jurisdictional authority. The Division does not regulate grading, excavations, or other land use issues.

If during development activities, any wells are encountered that were not part of this review, the property owner is expected to immediately notify the Division's construction site well review engineer in the Northern district office, and file for Division review an amended site plan with well casing diagrams. The District office will send a follow-up well evaluation letter to the property owner and local permitting agency.

Should you have any questions, please contact me at (916) 203-7734 or via email at Erwin.Sison@conservation.ca.gov.

Sincerely,

Erwin Sison
Senior Oil & Gas Engineer (Supervisor)

cc: Brian Millar - Plan Checker

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT
1010 10th Street, Suite 3400, Modesto, CA 95354
Planning Phone: (209) 525-6330 Fax: (209)525-5911
Building Phone: (209) 525-6557 Fax: (209) 525-7759

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE REFERRAL

DATE: October 30, 2023

TO:
Agricultural Commissioner – Linda Pinfold
Chief Executive Office – Patricia Lord
Cooperative Extension – Roger Duncan
County Counsel – Tom Boze
Environmental Resources – Parminder Dhillon
Hazardous Materials – Alvin Lal
Stanislaus Fire Prevention Bureau – Matthew Jenkins
Public Works – Isael Ojeda
Sheriff Dept. – Lt. Mike Parker

FROM: **Department of Planning and Community Development – Teresa McDonald**

SUBJECT: **ENVIRONMENTAL REFERRAL – NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND NOTICE OF SCOPING MEETING PACIFIC GATEWAY PROJECT**

Stanislaus County has established an Environmental Review Committee, which consists of representatives of the Departments of Public Works, Planning and Community Development, Environmental Resources, Fire Safety, County Counsel, and the Chief Executive Office. The ERC meets every other Wednesday at 9:30 AM in the Planning Department Conference Room at 1010 10th Street, Modesto. The primary purpose of the ERC is to provide a unified County review and response to environmental issues associated with projects which are referred to the County. The Planning Department has been designated as the County Agency responsible for coordinating the review process. This referral may also be forwarded to you as part of the California Environmental Quality Act (CEQA) review process.

Each agency should review the projects from the point of view of impacts on its own areas of responsibility. Please be as specific as possible in the expected degree of impacts including costs of providing services and possible methods of mitigating the impacts to acceptable levels including mitigation fees. Please complete the attached response form or provide a written response within two weeks.

The California Environmental Quality Act establishes very tight time frames for review. For that reason, it is very important that a prompt response be provided. It is our hope that all County responses can be sent to the referring agencies as a package. However, in some instances the time for review does not permit that to happen. Some responses will have to go directly to the agency, with a copy to County Planning, while others can come back to Planning. Please note below the date responses are needed and where to send them. PLEASE SEND THE ORIGINAL OF ANY COMMENTS YOU MAY HAVE DIRECTLY TO THE AGENCY LISTED BELOW AND A COPY TO THE STANISLAUS COUNTY PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT. Please contact me if you have any questions.

PROJECT AGENCY	RESPOND TO	RESPONSE DATE
San Joaquin County	**Brian Millar**	**November 22, 2023**
Community Development Dept. **1810 East Hazelton Avenue** **Stockton, California 95205** https://www.sjgov.org/commdev/cgi-bin/cdyn.exe/file/Planning/Pacific%20Gateway/Notice%20of%20Preparation.pdf	**bmillar@sjgov.org** **Ph. (209) 468-0291**	

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE
REFERRAL RESPONSE FORM

TO: **Stanislaus County Planning & Community Development**
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: _____

SUBJECT: **ENVIRONMENTAL REFERRAL – NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND NOTICE OF SCOPING MEETING PACIFIC GATEWAY PROJECT**

Based on this agency's particular field(s) of expertise, it is our position the above described project:

_____ Will not have a significant effect on the environment.
_____ May have a significant effect on the environment.
_____ No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheets if necessary)

1.
2.
3.
4.

Listed below are possible mitigation measures for the above-listed impacts *PLEASE BE SURE TO INCLUDE WHEN MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

1.
2.
3.
4.

In addition, our agency has the following comments (attach additional sheets if necessary).

Response prepared by:

Name Title Date

ATTACHMENTS
EMAIL TO ERC

RECEIVED
OCT 24 2023
STANISLAUS CO. PLANNING & COMMUNITY DEVELOPMENT DEPT.

County of San Joaquin

Notice of Preparation of an Environmental Impact Report and Notice of Scoping Meeting

Pacific Gateway Project

Date: October 23, 2023

To: All Interested Agencies, Organizations, Persons and State Clearinghouse

From: San Joaquin County

Subject: Notice of Preparation of an Environmental Impact Report and Notice of Public Scoping Meeting for the Pacific Gateway Project:

- General Plan Text Amendments No. PA-2100188;
- General Plan Map Amendments No. PA-2100189;
- Specific Plan No. P-2100190;
- Zone Reclassification No. PA-2100191;
- Tentative Map application Nos. PA-2300091 and PA-2300092;
- Administrative Use Permit (Site Approval) Applications for Phase 1 development of the 140.7-acre Industrial Phase 1 area (No. PA-2300093), the 29.1-acre University Campus Phase 1 area (No. PA-2300094) and VFW facility (PA-2300095; and
- Development Agreement.

The development of the 1,612-acre Project site is divided into four development districts that will result in up to 27,650,000 square feet (sf) of limited industrial use, 104,544 sf of general commercial use, 93,654 sf of business park use, a 29-acre private University, a Veterans of Foreign Wars of the U.S. (VFW) post, and open space, park, pedestrian, and bicycle facilities. The initial development phase will consist of 2.8 million sf of industrial uses in five buildings, a 140,200 sf University Medical School Facility, and the VFW post, as well as associated utilities to serve the Initial Phase. Subsequent Development through buildout of the Project will be done consistent with the Specific Plan based on market demands. The Environmental Impact Report will analyze potential impacts from development of both the Initial Phase and Subsequent Development.

Project Title: Pacific Gateway

Project Address: Located north and east of Interstate 580 (I-580) and north of State Route 132 (SR 132), consisting of multiple properties. See link, below, to the full NOP and list of properties.

Project Applicant: Ridgeline Property Group

Lead Agency/Contact: County of San Joaquin Community Development Department

Brian Millar, Contract Planner
Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
(209) 468-0291
bmillar@sjgov.org

Comment Period: October 23, 2023 – November 22, 2023

Public Scoping Meeting:

Date and Time: Wednesday, November 15, 2023 (6:30pm – 7:30pm)

Location: Jefferson School – 7500 W. Linne Road, Tracy, CA

The scoping meeting will provide a forum for community and agency input for the scope of the environmental review including content of the environmental information to be included for analysis in the Draft EIR, mitigation measures, or Project alternatives to reduce potential environmental effects. *The Scoping Meeting is not a public hearing, and no decisions about the Project will be made at the Scoping Meeting. Separate public hearings to consider the entitlement requests will be scheduled after the completion of the Draft EIR.*

Notice of Preparation: This Notice of Preparation (NOP) has been prepared to notify agencies and interested parties that the County of San Joaquin (County), as Lead Agency, is commencing preparation of an Environmental Impact Report (EIR) pursuant to the California Environmental Quality Act (CEQA) (Public Resources Code Section 21080.4) and CEQA Guidelines (14 California Code of Regulations [CCR] Section 15082). The purpose of the NOP is to provide sufficient information about the Pacific Gateway Project (the "Project"), described below, and its potential environmental effects to allow public agencies, organizations, and interested members of the public the opportunity to provide a meaningful response related to the scope and content of the EIR, including feasible mitigation measures and project alternatives that should be considered in the EIR (CEQA Guidelines, 14 CCR Section 15082[b]).
The County is requesting input from interested individuals, organizations, and agencies regarding the scope and content of the environmental analysis to be included in the upcoming Draft EIR.

EIR Scoping Comments: All comments must be received in writing by 5:00 p.m. on November 22, 2023, which marks the end of the 30-day public comment period on the scoping of the Draft EIR. All written comments should indicate an associated contact person for the agency or organization, if applicable, and reference the Project name in the subject line. Pursuant to CEQA, responsible agencies are requested to indicate their statutory responsibilities in connection with the Project when responding. Please mail or email comments and direct any questions to the following contact person:

Brian Millar, Contract Planner
County of San Joaquin Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
(209) 468-0291
bmillar@sjgov.org

Access: This NOP and Project information, including the draft Specific Plan, may be accessed electronically at the following link:

https://www.sjgov.org/commdev/cgi-bin/cdyn.exe?grp=planning&htm=pacific_gateway

A hard-copy of the NOP is also available for review at the San Joaquin County Community Development Department on Monday throughout Friday from 8:00 a.m. to 12 p.m. and 1 p.m. to 5:00 p.m.

Pacific Gas and Electric Company

Plan Review Team
Land Management

PGEPlanReview@pge.com

December 30, 2024

Brian Millar
County of San Joaquin
1810 E Hazelton Ave
Stockton, CA 95205

Ref: Gas and Electric Transmission and Distribution

Dear Brian Millar,

Thank you for submitting the Pacific Gateway plans for our review. PG&E will review the submitted plans in relationship to any existing Gas and Electric facilities within the project area. If the proposed project is adjacent/or within PG&E owned property and/or easements, we will be working with you to ensure compatible uses and activities near our facilities.

Attached you will find information and requirements as it relates to Gas facilities (Attachment 1) and Electric facilities (Attachment 2). Please review these in detail, as it is critical to ensure your safety and to protect PG&E's facilities and its existing rights.

Below is additional information for your review:

1. This plan review process does not replace the application process for PG&E gas or electric service your project may require. For these requests, please continue to work with PG&E Service Planning: https://www.pge.com/en/account/service-requests/building-and-renovation.html.

2. If the project being submitted is part of a larger project, please include the entire scope of your project, and not just a portion of it. PG&E's facilities are to be incorporated within any CEQA document. PG&E needs to verify that the CEQA document will identify any required future PG&E services.

3. An engineering deposit may be required to review plans for a project depending on the size, scope, and location of the project and as it relates to any rearrangement or new installation of PG&E facilities.

Any proposed uses within the PG&E fee strip and/or easement, may include a California Public Utility Commission (CPUC) Section 851 filing. This requires the CPUC to render approval for a conveyance of rights for specific uses on PG&E's fee strip or easement. PG&E will advise if the necessity to incorporate a CPUC Section 851filing is required.

This letter does not constitute PG&E's consent to use any portion of its easement for any purpose not previously conveyed. PG&E will provide a project specific response as required.

Sincerely,

Plan Review Team
Land Management

Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf

1. Standby Inspection: A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.

2. Access: At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

3. Wheel Loads: To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. Grading: PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.

5. Excavating: Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 24 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch

wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [24/2 + 24 + 36/2 = 54] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 24 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible (90° +/- 15°). All utility lines crossing the gas pipeline must have a minimum of 24 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line ‘kicker blocks’, storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E’s ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4’) in height at maturity may be planted within the easement area.

11. Cathodic Protection: PG&E pipelines are protected from corrosion with an “Impressed Current” cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E’s facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.

Attachment 2 – Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as "**RESTRICTED USE AREA – NO BUILDING."**

2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.

3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&'s facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.

4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), plant only low-growing shrubs under the wire zone and only grasses within the area directly below the tower. Along the border of the transmission line right-of-way, plant only small trees no taller than 10 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.

5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.

6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.

7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.

8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (https://www.dir.ca.gov/Title8/sb5g2.html), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

San Joaquin LAFCO
Local Agency Formation Commission
The Gateway County

Balancing Community and Commerce

44 N. SAN JOAQUIN STREET SUITE 374 STOCKTON, CA 95202 209-468-3198

January 20, 2025

Brian Millar, Contract Planner
San Joaquin County Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
Via Email: bmillar@sjgov.org

SUBJECT: Comments on Pacific Gateway Project
Notice of Preparation of an Environmental Impact Report
PA-2400363 through -368; 2400371 through -372; 2400500

Dear Mr. Millar:

Thank you for sending San Joaquin LAFCo the Notice of Preparation (NOP) for the Environmental Impact Report (EIR) that will be prepared for the proposed Pacific Gateway Project. San Joaquin LAFCo appreciates the opportunity to review and comment on the project. LAFCo staff has reviewed this document and offers the following comments.

Pacific Gateway Project Description

At its nearest point, the project site is approximately one mile from the southern boundary of the City of Tracy. The Project is bounded on the south by State Route 132 (SR 132) and the California Aqueduct; Tracy Boulevard on the west; Bird Road to the east; and the Delta-Mendota Canal at the north. South Tracy Boulevard, South MacArthur Drive, and South Chrisman Road provide north/south circulation access through the project area. Existing east/west access is limited to private, unimproved farm roads. The Project would include new public streets within the Specific Plan Area, including two primary east/west thoroughfares traveling from Tracy Boulevard to the west, which join each other east of Chrisman Road before continuing to Bird Road on the east.

According to the Project Description provided with the NOP, the Project consists of 24.7 million square feet of Limited-Industrial use buildings, a 93,000 square foot business park, 160,000 square feet of commercial space, and a private university with 1.2 million square feet of building space for up to 5,000 students, up to 1,000 student housing beds, and an expansion

area for the University providing an additional 115,000 of building area and up to 600 more student housing beds. The Project incorporates related parks, open space and infrastructure improvements. The Project is anticipated to be fully developed over the course of 25 to 30 years, based on market demand, and encompasses five development areas.

Project Jurisdiction

The Project is outside the Tracy City Limits and Sphere of Influence (SOI) boundaries. However, approximately half of the site is located within the City's Planning Area boundary. The Planning Area is outside of city boundaries and the SOI but is relevant to the City's planning and policy direction. The City does not have any regulatory authority within the Planning Area but recognizes that planning and development within this area have an impact on the future of the City. Areas outside of the SOI remain under the jurisdiction of San Joaquin County, and this Project does not propose to be annexed into the City.

Project Infrastructure Improvements

The Project has been designed and would be developed over time with a full range of infrastructure improvements to serve both the initial stages of development and full build out. According to the Project Description, long term operation and maintenance of the Project infrastructure other than roads would be supported by a project-specific Community Service District (CSD) and/or Community Services Area (CSA) and related financing mechanisms formed in accordance with a project-wide public facilities financing plan.

Water and Wastewater Infrastructure: The Project would include dedicated water and wastewater systems sized to serve the Project's specific needs, including a minimum of two water sources to provide enough water to serve all project uses, on-site water and wastewater treatment plants, and corresponding transmission and distribution infrastructure to serve the project during all phases of development.

Circulation Infrastructure: The Project is situated near major transportation corridors, with primary direct access from southbound Chrisman Road, a state designated STAA route, to I-580 and CA-132 and northbound Chrisman Road to Business Route 205/11th Street. Eastbound CA-132 connects to I-5 and CA-99, providing north and southbound connectivity with the California highway transportation system. The project also includes the development of new private and public roads to serve the project site.

Stormwater Infrastructure

The Project incorporates comprehensive storm water management infrastructure including stormwater basins sized and located to independently serve each of the five development areas as each phase of the Project proceeds, as well as comprehensively at full project buildout. Stormwater calculations would be done at every phase during the Project's phased buildout, including runoff from the hills. When stormwater calculations exceed retention capacity on-site, the Off-Site Basin would be constructed and implemented.

Fire, Emergency, and Law Enforcement Services
The Project is located within the jurisdiction of the South San Joaquin County Fire Authority, with services provided by the Tracy Rural Fire Protection District. In conjunction with these services, the Project also incorporates dedicated groundwater wells and storage infrastructure to meet the fire water quantity and pressure needs for all phases of project development. Additionally, the Project includes a new fire station site located near the main entrance to the Project to meet the Project's public safety needs. Law enforcement services would be provided the San Joaquin County Sherriff's Department.

The Project Description indicates that the County would maintain all improvements within the street right of way, property owners would be responsible for all landscaping behind the back of walk and within proposed landscape setbacks, utilities would be maintained by the appropriate service providers, and drainage basins, inlets and detention structures will be maintained by the property owners.

LAFCo Responsibility

LAFCo is an independent, regulatory agency with discretion to approve, wholly, partially or conditionally, or disapprove, changes of organization or reorganizations. In accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 ("CKH Act"), LAFCo is required to consider various factors when evaluating a proposal, including, but not limited to, impacts to agricultural and open space lands, the provision of municipal services and infrastructure to the project site, timely and available supply of water, fair share of regional housing, consistency with regional plans, and other factors. The statutory mission of LAFCo is to discourage urban sprawl and encourage the orderly formation and development of local agencies.

LAFCo Comments

LAFCo's approvals for the formation or reorganization of any special districts or annexation of any portion of the project into the City of Tracy would be a fundamental part of the entitlements required for this project. In order to approve the formation or reorganization of any districts, LAFCo must consider specific factors in reviewing such proposals as outlined in Section 56668 of the Government Code. As such, LAFCo provides the following comments on the project proposal to be considered for inclusion in the project analysis. In addition, because LAFCo would rely on the project EIR in its own approvals to comply with CEQA, LAFCo requests that the following be addressed in the Draft EIR.

1. Project Description

    - Please ensure that LAFCo is listed as an agency whose approval is required for any annexations, detachments, formations, and reorganizations of any special districts.

- Please identify maintenance entities for all utilities and public services, including landscaping, lighting, sound walls, roads, public water, storm water drainage and maintenance in and out of public right of way, and sewer infrastructure.
- Please include a description of the timing of annexations relative to the timing of the proposed development entitlements and construction. Typically, LAFCOs organization/reorganization processes are required after project approvals and prior to map recordation. In the case of a phased map, all approvals should occur prior to recordation of the first phase of the map so as not to create island territory issues.

2. Agricultural Resources (and Growth-Inducing Impacts)

LAFCo Review Factor: *The effect of the proposal on maintaining the physical and economic integrity of agricultural lands.* (CKH Act § 56668.e)

According to the Project Description, the Project Area is "currently developed with active agricultural uses, which include commercial scale almond orchards, cherry orchards, and vineyards, as well as an agricultural machinery manufacturing facility, separately operated by A.B. FAB, Inc." The project proposal does not appear to meet the intent of the referenced LAFCo criterion in terms of both direct conversion of important farmlands as well as indirect growth-inducing impacts on nearby agricultural lands. This factor will be considered by San Joaquin LAFCo in any reorganization proposals. The project analysis should include an evaluation of this factor for LAFCo's consideration.

In addition to the definition of Prime Agricultural Land used by the Department of Conservation's Farmland Mapping and Monitoring Program, the EIR should evaluate the project site to determine whether it meets the LAFCo definition of "prime agricultural land" under Government Code Section 56064, indicate whether implementation of the project would result in a loss of such land, and provide mitigation to reduce the impact if necessary. LAFCo will use this information and the findings of the EIR to inform its decisions about any annexation process. A preliminary review of this project indicates that much of it is located on Prime Farmland within General Agriculture designations/districts, and that the impact to agricultural resources could therefore be significant and unavoidable even with implementation of any Right-to-Farm ordinances or deed restrictions and agricultural conversion fees.

3. Hazards and Hazardous Materials

LAFCo Review Factor: *Information contained in a local hazard mitigation plan, information contained in a safety element of a general plan, and any maps that identify land as a very high fire hazard zone pursuant to Section 51178 or maps that identify land determined to be in a state responsibility area pursuant to Section 4102 of the Public*

Resources Code, if it is determined that such information is relevant to the area that is the subject of the proposal. (CKH Act Section 56668.q)

The Draft EIR should include an analysis of potential safety impacts resulting from the project to ensure LAFCo can make appropriate determinations on the project.

4. Hydrology and Water Quality (and Public Services and Utilities)

LAFCo Review Factor: *Timely availability of water supplies adequate for projected needs including, but not limited to, the projected needs as specified in Section 65352.5.* (CKH Act § 56668.l)

A preliminary review of the Technical Memorandum prepared by Schaaf & Wheeler indicates that the proposed project would use approximately 1/8 the amount of water used by the existing agricultural uses. However, the project may still be subject to the SB 610. SB 610 requires a water supply analysis with a 20-year projection in addition to an analysis of the demand of existing and other planned future uses for any project with more than 500 residential units; commercial development of more than 250,000 square feet of floor space; industrial uses with more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; a mixed-use project that includes one or more of the projects outlined in the legislation; or a project that will demand an amount of water equal to or greater than the amount of water required by 500 dwelling units. A Water Supply Assessment would include identification of current water supply entitlements, water rights, and service contracts; a calculation of anticipated water usage for the proposed development; an assessment of whether the existing water supply can meet the projected demand under different climate scenarios, including average, single dry, and multiple dry years; an evaluation of how the project might affect water availability for current water users in the area; and any mitigation strategies needed to reduce project impacts.

LAFCo therefore encourages the preparation of a Water Supply Assessment and integration with the local Groundwater Sustainability Plan to understand how the project will affect water supply and demand for the region, and how it will impact the groundwater aquifer. Please include this information in the project analysis.

5. Land Use and Planning (and Growth Inducing Impacts)

LAFCo Review Factor: *The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county.* (CKH Act § 56668.c)

A portion of the project is within the City's Planning Area. Please identify annexation interest to the City for this area in the Draft EIR. Please provide exhibits that show any proposed areas of annexation, City boundaries, spheres of influence, and public and private infrastructure and maintenance entities, with all layers on one map for ease of reference. Per San Joaquin LAFCo's standards for annexation, "LAFCo will require cities to annex streets where adjacent lands that are in the city will generate additional traffic or where the annexation will isolate sections of county road. Cities shall include all contiguous public roads that can be included without fragmenting governmental responsibility by alternating city and county road jurisdiction over short section of the same roadway." Any annexation of the subject property should include surrounding roadways and rights of way to avoid the creation of islands and/or illogical boundaries pursuant to Section 56668 of the CKH Act. When a boundary must follow a street, the boundary should include the complete right of way for the entire street.

LAFCo Review Factor: *The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377.* (CKH Act Section 56668.d)

Government Code Section 56377 states:

(a) Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.
(b) Development of existing vacant or nonprime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the sphere of influence of a local agency should be encouraged before any proposal is approved which would allow for or lead to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency.

Much of the project site appears to be Prime Farmland. The current project proposal therefore does not appear to meet the intent of this code section and will be evaluated as such under any organization or reorganization proposal. The project applicant is strongly encouraged to explore areas of development within the Tracy SOI before developing the proposed project site.

LAFCo Review Factor: *Consistency with city or county general and specific plans.* (CKH Act Section 56668.h)

The Project is currently inconsistent with the County and City General Plans and is requesting General Plan Amendments for both land use designations and for policies related to the conversion of agricultural lands. San Joaquin County General Plan Policy LU-2.15 related to agricultural conversions is currently intended to provide protections and additional considerations when a project proposes to convert agricultural lands to non-agricultural uses by requiring decision makers to consider the effects of development pressure on surrounding agricultural lands, the premature conversion of important farmlands, the impacts of development on farming operations, the growth-inducing impacts of development in rural areas, and protection of habitat restoration opportunities. The Project applicant proposes that an additional consideration be added to this list: economic development opportunities in supply chain corridors in south San Joaquin County in areas proximate to I-580, I-5, and SR-132. The inclusion of the consideration of "economic opportunities" in this General Plan policy runs counter to the intent of the policy. All development, and particularly the development of agricultural or open space land, provide economic development opportunities for some or many, and the very intent of GP Policy LU-2.15 is to provide countermeasures of consideration to those economic drives that incentivize development. The General Plan's open space and agricultural land use areas and policies, which were agreed to through a long and carefully considered public process, are intended to be generally protected by this policy. The proposed text amendment therefore runs counter to the intent of the policy, which is to provide additional protections for agricultural lands and open space that San Joaquin County residents indicated they valued at the time the policy was adopted.

If this text amendment and the addition of ED-3.8 is going to be considered by the County, LAFCo offers the following comments on it:

- "Potential for economic development opportunities" as a factor of consideration in the conversion of agricultural land should be defined more carefully. A fiscal analysis of the benefits of the economic development should be provided if this policy language is used, including who benefits and how much, the duration of benefit, and both the tangible and intangible costs of the benefit.
- "Proximate" location should be defined, such as including a maximum distance or indicating that the property must have direct access to specified routes.
- The routes listed in the proposed text amendment should be considered carefully. State Route 132 is a small part of the transportation network of San Joaquin County (and only a portion of it is vital to I-5 access), whereas I-205 is a much larger route and is not included.

- The policy changes would beg the question as to whether lands "proximate" to the proposed routes should be re-designated to non-agricultural use designations to support the supply chain policy in ED-3.8 to avoid spot zoning and the creation of islands of development. The County would need to seriously consider whether redesignating all lands along these corridors is desirable as that could be the outcome of such a policy. Much of the County's most desirable Prime Agricultural Land is along these corridors.

San Joaquin LAFCo will consider the project's consistency with the general plans when processing any applications for formations or reorganization. Please include a thorough analysis of both text amendment and map amendments with the project evaluation. In addition, LAFCo requests that General Plan and Zoning map amendment diagrams include the larger context of General Plan and Zoning designations for informational purposes.

6. Population and Housing

LAFCo Review Factor: *Population, population density, land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas, during the next 10 years.* (CKH Act Section 56668.a)

Given that the Project's proposal to convert rural agricultural lands to intensively developed urban uses will increase the population and require more intensive public services, this Project will require the evaluation of the factors listed in this item, including but not limited to population and growth inducement in adjoining areas. Please include this information in the project analysis.

LAFCo Review Factor: *The extent to which the proposal will assist the receiving entity in achieving its fair share of the regional housing needs as determined by the appropriate council of governments.* (CKH Act Section 56668.m)

LAFCo will consider the project's assistance with regional fair share housing needs as determined by San Joaquin COG. Please include this information in the project analysis.

LAFCo Review Factor: *The extent to which the proposal will promote environmental justice. As used in this subdivision, "environmental justice" means the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the location of public facilities and the provision of public services, to ensure a healthy environment for all people such that the effects of pollution are not*

disproportionately borne by any particular populations or communities. (CKH Act Section 56668.p)

Given the amount of industrial uses proposed, LAFCo recommends that the appropriate Environmental Justice considerations be given in the EIR and/or staff analysis so that LAFCo may make appropriate findings. Environmental Justice (EJ) communities can be identified as disadvantaged communities or low-income areas disproportionately affected by environmental pollution and other hazards. OPR recommends jurisdictions analyze the following issues to address EJ concerns: pollution exposure (e.g., air quality, water quality, and land use compatibility), access to public facilities, fresh foods and physical activity, safe and sanitary homes, enhancing civic engagement, and addressing compounded health risks due to climate vulnerability. The EIR should determine if any EJ community exists in or adjacent to the project area and then provide that information within the environmental setting of the relevant EIR section, which could include, as needed, Population and Housing (demographic information) Air Quality (connection between project emissions and health impacts on EJ communities), and Hazards and Hazardous Materials (connection between industrial hazards and impacts on EJ communities), and any other applicable sections.

7. Public Services/Utilities and Service Systems (and Growth Inducing Impacts)

LAFCo Review Factors:

Need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed incorporation, formation, annexation, or exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and in adjacent areas. (CKH Act Section 56668.b.1)

The ability of newly formed or receiving entity to provide the services which are the subject of the application to the area, including the sufficiency of revenues for such services following the proposed boundary change. (CKH Act Section 56668.k)

The project could require the update of existing Municipal Service Reviews (MSRs) for the City of Tracy (if any portion of the project will be annexed), the San Joaquin County Rural Fire Protection Districts, and any other special district MSRs affected by the Project. The formation of any new special districts for maintenance and operation of public services and facilities would also require new MSRs, which would be required upon formation and review by LAFCo in order to ensure ability of the districts to serve and provide adequate capacity for growth. Pursuant to Section 56653 of the CKH Act, an annexation can only be approved if the applicable MSRs and Plans for Services demonstrate that

adequate services can be provided to the annexed area. An annexation proposal must therefore include a Plan for Services consistent with the applicable MSR and must demonstrate that the service provider can provide the required services.

Services that may require the formation of special districts could include not only water and wastewater facilities, collection, treatment, and operation and maintenance of such facilities, but also street lighting, landscaping, and storm water management and treatment. The County can consider requiring special districts such as County Service Areas (CSAs) or Community Service Districts (CSDs) for these services.

The Project Description indicates that the County will maintain all new local and collector roads within the development. The County should consider the long-term financial and service impact of taking new roads in this development into its maintained mileage system in this area versus requiring the development to pay for the operation and maintenance of its roads through Permanent Road Divisions (PRDs), CSAs, CSDs, or other special district types.

LAFCo Review Factor: *The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of island or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.* (CKH Act Section 56668.f)

Although the Project Description does not describe any annexation into the City of Tracy, the large size of the project and the boundaries of the Specific Plan Area could create public service islands as well as growth-inducing impacts that should be considered in the project evaluation process.

8. Transportation and Circulation

LAFCo Review Factors:

The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county. (CKH Act § 56668.c)

A regional transportation plan adopted pursuant to Section 65080. (CKH Act § 56668.g)

Please include trip distribution in the transportation analysis to determine the impact to nearby City and County roads, maintenance responsibility, and the need for any annexation. Please also include an evaluation of the project's consistency

with the San Joaquin County of Governments Regional Transportation Plan/Sustainable Communities Strategy.

Thank you for the opportunity to comment on the Pacific Gateway Project. We would request that LAFCo be notified of all future actions on this project, including the Draft EIR, Final EIR, and any public hearings on the project. Please contact the LAFCo office if you have any questions.

Yours Truly,

J.D. Hightower
Executive Officer

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE
REFERRAL RESPONSE FORM

TO: **Stanislaus County Planning & Community Development**
1010 10th Street, Suite 3400
Modesto, CA 95354

FROM: Stanislaus County Department of Environmental Resources - Hazardous Materials Division

SUBJECT: **ENVIRONMENTAL REFERRAL – NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND NOTICE OF SCOPING MEETING PACIFIC GATEWAY PROJECT**

Based on this agency's particular field(s) of expertise, it is our position the above described project:

_____ Will not have a significant effect on the environment.
_____ May have a significant effect on the environment.
__X__ No Comments.

Listed below are specific impacts which support our determination (e.g., traffic general, carrying capacity, soil types, air quality, etc.) – (attach additional sheets if necessary)

1.
2.
3.
4.

Listed below are possible mitigation measures for the above-listed impacts *PLEASE BE SURE TO INCLUDE WHEN MITIGATION OR CONDITION NEEDS TO BE IMPLEMENTED (PRIOR TO RECORDING A MAP, PRIOR TO ISSUANCE OF A BUILDING PERMIT, ETC.):*

1.
2.
3.
4.

In addition, our agency has the following comments (attach additional sheets if necessary).

Response prepared by:

Stephanie Freier	Senior Hazardous Materials Specialist	11/22/2023
Name	Title	Date

ATTACHMENTS
EMAIL TO ERC

CHIEF EXECUTIVE OFFICE
Jody L. Hayes
CHIEF EXECUTIVE OFFICER
Patrice M. Dietrich
ASSISTANT EXECUTIVE OFFICER/
CHIEF OPERATIONS OFFICER
Tina M. Rocha
ASSISTANT EXECUTIVE OFFICER
Ruben Imperial
ASSISTANT EXECUTIVE OFFICER

STANISLAUS COUNTY ENVIRONMENTAL REVIEW COMMITTEE

December 9, 2024

Sent Via Email to: bmillar@sjgov.com

Attn: Brian Millar, Contract Planner
San Joaquin County
Community Development Department
1810 E Hazelton Ave
Stockton, CA 95205

SUBJECT: ENVIRONMENTAL REFERRAL – NOTICE OF REVISIONS TO PACIFIC GATEWAY PROJECT

Mr. Millar,

Please accept this letter as the formal response from Stanislaus County to the above-referenced project. Staff has reviewed the subject project, and the comments below represent Stanislaus County's response to the application referral. These comments were previously shared in a November 20, 2023, letter in response to the Notice of Preparation of a Draft Environmental Impact Report for the project.

Transportation/Circulation

The proposed project's General Plan amendment is likely to have significant impacts on the local and regional transportation network, including general plan consistency with the San Joaquin County and Stanislaus County General Plan's circulation elements. The traffic analysis for the project needs to identify its impacts and per the San Joaquin County General plan, shall pay its fair share cost for the necessary improvements. Facilities of note include State Route 132 (SR 132), Interstate 5 (I-5), and State Route 33 (SR 33) in Stanislaus County. Existing transportation projects which may be negatively impacted by the proposed project include three phases of the State Route 132 Expressway Project: Phase 2 (4 Lane Widening), Phase 3 (Dakota Avenue to Gates Rd), and Phase 4 (Gates Rd to Vernalis).

Stanislaus County appreciate the opportunity to comment on this project, looks forward to further discussion to ensure a proper environmental analysis is conducted, and requests to be included in any future publications or referrals related to this project.

Sincerely,

Patrick Cavanah
Senior Management Consultant
Environmental Review Committee

Cc: Environmental Review Committee

SAN JOAQUIN FARM BUREAU FEDERATION

MEETING TODAY'S CHALLENGES / PLANNING FOR TOMORROW

January 21, 2025

Brian Millar, Contract Planner
County of San Joaquin Community Development Department
1810 East Hazelton Avenue
Stockton, Ca 95205

RE: Pacific Gateway Project EIR Scoping Comments

Dear Mr. Millar,

The San Joaquin Farm Bureau is submitting this letter with our input on the scope and content on the proposed Environmental Impact Report for the Pacific Gateway Project. The San Joaquin Farm Bureau Federation is San Joaquin County's oldest agriculture organization, dedicated to the advancement of agriculture for over 100 years. Representing over 1,400 members throughout the county, we are committed to the protection of the natural resources that our industry depends on, including land. Protecting the prime farmland in our county is one of our highest priorities. While we have concerns with the project overall, we do have specific concerns that we would like to have addressed in the EIR.

First, we would like to report to address the impact this project will have on not only the identified main routes of travel but also on the smaller secondary roads in the area. We appreciate that the updated project has moved closer to the overpasses and onramps for SR-132 and I-580, but there will still be impacts on smaller roadways as people travel to and from the site from nearby homes in Tracy. While this updated plan will help to minimize the large vehicle traffic for the project, there is still not a well-developed, direct route from Tracy to the project. Even with the proposed expansion of Chrisman Road through the project area, at times of high traffic, large and small motorists will shift to these smaller roadways in hopes of avoiding high traffic areas. Chrisman Road would need to be expanded not only in the project footprint, but also between the project and Tracy to safely handle this increase in traffic. Most, if not all these roads are not designed to handle the increased amount and size of traffic that they may see. If this project does indeed provide 30,000 jobs as is claimed in their literature, those workers will also need to travel to work on these same roads. While the project does include pedestrian and bicycle facilities on site, those employees will still need to get to the site before they can utilize them. This increase in traffic will also impact local residents, increasing pollution and noise for those living in that area and along the proposed routes for traffic. This increased pollution and noise will impact the quality of life for not only those living in the area, but also any local schools, their employees and the children that attend them.

We would also like the report to address potential impacts on water supply and quality, above and below ground. Below ground, the up to four pumps proposed for domestic water needs

along with the dedicated groundwater pumps for emergency fire water quantity and pressure needs for the site have the potential to negatively impact water availability for existing groundwater users in the area. This could potentially be mitigated by requiring the project to tie into a municipal water supply, such as CSA-16. The loss of groundwater recharge that comes with irrigated agriculture also has the potential to impact existing well users. Above ground, the conversion of agriculture land into paved spaces and roof tops will make for larger flows into local waterways. Ag lands and vegetation slow water flow and promote absorption into the landscape. With this loss of ability to slow flows, onsite retention needs to be large enough to capture the increasingly heavy atmospheric river type of rainfall we are seeing here in the valley, and which are forecasted to get heavier in the future due to climate change.

Lastly, we would ask that the report also factor in and address the cumulative impact of the potential infill of development between the project and the city of Tracy. A leapfrogging development like the Pacific Gateway Project will encourage the development of the lands between the proposed site and the city of Tracy, which at its nearest point is still a mile away, in ways that should be accounted for. This development will further increase pollution and impact the quality of life for residents in ways that would be better planned for in a well thought out general plan for a city and not an industrial development in the middle of zoned ag land.

Thank you for your attention to our concerns and we look forward to seeing them addressed in the upcoming Environmental Impact Report. If you have any questions, please feel free to contact me at any time.

Andrew Genasci
Executive Director, San Joaquin Farm Bureau
andrew@sjfb.org
209-670-4390

South San Joaquin County Fire Authority
835 N. Central Avenue | Tracy, CA 95376
MAIN 209.831.6700 | FAX 209.831.6703
WWW.SJCFIRE.ORG

December 23, 2024

Jennifer Jolley, Director
San Joaquin County Community Development Department
1810 East Hazelton Ave
Stockton, CA 95205

Steve Arthur
Ridgeline Property Group
915 Highland Point Drive, Suite 250
Roseville, CA 95678

Subject: Fire Protection Requirements for Pacific Gateway Project

Dear Ms. Jolley and Mr. Arthur,

The South San Joaquin County Fire Authority (SSJCFA), on behalf of the Tracy Rural Fire District (TRFD), has reviewed the proposed Pacific Gateway Project, encompassing 1,580 acres, 26.3 million square feet of total development, including approximately 24.7 million square feet of logistics facilities, and a 1.2 million square foot university. Given the remote location and the significant size of the proposed project, SSJCFA is committed to ensuring that adequate fire protection services are available to safeguard the development, it's occupants, and surrounding areas.

To maintain our ability to provide high-quality fire protection and emergency response services, SSJCFA requires that the following conditions be met prior to the issuance of a building permit for the project that would exceed 6,000,000 square feet of development:

1. **Funding for Fire Station and Equipment:** The developer shall fund the land, construction of a fire station, the procurement of a fire engine, and all associated equipment necessary to support fire protection services for the development. The total funding required for these items in the year 2025 is $10,350,000.

2. **Inflation Adjustment:** Beginning on July 1, 2026, a four percent (4%) annual inflation rate will be applied to the required funding amount on an annual basis until the funding is fully provided. As stated above, all funding must be provided prior to the issuance of a building permit for the project that would exceed 6,000,000 square feet of development.

3. **Fee Credits:** The developer will be eligible to receive fee credits for fire protection developer fees within the project area, up to the amount funded for the land, fire station, fire engine, and associated equipment. It should be noted that TRFD is in the process of completing a nexus study to update fire protection developer fees. The costs for the fire station, fire engine, and equipment were based on the draft nexus study.

4. **Fire Station Location and Land Purchase:** The developer and SSJCFA have agreed to a location for the fire station, ensuring optimal coverage for the proposed development and surrounding areas. The agreed-upon location is a 2.59-acre site just east of Chrisman Road and north of the California Aqueduct (Attachment A). The developer agrees to provide utilities to the parcel and sell the parcel to the Tracy Rural Fire District at a cost not to exceed $325,000.

5. **CEQA and Development Agreement Fire Station Funding Requirement:** SSJCFA requests that the San Joaquin County Community Development Department include fire station funding requirements as a condition of approval for CEQA documents and Development Agreements. This provision is essential to ensure the financial resources for fire protection services are secured as part of the overall development approval process.

The new fire station will be staffed with a three-person Advanced Life Support (ALS) engine company. Until the new fire station is constructed and staffed, fire protection for the development will be provided from existing Fire Station 93, located at 1400 West Durham Ferry Road, and Station 95, located at 7151 Tracy Hills Drive. Both stations are staffed by three-person ALS engine companies and are within five miles of the development.

SSJCFA affirms that it has the capacity to provide adequate fire protection services for the proposed development, provided the above funding requirements are met. These measures are essential to ensure timely emergency response and the safety of the development's occupants and assets.

We appreciate the opportunity to work collaboratively with Ridgeline Property Group and the San Joaquin County Planning Department to support this significant development. If you have any questions or require further clarification, please do not hesitate to contact me at (209) 831-6700 or randall.bradley@sjcfire.org

Sincerely,



Randall Bradley
Fire Chief
South San Joaquin County Fire Authority

c: Jeff Ramsey, Chairperson, Tracy Rural Fire District
Raychel Jackson, Clerk, Tracy Rural Fire District

January 13, 2025

Brian Millar
County of San Joaquin
1810 E Hazelton Ave
Stockton, CA 95205

Re: Pacific Gateway Specific Plan
San Joaquin County

Dear Brian Millar,

Thank you for giving us the opportunity to review the subject plans. The proposed Pacific Gateway Specific Plan is within the same vicinity of PG&E's existing facilities that impact this property.

PG&E operates high-pressure gas transmission facilities, in addition to overhead electric distribution facilities within the project boundary. The applicant is to ensure the development of the proposed Pacific Gateway Specific Plan within any PG&E easements complies with the existing easement language and the provided guidelines for projects near PG&E electric and gas facilities, attached. The applicant is to provide development plans within PG&E's easements and tentative subdivision maps to PG&E's Plan Review Team for comment once they are available. The applicant may contact PG&E's Plan Review Team via email at PGEPlanReview@pge.com.

The applicant must contact PG&E's Service Planning department at www.pge.com/cco for any modification or relocation requests, or for any additional services they may require prior to any proposed demolition or new construction.

The applicant may also contact the Building and Renovation Center (BRSC) for facility map requests by calling 1-877-743-7782. As a reminder, before any digging or excavation occurs, please contact Underground Service Alert (USA) by dialing 811 a minimum of 2 working days prior to commencing any work. This free and independent service will ensure that all existing underground utilities are identified and marked on-site.

If you have any questions regarding our response, please contact me at alexa.boyd@pge.com.

Sincerely,

Alexa Boyd

Alexa Boyd
Land Management

Attachment 1 – Gas Facilities

There could be gas transmission pipelines in this area which would be considered critical facilities for PG&E and a high priority subsurface installation under California law. Care must be taken to ensure safety and accessibility. So, please ensure that if PG&E approves work near gas transmission pipelines it is done in adherence with the below stipulations. Additionally, the following link provides additional information regarding legal requirements under California excavation laws: https://www.usanorth811.org/images/pdfs/CA-LAW-2018.pdf

1. Standby Inspection: A PG&E Gas Transmission Standby Inspector must be present during any demolition or construction activity that comes within 10 feet of the gas pipeline. This includes all grading, trenching, substructure depth verifications (potholes), asphalt or concrete demolition/removal, removal of trees, signs, light poles, etc. This inspection can be coordinated through the Underground Service Alert (USA) service at 811. A minimum notice of 48 hours is required. Ensure the USA markings and notifications are maintained throughout the duration of your work.

2. Access: At any time, PG&E may need to access, excavate, and perform work on the gas pipeline. Any construction equipment, materials, or spoils may need to be removed upon notice. Any temporary construction fencing installed within PG&E's easement would also need to be capable of being removed at any time upon notice. Any plans to cut temporary slopes exceeding a 1:4 grade within 10 feet of a gas transmission pipeline need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

3. Wheel Loads: To prevent damage to the buried gas pipeline, there are weight limits that must be enforced whenever any equipment gets within 10 feet of traversing the pipe.

Ensure a list of the axle weights of all equipment being used is available for PG&E's Standby Inspector. To confirm the depth of cover, the pipeline may need to be potholed by hand in a few areas.

Due to the complex variability of tracked equipment, vibratory compaction equipment, and cranes, PG&E must evaluate those items on a case-by-case basis prior to use over the gas pipeline (provide a list of any proposed equipment of this type noting model numbers and specific attachments).

No equipment may be set up over the gas pipeline while operating. Ensure crane outriggers are at least 10 feet from the centerline of the gas pipeline. Transport trucks must not be parked over the gas pipeline while being loaded or unloaded.

4. Grading: PG&E requires a minimum of 36 inches of cover over gas pipelines (or existing grade if less) and a maximum of 7 feet of cover at all locations. The graded surface cannot exceed a cross slope of 1:4.

5. Excavating: Any digging within 2 feet of a gas pipeline must be dug by hand. Note that while the minimum clearance is only 24 inches, any excavation work within 24 inches of the edge of a pipeline must be done with hand tools. So to avoid having to dig a trench entirely with hand tools, the edge of the trench must be over 24 inches away. (Doing the math for a 24 inch wide trench being dug along a 36 inch pipeline, the centerline of the trench would need to be at least 54 inches [24/2 + 24 + 36/2 = 54] away, or be entirely dug by hand.)

Water jetting to assist vacuum excavating must be limited to 1000 psig and directed at a 40° angle to the pipe. All pile driving must be kept a minimum of 3 feet away.

Any plans to expose and support a PG&E gas transmission pipeline across an open excavation need to be approved by PG&E Pipeline Services in writing PRIOR to performing the work.

6. Boring/Trenchless Installations: PG&E Pipeline Services must review and approve all plans to bore across or parallel to (within 10 feet) a gas transmission pipeline. There are stringent criteria to pothole the gas transmission facility at regular intervals for all parallel bore installations.

For bore paths that cross gas transmission pipelines perpendicularly, the pipeline must be potholed a minimum of 2 feet in the horizontal direction of the bore path and a minimum of 24 inches in the vertical direction from the bottom of the pipe with minimum clearances measured from the edge of the pipe in both directions. Standby personnel must watch the locator trace (and every ream pass) the path of the bore as it approaches the pipeline and visually monitor the pothole (with the exposed transmission pipe) as the bore traverses the pipeline to ensure adequate clearance with the pipeline. The pothole width must account for the inaccuracy of the locating equipment.

7. Substructures: All utility crossings of a gas pipeline should be made as close to perpendicular as feasible (90° +/- 15°). All utility lines crossing the gas pipeline must have a minimum of 24 inches of separation from the gas pipeline. Parallel utilities, pole bases, water line ‘kicker blocks’, storm drain inlets, water meters, valves, back pressure devices or other utility substructures are not allowed in the PG&E gas pipeline easement.

If previously retired PG&E facilities are in conflict with proposed substructures, PG&E must verify they are safe prior to removal. This includes verification testing of the contents of the facilities, as well as environmental testing of the coating and internal surfaces. Timelines for PG&E completion of this verification will vary depending on the type and location of facilities in conflict.

8. Structures: No structures are to be built within the PG&E gas pipeline easement. This includes buildings, retaining walls, fences, decks, patios, carports, septic tanks, storage sheds, tanks, loading ramps, or any structure that could limit PG&E’s ability to access its facilities.

9. Fencing: Permanent fencing is not allowed within PG&E easements except for perpendicular crossings which must include a 16 foot wide gate for vehicular access. Gates will be secured with PG&E corporation locks.

10. Landscaping: Landscaping must be designed to allow PG&E to access the pipeline for maintenance and not interfere with pipeline coatings or other cathodic protection systems. No trees, shrubs, brush, vines, and other vegetation may be planted within the easement area. Only those plants, ground covers, grasses, flowers, and low-growing plants that grow unsupported to a maximum of four feet (4') in height at maturity may be planted within the easement area.

11. Cathodic Protection: PG&E pipelines are protected from corrosion with an "Impressed Current" cathodic protection system. Any proposed facilities, such as metal conduit, pipes, service lines, ground rods, anodes, wires, etc. that might affect the pipeline cathodic protection system must be reviewed and approved by PG&E Corrosion Engineering.

12. Pipeline Marker Signs: PG&E needs to maintain pipeline marker signs for gas transmission pipelines in order to ensure public awareness of the presence of the pipelines. With prior written approval from PG&E Pipeline Services, an existing PG&E pipeline marker sign that is in direct conflict with proposed developments may be temporarily relocated to accommodate construction work. The pipeline marker must be moved back once construction is complete.

13. PG&E is also the provider of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs which may endanger the safe operation of its facilities.

Attachment 2 – Electric Facilities

It is PG&E's policy to permit certain uses on a case by case basis within its electric transmission fee strip(s) and/or easement(s) provided such uses and manner in which they are exercised, will not interfere with PG&E's rights or endanger its facilities. Some examples/restrictions are as follows:

1. Buildings and Other Structures: No buildings or other structures including the foot print and eave of any buildings, swimming pools, wells or similar structures will be permitted within fee strip(s) and/or easement(s) areas. PG&E's transmission easement shall be designated on subdivision/parcel maps as "**RESTRICTED USE AREA – NO BUILDING."**

2. Grading: Cuts, trenches or excavations may not be made within 25 feet of our towers. Developers must submit grading plans and site development plans (including geotechnical reports if applicable), signed and dated, for PG&E's review. PG&E engineers must review grade changes in the vicinity of our towers. No fills will be allowed which would impair ground-to-conductor clearances. Towers shall not be left on mounds without adequate road access to base of tower or structure.

3. Fences: Walls, fences, and other structures must be installed at locations that do not affect the safe operation of PG&'s facilities. Heavy equipment access to our facilities must be maintained at all times. Metal fences are to be grounded to PG&E specifications. No wall, fence or other like structure is to be installed within 10 feet of tower footings and unrestricted access must be maintained from a tower structure to the nearest street. Walls, fences and other structures proposed along or within the fee strip(s) and/or easement(s) will require PG&E review; submit plans to PG&E Centralized Review Team for review and comment.

4. Landscaping: Vegetation may be allowed; subject to review of plans. On overhead electric transmission fee strip(s) and/or easement(s), plant only low-growing shrubs under the wire zone and only grasses within the area directly below the tower. Along the border of the transmission line right-of-way, plant only small trees no taller than 10 feet in height at maturity. PG&E must have access to its facilities at all times, including access by heavy equipment. No planting is to occur within the footprint of the tower legs. Greenbelts are encouraged.

5. Reservoirs, Sumps, Drainage Basins, and Ponds: Prohibited within PG&E's fee strip(s) and/or easement(s) for electric transmission lines.

6. Automobile Parking: Short term parking of movable passenger vehicles and light trucks (pickups, vans, etc.) is allowed. The lighting within these parking areas will need to be reviewed by PG&E; approval will be on a case by case basis. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications. Blocked-up vehicles are not allowed. Carports, canopies, or awnings are not allowed.

7. Storage of Flammable, Explosive or Corrosive Materials: There shall be no storage of fuel or combustibles and no fueling of vehicles within PG&E's easement. No trash bins or incinerators are allowed.

8. Streets and Roads: Access to facilities must be maintained at all times. Street lights may be allowed in the fee strip(s) and/or easement(s) but in all cases must be reviewed by PG&E for proper clearance. Roads and utilities should cross the transmission easement as nearly at right angles as possible. Road intersections will not be allowed within the transmission easement.

9. Pipelines: Pipelines may be allowed provided crossings are held to a minimum and to be as nearly perpendicular as possible. Pipelines within 25 feet of PG&E structures require review by PG&E. Sprinklers systems may be allowed; subject to review. Leach fields and septic tanks are not allowed. Construction plans must be submitted to PG&E for review and approval prior to the commencement of any construction.

10. Signs: Signs are not allowed except in rare cases subject to individual review by PG&E.

11. Recreation Areas: Playgrounds, parks, tennis courts, basketball courts, barbecue and light trucks (pickups, vans, etc.) may be allowed; subject to review of plans. Heavy equipment access to PG&E facilities is to be maintained at all times. Parking is to clear PG&E structures by at least 10 feet. Protection of PG&E facilities from vehicular traffic is to be provided at developer's expense AND to PG&E specifications.

12. Construction Activity: Since construction activity will take place near PG&E's overhead electric lines, please be advised it is the contractor's responsibility to be aware of, and observe the minimum clearances for both workers and equipment operating near high voltage electric lines set out in the High-Voltage Electrical Safety Orders of the California Division of Industrial Safety (https://www.dir.ca.gov/Title8/sb5g2.html), as well as any other safety regulations. Contractors shall comply with California Public Utilities Commission General Order 95 (http://www.cpuc.ca.gov/gos/GO95/go_95_startup_page.html) and all other safety rules. No construction may occur within 25 feet of PG&E's towers. All excavation activities may only commence after 811 protocols has been followed.

Contractor shall ensure the protection of PG&E's towers and poles from vehicular damage by (installing protective barriers) Plans for protection barriers must be approved by PG&E prior to construction.

13. PG&E is also the owner of distribution facilities throughout many of the areas within the state of California. Therefore, any plans that impact PG&E's facilities must be reviewed and approved by PG&E to ensure that no impact occurs that may endanger the safe and reliable operation of its facilities.

S J C O G, Inc.

555 East Weber Avenue ● Stockton, CA 95202 ● (209) 235-0574 ● Email: boyd@sjcog.org

San Joaquin County Multi-Species Habitat Conservation & Open Space Plan (SJMSCP)

SJMSCP RESPONSE TO LOCAL JURISDICTION (RTLJ)
ADVISORY AGENCY NOTICE TO SJCOG, Inc.

To: Brian Millar, San Joaquin County, Community Development Department

From: Laurel Boyd, SJCOG, Inc. Phone: (209) 235-0574 Email: boyd@sjcog.org

Date: January 7, 2025

Local Jurisdiction Project Title: Notice of Preparation of an EIR & Scoping Meeting for the Pacific Gateway Project

Assessor Parcel Number(s): Multiple APNs

Local Jurisdiction Project Number: PA-2400363 to 369, 371, 372, PA-2400500

Total Acres to be converted from Open Space Use: Unknown

Habitat Types to be Disturbed: Agricultural, Natural, and Multi-Purpose Open Space Habitat Land

Species Impact Findings: Findings to be determined by SJMSCP biologist.

Dear Mr. Millar:

SJCOG, Inc. has reviewed the application referral for the Notice of Preparation of an Environmental Impact Report and Scoping Meeting for the Pacific Gateway Project. This project consists of a General Plan Text Amendment (PA-2400364); General Plan and Zoning Map Amendments (PA-2400363); Specific Plan (PA-2400265); Zone Compliance (Site Plan Level Entitlements; PA-2400369, 371, and 372); Subdivision application (PA-2400367, 368); Development Agreement (PA-2400366); and Williamson Act Contract Cancellations (PA-2400500).

The development of the 1,567-acre project site is divided into five development areas that will result in up to 24,675,000 square feet of Limited Industrial use, 160,000 square feet of General Commercial use, 93,000 square feet of Industrial Park use, a 76.3-acre University campus, a Veterans of Foreign Wars of the U.S. (VFW) post, and open space, park, pedestrian, and bicycle facilities. The initial development phase will consist of approximately four million square feet of limited Industrial uses in four buildings, a 25,000 square foot University building, and the VFW post, as well as associated utilities to serve the Initial Plan based on market demands.
The project site is located east of Interstate 580, north of State Route 132, and is bounded by Durham Ferry Road to the north and Tracy Boulevard to the west.

San Joaquin County is a signatory to San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Participation in the SJMSCP satisfies requirements of both the state and federal endangered species acts and ensures that the impacts are mitigated below a level of significance in compliance with the California Environmental Quality Act (CEQA). The LOCAL JURISDICTION retains responsibility for ensuring that the appropriate Incidental Take Minimization Measure are properly implemented and monitored and that appropriate fees are paid in compliance with the SJMSCP. Although participation in the SJMSCP is voluntary, Local Jurisdiction/Lead Agencies should be aware that if project applicants choose against participating in the SJMSCP, they will be required to provide alternative mitigation in an amount and kind equal to that provided in the SJMSCP.

At this time, the applicant is requesting a General Plan Text, General Plan and Zoning Map Amendment, Specific Plan, Zone Compliance, Subdivision Application, Development Agreement, and Williamson Act Contract Cancellationswith no ground disturbance. Any future ground disturbing activities (e.g. roads, curb, gutter, electrical, water, etc.) or any physical structures that require ground disturbance on this or subsequent divided parcels will be subject to participate in the SJMSCP before ANY ground disturbance occurs and should be resubmitted to this agency. Current or future owners of this-or subdivided properties should be made aware of the conditions that are placed by the SJMSCP on future development on the created parcels.

This Project is subject to the SJMSCP. This can be up to a 90-day process and it is recommended that the project applicant contact SJMSCP staff as early as possible. It is also recommended that the project applicant obtain an information package. http://www.sjcog.org

Please contact SJMSCP staff regarding completing the following steps to satisfy SJMSCP requirements:

- Schedule a SJMSCP Biologist to perform a pre-construction survey ***prior to any ground disturbance***
- SJMSCP Incidental Take Minimization Measures and mitigation requirement:

1. Incidental Take Minimization Measures (ITMMs) will be issued to the project and must be signed by the project applicant prior to any ground disturbance but no later than six (6) months from receipt of the ITMMs. If ITMMs are not signed within six months, the applicant must reapply for SJMSCP Coverage. Upon receipt of signed ITMMs from project applicant, SJCOG, Inc. staff will sign the ITMMs. This is the effective date of the ITMMs.
2. Under no circumstance shall ground disturbance occur without compliance and satisfaction of the ITMMs.
3. Upon issuance of fully executed ITMMs and prior to any ground disturbance, the project applicant must:
    a. Post a bond for payment of the applicable SJMSCP fee covering the entirety of the project acreage being covered (the bond should be valid for no longer than a 6 month period); or
    b. Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or
    c. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
    d. Purchase approved mitigation bank credits.
4. Within 6 months from the effective date of the ITMMs or issuance of a building permit, whichever occurs first, the project applicant must:
    a. Pay the appropriate SJMSCP for the entirety of the project acreage being covered; or
    b. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
    c. Purchase approved mitigation bank credits.

Failure to satisfy the obligations of the mitigation fee shall subject the bond to be called.

- Receive your Certificate of Payment and release the required permit

It should be noted that if this project has any potential impacts to waters of the United States [pursuant to Section 404 Clean Water Act], it would require the project to seek voluntary coverage through the unmapped process under the SJMSCP which could take up to 90 days. It may be prudent to obtain a preliminary wetlands map from a qualified consultant. If waters of the United States are confirmed on the project site, the Corps and the Regional Water Quality Control Board (RWQCB) would have regulatory authority over those mapped areas [pursuant to Section 404 and 401 of the Clean Water Act respectively] and permits would be required from each of these resource agencies prior to grading the project site.

If you have any questions, please call (209) 235-0574.

S J C O G, Inc.

San Joaquin County Multi-Species Habitat Conservation & Open Space Plan

555 East Weber Avenue ● Stockton, CA 95202 ● (209) 235-0600 ● FAX (209) 235-0438

SJMSCP HOLD

TO: Local Jurisdiction: Community Development Department, Planning Department, Building Department, Engineering Department, Survey Department, Transportation Department, Public Works Department,
Other: _____

FROM: Laurel Boyd, SJCOG, Inc.

DO NOT AUTHORIZE SITE DISTURBANCE
DO NOT ISSUE A BUILDING PERMIT
DO NOT ISSUE _____ FOR THIS PROJECT

The landowner/developer for this site has requested coverage pursuant to the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). In accordance with that agreement, the Applicant has agreed to:

1) SJMSCP Incidental Take Minimization Measures and mitigation requirement:

1. Incidental Take Minimization Measures (ITMMs) will be issued to the project and must be signed by the project applicant prior to any ground disturbance but no later than six (6) months from receipt of the ITMMs. If ITMMs are not signed within six months, the applicant must reapply for SJMSCP Coverage. Upon receipt of signed ITMMs from project applicant, SJCOG, Inc. staff will sign the ITMMs. This is the effective date of the ITMMs.
2. Under no circumstance shall ground disturbance occur without compliance and satisfaction of the ITMMs.
3. Upon issuance of fully executed ITMMs and prior to any ground disturbance, the project applicant must:
   a. Post a bond for payment of the applicable SJMSCP fee covering the entirety of the project acreage being covered (the bond should be valid for no longer than a 6 month period); or
   b. Pay the appropriate SJMSCP fee for the entirety of the project acreage being covered; or
   c. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
   d. Purchase approved mitigation bank credits.
4. Within 6 months from the effective date of the ITMMs or issuance of a building permit, whichever occurs first, the project applicant must:
   a. Pay the appropriate SJMSCP for the entirety of the project acreage being covered; or
   b. Dedicate land in-lieu of fees, either as conservation easements or fee title; or
   c. Purchase approved mitigation bank credits.

   Failure to satisfy the obligations of the mitigation fee shall subject the bond to be called.

Project Title: NOP for an EIR for the Pacific Gateway Project

Landowner: Pacific Gateway CA, LLC Applicant: Ridgeline Property Group

Assessor Parcel #s: Multiple APNs

T _____, R_____, Section(s): _____

Local Jurisdiction Contact: Brian Millar

The LOCAL JURISDICTION retains responsibility for ensuring that the appropriate Incidental Take Minimization Measures are properly implemented and monitored and that appropriate fees are paid in compliance with the SJMSCP.

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

December 9, 2024

Brian Millar
County of San Joaquin
Community Development Department
1810 E. Hazelton Avenue
Stockton, CA 95205

Project: Early Consultation for Pacific Gateway Specific Plan (PA-2400363 GPA & RZ, PA-2400364 TA, PA-2400364 SP, PA-2400366 DA, PA-2400367 TM, PA-2400368 TM, PA-2400369 ZC, PA-2400371 ZC, PA-2400372 ZC, PA-240050 WA)

District CEQA Reference No: 20241287

Dear Mr. Millar:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Early Consultation (EC) for the project above from the County of San Joaquin (County). Per the EC, the project consists of 24,675,000 square feet (sf) of limited industrial use, 160,000 sf of general commercial use, 93,000 sf of business park use, a private university with 1,264,150 sf of development, a Veterans of Foreign Wars (VFW) post, and various open space, park, and pedestrian and bicycle facilities within an approximately 1,577-acre project site (Project). The Project is located east of Interstate 580 and west of the Delta Mendota Canal, bordered to the north by Durham Ferry Road and to the south by Highway 132 in San Joaquin County, CA.

The District offers the following comments at this time regarding the Project:

1) Land Use Planning

Nearly all development projects within the San Joaquin Valley Air Basin, from Pacific Gateway Project to individual projects have the potential to generate air pollutants, making it more difficult to attain state and federal ambient air quality standards. Land use decisions are critical to improving air quality within the San Joaquin Valley Air Basin because land use patterns greatly influence transportation needs, and motor vehicle emissions are the largest source of air pollution in the Valley. Land use decisions and project design elements such as preventing urban sprawl,

Samir Sheikh
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585

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encouraging mix-use development, and project design elements that reduce vehicle miles traveled (VMT) have proven to be beneficial for air quality. The District recommends that the DEIR incorporate strategies that reduce VMTs and require the cleanest available heavy duty trucks, vehicles, and off-road equipment, including zero and near-zero technologies. VMTs can be reduced through encouragement of mix-use development, walkable communities, etc. Additional design element options can be found at:
https://ww2.valleyair.org/media/ob0pweru/clean-air-measures.pdf

In addition, the District recommends that the DEIR incorporate strategies that will advance implementation of the best practices listed in Tables 5 and 6 of California Air Resource Board's (CARB's) Freight Handbook Concept Paper, to the extent feasible. This document compiles best practices designed to address air pollution impacts as "practices" which may apply to the siting, design, construction, and operation of freight facilities to minimize health impacts on nearby communities. The concept paper is available at:
https://ww2.arb.ca.gov/sites/default/files/2020-03/2019.12.12%20-%20Concept%20Paper%20for%20the%20Freight%20Handbook_1.pdf

2) Project Related Emissions

At the federal level under the National Ambient Air Quality Standards (NAAQS), the District is designated as extreme nonattainment for the 8-hour ozone standards and serious nonattainment for the particulate matter less than 2.5 microns in size (PM2.5) standards. At the state level under California Ambient Air Quality Standards (CAAQS), the District is designated as nonattainment for the 8-hour ozone, PM10, and PM2.5 standards.

The District's initial review of the Project concludes that emissions resulting from construction and operation of the Project would exceed any of the following significance thresholds as identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf. The District recommends that a more detailed preliminary review of the Project be conducted for the Project's construction and operational emissions.

2a) Construction Emissions

The District recommends, to reduce impacts from construction-related diesel exhaust emissions, the Project should utilize the cleanest available off-road construction equipment.

2b) Operational Emissions

Operational (ongoing) air emissions from mobile sources and stationary sources should be analyzed separately. For reference, the District's

significance thresholds are identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

Recommended Mitigation Measure: At a minimum, project related impacts on air quality should be reduced to levels below the District's significance thresholds through incorporation of design elements such as the use of cleaner Heavy Heavy-Duty (HHD) trucks and vehicles, measures that reduce Vehicle Miles Traveled (VMTs), and measures that increase energy efficiency. More information on transportation mitigation measures can be found at: https://ww2.valleyair.org/media/ob0pweru/clean-air-measures.pdf

2c) Project Trip Length for HHD Truck Travel

The County's environmental review should adequately characterize and justify an appropriate trip length distance for off-site HHD truck travel to and from the Project site. Based on the following factors: 1) the Project consists of a warehouse/distribution center that is expected to generate a high volume of HHD truck trips, and 2) HHD trucks generally travel further distances for distribution. The District recommends the environmental review include a discussion characterizing an appropriate trip length distance for HHD truck travel, and reflect such appropriate distance supported by project-specific factors.

2d) Recommended Model for Quantifying Air Emissions

Project-related criteria pollutant emissions from construction and operational sources should be identified and quantified. Emissions analysis should be performed using the California Emission Estimator Model (CalEEMod), which uses the most recent CARB-approved version of relevant emissions models and emission factors. CalEEMod is available to the public and can be downloaded from the CalEEMod website at: www.caleemod.com.

3) Health Risk Screening/Assessment

The County should evaluate the risk associated with the Project for sensitive receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) in the area and mitigate any potentially significant risk to help limit exposure of sensitive receptors to emissions.

To determine potential health impacts on surrounding receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) a Prioritization and/or a Health Risk Assessment (HRA) should be performed for the Project. These health risk determinations should quantify and characterize potential Toxic Air Contaminants (TACs) identified by the Office of Environmental Health Hazard

Assessment/California Air Resources Board (OEHHA/CARB) that pose a present or potential hazard to human health.

Health risk analyses should include all potential air emissions from the project, which include emissions from construction of the project, including multi-year construction, as well as ongoing operational activities of the project. Note, two common sources of TACs can be attributed to diesel exhaust emitted from heavy-duty off-road earth moving equipment during construction, and from ongoing operation of heavy-duty on-road trucks.

Prioritization (Screening Health Risk Assessment):
A "Prioritization" is the recommended method for a conservative screening-level health risk assessment. The Prioritization should be performed using the California Air Pollution Control Officers Association's (CAPCOA) methodology. Please contact the District for assistance with performing a Prioritization analysis.

The District recommends that a more refined analysis, in the form of an HRA, be performed for any project resulting in a Prioritization score of 10 or greater. This is because the prioritization results are a conservative health risk representation, while the detailed HRA provides a more accurate health risk evaluation.

Health Risk Assessment:
Prior to performing an HRA, it is strongly recommended that land use agencies/ project proponents develop and submit for District review a health risk modeling protocol that outlines the sources and methodologies that will be used to perform the HRA.

A development project would be considered to have a potentially significant health risk if the HRA demonstrates that the health impacts would exceed the District's established risk thresholds, which can be found here: https://ww2.valleyair.org/permitting/ceqa/.

A project with a significant health risk would trigger all feasible mitigation measures. The District strongly recommends that development projects that result in a significant health risk not be approved by the land use agency.

The District is available to review HRA protocols and analyses. For HRA submittals please provide the following information electronically to the District for review:

- HRA (AERMOD) modeling files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodologies.

For assistance, please contact the District's Technical Services Department by:

- E-Mailing inquiries to: hramodeler@valleyair.org
- Calling (559) 230-5900

Recommended Measure: Development projects resulting in TAC emissions should be located an adequate distance from residential areas and other sensitive receptors to prevent the creation of a significant health risk in accordance to CARB's Air Quality and Land Use Handbook: A Community Health Perspective located at https://ww2.arb.ca.gov/our-work/programs/resource-center/strategy-development/land-use-resources.

4) Health Impact Discussion

As required by the recent decision in Sierra Club v. County of Fresno (2018) 6 Cal.4th 502, a reasonable effort to discuss relevant specifics regarding the connection between potential adverse air quality impacts from the Project with the likely nature and magnitude of potential health impacts may be required. If the potential health impacts from the Project cannot be specifically correlated, explain what is known and why, given scientific constraints, potential health impacts cannot be translated.

5) Ambient Air Quality Analysis

An Ambient Air Quality Analysis (AAQA) uses air dispersion modeling to determine if emissions increases from a project will cause or contribute to a violation of State or National Ambient Air Quality Standards. The District recommends an AAQA be performed for the Project if emissions exceed 100 pounds per day of any pollutant.

An AAQA uses air dispersion modeling to determine if emission increase from a project will cause or contribute to a violation of State or National Ambien Air Quality Standards. An acceptable analysis would include emissions from both project-specific permitted and non-permitted equipment and activities. The District recommends consultation with District staff to determine the appropriate model and input data to use in the analysis.

Specific information for assessing significance, including screening tools and modeling guidance, is available online at the District's website: https://ww2.valleyair.org/permitting/ceqa/.

6) Voluntary Emission Reduction Agreement

Criteria pollutant emissions may result in emissions exceeding the District's significance thresholds, potentially resulting in a significant impact on air quality.

When a project is expected to have a significant impact, the District recommends the DEIR also include a discussion on the feasibility of implementing a Voluntary Emission Reduction Agreement (VERA) for this Project.

A VERA is a mitigation measure by which the project proponent provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects, with the District serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. To implement a VERA, the project proponent and the District enter into a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the District's incentives programs. The funds are disbursed by the District in the form of grants for projects that achieve emission reductions. Thus, project-related impacts on air quality can be mitigated. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of agricultural equipment with the latest generation technologies.

In implementing a VERA, the District verifies the actual emission reductions that have been achieved as a result of completed grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions. After the project is mitigated, the District certifies to the Lead Agency that the mitigation is completed, providing the Lead Agency with an enforceable mitigation measure demonstrating that project-related emissions have been mitigated. To assist the Lead Agency and project proponent in ensuring that the environmental document is compliant with CEQA, the District recommends the environmental document includes an assessment of the feasibility of implementing a VERA.

7) Industrial/Warehouse Emission Reduction Strategies

The District recommends the County incorporate emission reduction strategies that can reduce potential harmful health impacts, such as those listed below:

- Require cleanest available heavy-duty trucks and off-road equipment (see comment 9)
- Require HHD truck routing patterns that limit exposure of residential communities and sensitive receptors to emissions (see comment 8)
- Require minimization of heavy-duty truck idling (see comment 10)
- Require solid screen buffering trees, solid decorative walls, and/or other natural ground landscaping techniques are implemented along the property line of adjacent sensitive receptors
- Orient loading docks away from sensitive receptors unless physically impossible

- Require loading docks a minimum of 300 feet away from the property line of sensitive receptor unless dock is exclusively used for electric trucks
- Incorporate signage and "pavement markings" to clearly identify on-site circulation patterns to minimize unnecessary on-site vehicle travel
- Require truck entries be located on streets of a higher commercial classification
- Require projects be designed to provide the necessary infrastructure to support use of zero-emissions on-road vehicles and off-road equipment (see comment 11)
- Require all building roofs are solar-ready
- Require all portions of roof tops that are not covered with solar panels are constructed to have light colored roofing material with a solar reflective index of greater than 78
- Ensure rooftop solar panels are installed and operated to supply 100% of the power needed to operate all non-refrigerated portions of the development project
- Require power sources at loading docks for all refrigerated trucks have "plugin" capacity, which will eliminate prolonged idling while loading and unloading goods
- Incorporate bicycle racks and electric bike plug-ins
- Require the use of low volatile organic compounds (VOC) architectural and industrial maintenance coatings
- Designate an area during construction to charge electric powered construction vehicles and equipment, if temporary power is available
- Prohibit the use of non-emergency diesel-powered generators during construction
- Inform the project proponent of the incentive programs (e.g., Carl Moyer Program and Voucher Incentive Program) offered to reduce air emissions from the Project
- Ensure all landscaping be drought tolerant

8) Truck Routing

Truck routing involves the assessment of which roads Heavy Heavy-Duty (HHD) trucks take to and from their destination, and the emissions impact that the HHD trucks may have on residential communities and sensitive receptors. Since the Project consists of the construction of industrial warehouse/distribution development, the Project is expected to generate an increase in HHD truck trips.

The District recommends the County evaluate HHD truck routing patterns for the Project, with the aim of limiting exposure of residential communities and sensitive receptors to emissions. This evaluation would consider the current truck routes, the quantity and type of each truck (e.g., Medium Heavy-Duty, HHD, etc.), the destination and origin of each trip, traffic volume correlation with the time of day or

the day of the week, overall Vehicle Miles Traveled (VMT), and associated exhaust emissions. The truck routing evaluation would also identify alternative truck routes and their impacts on VMT and air quality.

9) Cleanest Available Heavy-Duty Trucks

The San Joaquin Valley will not be able to attain stringent health-based federal air quality standards without significant reductions in emissions from HHD trucks, the single largest source of NOx emissions in the San Joaquin Valley. Accordingly, to meet federal air quality attainment standards, the District's ozone and particulate matter attainment plans rely on a significant and rapid transition of HHD fleets to zero or near-zero emissions technologies.

For development projects which typically generate a high volume of HHD truck traffic (e.g., "high-cube" warehouses or distribution centers), there are HHD trucks traveling to-and-from the project location at longer distribution trip length distances. Since the Project may exceed the District significance thresholds, the District recommends that the following measures be considered by the County to reduce Project-related operational emissions:

- *Recommended Measure*: Fleets associated with operational activities utilize the cleanest available HHD trucks, including zero and near-zero technologies.

- *Recommended Measure*: All on-site service equipment (cargo handling, yard hostlers, forklifts, pallet jacks, etc.) utilize zero-emissions technologies.

10) Reduce Idling of Heavy-Duty Trucks

The goal of this strategy is to limit the potential for localized PM2.5 and toxic air contaminant impacts associated with the idling of Heavy-Duty trucks. The diesel exhaust from idling has the potential to impose significant adverse health and environmental impacts.

Since the Project is expected to result in HHD truck trips, the District recommends the DEIR include measures to ensure compliance of the state anti-idling regulation (13 CCR § 2485 and 13 CCR § 2480) and discuss the importance of limiting the amount of idling, especially near sensitive receptors. In addition, the District recommends the County consider the feasibility of implementing a more stringent 3-minute idling restriction and requiring appropriate signage and enforcement of idling restrictions.

11) Electric On-Site Off-Road and On-Road Equipment

Since the development project may include Heavy Industrial and Light Industrial uses, the Project may have the potential to result in increased use of off-road

equipment (e.g., forklifts) and on-road equipment (e.g., mobile yard trucks with the ability to move materials). The District recommends that the DEIR include requirements for project proponents to utilize electric or zero emission off-road and on-road equipment.

12) Under-fired Charbroilers

The Project may have restaurants with under-fired charbroilers. Such charbroilers may pose the potential for immediate health risk, particularly when located in densely populated areas or near sensitive receptors.

Since the cooking of meat can release carcinogenic PM2.5 species, such as polycyclic aromatic hydrocarbons, controlling emissions from new under-fired charbroilers will have a substantial positive impact on public health. The air quality impacts on neighborhoods near restaurants with under-fired charbroilers can be significant on days when meteorological conditions are stable, when dispersion is limited and emissions are trapped near the surface within the surrounding neighborhoods. This potential for neighborhood-level concentration of emissions during evening or multi-day stagnation events raises air quality concerns.

Furthermore, reducing commercial charbroiling emissions is essential to achieving attainment of multiple federal PM2.5 standards. Therefore, the District recommends that the DEIR include a measure requiring the assessment and potential installation, as technologically feasible, of particulate matter emission control systems for new large restaurants operating under-fired charbroilers.

The District is available to assist the County and project proponents with this assessment. Additionally, the District is currently offering substantial incentive funding that covers the full cost of purchasing, installing, and maintaining the system during a demonstration period covering two years of operation. Please contact the District at (559) 230-5800 or technology@valleyair.org for more information, or visit: https://ww2.valleyair.org/grants/restaurant-charbroiler-technology-partnership/

13) Vegetative Barriers and Urban Greening

The District suggests the County consider the feasibility of incorporating vegetative barriers and urban greening as a measure to further reduce air pollution exposure on sensitive receptors (e.g., residential units).

While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, vegetative barriers have been shown to be an additional measure to potentially reduce a population's exposure to air pollution through the interception of airborne particles and the update of gaseous pollutants. Examples of vegetative barriers include, but are not limited to the following: trees, bushes, shrubs, or a mix of these. Generally, a higher and thicker

vegetative barrier with full coverage will result in greater reductions in downwind pollutant concentrations. In the same manner, urban greening is also a way to help improve air quality and public health in addition to enhancing the overall beautification of a community with drought tolerant, low-maintenance greenery.

14) Clean Lawn and Garden Equipment in the Community

Since the Project consists of commercial development, gas-powered lawn and garden equipment have the potential to result in an increase of NOx and PM2.5 emissions. Utilizing electric lawn care equipment can provide residents with immediate economic, environmental, and health benefits. The District recommends the Project proponent consider the District's Clean Green Yard Machines (CGYM) program which provides incentive funding for replacement of existing gas powered lawn and garden equipment. More information on the District CGYM program and funding can be found at: https://ww2.valleyair.org/grants/clean-green-yard-machines-residential/
and https://ww2.valleyair.org/grants/zero-emission-landscaping-equipment-voucher-program/.

15) On-Site Solar Deployment

It is the policy of the State of California that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045. While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, the production of solar energy is contributing to improving air quality and public health. The District suggests that the County consider incorporating solar power systems as an emission reduction strategy for the Project.

16) Electric Infrastructure

The District recommends that the County require all nonresidential buildings be designed to provide electric infrastructure to support the use of on-road zero emissions vehicles, such as HHD trucks associated with a warehouse or commercial project.

To support and accelerate the installation of electric vehicle charging equipment and development of required infrastructure, the District offers incentives to public agencies, businesses, and property owners of multi-unit dwellings to install electric charging infrastructure (Level 2 and 3 chargers). The purpose of the District's Charge Up! Incentive program is to promote clean air alternative-fuel technologies and the use of low or zero-emission vehicles.

The District recommends that the County and project proponents install electric vehicle chargers at project sites, and at strategic locations.

Please visit https://ww2.valleyair.org/grants/charge-up for more information.

17) District's Bikeway Incentive Program

Incorporating design elements (e.g., installing bikeways) within the Project that enhance walkability and connectivity can result in an overall reduction of vehicles miles traveled (VMT) and improve air quality within the area. The Project may be eligible for funding through the District's Bikeway Incentive Program. The Bikeway Incentive Program provides funding for eligible Class 1 (Bicycle Path Construction), Class II (Bicycle Lane Striping), or Class III (Bicycle Route) projects. These incentives are designed to support the construction of new bikeway projects to promote clean air through the development of a widespread, interconnected network of bike paths, lanes, or routes and improving the general safety conditions for commuter bicyclists. Only municipalities, government agencies, or public educational institutions are eligible to apply. More information on the grant program can be found at:
https://ww2.valleyair.org/grants/bike-paths/

Guidelines and Project Eligibility for the grant program can be found at:
https://ww2.valleyair.org/media/drpijuw1/bikeway-program-guidelines-62515.pdf

18) Nuisance Odors

While offensive odors rarely cause any physical harm, they can be unpleasant, leading to considerable distress among the public and often resulting in citizen complaints.

The County should consider all available pertinent information to determine if the Project could have a significant impact related to nuisance odors. Nuisance odors may be assessed qualitatively taking into consideration the proposed business or industry type and its potential to create odors, as well as proximity to off-site receptors that potentially would be exposed to objectionable odors. The intensity of an odor source's operations and its proximity to receptors influences the potential significance of malodorous emissions. Any project with the potential to frequently expose members of the public to objectionable odors should be deemed to have a significant impact.

According to the District Guidance for Assessing and Mitigating air Quality Impacts (GAMAQI), a significant odor impact is defined as more than one confirmed complaint per year averaged over a three-year period, or three unconfirmed complaints per year averaged over a three-year period.

An unconfirmed complaint means that either the odor or air contaminant release could not be detected, or the source of the odor could not be determined.

The District is available to assist the County with information regarding specific facilities and categories of facilities, and associated odor complaint records.

19) District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (209) 557-6446.

19a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. Prior to construction, the Project proponent should submit to the District an application for an ATC. For further information or assistance, the project proponent may contact the District's SBA Office at (209) 557-6446.

19b) District Rule 9510 - Indirect Source Review (ISR)

The Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 2,000 square feet of commercial space.

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The ISR Rule requires developers to mitigate their NOx and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

Per Section 5.0 of the ISR Rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency. As of the date of this letter, the District has not received an AIA application for this Project. Please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510 so that proper mitigation and clean air design under ISR can be incorporated into the Project's design. One AIA application should be submitted for the entire Project.

Information about how to comply with District Rule 9510 can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview

The AIA application form can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview/forms-and-applications/

District staff is available to provide assistance, and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

19c) District Rule 9410 (Employer Based Trip Reduction)

The Project may be subject to District Rule 9410 (Employer Based Trip Reduction) if the project would result in employment of 100 or more "eligible" employees. District Rule 9410 requires employers with 100 or more "eligible" employees at a worksite to establish an Employer Trip Reduction Implementation Plan (eTRIP) that encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. Under an eTRIP plan, employers have the flexibility to select the options that work best for their worksites and their employees.

Information about District Rule 9410 can be found online at: https://ww2.valleyair.org/compliance/rule-9410-employer-based-trip-reduction/.

For additional information, you can contact the District by phone at 559-230-6000 or by e-mail at etrip@valleyair.org

19d) District Rule 4002 (National Emissions Standards for Hazardous Air Pollutants)

In the event an existing building will be renovated, partially demolished or removed, the Project may be subject to District Rule 4002. This rule requires a thorough inspection for asbestos to be conducted before any regulated facility is demolished or renovated. Information on how to comply with District Rule 4002 can be found online at: https://ww2.valleyair.org/compliance/demolition-renovation/

19e) District Rule 4601 (Architectural Coatings)

The Project will be subject to District Rule 4601 since it is expected to utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at: https://ww2.valleyair.org/media/tkgjeusd/rule-4601.pdf

19f) District Regulation VIII (Fugitive PM10 Prohibitions)

The project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities.*

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities).

For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950.

The application for both the Construction Notification and Dust Control Plan can be found online at: https://ww2.valleyair.org/media/fm3jrbsq/dcp-form.docx

Information about District Regulation VIII can be found online at: https://ww2.valleyair.org/dustcontrol

19g) District Rule 4901 - Wood Burning Fireplaces and Heaters

The purpose of this rule is to limit emissions of carbon monoxide and particulate matter from wood burning fireplaces, wood burning heaters, and outdoor wood burning devices. This rule establishes limitations on the installation of new wood burning fireplaces and wood burning heaters. Specifically, at elevations below 3,000 feet in areas with natural gas service, no person shall install a wood burning fireplace, low mass fireplace, masonry heater, or wood burning heater.

Information about District Rule 4901 can be found online at: https://ww2.valleyair.org/compliance/residential-wood-smoke-reduction-program/

19h) Other District Rules and Regulations

The Project may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

20) District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent.

If you have any questions or require further information, please contact Jacob Torrez by e-mail at Jacob.torrez@valleyair.org or by phone at (559) 230-6558.

Sincerely,

Tom Jordan
Director of Policy and Government Affairs



For: Mark Montelongo
Program Manager

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

January 16, 2025

Brian Millar
County of San Joaquin
Community Development Department
1810 East Hazelton Avenue
Stockton, CA, 95205

Project: Notice of Preparation of a Draft Environmental Impact Report for the Pacific Gateway Specific Plan Project

District CEQA Reference No: 20241414

Dear Mr. Millar:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) from the County of San Joaquin (County) for the Pacific Gateway Specific Plan Project. Per the NOP, the project consists of the development of a 1,576.7-acre site into five areas totaling 26,307,150 square feet of development, including industrial primarily, commercial, education, recreational, and utility facilities such as parks, roads, water and sewer systems, stormwater basins, and a fire station (Project). The Project is located north and east of Interstate 580 and north of State Route 132, approximately two miles west of I-5 in San Joaquin County, CA.

The District offers the following comments at this time regarding the Project:

1) Project Related Emissions

At the federal level under the National Ambient Air Quality Standards (NAAQS), the District is designated as extreme nonattainment for the 8-hour ozone standards and serious nonattainment for the particulate matter less than 2.5 microns in size (PM2.5) standards. At the state level under California Ambient Air Quality Standards (CAAQS), the District is designated as nonattainment for the 8-hour ozone, PM10, and PM2.5 standards.

The District's initial review of the Project concludes that emissions resulting from construction and/or operation of the Project would exceed any of the following significance thresholds as identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

Samir Sheikh
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: (661) 392-5500 FAX: (661) 392-5585

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The District recommends that a more detailed preliminary review of the Project be conducted for the Project's construction and operational emissions.

1a) Construction Emissions

The District recommends, to reduce impacts from construction-related diesel exhaust emissions, the Project should utilize the cleanest available off-road construction equipment.

1b) Operational Emissions

Operational (ongoing) air emissions from mobile sources and stationary sources should be analyzed separately. For reference, the District's significance thresholds are identified in the District's Guidance for Assessing and Mitigating Air Quality Impacts: https://ww2.valleyair.org/media/g4nl3p0g/gamaqi.pdf.

Recommended Mitigation Measure: At a minimum, project related impacts on air quality should be reduced to levels below the District's significance thresholds through incorporation of design elements such as the use of cleaner Heavy Heavy-Duty (HHD) trucks and vehicles, measures that reduce Vehicle Miles Traveled (VMTs), and measures that increase energy efficiency. More information on transportation mitigation measures can be found at: https://ww2.valleyair.org/media/ob0pweru/clean-air-measures.pdf

1c) Project Trip Length for HHD Truck Travel

The County's environmental review should adequately characterize and justify an appropriate trip length distance for off-site HHD truck travel to and from the Project site. Based on the following factors: 1) the Project includes 24,675,000 square feet of industrial development with potential warehousing that could be expected to generate a high volume of HHD truck trips, and 2) HHD trucks generally travel further distances for distribution. The District recommends the environmental review include a discussion characterizing an appropriate trip length distance for HHD truck travel, and reflect such appropriate distance supported by project-specific factors.

1d) Recommended Model for Quantifying Air Emissions

Project-related criteria pollutant emissions from construction and operational sources should be identified and quantified. Emissions analysis should be performed using the California Emission Estimator Model (CalEEMod), which uses the most recent CARB-approved version of relevant emissions models and emission factors. CalEEMod is available to the public and can be downloaded from the CalEEMod website at: www.caleemod.com.

2) Health Risk Screening/Assessment

The County should evaluate the risk associated with the Project for sensitive receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) in the area and mitigate any potentially significant risk to help limit exposure of sensitive receptors to emissions.

To determine potential health impacts on surrounding receptors (residences, businesses, hospitals, day-care facilities, health care facilities, etc.) a Prioritization and/or a Health Risk Assessment (HRA) should be performed for the Project. These health risk determinations should quantify and characterize potential Toxic Air Contaminants (TACs) identified by the Office of Environmental Health Hazard Assessment/California Air Resources Board (OEHHA/CARB) that pose a present or potential hazard to human health.

Health risk analyses should include all potential air emissions from the project, which include emissions from construction of the project, including multi-year construction, as well as ongoing operational activities of the project. Note, two common sources of TACs can be attributed to diesel exhaust emitted from heavy-duty off-road earth moving equipment during construction, and from ongoing operation of heavy-duty on-road trucks.

Prioritization (Screening Health Risk Assessment):
A "Prioritization" is the recommended method for a conservative screening-level health risk assessment. The Prioritization should be performed using the California Air Pollution Control Officers Association's (CAPCOA) methodology. Please contact the District for assistance with performing a Prioritization analysis.

The District recommends that a more refined analysis, in the form of an HRA, be performed for any project resulting in a Prioritization score of 10 or greater. This is because the prioritization results are a conservative health risk representation, while the detailed HRA provides a more accurate health risk evaluation.

Health Risk Assessment:
Prior to performing an HRA, it is strongly recommended that land use agencies/ project proponents develop and submit for District review a health risk modeling protocol that outlines the sources and methodologies that will be used to perform the HRA.

A development project would be considered to have a potentially significant health risk if the HRA demonstrates that the health impacts would exceed the District's established risk thresholds, which can be found here: https://ww2.valleyair.org/permitting/ceqa/.

A project with a significant health risk would trigger all feasible mitigation measures. The District strongly recommends that development projects that result in a significant health risk not be approved by the land use agency.

The District is available to review HRA protocols and analyses. For HRA submittals please provide the following information electronically to the District for review:

- HRA (AERMOD) modeling files
- HARP2 files
- Summary of emissions source locations, emissions rates, and emission factor calculations and methodologies.

For assistance, please contact the District's Technical Services Department by:

- E-Mailing inquiries to: hramodeler@valleyair.org
- Calling (559) 230-5900

Recommended Measure: Development projects resulting in TAC emissions should be located an adequate distance from residential areas and other sensitive receptors to prevent the creation of a significant health risk in accordance to CARB's Air Quality and Land Use Handbook: A Community Health Perspective located at https://ww2.arb.ca.gov/our-work/programs/resource-center/strategy-development/land-use-resources.

3) Health Impact Discussion

As required by the recent decision in Sierra Club v. County of Fresno (2018) 6 Cal.4th 502, a reasonable effort to discuss relevant specifics regarding the connection between potential adverse air quality impacts from the Project with the likely nature and magnitude of potential health impacts may be required. If the potential health impacts from the Project cannot be specifically correlated, explain what is known and why, given scientific constraints, potential health impacts cannot be translated.

4) Ambient Air Quality Analysis

An Ambient Air Quality Analysis (AAQA) uses air dispersion modeling to determine if emissions increases from a project will cause or contribute to a violation of State or National Ambient Air Quality Standards. The District recommends an AAQA be performed for the Project if emissions exceed 100 pounds per day of any pollutant.

An AAQA uses air dispersion modeling to determine if emission increase from a project will cause or contribute to a violation of State or National Ambien Air Quality Standards. An acceptable analysis would include emissions from both project-

specific permitted and non-permitted equipment and activities. The District recommends consultation with District staff to determine the appropriate model and input data to use in the analysis.

Specific information for assessing significance, including screening tools and modeling guidance, is available online at the District's website: https://ww2.valleyair.org/permitting/ceqa/.

5) Voluntary Emission Reduction Agreement

Criteria pollutant emissions may result in emissions exceeding the District's significance thresholds, potentially resulting in a significant impact on air quality. When a project is expected to have a significant impact, the District recommends the DEIR also include a discussion on the feasibility of implementing a Voluntary Emission Reduction Agreement (VERA) for this Project.

A VERA is a mitigation measure by which the project proponent provides pound-for-pound mitigation of emissions increases through a process that develops, funds, and implements emission reduction projects, with the District serving a role of administrator of the emissions reduction projects and verifier of the successful mitigation effort. To implement a VERA, the project proponent and the District enter into a contractual agreement in which the project proponent agrees to mitigate project specific emissions by providing funds for the District's incentives programs. The funds are disbursed by the District in the form of grants for projects that achieve emission reductions. Thus, project-related impacts on air quality can be mitigated. Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of agricultural equipment with the latest generation technologies.

In implementing a VERA, the District verifies the actual emission reductions that have been achieved as a result of completed grant contracts, monitors the emission reduction projects, and ensures the enforceability of achieved reductions. After the project is mitigated, the District certifies to the Lead Agency that the mitigation is completed, providing the Lead Agency with an enforceable mitigation measure demonstrating that project-related emissions have been mitigated. To assist the Lead Agency and project proponent in ensuring that the environmental document is compliant with CEQA, the District recommends the environmental document includes an assessment of the feasibility of implementing a VERA.

6) Industrial/Warehouse Emission Reduction Strategies

The District recommends the County incorporate emission reduction strategies that can reduce potential harmful health impacts, such as those listed below:

- Require cleanest available heavy-duty trucks and off-road equipment (see comment 8)
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- Require projects be designed to provide the necessary infrastructure to support use of zero-emissions on-road vehicles and off-road equipment (see comment 15)
- Require all building roofs are solar-ready
- Require all portions of roof tops that are not covered with solar panels are constructed to have light colored roofing material with a solar reflective index of greater than 78
- Ensure rooftop solar panels are installed and operated to supply 100% of the power needed to operate all non-refrigerated portions of the development project
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- Inform the project proponent of the incentive programs (e.g., Carl Moyer Program and Voucher Incentive Program) offered to reduce air emissions from the Project
- Ensure all landscaping be drought tolerant

7) Truck Routing

Truck routing involves the assessment of which roads HHD trucks take to and from their destination, and the emissions impact that the HHD trucks may have on residential communities and sensitive receptors.

Since the Project will result in an increase of industrial uses, the District recommends the County evaluate HHD truck routing patterns for the Project, with the aim of limiting exposure of residential communities and sensitive receptors to emissions. This evaluation would consider the current truck routes, the quantity and type of each truck (e.g., Medium Heavy-Duty, HHD, etc.), the destination and origin of each trip, traffic volume correlation with the time of day or the day of the week, overall Vehicle Miles Traveled (VMT), and associated exhaust emissions. The truck routing evaluation would also identify alternative truck routes and their impacts on VMT and air quality.

8) Cleanest Available Heavy-Duty Trucks

The San Joaquin Valley will not be able to attain stringent health-based federal air quality standards without significant reductions in emissions from HHD trucks, the single largest source of NOx emissions in the San Joaquin Valley. Accordingly, to meet federal air quality attainment standards, the District's ozone and particulate matter attainment plans rely on a significant and rapid transition of HHD fleets to zero or near-zero emissions technologies.

Since the Project includes industrial uses which could result in a high volume of HHD truck traffic (e.g., "high-cube" warehouses or distribution centers), there are HHD trucks traveling to-and-from the project location at longer distribution trip length distances. Since the Project would exceed the District significance thresholds, the District recommends that the following measures be considered by the County to reduce Project-related operational emissions:

- *Recommended Measure*: Fleets associated with operational activities utilize the cleanest available HHD trucks, including zero and near-zero technologies.

- *Recommended Measure*: All on-site service equipment (cargo handling, yard hostlers, forklifts, pallet jacks, etc.) utilize zero-emissions technologies.

9) Reduce Idling of Heavy-Duty Trucks

The goal of this strategy is to limit the potential for localized PM2.5 and toxic air contaminant impacts associated with the idling of Heavy-Duty trucks. The diesel exhaust from idling has the potential to impose significant adverse health and environmental impacts.

Since the Project will result in HHD truck trips, the District recommends the DEIR include measures to ensure compliance of the state anti-idling regulation (13 CCR § 2485 and 13 CCR § 2480) and discuss the importance of limiting the amount of idling, especially near sensitive receptors. In addition, the District recommends the County consider the feasibility of implementing a more stringent 3-minute idling restriction and requiring appropriate signage and enforcement of idling restrictions.

10) Electric On-Site Off-Road and On-Road Equipment

Since the Project will include Industrial uses, the Project may have the potential to result in increased use of off-road equipment (e.g., forklifts) and on-road equipment (e.g., mobile yard trucks with the ability to move materials). The District recommends that the DEIR include requirements for project proponents to utilize electric or zero emission off-road and on-road equipment.

11) Under-fired Charbroilers

The Project may have restaurants with under-fired charbroilers. Such charbroilers may pose the potential for immediate health risk, particularly when located in densely populated areas or near sensitive receptors.

Since the cooking of meat can release carcinogenic PM2.5 species, such as polycyclic aromatic hydrocarbons, controlling emissions from new under-fired charbroilers will have a substantial positive impact on public health. The air quality impacts on neighborhoods near restaurants with under-fired charbroilers can be significant on days when meteorological conditions are stable, when dispersion is limited and emissions are trapped near the surface within the surrounding neighborhoods. This potential for neighborhood-level concentration of emissions during evening or multi-day stagnation events raises air quality concerns.

Furthermore, reducing commercial charbroiling emissions is essential to achieving attainment of multiple federal PM2.5 standards. Therefore, the District recommends that the DEIR include a measure requiring the assessment and potential installation, as technologically feasible, of particulate matter emission control systems for new large restaurants operating under-fired charbroilers.

The District is available to assist the County and project proponents with this assessment. Additionally, the District is currently offering substantial incentive funding that covers the full cost of purchasing, installing, and maintaining the system during a demonstration period covering two years of operation. Please contact the District at (559) 230-5800 or technology@valleyair.org for more information, or visit: https://ww2.valleyair.org/grants/restaurant-charbroiler-technology-partnership/

12) Vegetative Barriers and Urban Greening

There are residential units located east and west of the Project. The District suggests the County consider the feasibility of incorporating vegetative barriers and urban greening as a measure to further reduce air pollution exposure on sensitive receptors (e.g., residential units).

While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, vegetative barriers have been shown to be an additional measure to potentially reduce a population's exposure to air pollution through the interception of airborne particles and the update of gaseous pollutants. Examples of vegetative barriers include, but are not limited to the following: trees, bushes, shrubs, or a mix of these. Generally, a higher and thicker vegetative barrier with full coverage will result in greater reductions in downwind pollutant concentrations. In the same manner, urban greening is also a way to help improve air quality and public health in addition to enhancing the overall beautification of a community with drought tolerant, low-maintenance greenery.

13) Clean Lawn and Garden Equipment in the Community

Since the Project consists of commercial development, gas-powered commercial lawn and garden equipment have the potential to result in an increase of NOx and PM2.5 emissions. Utilizing electric lawn care equipment can provide residents with immediate economic, environmental, and health benefits. The District recommends the Project proponent consider the District's Clean Green Yard Machines (CGYM) program which provides incentive funding for replacement of existing gas powered lawn and garden equipment. More information on the District CGYM program and funding can be found at: https://ww2.valleyair.org/grants/clean-green-yard-machines-residential/
and https://ww2.valleyair.org/grants/zero-emission-landscaping-equipment-voucher-program/.

14) On-Site Solar Deployment

It is the policy of the State of California that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers by December 31, 2045. While various emission control techniques and programs exist to reduce air quality emissions from mobile and stationary sources, the production of solar energy is contributing to improving air quality and public health. The District suggests that the County consider incorporating solar power systems as an emission reduction strategy for the Project.

15) Electric Infrastructure

The District recommends that the County require all nonresidential buildings be designed to provide electric infrastructure to support the use of on-road zero emissions vehicles, such as HHD trucks associated with the Project.

Additionally, to support and accelerate the installation of electric vehicle charging equipment and development of required infrastructure, the District offers incentives to public agencies, and businesses, to install electric charging infrastructure (Level 2 and 3 chargers). The purpose of the District's Charge Up! Incentive program is to promote clean air alternative-fuel technologies and the use of low or zero-emission vehicles. The District recommends that the County and project proponents install electric vehicle chargers at project sites, and at strategic locations.

Please visit https://ww2.valleyair.org/grants/charge-up for more information.

16) District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (209) 557-6446.

16a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to Operate (PTO) from the District. District Rule 2201 (New and Modified

Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. Prior to construction, the Project proponent should submit to the District an application for an ATC. For further information or assistance, the project proponent may contact the District's SBA Office at (209) 557-6446.

16b) District Rule 9510 - Indirect Source Review (ISR)

The Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 9,000 square feet for a mixed use development.

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The ISR Rule requires developers to mitigate their NOx and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

Per Section 5.0 of the ISR Rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency. As of the date of this letter, the District has not received an AIA application for this Project. Please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510 so that proper mitigation and clean air design under ISR can be incorporated into the Project's design. One AIA application should be submitted for the entire Project.

Information about how to comply with District Rule 9510 can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview

The AIA application form can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview/forms-and-applications/

District staff is available to provide assistance, and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

16c) District Rule 9410 (Employer Based Trip Reduction)

The Project may be subject to District Rule 9410 (Employer Based Trip Reduction) if the project would result in employment of 100 or more "eligible" employees. District Rule 9410 requires employers with 100 or more "eligible" employees at a worksite to establish an Employer Trip Reduction Implementation Plan (eTRIP) that encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. Under an eTRIP plan, employers have the flexibility to select the options that work best for their worksites and their employees.

Information about District Rule 9410 can be found online at: https://ww2.valleyair.org/compliance/rule-9410-employer-based-trip-reduction/.

For additional information, you can contact the District by phone at 559-230-6000 or by e-mail at etrip@valleyair.org

16d) District Rule 4002 (National Emissions Standards for Hazardous Air Pollutants)

In the event an existing building will be renovated, partially demolished or removed, the Project may be subject to District Rule 4002. This rule requires a thorough inspection for asbestos to be conducted before any regulated facility is demolished or renovated. Information on how to comply with District Rule 4002 can be found online at: https://ww2.valleyair.org/compliance/demolition-renovation/

16e) District Rule 4601 (Architectural Coatings)

The Project may be subject to District Rule 4601 since it may utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at: https://ww2.valleyair.org/media/tkgjeusd/rule-4601.pdf

16f) District Regulation VIII (Fugitive PM10 Prohibitions)

The project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities.*

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950.

The application for both the Construction Notification and Dust Control Plan can be found online at: https://ww2.valleyair.org/media/fm3jrbsq/dcp-form.docx

Information about District Regulation VIII can be found online at: https://ww2.valleyair.org/dustcontrol

16g) Other District Rules and Regulations

The Project may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

17) District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent.

If you have any questions or require further information, please contact Eric McLaughlin by e-mail at eric.mclaughlin@valleyair.org or by phone at (559) 230-5808.

Sincerely,

Tom Jordan
Director of Policy and Government Affairs



For: Mark Montelongo
Program Manager

February 21, 2025

Sent via email

Brian Millar, Contract Planner
San Joaquin County Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
(209) 468-0291
bmillar@sjgov.org

Re: Pacific Gateway Project Notice of Preparation

Dear Mr. Millar,

I write to inform you that the County of San Joaquin failed to notify the Center for Biological Diversity ("Center") regarding the County's December 20, 2024 publication of a new Notice of Preparation for the Pacific Gateway Project ("Project.") This failure deprived the Center of the opportunity to meaningfully comment on the scope and contents of the environmental impact report and violates the California Environmental Quality Act's clear mandates to provide notice to interested parties.

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in San Joaquin County. The Center frequently participates in environmental review for development projects in California and submits comment letters throughout the CEQA environmental review process.

On November 21, 2023, the Center for Biological Diversity timely submitted comments on the NOP for the Pacific Gateway Project that the County released on October 23, 2023. In her cover email, Dr. Sofia Prado-Irwin asked the County to add herself, Frances Tinney and Theresa Rettinghouse to the notice list for the Project. (Exhibit A.) On December 21, 2023, Dr. Prado-Irwin repeated the request and was told we would be added to the list. (Exhibit A.) On December 20, 2024, the County released a new NOP for the Pacific Gateway project and did not notify the Center or any staff members. To date, the County has not provided the Center with notice of any

Project developments, nor has the County explained why it failed to provide notice. The County has no apparent justification for the failure to provide notice.

The California Environmental Quality Act ("CEQA") requires that lead agencies provide notice to the name and last known address of all individuals and organizations that have previously made a written request for such notice. (Pub. Resources Code, 21080.4, subd. (a), 21092.2, subd. (a); CEQA Guidelines 15082, subd. (a).) The Center has made two written requests, and the County confirmed that the requests were received. By failing to notify the Center before the scoping period closed, the County has deprived the Center of its right to submit information or comments to the County to assist in the preparation of the EIR. (CEQA Guidelines 15084, subd. (c).)

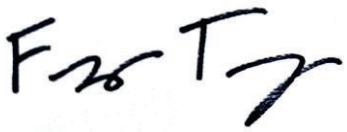
The December 2024 NOP, just like the October 2023 NOP, concerns Ridgeline Property Group's proposal to build roughly 25 million square feet of industrial development on land north and east of Interstate 580 and north of State Route 132. The December 2024 NOP acknowledges that it concerns a slightly altered version of the same project discussed in the October 23, 2023 NOP and that it represents the next step in the applicant's ongoing effort to get that Project approved. The December 2024 NOP says that the applicant redesigned the Project in response to "valuable input" received from the community on the original application. Anyone who commented on and requested notice of the version of the Project contemplated in the December 2024 NOP is entitled to notice of the next stage of environmental review for that Project. Here, the next stage of the process came in the form of another NOP. The Center, and any other organization that requested notice, was entitled to receive that notice.

Should the County go forward with preparing and circulating a DEIR after a deficient scoping process, it will do so in violation of CEQA. The Center requests that the County recirculate the NOP and reopen the comment period for at least 30 days in order to give the Center—and any other potentially interested parties who were not notified of the document's availability—time to review and comment on the document.

Given the possibility that the Center will be required to pursue legal remedies to ensure that the County complies with its legal obligations including those arising under CEQA, we would like to remind the County of its statutory duty to maintain and preserve all documents and communications that may constitute part of the "administrative record" of this proceeding. (§ 21167.6(e); *Golden Door Properties, LLC v. Superior Court* (2020) 53 Cal.App.5th 733, 762-65.) The administrative record encompasses any and all documents and communications that relate to any and all actions taken by the County with respect to the Project, and includes "pretty much everything that ever came near a proposed [project] or [] the agency's compliance with CEQA . . . ." (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further includes all correspondence, emails, and text messages sent to or received by the County's representatives or employees, that relate to the Project, including any correspondence, emails, and text messages sent between the County's representatives or employees and the Applicant's representatives or employees. Maintenance and preservation of the administrative record requires that, *inter alia*, the County (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

We request a response to this letter. Please direct your response to me at the email listed below and do not hesitate to call me with any questions.

Sincerely,



Frances Tinney
Attorney
Center for Biological Diversity
2100 Franklin St., Suite 375
Oakland, CA 94612
(509) 432-9256
ftinney@biologicaldiversity.org

Exhibit A

Outlook

RE: Comments on Pacific Gateway Project NOP, SCH No. 2023100642

From Sofia Prado-Irwin <spradoirwin@biologicaldiversity.org>
Date Fri 12/22/2023 9:40 AM
To Millar, Brian [CDD] <bmillar@sjgov.org>
Cc Frances Tinney <FTinney@biologicaldiversity.org>; Theresa Rettinghouse <trettinghouse@biologicaldiversity.org>; Planning [CDD] <planning@sjgov.org>

Good morning Mr. Millar,
Thank you for the confirmation, much appreciated.

Happy Holidays,

Sofia Prado-Irwin, PhD
pronouns: she/her/hers
Staff Scientist
Urban Wildlands Program
Center for Biological Diversity
spradoirwin@biologicaldiversity.org
(510) 844-7100 x548

From: Millar, Brian [CDD] <bmillar@sjgov.org>
Sent: Thursday, December 21, 2023 7:14 PM
To: Sofia Prado-Irwin <spradoirwin@biologicaldiversity.org>
Cc: Frances Tinney <FTinney@biologicaldiversity.org>; Theresa Rettinghouse <trettinghouse@biologicaldiversity.org>; Planning [CDD] <planning@sjgov.org>
Subject: RE: Comments on Pacific Gateway Project NOP, SCH No. 2023100642

Good evening,
Yes, the comments were received and were passed along to the project EIR consultant; this includes the references you had provided.
We'll be sure to add you to the County's contact list for this project as well.
Please let me know of any additional questions…
Kind regards,
Brian Millar
Project Planner
Ph: 209.468.0291

From: Sofia Prado-Irwin <spradoirwin@biologicaldiversity.org>
Sent: Thursday, December 21, 2023 3:28 PM
To: Millar, Brian [CDD] <bmillar@sjgov.org>
Cc: Frances Tinney <FTinney@biologicaldiversity.org>; Theresa Rettinghouse <trettinghouse@biologicaldiversity.org>; Planning [CDD] <planning@sjgov.org>
Subject: RE: Comments on Pacific Gateway Project NOP, SCH No. 2023100642

Good afternoon Mr. Millar,
I am following up on an email I sent last month with comments submitted on behalf of the Center for Biological Diversity regarding the Pacific Gateway Project (State Clearinghouse No. 2023100642). I have not received confirmation that you received our comments, which were submitted ahead of the deadline. Please confirm receipt of the attached letter in the previous email as well as the references included in the OneDrive link below. Additionally, please add me and my colleagues Frances Tinney and Theresa Rettinghouse (cc'd) to the notice list for the project.

Thank you,

Sofia Prado-Irwin, PhD
pronouns: she/her/hers
Staff Scientist
Urban Wildlands Program
Center for Biological Diversity
spradoirwin@biologicaldiversity.org
(510) 844-7100 x548

From: Sofia Prado-Irwin
Sent: Tuesday, November 21, 2023 3:16 PM
To: bmillar@sjgov.org
Cc: Frances Tinney <FTinney@biologicaldiversity.org>; Theresa Rettinghouse <TRettinghouse@biologicaldiversity.org>
Subject: Comments on Pacific Gateway Project NOP, SCH No. 2023100642

Good afternoon Mr. Millar,
Please accept these comments submitted on behalf of the Center for Biological Diversity regarding the Pacific Gateway Project (State Clearinghouse No. 2023100642). Please add me and my colleagues Frances Tinney and Theresa Rettinghouse (cc'd) to the notice list for the project.

Please confirm receipt of the attached letter and of the references included in the OneDrive link below:
Pacific Gateway references

Thank you,

Sofia Prado-Irwin, PhD
pronouns: she/her/hers
Staff Scientist
Urban Wildlands Program
Center for Biological Diversity - Denver
spradoirwin@biologicaldiversity.org
(510) 844-7100 x548

From: DoNotReply@auburnrancheria.com <DoNotReply@auburnrancheria.com>
Sent: Thursday, January 2, 2025 10:39 AM
To: Millar, Brian [CDD] <bmillar@sjgov.org>
Subject: UAIC Response for Pacific Gateway Project



On behalf of the Tribal Historic Preservation Department of the United Auburn Indian Community (UAIC), thank you for providing the Pacific Gateway Project notification received on 12/26/2024. After a thorough assessment, including a detailed review within our Tribal Historic Information System, we have determined that this project is not likely to affect resources of cultural significance to UAIC and government-to-government consultation is not required. In the event of an unanticipated discovery of a cultural resource, please contact us immediately. Kindly include this response in your administrative record.

Sincerely,

Josef Fore, UAIC Tribal Historic Preservation Officer

**This is an automated email. Replies to this address will not be received.

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ROB BONTA
Attorney General

State of California
DEPARTMENT OF JUSTICE

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act

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In carrying out its duty to enforce laws across California, the California Attorney General's Bureau of Environmental Justice (Bureau)[1] regularly reviews proposed warehouse projects for compliance with the California Environmental Quality Act (CEQA) and other laws. When necessary, the Bureau submits comment letters to lead agencies regarding warehouse projects, and in rare cases the Bureau has filed litigation to enforce CEQA.[2] This document builds upon the Bureau's work on warehouse projects, collecting information gained from the Bureau's review of hundreds of warehouse projects across the state.[3] It is meant to help lead agencies pursue CEQA compliance and promote environmentally-just development as they confront warehouse project proposals.[4] While CEQA analysis is necessarily project-specific, this document provides information on feasible best practices and mitigation measures, nearly all of which have been adapted from actual warehouse projects in California.

I. Background

In recent years, the proliferation of e-commerce and rising consumer expectations of rapid shipping have contributed to a boom in warehouse development.[5] California, with its ports, population centers, and transportation network, has found itself at the center of this trend. In 2020, the Ports of Los Angeles, Long Beach, and Oakland collectively accounted for over 34% of all United States international container trade.[6] The Ports of Los Angeles and Long Beach alone generate about 35,000 container truck trips every day.[7] Accordingly, the South Coast Air Basin now contains approximately 3,000 warehouses of over 100,000 square feet each, with a total warehouse capacity of approximately 700 million square feet, an increase of 20 percent over the last five years.[8] This trend has only accelerated, with e-commerce growing to

[1] https://oag.ca.gov/environment/justice.
[2] https://oag.ca.gov/environment/ceqa; *People of the State of California v. City of Fontana* (Super. Ct. San Bernardino County, No. CIVSB2121829); *South Central Neighbors United et al. v. City of Fresno et al.* (Super. Ct. Fresno County, No. 18CECG00690).
[3] This September 2022 version revises and replaces the prior March 2021 version of this document.
[4] Anyone reviewing this document to determine CEQA compliance responsibilities should consult their own attorney for legal advice.
[5] As used in this document, "warehouse" or "logistics facility" is defined as a facility consisting of one or more buildings that stores cargo, goods, or products on a short- or long-term basis for later distribution to businesses and/or retail customers.
[6] Data from the Bureau of Transportation Statistics, Container TEUs (Twenty-foot Equivalent Units) (2020), https://data.bts.gov/stories/s/Container-TEU/x3fb-aeda/ (Ports of Los Angeles, Long Beach, and Oakland combined for 14.157 million TEUs, 34% of 41.24 million TEUs total nationwide) (last accessed September 18, 2022).
[7] U.S. Dept. of Transportation, Federal Highway Administration, *FHWA Operations Support – Port Peak Pricing Program Evaluation* (2020), available at https://ops.fhwa.dot.gov/publications/fhwahop09014/sect2.htm (last accessed September 18, 2022).
[8] South Coast Air Qual. Mgmt. Dist., *Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305*, at 7-8, 41 (May 2021).

13% of all retail sales and 2021 being a second consecutive record year for new warehouse space leased.[9] The latest data and forecasts predict that the next wave of warehouse development will be in the Central Valley.[10]

When done properly, these activities can contribute to the economy and consumer welfare. However, imprudent warehouse development can harm local communities and the environment. Among other pollutants, diesel trucks visiting warehouses emit nitrogen oxide (NO_x)—a primary precursor to smog formation and a significant factor in the development of respiratory problems like asthma, bronchitis, and lung irritation—and diesel particulate matter (a subset of fine particular matter that is smaller than 2.5 micrometers)—a contributor to cancer, heart disease, respiratory illnesses, and premature death.[11] Trucks and on-site loading activities can also be loud, bringing disruptive noise levels during 24/7 operation that can cause hearing damage after prolonged exposure.[12] The hundreds, and sometimes thousands, of daily truck and passenger car trips that warehouses generate contribute to traffic jams, deterioration of road surfaces, and traffic accidents.

These environmental impacts also tend to be concentrated in neighborhoods already suffering from disproportionate health impacts and systemic vulnerability. For example, a comprehensive study by the South Coast Air Quality Management District found that communities located near large warehouses scored far higher on California's environmental justice screening tool, which measures overall pollution and demographic vulnerability.[13] That

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[9] U.S. Census Bureau News, Quarterly Retail E-Commerce Sales 4th Quarter 2021 (February 22, 2022), https://www.census.gov/retail/mrts/www/data/pdf/ec_current.pdf (last accessed September 18, 2022); CBRE Research, *2022 North America Industrial Big Box Report: Review and Outlook*, at 2-3 (March 2022), *available at* https://www.cbre.com/insights/reports/2022-north-america-industrial-big-box#download-report (last accessed September 18, 2022).

[10] CBRE Research, *supra note* 9, at 4, 36; New York Times, *Warehouses Are Headed to the Central Valley, Too* (Jul. 22, 2020), *available* at https://www.nytimes.com/2020/07/22/us/coronavirus-ca-warehouse-workers.html.

[11] California Air Resources Board, Nitrogen Dioxide & Health, https://ww2.arb.ca.gov/resources/nitrogen-dioxide-and-health (last accessed September 18, 2022) (NOx); California Air Resources Board, Summary: Diesel Particular Matter Health Impacts, https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts (last accessed September 18, 2022); Office of Environmental Health Hazard Assessment and American Lung Association of California, Health Effects of Diesel Exhaust, https://oehha.ca.gov/media/downloads/calenviroscreen/indicators/diesel4-02.pdf (last accessed September 18, 2022) (DPM).

[12] Noise Sources and Their Effects, https://www.chem.purdue.edu/chemsafety/Training/PPETrain/dblevels.htm (last accessed September 18, 2022) (a diesel truck moving 40 miles per hour, 50 feet away, produces 84 decibels of sound).

[13] South Coast Air Quality Management District, "Final Socioeconomic Assessment for Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305" (May 2021), at 4-5.

study concluded that, compared to the South Coast Air Basin averages, communities in the South Coast Air Basin near large warehouses had a substantially higher proportion of people of color; were exposed to more diesel particulate matter; had higher rates of asthma, cardiovascular disease, and low birth weights; and had higher poverty and unemployment rates.[14] Each area has its own unique history, but many of these impacts and vulnerabilities reflect historic redlining practices in these communities, which devalued land and concentrated poverty, racial outgroups, and pollution into designated areas.[15]

II. Proactive Planning: General Plans, Local Ordinances, and Good Neighbor Policies

To systematically guide warehouse development, we encourage local governing bodies to proactively plan for logistics projects in their jurisdictions. Proactive planning allows jurisdictions to prevent land use conflicts before they materialize and direct sustainable development. Benefits also include providing a predictable business environment, protecting residents from environmental harm, and setting consistent expectations jurisdiction-wide.

Proactive planning can take many forms. Land use designation and zoning decisions should channel development into appropriate areas. For example, establishing industrial districts near major highway and rail corridors but away from sensitive receptors[16] can help attract investment while avoiding conflicts between warehouse facilities and residential communities. Transition zones with lighter industrial and commercial land uses may also help minimize conflicts between residential and industrial uses.

In addition, general plan policies, local ordinances, and good neighbor policies should set minimum standards for logistics projects. General plan policies can be incorporated into existing economic development, land use, circulation, or other related general plan elements. Many jurisdictions alternatively choose to consolidate policies in a separate environmental justice element. Adopting general plan policies to guide warehouse development may also help

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[14] *Id*. at 5-7.

[15] Beginning in the 1930s, federal housing policy directed investment away from Black, immigrant, and working-class communities by color-coding neighborhoods according to the purported "riskiness" of loaning to their residents. In California cities where such "redlining" maps were drawn, nearly all of the communities where warehouses are now concentrated were formerly coded "red," signifying the least desirable areas where investment was to be avoided. *See* University of Richmond Digital Scholarship Lab, Mapping Inequality, https://dsl.richmond.edu/panorama/redlining/#loc=12/33.748/-118.272&city=los-angeles-ca (Los Angeles), https://dsl.richmond.edu/panorama/redlining/#loc=13/32.685/-117.132&city=san-diego-ca (San Diego), https://dsl.richmond.edu/panorama/redlining/#loc=11/37.81/-122.38&city=oakland-ca (Oakland), https://dsl.richmond.edu/panorama/redlining/#loc=13/37.956/-121.326&city=stockton-ca (Stockton), https://dsl.richmond.edu/panorama/redlining/#loc=12/36.751/-119.86&city=fresno-ca (Fresno) (all last accessed September 18, 2022).

[16] In this document, "sensitive receptors" refers to residences, schools, public recreation facilities, health care facilities, places of worship, daycare facilities, community centers, or incarceration facilities.

jurisdictions comply with their obligations under SB 1000, which requires local government general plans to identify objectives and policies to reduce health risks in disadvantaged communities, promote civil engagement in the public decision making process, and prioritize improvements and programs that address the needs of disadvantaged communities.[17]

Local ordinances and good neighbor policies that set development standards for all warehouses in the jurisdiction are a critical and increasingly common tool that serve several goals. When well-designed, these ordinances direct investment to local improvements, provide predictability for developers, conserve government resources by streamlining project review processes, and reduce the environmental impacts of industrial development. While many jurisdictions have adopted warehouse-specific development standards, an ordinance in the City of Fontana provides an example to review and build upon.[18] Good neighbor policies in Riverside County and by the Western Riverside Council of Government include additional measures worth consideration.[19]

The Bureau encourages jurisdictions to adopt their own local ordinances that combine the strongest policies from those models with measures discussed in the remainder of this document.

III. Community Engagement

Early and consistent community engagement is central to establishing good relationships between communities, lead agencies, and warehouse developers and tenants. Robust community engagement can give lead agencies access to community residents' on-the-ground knowledge and information about their concerns, build community support for projects, and develop creative solutions to ensure new logistics facilities are mutually beneficial. Examples of best practices for community engagement include:

- Holding a series of community meetings at times and locations convenient to members of the affected community and incorporating suggestions into the project design.
- Posting information in hard copy in public gathering spaces and on a website about the project. The information should include a complete, accurate project description, maps and drawings of the project design, and information about how the public can provide input and be involved in the project approval process. The

[17] For more information about SB 1000, *see* https://oag.ca.gov/environment/sb1000.
[18] https://oag.ca.gov/system/files/attachments/press-docs/Final%20Signed%20Fontana%20Ordinance.pdf (last accessed September 18, 2022).
[19] For example, the Riverside County policy requires community benefits agreements and supplemental funding contributions toward additional pollution offsets, and the Western Riverside Council of Governments policy sets a minimum buffer zone of 300 meters between warehouses and sensitive receptors. https://www.rivcocob.org/wp-content/uploads/2020/01/Good-Neighbor-Policy-F-3-Final-Adopted.pdf (last accessed September 18, 2022) (Riverside County); http://www.wrcog.cog.ca.us/DocumentCenter/View/318/Good-Neighbor-Guidelines-for-Siting-Warehouse-Distribution-Facilities-PDF?bidId= (last accessed September 18, 2022) (Western Riverside Council of Governments).

information should be in a format that is easy to navigate and understand for members of the affected community.

- Providing notice by mail to residents and schools within a certain radius of the project and along transportation corridors to be used by vehicles visiting the project, and by posting a prominent sign on the project site. The notice should include a brief project description and directions for accessing complete information about the project and for providing input on the project.
- Providing translation or interpretation in residents' native language, where appropriate.
- For public meetings broadcast online or otherwise held remotely, providing for access and public comment by telephone and supplying instructions for access and public comment with ample lead time prior to the meeting.
- Partnering with local community-based organizations to solicit feedback, leverage local networks, co-host meetings, and build support.
- Considering adoption of a community benefits agreement, negotiated with input from affected residents and businesses, by which the developer provides benefits to the affected community.
- Creating a community advisory board made up of local residents to review and provide feedback on project proposals in early planning stages.
- Identifying a person to act as a community liaison concerning on-site construction activity and operations, and providing contact information for the community liaison to the surrounding community.
- Requiring signage in public view at warehouse facilities with contact information for a local designated representative for the facility operator who can receive community complaints, and requiring any complaints to be answered by the facility operator within 48 hours of receipt.

IV. Warehouse Siting and Design Considerations

The most important consideration when planning a logistics facility is its location. Warehouses located in residential neighborhoods or near sensitive receptors expose community residents and those using or visiting sensitive receptor sites to the air pollution, noise, traffic, and other environmental impacts they generate. Therefore, placing facilities away from sensitive receptors significantly reduces their environmental and quality of life harms on local communities. The suggested best practices for siting and design of warehouse facilities does not relieve lead agencies' responsibility under CEQA to conduct a project-specific analysis of the project's impacts and evaluation of feasible mitigation measures and alternatives; lead agencies' incorporation of the best practices must be part of the impact, mitigation and alternatives analyses to meet the requirements of CEQA. Examples of best practices when siting and designing warehouse facilities include:

- Per California Air Resources Board (CARB) guidance, siting warehouse facilities so that their property lines are at least 1,000 feet from the property lines of the nearest sensitive receptors.[20]
- Providing adequate amounts of on-site parking to prevent trucks and other vehicles from parking or idling on public streets and to reduce demand for off-site truck yards.
- Establishing setbacks from the property line of the nearest sensitive receptor to warehouse dock doors, loading areas, and truck drive aisles, and locating warehouse dock doors, loading areas, and truck drive aisles on the opposite side of the building from the nearest sensitive receptors—e.g., placing dock doors on the north side of the facility if sensitive receptors are near the south side of the facility.
- Placing facility entry and exit points from the public street away from sensitive receptors—e.g., placing these points on the north side of the facility if sensitive receptors are adjacent to the south side of the facility.
- Ensuring heavy duty trucks abide by the on-site circulation plans by constructing physical barriers to block those trucks from using areas of the project site restricted to light duty vehicles or emergency vehicles only.
- Preventing truck queuing spillover onto surrounding streets by positioning entry gates after a minimum of 140 feet of space for queuing, and increasing the distance by 70 feet for every 20 loading docks beyond 50 docks.
- Locating facility entry and exit points on streets of higher commercial classification that are designed to accommodate heavy duty truck usage.
- Screening the warehouse site perimeter and onsite areas with significant truck traffic (e.g., dock doors and drive aisles) by creating physical, structural, and/or vegetative buffers that prevent or substantially reduce pollutant and noise dispersion from the facility to sensitive receptors.
- Planting exclusively 36-inch box evergreen trees to ensure faster maturity and four-season foliage.
- Requiring all property owners and successors in interest to maintain onsite trees and vegetation for the duration of ownership, including replacing any dead or unhealthy trees and vegetation.
- Posting signs clearly showing the designated entry and exit points from the public street for trucks and service vehicles.
- Including signs and drive aisle pavement markings that clearly identify onsite circulation patterns to minimize unnecessary onsite vehicle travel.
- Posting signs indicating that all parking and maintenance of trucks must be conducted within designated on-site areas and not within the surrounding community or public streets.

[20] CARB, Air Quality and Land Use Handbook: A Community Health Perspective (April 2005), at ES-1. CARB staff has released draft updates to this siting and design guidance which suggests a greater distance may be warranted in some scenarios. CARB, Concept Paper for the Freight Handbook (December 2019), *available at* https://ww2.arb.ca.gov/sites/default/files/2020-03/2019.12.12%20-%20Concept%20Paper%20for%20the%20Freight%20Handbook_1.pdf (last accessed September 18, 2022).

V. Air Quality and Greenhouse Gas Emissions Analysis and Mitigation

Emissions of air pollutants and greenhouse gases are often among the most substantial environmental impacts from new warehouse facilities. CEQA compliance demands a proper accounting of the full air quality and greenhouse gas impacts of logistics facilities and adoption of all feasible mitigation of significant impacts. Although efforts by CARB and other authorities to regulate the heavy-duty truck and off-road diesel fleets have made excellent progress in reducing the air quality impacts of logistics facilities, the opportunity remains for local jurisdictions to further mitigate these impacts at the project level. Lead agencies and developers should also consider designing projects with their long-term viability in mind. Constructing the necessary infrastructure to prepare for the zero-emission future of goods movement not only reduces a facility's emissions and local impact now, but it can also save money as demand for zero-emission infrastructure grows. In planning new logistics facilities, the Bureau strongly encourages developers to consider the local, statewide, and global impacts of their projects' emissions.

Examples of best practices when studying air quality and greenhouse gas impacts include:

- Fully analyzing all reasonably foreseeable project impacts, including cumulative impacts. In general, new warehouse developments are not ministerial under CEQA because they involve public officials' personal judgment as to the wisdom or manner of carrying out the project, even when warehouses are permitted by a site's applicable zoning and/or general plan land use designation.[21]
- When analyzing cumulative impacts, thoroughly considering the project's incremental impact in combination with past, present, and reasonably foreseeable future projects, even if the project's individual impacts alone do not exceed the applicable significance thresholds.
- Preparing a quantitative air quality study in accordance with local air district guidelines.
- Preparing a quantitative health risk assessment in accordance with California Office of Environmental Health Hazard Assessment and local air district guidelines.
- Refraining from labeling compliance with CARB or air district regulations as a mitigation measure—compliance with applicable regulations is required regardless of CEQA.
- Disclosing air pollution from the entire expected length of truck trips. CEQA requires full public disclosure of a project's anticipated truck trips, which entails calculating truck trip length based on likely truck trip destinations, rather than the distance from the facility to the edge of the air basin, local jurisdiction, or other truncated endpoint. All air pollution associated with the project must be considered, regardless of where those impacts occur.

[21] CEQA Guidelines § 15369.

- Accounting for all reasonably foreseeable greenhouse gas emissions from the project, without discounting projected emissions based on participation in California's Cap-and-Trade Program.

Examples of measures to mitigate air quality and greenhouse gas impacts from construction are below. To ensure mitigation measures are enforceable and effective, they should be imposed as permit conditions on the project where applicable.

- Requiring off-road construction equipment to be hybrid electric-diesel or zero-emission, where available, and all diesel-fueled off-road construction equipment to be equipped with CARB Tier IV-compliant engines or better, and including this requirement in applicable bid documents, purchase orders, and contracts, with successful contractors demonstrating the ability to supply the compliant construction equipment for use prior to any ground-disturbing and construction activities.
- Prohibiting off-road diesel-powered equipment from being in the "on" position for more than 10 hours per day.
- Using electric-powered hand tools, forklifts, and pressure washers, and providing electrical hook ups to the power grid rather than use of diesel-fueled generators to supply their power.
- Designating an area in the construction site where electric-powered construction vehicles and equipment can charge.
- Limiting the amount of daily grading disturbance area.
- Prohibiting grading on days with an Air Quality Index forecast of greater than 100 for particulates or ozone for the project area.
- Forbidding idling of heavy equipment for more than three minutes.
- Keeping onsite and furnishing to the lead agency or other regulators upon request, all equipment maintenance records and data sheets, including design specifications and emission control tier classifications.
- Conducting an on-site inspection to verify compliance with construction mitigation and to identify other opportunities to further reduce construction impacts.
- Using paints, architectural coatings, and industrial maintenance coatings that have volatile organic compound levels of less than 10 g/L.
- Providing information on transit and ridesharing programs and services to construction employees.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations for construction employees.

Examples of measures to mitigate air quality and greenhouse gas impacts from operation include:

- Requiring all heavy-duty vehicles engaged in drayage[22] to or from the project site to be zero-emission beginning in 2030.

[22] "Drayage" refers generally to transport of cargo to or from a seaport or intermodal railyard.

- Requiring all on-site motorized operational equipment, such as forklifts and yard trucks, to be zero-emission with the necessary charging or fueling stations provided.
- Requiring tenants to use zero-emission light- and medium-duty vehicles as part of business operations.
- Forbidding trucks from idling for more than three minutes and requiring operators to turn off engines when not in use.
- Posting both interior- and exterior-facing signs, including signs directed at all dock and delivery areas, identifying idling restrictions and contact information to report violations to CARB, the local air district, and the building manager.
- Installing solar photovoltaic systems on the project site of a specified electrical generation capacity that is equal to or greater than the building's projected energy needs, including all electrical chargers.
- Designing all project building roofs to accommodate the maximum future coverage of solar panels and installing the maximum solar power generation capacity feasible.
- Constructing zero-emission truck charging/fueling stations proportional to the number of dock doors at the project.
- Running conduit to designated locations for future electric truck charging stations.
- Unless the owner of the facility records a covenant on the title of the underlying property ensuring that the property cannot be used to provide refrigerated warehouse space, constructing electric plugs for electric transport refrigeration units at every dock door and requiring truck operators with transport refrigeration units to use the electric plugs when at loading docks.
- Oversizing electrical rooms by 25 percent or providing a secondary electrical room to accommodate future expansion of electric vehicle charging capability.
- Constructing and maintaining electric light-duty vehicle charging stations proportional to the number of employee parking spaces (for example, requiring at least 10% of all employee parking spaces to be equipped with electric vehicle charging stations of at least Level 2 charging performance)
- Running conduit to an additional proportion of employee parking spaces for a future increase in the number of electric light-duty charging stations.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, air filtration systems at sensitive receptors within a certain radius of facility for the life of the project.
- Installing and maintaining, at the manufacturer's recommended maintenance intervals, an air monitoring station proximate to sensitive receptors and the facility for the life of the project, and making the resulting data publicly available in real time. While air monitoring does not mitigate the air quality or greenhouse gas impacts of a facility, it nonetheless benefits the affected community by providing information that can be used to improve air quality or avoid exposure to unhealthy air.
- Requiring all stand-by emergency generators to be powered by a non-diesel fuel.
- Requiring facility operators to train managers and employees on efficient scheduling and load management to eliminate unnecessary queuing and idling of

trucks.

- Requiring operators to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.
- Meeting CalGreen Tier 2 green building standards, including all provisions related to designated parking for clean air vehicles, electric vehicle charging, and bicycle parking.
- Designing to LEED green building certification standards.
- Providing meal options onsite or shuttles between the facility and nearby meal destinations.
- Posting signs at every truck exit driveway providing directional information to the truck route.
- Improving and maintaining vegetation and tree canopy for residents in and around the project area.
- Requiring that every tenant train its staff in charge of keeping vehicle records in diesel technologies and compliance with CARB regulations, by attending CARB-approved courses. Also require facility operators to maintain records on-site demonstrating compliance and make records available for inspection by the local jurisdiction, air district, and state upon request.
- Requiring tenants to enroll in the United States Environmental Protection Agency's SmartWay program, and requiring tenants who own, operate, or hire trucking carriers with more than 100 trucks to use carriers that are SmartWay carriers.
- Providing tenants with information on incentive programs, such as the Carl Moyer Program and Voucher Incentive Program, to upgrade their fleets.

VI. Noise Impacts Analysis and Mitigation

The noise associated with logistics facilities can be among their most intrusive impacts to nearby sensitive receptors. Various sources, such as unloading activity, diesel truck movement, and rooftop air conditioning units, can contribute substantial noise pollution. These impacts are exacerbated by logistics facilities' typical 24-hour, seven-days-per-week operation. Construction noise is often even greater than operational noise, so if a project site is near sensitive receptors, developers and lead agencies should adopt measures to reduce the noise generated by both construction and operation activities.

Examples of best practices when studying noise impacts include:

- Preparing a noise impact analysis that considers all reasonably foreseeable project noise impacts, including to nearby sensitive receptors. All reasonably foreseeable project noise impacts encompasses noise from both construction and operations, including stationary, on-site, and off-site noise sources.
- Adopting a lower significance threshold for incremental noise increases when baseline noise already exceeds total noise significance thresholds, to account for the cumulative impact of additional noise and the fact that, as noise moves up the decibel scale, each decibel increase is a progressively greater increase in sound

pressure than the last. For example, 70 dBA is ten times more sound pressure than 60 dBA.

- Disclosing and considering the significance of short-term noise levels associated with all aspects of project operation (i.e. both on-site noise generation and off-site truck noise). Considering only average noise levels may mask noise impacts sensitive receptors would consider significant—for example, the repeated but short-lived passing of individual trucks or loading activities at night.

Examples of measures to mitigate noise impacts include:

- Constructing physical, structural, or vegetative noise barriers on and/or off the project site.
- Planning and enforcing truck routes that avoid passing sensitive receptors.
- Locating or parking all stationary construction equipment as far from sensitive receptors as possible, and directing emitted noise away from sensitive receptors.
- Verifying that construction equipment has properly operating and maintained mufflers.
- Requiring all combustion-powered construction equipment to be surrounded by a noise protection barrier
- Limiting operation hours to daytime hours on weekdays.
- Paving roads where truck traffic is anticipated with low noise asphalt.
- Orienting any public address systems onsite away from sensitive receptors and setting system volume at a level not readily audible past the property line.

VII. Traffic Impacts Analysis and Mitigation

Warehouse facilities inevitably bring truck and passenger car traffic. Truck traffic can present substantial safety issues. Collisions with heavy-duty trucks are especially dangerous for passenger cars, motorcycles, bicycles, and pedestrians. These concerns can be even greater if truck traffic passes through residential areas, school zones, or other places where pedestrians are common and extra caution is warranted.

Examples of measures to mitigate traffic impacts include:

- Designing, clearly marking, and enforcing truck routes that keep trucks out of residential neighborhoods and away from other sensitive receptors.
- Installing signs in residential areas noting that truck and employee parking is prohibited.
- Requiring preparation and approval of a truck routing plan describing the facility's hours of operation, types of items to be stored, and truck routing to and from the facility to designated truck routes that avoids passing sensitive receptors. The plan should include measures for preventing truck queuing, circling, stopping, and parking on public streets, such as signage, pavement markings, and queuing analysis and enforcement. The plan should hold facility operators responsible for violations of the truck routing plan, and a revised plan should be required from any new tenant that occupies the property before a business license

is issued. The approving agency should retain discretion to determine if changes to the plan are necessary, including any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility.

- Constructing new or improved transit stops, sidewalks, bicycle lanes, and crosswalks, with special attention to ensuring safe routes to schools.
- Consulting with the local public transit agency and securing increased public transit service to the project area.
- Designating areas for employee pickup and drop-off.
- Implementing traffic control and safety measures, such as speed bumps, speed limits, or new traffic signs or signals.
- Placing facility entry and exit points on major streets that do not have adjacent sensitive receptors.
- Restricting the turns trucks can make entering and exiting the facility to route trucks away from sensitive receptors.
- Constructing roadway improvements to improve traffic flow.
- Preparing a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.

VIII. Other Significant Environmental Impacts Analysis and Mitigation

Warehouse projects may result in significant environmental impacts to other resources, such as to aesthetics, cultural resources, energy, geology, or hazardous materials. All significant adverse environmental impacts must be evaluated, disclosed and mitigated to the extent feasible under CEQA. Examples of best practices and mitigation measures to reduce environmental impacts that do not fall under any of the above categories include:

- Appointing a compliance officer who is responsible for implementing all mitigation measures, and providing contact information for the compliance officer to the lead agency, to be updated annually.
- Creating a fund to mitigate impacts on affected residents, schools, places of worship, and other community institutions by retrofitting their property. For example, retaining a contractor to retrofit/install HVAC and/or air filtration systems, doors, dual-paned windows, and sound- and vibration-deadening insulation and curtains.
- Sweeping surrounding streets on a daily basis during construction to remove any construction-related debris and dirt.
- Directing all lighting at the facility into the interior of the site.
- Using full cut-off light shields and/or anti-glare lighting.
- Requiring submission of a property maintenance program for agency review and approval providing for the regular maintenance of all building structures, landscaping, and paved surfaces.
- Using cool pavement to reduce heat island effects.

- Planting trees in parking areas to provide at least 35% shade cover of parking areas within fifteen years to reduce heat island impacts.
- Using light colored roofing materials with a solar reflective index of 78 or greater.
- Including on-site amenities, such as a truck operator lounge with restrooms, vending machines, and air conditioning, to reduce the need for truck operators to idle or travel offsite.
- Designing skylights to provide natural light to interior worker areas.
- Installing climate control and air filtration in the warehouse facility to promote worker well-being.

IX. Conclusion

California's world-class economy, ports, and transportation network position it at the center of the e-commerce and logistics industry boom. At the same time, California is a global leader in environmental protection and environmentally just development. The guidance in this document furthers these dual strengths, ensuring that all can access the benefits of economic development. The Bureau will continue to monitor proposed projects for compliance with CEQA and other laws. Lead agencies, developers, community advocates, and other interested parties should feel free to reach out to us as they consider how to guide warehouse development in their area.

Please do not hesitate to contact the Environmental Justice Bureau at ej@doj.ca.gov if you have any questions.

San Joaquin LAFCO
Local Agency Formation Commission
The Gateway County

Balancing Community and Commerce

44 N. SAN JOAQUIN STREET SUITE 374 STOCKTON, CA 95202 209-468-3198

January 28, 2025

Brian Millar, Contract Planner
San Joaquin County Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
Via Email: bmillar@sjgov.org

SUBJECT: Comments on Pacific Gateway Project
Notice of Preparation of an Environmental Impact Report
PA-2400363 through -368; 2400371 through -372; 2400500

Dear Mr. Millar:

Thank you for sending San Joaquin LAFCo the Notice of Preparation (NOP) for the Environmental Impact Report (EIR) that will be prepared for the proposed Pacific Gateway Project. San Joaquin LAFCo appreciates the opportunity to review and comment on the project. LAFCo staff has reviewed this document and offers the following comments.

Pacific Gateway Project Description

At its nearest point, the project site is approximately one mile from the southern boundary of the City of Tracy. The Project is bounded on the south by State Route 132 (SR 132) and the California Aqueduct; Tracy Boulevard on the west; Bird Road to the east; and the Delta-Mendota Canal at the north. South Tracy Boulevard, South MacArthur Drive, and South Chrisman Road provide north/south circulation access through the project area. Existing east/west access is limited to private, unimproved farm roads. The Project would include new public streets within the Specific Plan Area, including two primary east/west thoroughfares traveling from Tracy Boulevard to the west, which join each other east of Chrisman Road before continuing to Bird Road on the east.

According to the Project Description provided with the NOP, the Project consists of 24.7 million square feet of Limited-Industrial use buildings, a 93,000 square foot business park, 160,000 square feet of commercial space, and a private university with 1.2 million square feet of building space for up to 5,000 students, up to 1,000 student housing beds, and an expansion

area for the University providing an additional 115,000 of building area and up to 600 more student housing beds. The Project incorporates related parks, open space and infrastructure improvements. The Project is anticipated to be fully developed over the course of 25 to 30 years, based on market demand, and encompasses five development areas.

Project Jurisdiction

The Project is outside the Tracy City Limits and Sphere of Influence (SOI) boundaries. However, approximately half of the site is located within the City's Planning Area boundary. The Planning Area is outside of city boundaries and the SOI but is relevant to the City's planning and policy direction. The City does not have any regulatory authority within the Planning Area but recognizes that planning and development within this area have an impact on the future of the City. Areas outside of the SOI remain under the jurisdiction of San Joaquin County, and this Project does not propose to be annexed into the City.

Project Infrastructure Improvements

The Project has been designed and would be developed over time with a full range of infrastructure improvements to serve both the initial stages of development and full build out. According to the Project Description, long term operation and maintenance of the Project infrastructure other than roads would be supported by a project-specific Community Service District (CSD) and/or Community Services Area (CSA) and related financing mechanisms formed in accordance with a project-wide public facilities financing plan.

Water and Wastewater Infrastructure: The Project would include dedicated water and wastewater systems sized to serve the Project's specific needs, including a minimum of two water sources to provide enough water to serve all project uses, on-site water and wastewater treatment plants, and corresponding transmission and distribution infrastructure to serve the project during all phases of development.

Circulation Infrastructure: The Project is situated near major transportation corridors, with primary direct access from southbound Chrisman Road, a state designated STAA route, to I-580 and CA-132 and northbound Chrisman Road to Business Route 205/11th Street. Eastbound CA-132 connects to I-5 and CA-99, providing north and southbound connectivity with the California highway transportation system. The project also includes the development of new private and public roads to serve the project site.

Stormwater Infrastructure

The Project incorporates comprehensive storm water management infrastructure including stormwater basins sized and located to independently serve each of the five development areas as each phase of the Project proceeds, as well as comprehensively at full project buildout. Stormwater calculations would be done at every phase during the Project's phased buildout, including runoff from the hills. When stormwater calculations exceed retention capacity on-site, the Off-Site Basin would be constructed and implemented.

Fire, Emergency, and Law Enforcement Services
The Project is located within the jurisdiction of the South San Joaquin County Fire Authority, with services provided by the Tracy Rural Fire Protection District. In conjunction with these services, the Project also incorporates dedicated groundwater wells and storage infrastructure to meet the fire water quantity and pressure needs for all phases of project development. Additionally, the Project includes a new fire station site located near the main entrance to the Project to meet the Project's public safety needs. Law enforcement services would be provided the San Joaquin County Sherriff's Department.

The Project Description indicates that the County would maintain all improvements within the street right of way, property owners would be responsible for all landscaping behind the back of walk and within proposed landscape setbacks, utilities would be maintained by the appropriate service providers, and drainage basins, inlets and detention structures will be maintained by the property owners.

LAFCo Responsibility

LAFCo is an independent, regulatory agency with discretion to approve, wholly, partially or conditionally, or disapprove, changes of organization or reorganizations. In accordance with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 ("CKH Act"), LAFCo is required to consider various factors when evaluating a proposal, including, but not limited to, impacts to agricultural and open space lands, the provision of municipal services and infrastructure to the project site, timely and available supply of water, fair share of regional housing, consistency with regional plans, and other factors. The statutory mission of LAFCo is to discourage urban sprawl and encourage the orderly formation and development of local agencies.

LAFCo Comments

LAFCo's approvals for the formation or reorganization of any special districts or annexation of any portion of the project into the City of Tracy would be a fundamental part of the entitlements required for this project. In order to approve the formation or reorganization of any districts, LAFCo must consider specific factors in reviewing such proposals as outlined in Section 56668 of the Government Code. As such, LAFCo provides the following comments on the project proposal to be considered for inclusion in the project analysis. In addition, because LAFCo would rely on the project EIR in its own approvals to comply with CEQA, LAFCo requests that the following be addressed in the Draft EIR.

1. <u>Project Description</u>

    - Please ensure that LAFCo is listed as an agency whose approval is required for any annexations, detachments, formations, and reorganizations of any special districts.

- Please identify maintenance entities for all utilities and public services, including landscaping, lighting, sound walls, roads, public water, storm water drainage and maintenance in and out of public right of way, and sewer infrastructure.
- Please include a description of the timing of annexations relative to the timing of the proposed development entitlements and construction. Typically, LAFCOs organization/reorganization processes are required after project approvals and prior to map recordation. In the case of a phased map, all approvals should occur prior to recordation of the first phase of the map so as not to create island territory issues.

2. Agricultural Resources (and Growth-Inducing Impacts)

LAFCo Review Factor: *The effect of the proposal on maintaining the physical and economic integrity of agricultural lands*. (CKH Act § 56668.e)

According to the Project Description, the Project Area is "currently developed with active agricultural uses, which include commercial scale almond orchards, cherry orchards, and vineyards, as well as an agricultural machinery manufacturing facility, separately operated by A.B. FAB, Inc." The project proposal does not appear to meet the intent of the referenced LAFCo criterion in terms of both direct conversion of important farmlands as well as indirect growth-inducing impacts on nearby agricultural lands. This factor will be considered by San Joaquin LAFCo in any reorganization proposals. The project analysis should include an evaluation of this factor for LAFCo's consideration.

In addition to the definition of Prime Agricultural Land used by the Department of Conservation's Farmland Mapping and Monitoring Program, the EIR should evaluate the project site to determine whether it meets the LAFCo definition of "prime agricultural land" under Government Code Section 56064, indicate whether implementation of the project would result in a loss of such land, and provide mitigation to reduce the impact if necessary. LAFCo will use this information and the findings of the EIR to inform its decisions about any annexation process. A preliminary review of this project indicates that much of it is located on Prime Farmland within General Agriculture designations/districts, and that the impact to agricultural resources could therefore be significant and unavoidable even with implementation of any Right-to-Farm ordinances or deed restrictions and agricultural conversion fees.

3. Hazards and Hazardous Materials

LAFCo Review Factor: *Information contained in a local hazard mitigation plan, information contained in a safety element of a general plan, and any maps that identify land as a very high fire hazard zone pursuant to Section 51178 or maps that identify land determined to be in a state responsibility area pursuant to Section 4102 of the Public*

Resources Code, if it is determined that such information is relevant to the area that is the subject of the proposal. (CKH Act Section 56668.q)

The Draft EIR should include an analysis of potential safety impacts resulting from the project to ensure LAFCo can make appropriate determinations on the project.

4. Hydrology and Water Quality (and Public Services and Utilities)

LAFCo Review Factor: *Timely availability of water supplies adequate for projected needs including, but not limited to, the projected needs as specified in Section 65352.5.* (CKH Act § 56668.l)

A preliminary review of the Technical Memorandum prepared by Schaaf & Wheeler indicates that the proposed project would use approximately 1/8 the amount of water used by the existing agricultural uses. However, the project may still be subject to the SB 610. SB 610 requires a water supply analysis with a 20-year projection in addition to an analysis of the demand of existing and other planned future uses for any project with more than 500 residential units; commercial development of more than 250,000 square feet of floor space; industrial uses with more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area; a mixed-use project that includes one or more of the projects outlined in the legislation; or a project that will demand an amount of water equal to or greater than the amount of water required by 500 dwelling units. A Water Supply Assessment would include identification of current water supply entitlements, water rights, and service contracts; a calculation of anticipated water usage for the proposed development; an assessment of whether the existing water supply can meet the projected demand under different climate scenarios, including average, single dry, and multiple dry years; an evaluation of how the project might affect water availability for current water users in the area; and any mitigation strategies needed to reduce project impacts.

LAFCo therefore encourages the preparation of a Water Supply Assessment and integration with the local Groundwater Sustainability Plan to understand how the project will affect water supply and demand for the region, and how it will impact the groundwater aquifer. Please include this information in the project analysis.

5. Land Use and Planning (and Growth Inducing Impacts)

LAFCo Review Factor: *The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county.* (CKH Act § 56668.c)

A portion of the project is within the City's Planning Area. Please identify annexation interest to the City for this area in the Draft EIR. Please provide exhibits that show any proposed areas of annexation, City boundaries, spheres of influence, and public and private infrastructure and maintenance entities, with all layers on one map for ease of reference. Per San Joaquin LAFCo's standards for annexation, "LAFCo will require cities to annex streets where adjacent lands that are in the city will generate additional traffic or where the annexation will isolate sections of county road. Cities shall include all contiguous public roads that can be included without fragmenting governmental responsibility by alternating city and county road jurisdiction over short section of the same roadway." Any annexation of the subject property should include surrounding roadways and rights of way to avoid the creation of islands and/or illogical boundaries pursuant to Section 56668 of the CKH Act. When a boundary must follow a street, the boundary should include the complete right of way for the entire street.

LAFCo Review Factor: *The conformity of both the proposal and its anticipated effects with both the adopted commission policies on providing planned, orderly, efficient patterns of urban development, and the policies and priorities set forth in Section 56377.* (CKH Act Section 56668.d)

Government Code Section 56377 states:

(a) Development or use of land for other than open-space uses shall be guided away from existing prime agricultural lands in open-space use toward areas containing nonprime agricultural lands, unless that action would not promote the planned, orderly, efficient development of an area.
(b) Development of existing vacant or nonprime agricultural lands for urban uses within the existing jurisdiction of a local agency or within the sphere of influence of a local agency should be encouraged before any proposal is approved which would allow for or lead to the development of existing open-space lands for non-open-space uses which are outside of the existing jurisdiction of the local agency or outside of the existing sphere of influence of the local agency.

Much of the project site appears to be Prime Farmland. The current project proposal therefore does not appear to meet the intent of this code section and will be evaluated as such under any organization or reorganization proposal. The project applicant is strongly encouraged to explore areas of development within the Tracy SOI before developing the proposed project site.

LAFCo Review Factor: *Consistency with city or county general and specific plans.* (CKH Act Section 56668.h)

The Project is currently inconsistent with the County and City General Plans and is requesting General Plan Amendments for both land use designations and for policies related to the conversion of agricultural lands. San Joaquin County General Plan Policy LU-2.15 related to agricultural conversions is currently intended to provide protections and additional considerations when a project proposes to convert agricultural lands to non-agricultural uses by requiring decision makers to consider the effects of development pressure on surrounding agricultural lands, the premature conversion of important farmlands, the impacts of development on farming operations, the growth-inducing impacts of development in rural areas, and protection of habitat restoration opportunities. The Project applicant proposes that an additional consideration be added to this list: economic development opportunities in supply chain corridors in south San Joaquin County in areas proximate to I-580, I-5, and SR-132. The inclusion of the consideration of "economic opportunities" in this General Plan policy runs counter to the intent of the policy. All development, and particularly the development of agricultural or open space land, provide economic development opportunities for some or many, and the very intent of GP Policy LU-2.15 is to provide countermeasures of consideration to those economic drives that incentivize development. The General Plan's open space and agricultural land use areas and policies, which were agreed to through a long and carefully considered public process, are intended to be generally protected by this policy. The proposed text amendment therefore runs counter to the intent of the policy, which is to provide additional protections for agricultural lands and open space that San Joaquin County residents indicated they valued at the time the policy was adopted.

If this text amendment and the addition of ED-3.8 is going to be considered by the County, LAFCo offers the following comments on it:

- "Potential for economic development opportunities" as a factor of consideration in the conversion of agricultural land should be defined more carefully. A fiscal analysis of the benefits of the economic development should be provided if this policy language is used, including who benefits and how much, the duration of benefit, and both the tangible and intangible costs of the benefit.
- "Proximate" location should be defined, such as including a maximum distance or indicating that the property must have direct access to specified routes.
- The routes listed in the proposed text amendment should be considered carefully. State Route 132 is a small part of the transportation network of San Joaquin County (and only a portion of it is vital to I-5 access), whereas I-205 is a much larger route and is not included.

- The policy changes would beg the question as to whether lands "proximate" to the proposed routes should be re-designated to non-agricultural use designations to support the supply chain policy in ED-3.8 to avoid spot zoning and the creation of islands of development. The County would need to seriously consider whether redesignating all lands along these corridors is desirable as that could be the outcome of such a policy. Much of the County's most desirable Prime Agricultural Land is along these corridors.

San Joaquin LAFCo will consider the project's consistency with the general plans when processing any applications for formations or reorganization. Please include a thorough analysis of both text amendment and map amendments with the project evaluation. In addition, LAFCo requests that General Plan and Zoning map amendment diagrams include the larger context of General Plan and Zoning designations for informational purposes.

6. Population and Housing

LAFCo Review Factor: *Population, population density, land area and land use; per capita assessed valuation; topography, natural boundaries, and drainage basins; proximity to other populated areas; the likelihood of significant growth in the area, and in adjacent incorporated and unincorporated areas, during the next 10 years.* (CKH Act Section 56668.a)

Given that the Project's proposal to convert rural agricultural lands to intensively developed urban uses will increase the population and require more intensive public services, this Project will require the evaluation of the factors listed in this item, including but not limited to population and growth inducement in adjoining areas. Please include this information in the project analysis.

LAFCo Review Factor: *The extent to which the proposal will assist the receiving entity in achieving its fair share of the regional housing needs as determined by the appropriate council of governments.* (CKH Act Section 56668.m)

LAFCo will consider the project's assistance with regional fair share housing needs as determined by San Joaquin COG. Please include this information in the project analysis.

LAFCo Review Factor: *The extent to which the proposal will promote environmental justice. As used in this subdivision, "environmental justice" means the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the location of public facilities and the provision of public services, to ensure a healthy environment for all people such that the effects of pollution are not*

disproportionately borne by any particular populations or communities. (CKH Act Section 56668.p)

Given the amount of industrial uses proposed, LAFCo recommends that the appropriate Environmental Justice considerations be given in the EIR and/or staff analysis so that LAFCo may make appropriate findings. Environmental Justice (EJ) communities can be identified as disadvantaged communities or low-income areas disproportionately affected by environmental pollution and other hazards. OPR recommends jurisdictions analyze the following issues to address EJ concerns: pollution exposure (e.g., air quality, water quality, and land use compatibility), access to public facilities, fresh foods and physical activity, safe and sanitary homes, enhancing civic engagement, and addressing compounded health risks due to climate vulnerability. The EIR should determine if any EJ community exists in or adjacent to the project area and then provide that information within the environmental setting of the relevant EIR section, which could include, as needed, Population and Housing (demographic information) Air Quality (connection between project emissions and health impacts on EJ communities), and Hazards and Hazardous Materials (connection between industrial hazards and impacts on EJ communities), and any other applicable sections.

7. Public Services/Utilities and Service Systems (and Growth Inducing Impacts)

LAFCo Review Factors:

Need for organized community services; the present cost and adequacy of governmental services and controls in the area; probable future needs for those services and controls; probable effect of the proposed incorporation, formation, annexation, or exclusion and of alternative courses of action on the cost and adequacy of services and controls in the area and in adjacent areas. (CKH Act Section 56668.b.1)

The ability of newly formed or receiving entity to provide the services which are the subject of the application to the area, including the sufficiency of revenues for such services following the proposed boundary change. (CKH Act Section 56668.k)

The project could require the update of existing Municipal Service Reviews (MSRs) for the City of Tracy (if any portion of the project will be annexed), the San Joaquin County Rural Fire Protection Districts, and any other special district MSRs affected by the Project. The formation of any new special districts for maintenance and operation of public services and facilities would also require new MSRs, which would be required upon formation and review by LAFCo in order to ensure ability of the districts to serve and provide adequate capacity for growth. Pursuant to Section 56653 of the CKH Act, an annexation can only be approved if the applicable MSRs and Plans for Services demonstrate that

adequate services can be provided to the annexed area. An annexation proposal must therefore include a Plan for Services consistent with the applicable MSR and must demonstrate that the service provider can provide the required services.

Services that may require the formation of special districts could include not only water and wastewater facilities, collection, treatment, and operation and maintenance of such facilities, but also street lighting, landscaping, and storm water management and treatment. The County can consider requiring special districts such as County Service Areas (CSAs) or Community Service Districts (CSDs) for these services.

The Project Description indicates that the County will maintain all new local and collector roads within the development. The County should consider the long-term financial and service impact of taking new roads in this development into its maintained mileage system in this area versus requiring the development to pay for the operation and maintenance of its roads through Permanent Road Divisions (PRDs), CSAs, CSDs, or other special district types.

LAFCo Review Factor: *The definiteness and certainty of the boundaries of the territory, the nonconformance of proposed boundaries with lines of assessment or ownership, the creation of island or corridors of unincorporated territory, and other similar matters affecting the proposed boundaries.* (CKH Act Section 56668.f)

Although the Project Description does not describe any annexation into the City of Tracy, the large size of the project and the boundaries of the Specific Plan Area could create public service islands as well as growth-inducing impacts that should be considered in the project evaluation process.

8. Transportation and Circulation

LAFCo Review Factors:

The effect of the proposed action and of alternative actions, on adjacent areas, on mutual social and economic interests, and on the local governmental structure of the county. (CKH Act § 56668.c)

A regional transportation plan adopted pursuant to Section 65080. (CKH Act § 56668.g)

Please include trip distribution in the transportation analysis to determine the impact to nearby City and County roads, maintenance responsibility, and the need for any annexation. Please also include an evaluation of the project's consistency

with the San Joaquin County of Governments Regional Transportation Plan/Sustainable Communities Strategy.

Thank you for the opportunity to comment on the Pacific Gateway Project. We would request that LAFCo be notified of all future actions on this project, including the Draft EIR, Final EIR, and any public hearings on the project. Please contact the LAFCo office if you have any questions.

Yours Truly,

J.D. Hightower
Executive Officer

From: Vicki Huerta <huertajv@msn.com>

Sent: Saturday, December 28, 2024 4:39 PM
To: Millar, Brian [CDD] <bmillar@sjgov.org>

Cc: Vicki Huerta <huertajv@msn.com>

Subject: Pacific Gateway Project -

I am writing this letter as a concerned resident and land owner of San Joaquin County.

Currently Pacific Gateway CA, LLC, based out of Roseville, is requesting to turn protected Ag-40 land into Industrial, Commercial and various other forms of property.

There are numerous negative issues that arise from this request, first off being that the property was purchased as protected AG-40 land and all the laws and rules were made clear to the purchaser of this property. As such it has remained this protected form of land.

This protected AG-40 land that the County should be working cooperatively with the cities within the County and encouraging them to adopt agricultural preservation policies and ordinances which are consistent with this protection of the AG-40 land in order to undertake an integrated, comprehensive Countywide approach to preservation. It should be the goal of the County that all seven cities participate in or adopt an agricultural mitigation ordinance that is the same as or substantially similar to the preservation of protected AG-40 land.

A huge part of the land is Irrigated land with the best combination of physical and chemical features able to sustain long term production of agricultural crops. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields.

A few other reasons why the zoning change request should not even be considered, let alone reviewed;

San Joaquin County is losing farmland at a rapid rate.
San Joaquin County farmland is of exceptional productive quality.
The loss of farmland to development is irreparable and agriculture is an important component of the County's economy.
The loss of farmland will have a cumulatively negative impact on the economy of the County and the cities located within it.
The continuation of agricultural operations also preserves the landscape and environmental resources.
Permanent preservation of farmland is consistent with the policies of the San Joaquin County General Plan.

The Williamson act allows landowners to gain a tax reduction on this land, and ensures that the land is protected from the changes that the current owners are trying to make for the use of the land.

With the wildlife we have out in the area in question, we will have more issues and concerns with the protection of the wildlife as well as some coming closer to property owners.

These are a very few numbers of huge concerns that we property owners have.

I have not even started on the impact to our water availability, the increased traffic that is currently unsafe on Chrisman Road and the other county roads near this land, nor the impact it would have for the many cities in the area, with the backed-up traffic on the nearby freeways, thus pushing more commuters on to county back roads, into city roads, and other freeways.

Imagine coming from Manteca, Lathrop, French Camp, Modesto or Stockton. Commutters are already stuck in traffic, no matter the time of day, because they were promised beautiful homes, with new roads and minutes to the Bay.

The impact to the traffic alone is of major concern, and one that will not be addressed within the next 10 to 15 years, if then.

We can look to Valpico Road and the disaster the new home building has caused there.

The widening of the road has only caused more speeding and more accidents. When the closure of Corral Hollow Road was in place, Chrisman Road was backed up and at a stand still for hours, every day. These county roads cannot handle this type of traffic.

Chrisman Road is currently a racetrack and has a school that is dangerous to get to or around. We put our children's lives at risk, just trying to get them to school.

We could talk about the added crime this venture would bring to San Joaquin County, not to mention the city of Tracy.

Lastly, shall we look at all the empty warehouses in the county? All the approved ventures that took away protected Agricultural land, and now are just tax write-offs to those owners.

This project should not even be considered!

Concerned County Resident,

The Huerta Family
Huertajv@msn.com

From: Sheila Chartier <chartiers7@icloud.com>
Sent: Thursday, January 16, 2025 11:48 AM
To: Millar, Brian [CDD] <bmillar@sjgov.org>
Cc: Sheila Chartier <chartiers7@yahoo.com>
Subject: Pacific Gateway Project

I am imploring you to NOT approve the Pacific Gateway Project.

I live with daughter and family at 32931 S MacArthur Dr. She has 7 acres and there are 3 houses on this land, all family. We are at the very end of South MacArthur where the road dead ends against the Aqueduct. We have lived here since 2015. If you look at the project maps, we are the tiny triangle located at the end of MacArthur Drive This project would surround us on all 3 sides so it certainly would affect us.

I truly believe that this project will cause such havoc for us as South MacArthur is only a 2 lane road south of Linne. It cannot handle constant traffic by big rigs and the vehicles that would be undertaking the building of this project. When we first moved here, the road outside our property leading to Linne was a total disaster. A new road has been put in since then, but it is also quickly deteriorating. I cannot imagine what it will look like after the traffic increases to handle the properties mr. Sandhu is trying to create.

Currently this land is all surrounded by Orchard‘s owned by him. We were informed that the property directly across from our house where he now has an orchard is not his, but it has been leased for 25 years by him. To me, it is obvious that a man of his stature could find property elsewhere where it would not affect the people who have lived here for so long. I can’t imagine the damage it will do to our property value. Also he has never once come to discuss this project even though we are the only people out here and he knows that. I see him driving around in his truck almost daily on this road.

I believe the impact of all this construction and building would also be a huge detriment to S. Chrisman Rd. as well. There is a school located at the corner of Chrisman and Linne and that would affect that traffic that goes to the school Monday through Friday. It would also affect the traffic getting on and off 580 as the big rigs would increase as well, as Chrisman is also only a two lanes road.

I cannot imagine the effect it will have on the wildlife in this area also. I’m not an engineer, but mr. Sandhills would have to raze the orchards he has created in order to build these

buildings and the wildlife that lives in them would surely be affected.

Please do not approve this Project. If you have any questions, please contact me.

Thank you,
Sheila Chartier
32931 South MacArthur Drive
Tracy, CA 95377
(510) 565-0611
Chartiers7@yahoo.com

From: Ubbo Coty <umcoty@gmail.com>
Sent: Tuesday, January 21, 2025 9:00 AM
To: Millar, Brian [CDD] <bmillar@sjgov.org>
Subject: Pacific Gateway Blues

I seriously wonder if the residents really comprehend what Mike Sandhu wants to transform Tracy into. A mega truck stop complete with more warehouses and with a cultural center that only caters to his nationality. All of which would cover very prime, profitable agricultural land and would displace and eliminate local farms, and farmers.

Is that the future of Tracy?

What will happen to all of the wildlife that will lose their habitat, their shelters, their food sources?

More importantly what happens to our air quality?

Everyone loses in the vision this rich land owner, Mike Sandu has. He is the one behind this Pacific Gateway Project, not the JPA he hired to do his dirty work.

If that is vision y'all want for Tracy, then fine, but don't even complain about the traffic from commercial vehicles that will clog our highways and streets and the resulting Smog that will affect your health. And electric vehicles isn't the answer either, the infrastructure doesn't exit.

From: MC <all4ageless@gmail.com>
Sent: Wednesday, January 22, 2025 1:54 PM
To: Millar, Brian [CDD] <bmillar@sjgov.org>
Subject: NO Pacific Gateway Project

Here is the still active petition that has been going around... NO ONE WANTS THIS BUILD! IT IS NOT THE RIGHT MIVE FOR TRACY.

https://www.ipetitions.com/petition/no-to-pacific-gateway-project

Dear San Joaquin County Planning Team,

I did not think I would need to write something like this as it seemed to be clear the Pacific Gateway Project is NOT the right choice for Tracy. The unintelligent decision to take the last point in the Tracy triangle and put ANOTHER congested semi truck nightmare development is to give Tracy and it's residents a polluted death sentence. Why does this county want to add more semi truck traffic to an already congested, taxed infrastructure? No residents want this monstrosity and you will end up with a ghost town or polluted crime ridden ghetto. Anyone interested in pushing this through are those looking for a tax write off for the rich to get richer and elimination of our middle class. Is this the disastrous direction the central valley is headed? Once you add more to the already deadly volume of trucks that will riddle our roads no one will be safe, especially not the children at the nearby Jefferson school.

Our air pollution is off the charts and you want to make it worse. We won't be able to breathe the air or drink the water.

The success of a county is in it's surroundings towns and communities. The other 2 corners of the Tracy triangle have already been riddled with distribution centers. Each area has seen a massive uptick in crime, drug use and trafficking on streets and in front of people's homes. There's been drop in home value compared to those on the one part of Tracy that has held it's charm and now you want to take that too!? The "jobs" you are supplying are short lived to build a bunch more empty warehouses, why not fill the empty ones you already have? If you do fill the warehouse with places like Amazon, the wages can't support the cost of living in the town. Therefore we get commuters from Stockton and Modesto that zoom down our streets with no care for residents. They steal wfi, personal information, case our homes and come back not to patronize our retail, but to steal from our business owners, break in to homes, do drugs on our streets and near our schools. I've heard of countless stories of Banta and the Lammersville residents chasing away drug users in their

cars outside of our homes, "taking a break" from working at Amazon or other low wage warehouse jobs in the area!

The thought of how many more pot holes, traffic and pollution this will cause is insane! Why? In a county that is already incapable of keeping up with the road maintenance that damages our vehicles on a regular basis. Not to mention the destruction of prime agricultural land...and for what? ...more air pollution? Because this county has been fooled an expensive Sacramento Marketing company. Shame on your lack of intelligence to see why these builds are happening!

The owners of this land need more write off opportunity and any building they add to their monopoly allows them to write of hundreds of thousands of tax dollars that should be going back in to our federal funds ,state and communities. It's not just a one time write off, this is an annual write off they get for almost 3 decades of taxes! The owners of this land have no interest in investing in this community or county they only wish to monopolize it and then line their family pockets with the money that should have been given to our communities in taxes. It's disgusting you would allow this degradation of our community.

There is no need for a VFW. We already have one in town you can assemble in at any time! Ask them to build a Veterens hospital, not a gathering place they will use for their family events!

And the boast of a university...what a joke! It's an academy of Indian dance and language runned by questionable leaders that have been under investigation! Take a look at what they claim to have as their technical education...they don't even offer a certification in any programs! It's just general speak on technology with no offerings of an actual useful education. It is a ploy to bank on the aspiring wish of a community that hoped for a REAL 4year college. This is simply another location only focused on one culture creating a more segregated society excluding other cultures and diversity to an already saturated community.

How can you be duped by this? How much are they funding your political campaigns for? Why would you serve this town it's death sentence? Why would you allow the destruction of the last of the land that grows food, allows for nature to thrive, isn't yet polluted and could be the only desirable destination or charming part left of Tracy.

I moved to Tracy thinking would become what is just over the hill from it, a well balanced community with a little industry, small town charm, a plethora of retial choices and a charming destination area where food grows, and water and wine flows, making it a desirable place to be. The only part of the town left that was moving towards a charming

destination area with wineries, farmland, scenery and air you might be able to breathe is where you want to drop this industrial nightmare! NO!!! Stop this insanity! You're killing us!

STOP RUINING THE CENTRAL VALLEY FOR GREED!!!!

Please see this is not the place for this build. There has been enough here. We have plenty of available wherehouses to fill. Allow this town to have some balance of offerings for it's community. Please do not suffocate it's people with more crime, pollution, congestion and destruction of infrastructure. I beg you to say NO to the Pacific Gateway Project development that may as well be called the Destruction of Tracy Project.

Signed and commissioned by group of dedicated San Joaquin County Residents and Tax Payers!

Michelle Colombo

Dennis Colombo

David Laird

Diane Dance

Mason Laird

Randy Sainz

Margie Sainz

George Curry

Melanie Frazier

Justin Frazier

And many many more. A petition will be circulating soon.

From: MM <mamslane@gmail.com>
Sent: Friday, January 24, 2025 4:53 PM
To: Millar, Brian [CDD] <bmillar@sjgov.org>
Subject: Fwd: No on Pacific Gateway Project

Dear San Joaquin County Planning Team,

The Pacific Gateway Project is NOT the right choice for Tracy.

As a City of Tracy resident who started experiencing asthma symptoms within a few years after moving to Tracy, I am deeply concerned about our air pollution as it is already off the charts, and this project would only make it worse. The particulate matter from these trucks embeds itself deeply into our lungs when we breathe the air and causes long-term health issues. Surrounding the City of Tracy with more semi-truck traffic would result in a constant gross pollution especially for the residents living inside the Triangle.

The other 2 corners of the Tracy triangle already have major distribution centers and significant traffic. Each area has also seen a massive uptick in crime, drug use and trafficking on streets and in our neighborhoods. As a result, there's been a drop in home valuations, compared to those near parts of Tracy that have kept it's orchards, vineyards, and wineries. Removing our beautiful farm lands and replacing it with more distribution centers and semi trucks holds no value for the citizens of the City or County. The jobs that would be supplied are unlikely to be filled with our residents as most do not earn a livable wage for the area. Our residents would receive no enjoyment from the economic growth proposed, only health inequities and lower home values.

From what I've recently learned the only true benefit is for the family who wants the tax write-off. This is deeply alarming that this project is on the brink of moving forward without substantial benefit to the city's residents who would bare brunt of the harm imposed.

I've learned that the land owners would benefit most with up to three decades of tax write offs and an ethnic dance studio disguised as a University. There's nothing I can see as a true benefit for City or County residents. Allowing this to move forward would be more harmful to our citizens, exacerbating the pollution of our air and water and further lowering our home values.

In the age of artificial intelligence getting ready to explode, now is not the time to reduce further the beauty of our outdoors. What seems like an economic growth prospect today will not be viewed the same way in a few short years. We need more bike trails and clean air to breathe, more parks and hiking trails. We need a real University to help our community transition to future jobs with livable wages.

I implore you to say NO to the Pacific Gateway Project.

Sincerely,

Marcina Moreno
City of Tracy resident

Mon 1/20/2025 1:26 PM

Pacific Gateway Project Negative Impact to Tracy

From: jenniren777@gmail.com

To: bmillar@sjgov.org

To Whom It May Concern,

I am writing to express my deep concerns regarding the proposed Pacific Gateway project in Tracy, California. While development is an important aspect of growth, this project poses significant environmental and societal challenges that must be carefully considered.

First and foremost, the increased traffic the project will bring to our town and freeways is troubling. Tracy and the surrounding areas already struggle with congestion, particularly during peak hours. The addition of heavy truck traffic, employee commutes, and delivery vehicles associated with such a large-scale industrial complex will exacerbate these issues, leading to longer commute times, higher levels of air pollution, and reduced quality of life for residents.

Furthermore, the project's development will require the removal of significant numbers of trees and vegetation. These trees provide vital food and shelter for local wildlife and serve as natural carbon sinks to combat climate change. Their loss will disrupt the delicate ecological balance in the area, forcing animals to relocate or perish, which could lead to a decline in biodiversity.

Additionally, I question the necessity of constructing new industrial buildings when so many existing structures in Tracy and nearby cities remain vacant. Repurposing these empty facilities would be a more sustainable and efficient option, reducing the environmental footprint associated with new construction while revitalizing unused spaces. Expanding industrial zones when alternatives exist only encourages urban sprawl and detracts from the community's character.

I urge you to reconsider the Pacific Gateway project in its current form. Development should prioritize sustainability, minimize environmental harm, and address the existing needs of the community. Please explore alternative solutions that balance economic growth with ecological responsibility and community well-being.

Thank you for your time and attention to this important matter. I hope you will consider these concerns as you evaluate the project's future.

Sincerely,

Jenni Brandon

510-299-4602

Mon 1/20/2025 10:38 AM

Recall: Objection Letter to the San Joaquin Pacific Gateway Project

From: smith385@llnl.gov

To: bmillar@sjgov.org

Smith, Danielle Fetterman would like to recall the message, "Objection Letter to the San Joaquin Pacific Gateway Project".

Mon 1/20/2025 8:45 PM

Pacific Gateway Project

From: adamwipfli@gmail.com

To: bmillar@sjgov.org

Dear Mr. Millar,

I am writing to express my strong opposition to the proposal of the Pacific Gateway Project to build warehouses on valuable farmland on Chrisman Road in Tracy. As a concerned citizen and advocate for the preservation of agricultural land, I believe that this development would have far-reaching negative consequences for both the local community and the environment.

Farmland plays a crucial role in sustaining local food systems, supporting biodiversity, and contributing to the overall health of the ecosystem. Converting agricultural land into industrial spaces such as warehouses would irreversibly diminish these essential benefits, leading to potential food insecurity and loss of vital natural resources.

Additionally, there are a number of critical issues surrounding this development:

1. **Loss of Agricultural Land**: Farmland is a finite resource that, once lost, cannot be replaced. The encroachment of urbanization into rural areas threatens the long-term viability of food production, particularly in the face of climate change and growing populations.
2. **Environmental Impact**: Large-scale warehouse development would lead to deforestation, disruption of local wildlife habitats, and increased pollution due to

increased transportation and industrial waste. These environmental consequences would have lasting impacts on the region's natural beauty and biodiversity.

3. **Zoning and Local Development**: The conversion of farmland into commercial or industrial zones could set a dangerous precedent for future land use in the area. I am concerned that this decision may trigger further encroachment into rural spaces, which should be protected for future generations.
4. **Local Economy**: While warehouses may provide some jobs, they do not contribute to the local economy in the same way that farming does. Agriculture is a cornerstone of local economies, creating jobs not only in farming but also in ancillary industries such as food processing, transport, and retail.

I urge you to reconsider the proposal to build warehouses on this farmland. Instead, I encourage you to explore alternative solutions that promote sustainable economic development without sacrificing the health of the land and its ability to provide food and resources for future generations.

Thank you for considering my concerns. I hope you will join the growing number of individuals and organizations working to protect our farmland and the vital role it plays in our community's future.

Sincerely,

Adam Wipfli

7759 Stearman Road

Tracy, CA 95377

925-353-0105

Mon 1/20/2025 2:57 PM

Pacific Gateway Project

From: caligal0727@outlook.com

To: bmillar@sjgov.org

Mr. Millar,

I am urging you to vote NO to the Pacific Gateway Project in South Tracy. This project is taking away prime farmland, will harm the environment, decrease land values and cause a

traffic havoc, just to name a few. My family has lived and farmed out here for over 75 years and I hope that continues. None of us live here to be surrounded by warehouses and big rig trucks taking over our farmlands.

There are already a number of warehouses that have been built in Tracy and many which are vacant. Why build more? No one living out here is for this project except for those that will profit from it. Please stop this project from going forward. Support the American farmers!

Thank you,

Marie Baretta

S. Chrisman Road

Mon 1/20/2025 9:33 PM

Against Pacific Gateway Project

From: little22@comcast.net

To: bmillar@sjgov.org

Brian Millar,

I have lived in Tracy since the mid-1980s, most of the time in south Tracy. In the past 10 years, Tracy has grown too much, too fast for the infrastructure to endure. Due to housing developments such as Tracy Hills and Mountain House, my 24 mile commute to Livermore now takes anywhere from 1 to 2 hours, depending on traffic. And, that is with flexing my start time to avoid the heaviest commute periods, which has the additional problem of traffic gridlocks due to school drop offs. In addition, the vastly increased truck and commuter traffic along Chrisman, Linne, and Durham Ferry Roads is a safety hazard for me, my neighbors, and Jefferson school students and staff. The Pacific Gateway Project will increase these traffic and safety risks exponentially.

Availability of water is another concern. We are already facing water shortages and rationing. We can't withstand another drain on our water supply. In addition, most south Tracy residents are on individual or community wells. As our ground water declines, wells can go dry and/or water quality deteriorates.

Don't further destroy valuable farmland by converting AG production into warehouses. This is detrimental to the environment, increasing pollution as well as worsening flooding along

Chrisman Rd and surrounding country streets. In addition, why add warehouses when we are already experiencing a glut of empty warehouses in the Tracy area!

Bringing industrial development to south Tracy will increase crime in our area. We already suffer from delayed response from an understaffed San Joaquin County Sheriff's Department.

I understand some growth is necessary, but infrastructure and our quality of life should not suffer. Keep industrial development confined to existing industrial sites. I urge you to vote against the Pacific Gateway Project and other proposals for development in the south Tracy area.

Thank-you, Steve Little

Sent from my iPhone

Mon 1/20/2025 8:36 PM

Opposition to Pacific Gateway Project

From: alicia_pappas@att.net

To: bmillar@sjgov.org

Dear Mr. Millar,

I hope this letter finds you well. I am writing to you as a concerned resident of Par Country Estates (off Chrisman Road in Tracy) regarding the proposed construction of the Pacific Gateway Warehouse Project near the residential development in our area. As a constituent, I urge you to reconsider or oppose this project due to its potential negative impacts on our community.

I firmly believe that this particular warehouse development is not suited for this location. The construction and ongoing operations of the warehouse could have several detrimental effects, including but not limited to:

1. Increased Traffic and Safety Concerns

The addition of heavy truck traffic, which is inevitable with the operation of warehouses, could create severe traffic congestion in an area that was not designed for such volumes of large vehicles. This would not only increase commute times but also pose a significant safety risk, especially for children, elderly residents, and pedestrians who rely on Chrisman

Road for daily activities. Jefferson Middle School is already impacted by the current traffic and this would make it virtually impossible to pick up and drop off students.

2. Noise and Air Pollution

Warehouses often operate 24/7, bringing with them constant noise from trucks, loading docks, and machinery. The persistent noise pollution could greatly affect the quality of life for residents. Additionally, the increase in vehicle emissions could exacerbate air pollution, harming both public health and the local environment.

3. Decreased Property Values

As you are likely aware, the presence of industrial developments such as warehouses can significantly reduce property values in the surrounding areas. Many homeowners in our community have invested in their homes with the expectation of living in a peaceful environment. The introduction of large warehouses would likely decrease the desirability of our neighborhood, ultimately harming property values and residents' financial investments.

4. Environmental and Aesthetic Concerns

The warehouses would not only alter the landscape but could also disrupt local ecosystems, removing thousands of acres of prime agricultural land would lead to long-term environmental harm. Additionally, the visual impact of such large industrial structures could negatively affect the aesthetic quality of our beautiful county, making it a less pleasant place to live.

5. Community Wellbeing

At its core, our community is a place for families to grow and thrive. The disruption caused by industrial activity—whether it's noise, pollution, or traffic—could have a significant negative impact on residents' health, well-being, and quality of life. I fear that the introduction of these warehouses into this area would undermine the values we hold dear as a community.

In light of these concerns, I respectfully ask that you review this proposal and advocate for alternative solutions that prioritize the interests and well-being of the residents in our area. I do not believe that the City of Tracy or surrounding county property needs any more warehouses. We have many vacant warehouses near by which should be at 100% capacity before we even think about building more.

I trust you will take these concerns seriously and act in the best interest of the constituents. I would appreciate your support in opposing the construction of a warehouse so close to our homes.

Thank you for your time and attention to this matter. I look forward to hearing your thoughts and hope to see your leadership in advocating for the preservation of our community's integrity.

Sincerely,

Alicia Wipfli

7759 Stearman Road

Tracy, CA 95377

925-595-4989

Wed 1/22/2025 6:38 AM

Proposal to build Pacific Gateway Tracy CA for your consideration

From: akrista23@gmail.com

To: bmillar@sjgov.org

Dear Mr Millar,

It has come to my attention that the proposed Pacific Gateway Project in Tracy, CA (location below) will consist of more industrial parks and warehouses.

Our city has more than enough industrial buildings. As a 20+ year resident, I hope for better plans to improve the quality of life for Tracy residents and the county: more parks, walking trails, and grocery stores (Tracy has been classified as a food desert) are needed. We need your assistance to help our city become a better place to live and not be surrounded by more warehouses.

Location: north and east of interstate 580 (I-580) and north of State route 132 (SR 123)

24,675,000 ft of industrial use, 160,000 of General commercial use, 93,000 ft of industrial park use. Initial development phase will consist of approximately 4 million ft. limited industrial uses in four buildings!!

Respectfully,

Amy Krista
209-640-9011 mobile

Tue 1/21/2025 2:05 PM

Pacific Gateway Project impact letter

From: zkoster124@gmail.com

To: bmillar@sjgov.org

Hello Brian,

My name is Zach Koster Leanne Stass Said i needed to send my letter to you by 5 p.m. today. It is attatched here at the bottom.

Please call me if you have any questions 209-597-2798

Attachment:

Zachary Koster

1/20/25

Pacific Gateway Project

Dear Board of supervisors and who it may concern,

My name is Zach Koster, I am a fifth generational farmer in the Tracy community who lives on our family ranch not more than a few miles from where the proposed Pacific Gateway Project is said to be built if it is approved. I am writing to you as a farmer, stakeholder and concerned community member who like many others around me will be affected along with our environment if this project gets approved. In this letter I will lay out some facts and explanations on how the project will only bring negative effects upon our community.

My first argument on the environmental impact this project will have, is the water, both our surface and ground water will face negative repercussions if this project is approved regardless of what studies they may have done to argue the problems I am telling you. As a farmer water is everything for my livelihood. Any farmer will tell you that there is no one

person who is more aware of the changes in our climate than a farmer and this is because our jobs depend on it. This project is calling for six wells to fulfill its water usage. Our aquifers and well water levels have already gone down and remained down due to our changing climate with lower yearly rainfall to fill those water tables back to normal levels. Putting six wells in a 1500+ acre area will not help our problem it will only worsen. The people who are behind the Gateway project will argue that they have a contract to get excess surface water from the Byron Bethany irrigation district to help minimize how much well water they use. This may help to some extent, but what happens when we have another drought, and they have to turn on six wells to fulfill their water requirements for their business park and university. Our vital water levels drop and the stakeholders, pay the price. Also, we should be prioritizing our water resources especially in our county. In my water district for our crops we have received very low water allotments, some years have been so bad during a drought farmers have had to pull out orchards or not farm at all because they can not get the surface water they need due to our lack in water storage (Reservoirs) and the increasing dry years we have been having in California. We should be promoting water districts to prioritize our water and sell their excess water to other water districts further south like mine who get lower allotments, because yes our food and farming is more important than supplying water to a business park that is going to be built on farmland in a farming community with no other town in site. This project is now going to be taking our well water and surface water which are both in short supply.

Not only will our subsurface water levels go down for farmers, but it will also happen to the local people in our community as well. Their personal wells for their homes will drop. Too much depletion of well water brings a very big problem to our surface and the infrastructure on top of our soil surface. As some of you may know, when water is taken away from a well or aquifer for surface use, if it is not replenished to a certain level the land and everything that is built atop it sinks. This is caused by a pressure difference in the air pocket between the water level and the ceiling of a well or aquifer. When this happens, it is called Subsidence. This brings me to my next impact the project will have on the surrounding areas. Except this impact will hurt farmers financially far from where the project will be. The impact of subsidence is not unknown in the San Joaquin valley, and it is being monitored by the Sustainable Ground Water Management Act or also called (SGMA) for short. What makes this possible subsidence issue so bad is the location of which the project is being built and the infrastructure in the surrounding area that may be affected if subsidence is to occur which I will explain in the next paragraph.

The proposed project is said to be built in between two very important very expensive and vital water ways for our valley. Right next to the north side of the project, and

I am talking within 100 yards of the proposed project, you have the Delta Mendota Canal and to the south of the proposed project you have California Aqueduct. The Delta Mendota was built to supply water from the delta to farmers, and the Aqueduct was built to provide water from the delta to cities further south. If you put six wells within a 1500-acre plot regardless of surface water use, you will see subsidence. Next to our ranch there is a farmer with one well near the delta Mendota who uses both surface water and well water just like the proposed project is saying they are going to do, and our water district has recorded subsidence in the canal bank which is not far from the farmers well. This project will literally cause damage to our water infrastructure. When these canals sink the cement walls of the canals crack, the bridges and pipelines that cross the canals become compromised. This is not something that should be blown over or taken lightly because we are already seeing this in areas where there is only one well or two wells and they want to put in six for the proposed project. Furthermore, the farmers pay the water bureau to maintain and fix the canals every time something needs repairs. Yes, that is right, farmers help pay for the delta Mendota to stay running and in good condition. This money comes out of their dues they pay every year which is calculated as so many dollars per acre foot of water. These are the dues I have to pay. Our water prices are so high as it is that it has become hard to make a profit on crops we have grown here for years, now my water prices will go up to pay for repairs needed because of subsidence caused by an unwanted, unnecessary project that no one wants. I should not have to be financially affected nor should any farmer in the Del Puerto water district have to be financially affected because of this useless project.

Also, this will happen to the aqueduct as well, remember that both of these canals have bridges for roads such as Bird, Christman, McArthur and Tracy Blvd. all roads which are roads that will cross through this project. Please take this issue of subsidence into consideration and think of the people it will truly affect financially. Also, when damage is bad enough, the canals need to be lowered which means slowing down the water flow rate while they do repairs, this also affects farmers because water is not flowing at its proper rate. The subsidence is only one of the many issues this project is going to impede on this community.

We still need to discuss the traffic nightmare this is going to cause as well as traffic safety and road damage. As I said earlier, I live and work in this area and every day from 3:00-7:00 p.m. 132 is packed bumper to bumper from bird road to McCraken rd. in Vernalis because of commuter traffic. Regardless of the other impacts this project may pose, the traffic problem alone should show anyone how this project will not work in this location. Until Hwy 132 is upgraded to a six lane Highway this project is going to cause a train wreck

with the traffic on 132 which is already a major problem. Being that 132 gets backed up everyday in that area, commuters from Ripon and Manteca will get off on Christman road and drive down Durham ferry road to get to airport which will take them home. This is what the people living in the cities call “taking the back roads or taking a shortcut” well it does not help us, the ones who have to deal with people going 80mph down a 45mph road because they do not want to sit in traffic on 132. If we add a business park or university it will only make these problems worse tenfold. These commuters who take backroads to get home to Ripon and Manteca have caused wrecks and unfortunate deaths driving down these roads that are made for the people who live off them and have farmland next to the roads. I have been run off the road twice in the last year moving equipment from field to field because of speedy commuters and this project will only make it worse. Alone, highway 132 needs the proper infrastructure modification before any project in this location is built.

Lastly on the subject of traffic, you have the bird road and 132 overpass. This overpass was paid for by Teichert aggregates, a gravel company along with two other gravel pits one on Blewett and one on Bird rd. which use that small a stretch of Bird Rd and the overpass to Safely get onto 132. Teichert had paid for the overpass to be built in or around 2010 if I can remember correctly. They did this because their gravel truck would get stacked up on Bird rd. trying to get onto highway 132. Now you have a project being put in and the map of the proposed project has a street that will dump right onto Bird Rd right before the overpass. This overpass is not limited to the gravel trucks even though Teichert had paid for it, but it should not be flooded by traffic and taken advantage of by someone else either. Putting in the overpass ended collisions that were previously caused by gravel trucks trying to cross or get on 132, now that extremely busy road is going to be flooded with not gravel trucks but vehicles and trucks driving in and out of this unwanted business park. This project is a major traffic hazard and has no place being built where it is proposed.

This project is being built far from any city, and it is being put in the middle of a thriving farming community. The soil which this project is proposed to be built on is prime farmland soil that we will not get back once it is paved over with blacktop. Farmers like me who have young farming businesses are starving for land and it’s a shame to see land I and many other farmers would love to use go to waste so quickly. I ask think to yourself, is this where a place like this far from any town will really thrive or are we just wasting resources on something that may do more harm than good?

No one besides the person who is paying for the project wants this thing to be approved, we are a farming community and farmers along with the people who enjoy living the country lifestyle away from the cities and traffic have worked extremely hard generation

after generation to preserve our land and resources for farming. If you do not know the town of Tracy started out as a farming community and slowly over the past few decades, it has grown into a commuter town. Let us keep the little history of our town we have left and help us put a stop to this senseless waste of our farmland and history. Lastly, this project will take out a lot of people's front yards on Christman road when they widen the road to four lanes to handle all the traffic, they will be getting from this project if it is built. These are people who bought these homes decades ago. This project poses so many threats and problems to the community that anyone can tell you it is a bad idea. All I ask is that you take in these considerations, listen to the stakeholders, give them a say in what happens to their lives and their homes. This community and its historic way of life should not have to suffer and be damaged because of one person's agenda. Please put yourself in our shoes before you approve this project, you are our last hope.

Mon 1/20/2025 3:46 PM

Pacific Gateway Project

From: Kelly Moran gvpachomes@gmail.com

To: bmillar@sjgov.org

Brian Millar
c/o County of San Joaquin Community Development Department
1810 East Hazelton Avenue
Stockton, CA 95205
bmillar@sjgov.org

Subject: The San Joaquin Pacific Gateway Project

Dear Brian Millar and Members of the of San Joaquin Community Development Department.

I am writing to express
my strong opposition to the proposed San Joaquin Pacific Gateway Project.

The plans for this project raise significant concerns regarding land use, sustainability, and the actual benefits promised to residents. The proposed development sacrifices valuable

farmland, introduces unnecessary infrastructure, and fails to provide credible assurances to our community.

Farmland:
The utilization of irreplaceable farmland for this project is a profound mistake. San Joaquin County's
agricultural heritage is a cornerstone of our economy, providing essential food supplies and supporting countless local jobs.

Converting this farmland into warehouses jeopardizes our agricultural industry, diminishes open spaces,

and contributes to urban sprawl. With increasing concerns over food security and environmental degradation, protecting farmland should be a priority, not an afterthought.

Unnecessary Warehouses:
The proposal for yet another wave of warehouses is both redundant and unnecessary. Our county has empty warehouses. These structures often contribute to increased
traffic congestion, noise pollution, and wear and tear on local infrastructure without generating significant long-term benefits for the community. Additionally, the promise of jobs created by such developments frequently fails to meet expectations, offering primarily low-wage positions with minimal opportunities for upward mobility.

Unaccredited University:

I'm worried about the unaccredited University, it raises serious questions about the project's legitimacy. Unaccredited institutions often do not meet rigorous academic standards
and may not provide students with the quality of education they deserve, nor the certification or degree to obtain professional paying jobs. Investing in such a venture not only puts future students at risk but also diverts resources that could be better utilized to strengthen existing accredited educational institutions in our region.

Promise for VFW Hall:
The project's vague promise to establish a Veterans of Foreign Wars (VFW) Hall with significant restrictions is equally concerning. While the idea of supporting our veterans is commendable, imposing numerous limitations undermines
the potential value of this gesture. Many of our veterans are disabled and would have a difficult time traveling so far from town. Our veterans deserve facilities and services that are genuinely accessible, meaningful, and supportive
without unnecessary barriers.

High Pollution and Disruptions to Natural Habitats and Ecosystems:

Natural habitats and ecosystems that currently exist in the area would be disrupted.

This destruction of nature not only harms wildlife but also diminishes the biodiversity that is essential for a healthy

environment. I'm worried with the In increase in traffic vehicles servicing the

warehouses will exacerbate air pollution and negatively impact air quality.

Our community cannot afford to face the health risks associated with increased levels of particulate matter and emissions.

To illustrate the potential harm, I will include a satellite photo of the pollution in the Los Angeles area prior to the

recent fires, showcasing the poor air quality surrounding warehouse-heavy regions.

This serves as a cautionary

example of the consequences our community could face should this project proceed as planned. Undefined Industrial and Commercial Plans

Finally, the plans for limited industrial and commercial uses remain alarmingly undefined, leaving residents uncertain about the long-term impacts of this project.

Ambiguous terms and undetermined uses invite the possibility of undesirable developments that may harm the community's character and quality of life. Clear and specific plans should be a prerequisite for any development proposal to ensure transparency and accountability.

In light of these significant issues, I urge the San Joaquin County Planning Commission to reconsider the approval of

the San Joaquin Pacific Gateway Project. Instead, I encourage the commission to explore alternatives that preserve our farmland, support sustainable growth, and prioritize the long-term interests of our community.

Thank you for considering my concerns. I respectfully request that this letter be included as part of the official record for the project's review.

Please do not hesitate to contact me should you have any questions or require additional information.

Kelly Moran

Milo Glass

952 Centre Court Drive

Tracy, CA 95376

530-305-4282 cell

Mon 1/20/2025 2:39 PM

Pacific Gateway

From: gsknize@gmail.com

To: bmillar@sjgov.org

Mr. Millar,

Please note our concerns and opposition to the new proposed Pacific Gateway Project for the following reasons--

1) Because we live on Chrisman Road, we are extremely concerned with increased traffic noise from increased trucking and increased braking to what is already a very, very busy road. There is really no way to mitigate noise from a highway on a country road.

2) We are concerned as well over increased air pollution from increased traffic, truck fumes and dust.

3) Naturally, we are concerned with decreased property values if Chrisman Road should be widened. We enjoy our rural lifestyle and we enjoy our home.

4) We believe increased traffic would lead to decreased safety for pedestrians, school children and bicyclists as well as greater incidents of vehicular accidents.

5) Speed limits are supposed to be 45 mph in our section of Chrisman Road which for the most part are not obeyed. However, increased volume of cars almost guarantees more speeding.

6) Loss of valuable agricultural land is of concern as well as loss of habitat for the many birds and mammals. Endangered animals such as the San Joaquin Kit Fox lose areas to live and thrive.

7) We feel ground water for wells is at risk.

Overall, this new Pacific Gateway Project is not much different from the last proposal and we strongly urge you to find it unacceptable in so many ways.

Sincerely,

Mark and Gayle Knize

28263 S. Chrisman Road

Tracy, CA 95304

Sun 1/19/2025 1:18 PM

Pacific Gateway

From: grant@merlingraphics.net

To: bmillar@sjgov.org

Greetings, Please reject this plan. Warehouse Tracy is being ruined by more and more warehouses.

--

All the best,

Grant M. Davis

Merlin Graphics & C and C Design

www.candcdesign.com

www.merlingraphics.net

925-895-4478

Mon 1/20/2025 9:01 PM

Against Pacific Gateway Project: Please Vote NO

From: 4mlittle@comcast.net

To: bmillar@sjgov.org

Mr. Brian Millar,

I have lived in Tracy for 38+ years, 25 in south Tracy. I moved to Tracy for its small town feel and agricultural landscape. The quiet simplicity of south Tracy will be destroyed by the proposed Pacific Gateway Project. Not only is Tracy's infrastructure inadequate for the proposed project, but the impacts to the environment and safety will be intolerable.

Streets around Jefferson school are already clogged during to/from commute and Jefferson school pick-up/drop-off times. Traffic in the area is not only frustrating, but a danger to Jefferson school staff, students, and residents. Adding commuters and semi-truck traffic associated with the planned warehousing project will increase these safety issues exponentially, especially if there is access to the Pacific Gateway project from Chrisman Road.

Expanding Chrisman road to 4 lanes is a dire safety concern for Jefferson School and residents who live along and near Chrisman road. Not only will adding lanes to Chrisman road put heavy commute and semi-truck traffic at residents' front door steps, but it will bring the potential for vehicular accidents into their homes. We don't need another SR132 AKA "Blood Alley" in our neighbors' front yards!

Commuting into/out of Tracy is a nightmare. Two-lane country roads in south Tracy have become dangerous high-sped thoroughfares. Many residents already fear walking along their streets or checking mailboxes at the streets edge due to crazy commuters trying to skirt clogged highways and city surface streets. Yes, warehousing will bring more jobs into Tracy, but most warehousing jobs pay minimum wage or only slightly better. Therefore, most warehouse employees won't be able to afford to live in Tracy, further increasing commute traffic in/out of south Tracy.

According to the "Notice of Preparation of an Environmental Impact Report and Notice of Scoping Meeting" handout, the Pacific Gateway applicants filed new applications to address concerns about potential for extensive truck traffic along Durham Ferry Road. They are now proposing to move the proposed project father west, opening Durham Ferry Road west of the intersection of Chrisman and Durham Ferry, using it as an entrance into the Pacific Gateway complex. However, this proposed change is NOT the answer to traffic along Durham Ferry. Durham Ferry will be inundated with traffic as thousands of commuters as well as semi-truck traffic will travel to the Pacific Gateway complex via SR132 to Highway 33 to Durham Ferry. This route has an additional safety concern as the

intersection of Highway 33 (Ahern Road) and Durham Ferry is approximately 450 yards from New Jerusalem Elementary school. Delta Charter Elementary School is just down the road from New Jerusalem.

Tracy is already experiencing water shortages and rationing. Pacific Gateway Project will add to our water shortage problem. Since most south Tracy residents are on individual or community wells, the additional drain on our ground water supply will lead to deteriorating water quality.

Noise pollution will increase dramatically with the additional commute and semi-truck traffic. No more relaxing, enjoying the quiet solitude of my own backyard. And to think, I live a few residential blocks from Chrisman road. I can't imagine living closer.

Crime follows industrial development. The proposed Pacific Gateway Project will increase crime in south Tracy, putting an even greater strain on an overworked, understaffed San Joaquin County Sherriff's Office, whose response times to south Tracy are already long due to the size of their jurisdiction and focus on higher crime areas.

With the additional traffic, pollution, safety issues and crime, our property values will decrease. Some of our neighbors will even lose part of their front yards and/or land, all so big business can benefit. As of January 20, 2025, according to Property Shark, there is 6.4 million SF of empty commercial space available for rent in Tracy. Begging the question, why do we need more empty warehouses in Tracy? If warehousing needs increase, confine industrial development to existing industrial sites that have the infrastructure rather than turning valuable AG land into a commercial site.

Keep industrialization out of South Tracy, preserve our farmlands and maintain our way of life. Please decline the proposed Pacific Gateway Project. Thank you for your time.

Sincerely,

Margo Little

Tue 1/21/2025 10:29 AM

Pacific Gateway Project Opposition Letter

From: rjackman5@yahoo.com

To: bmillar@sjgov.org

Mr Millar,

Please find our letter of opposition attached. One of the many things that are troublesome about this project is, most if not all of the land is covered by the Williamson Act. We genuinely do not understand how people buy this land that is protected and then they can just change that? All these years we pay insane amounts in property taxes , they have paid minimal. I understand the county will benefit from the additional revenues but where does that leave our rural lifestyle way of living that we have had for the past 20 years?

Regards,

Brian & Rebecca Jackman

January 21, 2025

Attachment:

SAN JOAQUIN COUNTY

COMMUNITY DEVELOPMENT DEPARTMENT

Development Services Division 1810 East Hazleton Avenue Stockton, CA 95205

Contact Person: Brian Millar

VIA Email

bmillar@sjgov.org

RE:**APPLICATION NUMBERS: PA-2400363,PA-2400364,PA-2400365,PA-2400366,PA-2400367, PA-2400368,PA-2400369,PA-2400371,PA-2400372,PA-2400500**

PROPERTY OWNER:	**APPLICANT:**
Pacific Gateway CA, LLC	**Ridgeline Property Group c/o Steve Arthur**
as Authorized Agent for multiple property owners.	**915 Highland Pointe Dr., Ste. 2**
915 Highland Pointe Dr., Ste. 250	
Roseville, CA 95678	

Dear San Joaquin County Community Development Department:

This letter expresses our absolute opposition to the proposed Pacific Gateway Project. We strongly oppose this project and all the tactics the landowner has and is utilizing to try to get it approved. Doesn't moving it further south indicate they are aware of the negative impacts on the entire area? They moved the project south to appease the people on Durham Ferry. While they will no longer be in the residents' backyards, it will not change every other concern about the area we call home. This project was proposed not long ago under the name Golden State Logistical Hub. Once it met opposition, a high-priced marketing firm was hired, some minor adjustments were made to make it more appealing, and it was newly named Pacific Gateway Project. We have not changed our position or opposition to this project. At a minimum, these concerns must be documented in the EIR, especially if they are successful, so the approving entity can and will be held accountable.

Our concerns include but are not limited to:

- Where is the water going to come from? Our hydrants ran out in June when we had the fire. We do not have endless amounts of water.
- Increased risk for air, ground, and water pollution
- Additional destruction of agricultural land and surrounding nature and wildlife.
- Additional risk to the safety of our school children and residents in the surrounding areas
- Why have the Williamson Act if a person can buy land that is protected and then change the intended purpose of the land?
- A hotel, how can this possibly be beneficial to our community in rural Tracy
- Who do we hold accountable, not if but when there is an increase in crime?
- The application indicates “law enforcement services will be provided the San Joaquin County Sherriff’s Department”. This statement supports the anticipated need for law enforcement in our rural area.
- Increased traffic & semi-truck presence, with no control over what roadways they utilize to get to the proposed site.

Respectfully,

Brian & Rebecca Jackman

Brian & Rebecca Jackman 34868 Bernard Road

Tracy, CA 95377

rjackman5@yahoo.com

Mon 1/20/2025 3:00 PM

Pacific Gateway Objection

From: mjc12515@aol.com

To: bmillar@sjgov.org

CC: styrrell@sjgov.org; hcrowley@sjgov.org; jjolley@sjgov.org

Good Afternoon Mr. Millar,

My name is Miguel Contreras, and I reside at 27263 South Chrisman Road in Tracy. I am writing to express my **objection** to the Pacific Gateway Project. Out of respect for your time, I will keep my comments brief. I own three homes on Chrisman Road, all with similar issues regarding traffic and vehicle noise. I have lived at my home for over 25 years with my family and generational family members. I have seen the drastic impact of traffic and noise congestion on the quality of life even without the proposed Gateway Project.

To mitigate the existing noise issues on Chrisman Road, I have installed triple-pane windows and fencing on my homes to reduce traffic noise and traffic view, which have had minimal impact. During peak traffic hours, exhaust fumes, noise, and vibrations to the homes are constant.

I have been working with Supervisor Robert Rickman, County Engineering, and County Public Works to improve the existing poor roadway pavement conditions and seek remedies to reduce the vibrations of the existing road traffic that impact our homes. Our homes vibrate when oversized trucks travel in front of our homes on Chrisman Road.

With the pending Pacific Gateway Project, traffic conditions will worsen, and the roadway and our quality of life will be further reduced.

The Pacific Gateway Project is **overzealous** and greedy, eliminating thousands of acres of precious farmland. The project does not consider the impact on South Tracy, our community, and the legacy of many generations of Tracy residents who live in the area.

Please keep in mind, the area of South Tracy has no internet connection, relies on wooden utility poles, and offers no sidewalks, bike routes, or infrastructure for stormwater and drainage. Yet, the project will depend on the existing roadways to bring

in even more traffic. More importantly, residents such as myself rely on well water, which will also be impacted by a project relying on existing well water aquifers. Existing conditions do not support such a massive project, which will impact residents, roadways, and county infrastructure for years to come.

Thank-you,

Miguel Contreras

209-834-7666

Sun 1/19/2025 8:07 PM

Letter detailing our objections to revised Pacific Gateway Project

From: dlj1685@yahoo.com

To: bmillar@sjgov.org

Brian, my wife Susan and I enjoyed meeting with you and the project developers for the revised Pacific Gateway Project earlier this month. While the meeting format was not what we expected, since we got there early we actually had more one-on-one time with you and the other principals of the project.

Despite the relocation and size reduction, my wife and I are still opposed to this project. In conversation with our other neighbors that attended the event, they also still oppose the project. We are unaware of anyone in the area - other than the Sandhu's - that are in favor of the revised Pacific Gateway Project.

I have attached a PDF that lists the issues behind our objection. Please let me know if you have any problem opening this PDF or have any questions / comments regarding our concerns.

Regards,

Donald and Susan Johnston

1685 Piper Place

Tracy, CA 95304

Attachment:

Brian Millar

San Joaquin Community Development

Dear Mr. Millar:

Regarding the event this past Thursday, January 9, that provided information on the revamped Pacific Gateway Project my wife and I still have several concerns on what is being proposed.

We appreciate that Ridgeline Property Group, LLC put forth a revision that attempted to address resident objections on the earlier project version presented at New Jerusalem and Jefferson schools. Unfortunately, we do not believe the current revision adequately addresses those objections.

The current project revision does scale the project back in size and moves most of it further south to be mainly contained between the California aqueduct and the Delta Mendota canal. Speaking with Steve Arthur of Ridgeline, it was clear the developers feel that traffic for the revised project should mainly impact Chrisman Road and Highway 132 – addressing a principal objection raised at earlier meetings regarding the impact on Durham Ferry Road. Chrisman Road is still scheduled to be expanded to four lanes from Chrisman Road all the way up through the City of Tracy and Mr. Arthur made a point of saying that road expansion within the city limits of Tracy were due to the city's general plan and not as any result of the Pacific Gateway Project.

We agree with Mr. Arthur that the revised project plan would have lower impact on Durham Ferry Road at its inception but it is disingenuous to suggest that would be the end of the matter. With the revised Pacific Gateway Project in place and Chrisman Road widened to four lanes up through the City of Tracy at least as far north as 11th Street there would likely be further warehouse project expansion north in relatively short time. We have already seen the same type of rapid warehouse expansion twice in Tracy, once along the International Parkway / W Schulte Road corridors and once along the Grant Line Road corridor.

If the Pacific Gateway Project goes forward, there will be significant increased truck traffic and associated air pollution in the south of Tracy just as what has happened in west and east Tracy. There are also significant vacancies in the warehouse facilities already available so we don't believe a reasonable argument can be made that the project will be fulfilling a critical need – even ignoring its negative impacts on air quality and traffic.

Some might say with the fossil fuel ban being applied to newly purchased trucks in 2036 and a complete conversion to electric or hydrogen fueled vehicles in 2042 the air pollution impact of the project will be mitigated then. If the current fleet conversion requirements stay in place that still causes us concern. There is insufficient electrical capacity and no meaningful hydrogen fuel capacity in Tracy to meet the needs of existing truck fleets much less the additional vehicles that would be added by the Pacific Gateway Project. It's easy to say the technology exists to bring such assets online in time but given the past performance of PG&E and the State of California in planning, permitting and then completing such large-scale infrastructure improvements over the last ten years we have no confidence that will actually take place. One need only look at the high-speed rail system, under-grounding power transmission lines and grid-scale battery project decade-long delays and cost overruns to get very

cynical about likely outcomes.

I spoke with Mr. Arthur about our community's concern about potential water contamination from the actions of the occupants of the Pacific Gateway Project. Steve made a firm commitment that the project had waste water and storm drainage plans that were fully compliant with current State and County statute. After reviewing the detailed materials he shared with me I have no doubt that statement is true. Unfortunately, that only peripherally addressed our concern of water contamination resulting from the actions of the occupants of the Project (specifically, harmful chemical compounds entering the storm drainage system).

Mr. Arthur was very open that there would be no real-time monitoring of the storm drainage outflows of the project (unlike the wastewater treatment facility also part of the Project) as such monitoring is not required under California or County statute.

The large offsite basin for the Project shown north of Durham Ferry Road and between Chrisman Road and MacArthur Drive is directly above a key groundwater aquifer that feeds a number of resident wells in the area. Any contaminant that is inadvertently released into the storm drainage from the Project is a serious risk to this aquifer. The limited filtering on this part of the system should handle common solids and small amounts of vehicle fluid leaks that will be released from roadway and parking surfaces during storms, etc. but the zoning for this project looks like it would permit occupants that deal with PFAS chemicals and other hazardous formulations associated with light manufacturing. From what I have gathered from public sources, current filters mandated for storm drainage systems would be ineffective in stopping those chemicals from reaching the percolation areas – eventually being released into the aquifer.

A further water concern is the amount of potable water the project will require and the potential impact that could have on groundwater levels in the area. In the documents that Mr. Arthur provided me, the Phase 1 maximum daily consumption of potable water is forecast to be between 75,000 and 100,000 gallons (and the project might require up to 4 wells). That puts the annual usage of Phase 1 only somewhere in excess of 2.5 million gallons of water a year which is significantly in excess of the groundwater that the property currently uses. I have been monitoring the Tracy Sub-basin Groundwater committee meetings and am well aware of the reduction in groundwater levels over the last ten years. The State and Federal water projects have both emphasized that local county, municipal and private water districts must do more to reduce their existing water use. Recognizing that in the face of growing populations conservation efforts alone will likely be insufficient to achieve stated targets, they are encouraging all water districts to develop effective groundwater recharging capability.

The Pacific Gateway Project will likely accelerate groundwater level decreases in its area (if only for the first few years). Since a number of resident wells in the area are more than 25 years old and are not as deep given the groundwater level present when they were drilled, I do not understand how the County could approve the Pacific Gateway Project before credible groundwater recharging was in effect with measurable results.

The final objection to the Project is the permanent change it will make to the ambiance of this part of the Tracy area. Most of us in the area have been here for at least 10 years and many have been here for over 30 years. We moved here because we sought the open, pastoral setting of the community. Other than Mr. Sandhu and his family, I'm not aware of anyone else in the area that is in favor of this project. We all realize it would create a small number of additional jobs for the area and simplify some of the logistics for potential occupants of the project but our area already presented our unified opposition to the Board of Supervisors once and it was voted down at that time.

Despite the modifications to the Project introduced at the latest meeting, our area remains opposed to the Pacific Gateway Project. Mr. Sandhu certainly has the right to try and increase his family's financial standing but we also have the right to say it should not come at the expense of the neighborhood we've been living in for more than thirty years.

Our area will be VERY upset with the Board of Supervisors if they let this Project move forward after County Community Development has heard very clearly of our unified objection in three separate community meetings during the past year.

Donald and Susan Johnston 1685 Piper Place

Tracy, CA 95304

(209) 835-8538

Mon 1/20/2025 10:12 PM

Pacific Gateway Project

From: nabaretta@gmail.com

To: bmillar@sjgov.org

Sent from my iPad

Mr. Millar,

I am writing this email to voice my opposition to the Pacific Gateway Project.

The building of more warehouses in the Tracy area when there are so many sitting unoccupied is extremely concerning. Why would the county even consider approving so many more additional buildings of this type when existing structures sit empty? It would seem that we do not need more of the same.

Even more concerning is the location of this project. Although the project's location has shifted somewhat from the previous proposal it is still primarily being built on prime land. This is an agricultural community and I strongly believe that it should remain so. It is disheartening to see that any consideration is being given to something that will destroy so much prime agricultural land. Agricultural land once lost cannot be regained.

I strongly oppose this project and urge you to carefully consider the ramifications of metal, concrete and asphalt encroaching upon our farmland. It is my opinion that this project presents far too many negatives to warrant allowing it to move forward.

Thank you for your consideration.

Nellie Baretta

Mon 1/20/2025 4:42 PM

Gateway Project Opposition

From: 1212panhead@prodigy.net

To: bmillar@sjgov.org

CC: leannestaas@kw.com

Hello,

My husband and I are strongly opposed to the Gateway Project. Please accept the attached letter as further documentation of our opposition.

Thank you for your time and consideration.

Wanda Lenhardt

Attachment:

Brian Millar
1810 E.
Hazelton Ave
Stockton, CA
95205

Mr. Brian Millar

We are writing to oppose the Gateway Project that is proposed in Southeast Tracy.

I have been born and raised in Tracy and spent my full life here. My husband has lived in Tracy for the past 24 years. We purchased property on Bird Road 11 years ago and moved here 8 years ago. We wanted to move into to the country for peace and quiet in our retirement years.

The Gateway Project is a huge threat to that peace and quiet as well as our general way of life. We do not want the "university" to be placed in our community. It will bring traffic, a water treatment plant, and undeterminable assaults on our community. The properties around us have been owned by families for generations and should not have this moneymaking project allowed to disrupt their way of life either.

When looking at Tracy, the damages caused by the intrusion of industry on our farmland is most evident on Grantline Road. In decades past there were farms and dairies that lined that road. Now there is nothing but warehouses and other forms of

industry. We feel bad for the few farm houses that are left to look at the change in landscape industry created.

Industry has also taken over the South West quadrant of the rural Tracy area near Shulte Rd and the Industrial Parkway (Patterson Pass Rd).

The Gateway Project needs to be stopped before one of the last beautiful areas of Tracy is destroyed. We have attended every meeting that has been offered but it feels our opposition is not heard or given merit. This project can be relocated to an area already designated for industry.

Thank you for your time and consideration.

Wanda and James Lenhardt
31900 S. Bird Rd.
Tracy CA 95304

Mon 1/20/2025 11:08 AM

Objection Letter to the San Joaquin Pacific Gateway Project

From: smith385@llnl.gov

To: bmillar@sjgov.org

Note: Attachment same as message body.

Danielle F. Smith
550 Forest Hills Drive
Tracy, CA 95376
smith385@llnl.gov
19 January 2025

Brian Millar
c/o County of San Joaquin Community Development Department
1810 East Hazelton Avenue

Stockton, CA 95205
bmillar@sjgov.org

Subject: Opposition to the San Joaquin Pacific Gateway Project

Dear Brian Millar and Members of the of San Joaquin Community Development Department, I am writing to express my strong opposition to the proposed San Joaquin Pacific Gateway Project. While economic development is vital for our community, the plans for this project raise significant concerns regarding land use, sustainability, and the actual benefits promised to residents. The proposed development sacrifices valuable farmland, introduces unnecessary infrastructure, and fails to provide meaningful and credible assurances to our community.

Irreplaceable Farmland

Firstly, the utilization of irreplaceable farmland for this project is a profound mistake. San Joaquin County's agricultural heritage is a cornerstone of our economy, providing essential food supplies and supporting countless local jobs. Converting this farmland into warehouses jeopardizes our agricultural industry, diminishes open spaces, and contributes to urban sprawl. With increasing concerns over food security and environmental degradation, protecting farmland should be a priority, not an afterthought.

Unnecessary Warehouses

Secondly, the proposal for yet another wave of warehouses is both redundant and unnecessary. The county is already saturated with similar facilities, many of which remain underutilized. These structures often contribute to increased traffic congestion, noise pollution, and wear and tear on local infrastructure without generating significant long-term benefits for the community. Additionally, the promise of jobs created by such developments frequently fails to meet expectations, offering primarily low-wage positions with minimal opportunities for upward mobility.

Unaccredited University

Another aspect of the project, the inclusion of an unaccredited university, lacks credibility and raises serious questions about the project's legitimacy. Unaccredited institutions often do not meet rigorous academic standards and may not provide students with the quality of education they deserve, **nor the certification or degree to obtain professional paying jobs**. Investing in such a venture not only puts future students at risk but also diverts resources that could be better utilized to strengthen existing accredited educational institutions in our region.

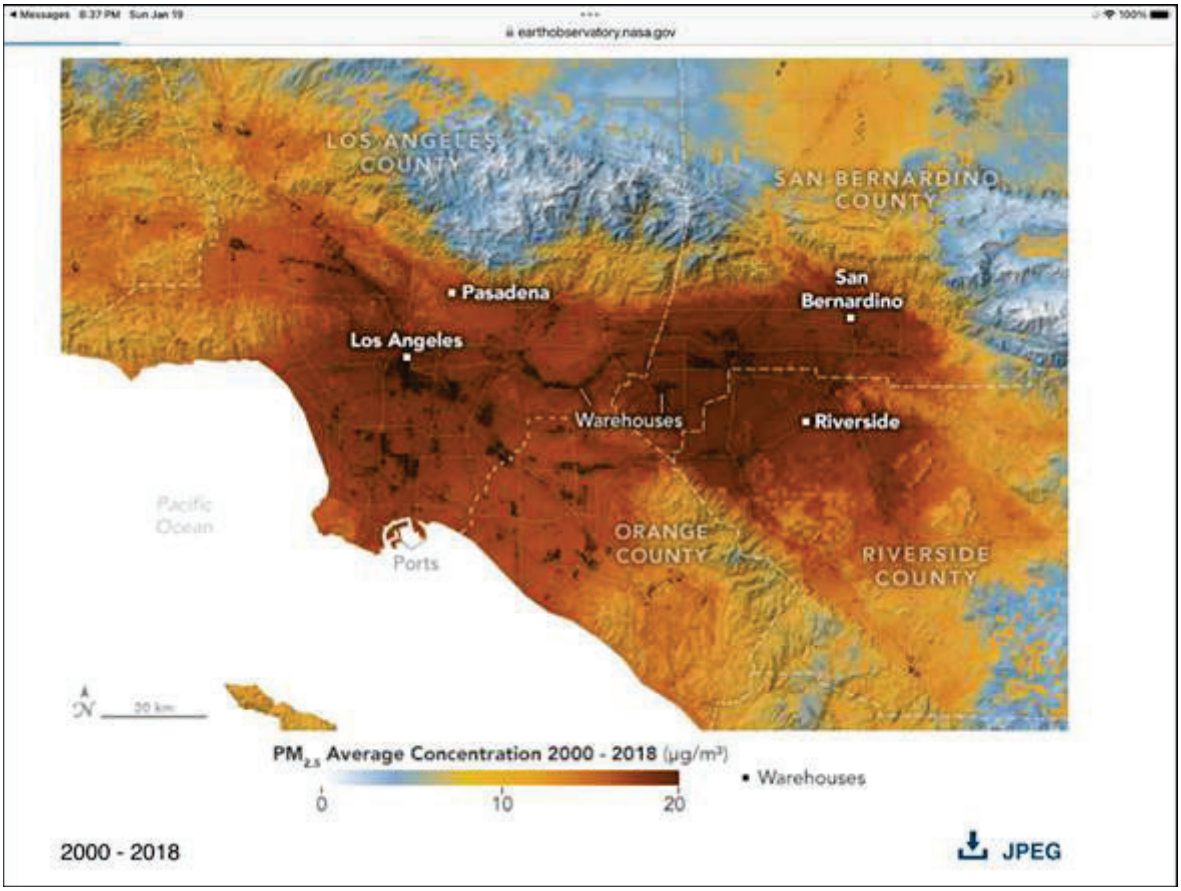
Vague Promise for VFW Hall

The project's vague promise to establish a Veterans of Foreign Wars (VFW) Hall with significant restrictions is equally concerning. While the idea of supporting our veterans is commendable, imposing numerous limitations undermines the potential value of this gesture. Many of our veterans are disabled and would have a difficult time traveling to that distance. Our veterans deserve facilities and services that are genuinely accessible, meaningful, and supportive without unnecessary barriers.

High Pollution and Disruptions to Natural Habitats and Ecosystems

Furthermore, the project would disrupt natural habitats and ecosystems that currently exist in the area. This destruction of nature not only harms wildlife but also diminishes the biodiversity that is essential for a healthy environment. In addition, the significant increase in traffic from big-rig trucks and other vehicles servicing the warehouses will exacerbate air pollution and negatively impact air quality. Our community cannot afford to face the health risks associated with increased levels of particulate matter and emissions.

To illustrate the potential harm, I will include a satellite photo of the pollution in the Los Angeles area prior to the recent fires, showcasing the poor air quality surrounding warehouse-heavy regions. This serves as a cautionary example of the consequences our community could face should this project proceed as planned.



Undefined Industrial and Commercial Plans

Finally, the plans for limited industrial and commercial uses remain alarmingly undefined, leaving residents uncertain about the long-term impacts of this project. Ambiguous terms and undetermined uses invite the possibility of undesirable developments that may harm the community's character and quality of life. Clear and specific plans should be a prerequisite for any development proposal to ensure transparency and accountability.

Conclusion

In light of these significant issues, I urge the San Joaquin County Planning Commission to reconsider the approval of the San Joaquin Pacific Gateway Project. Instead, I encourage the commission to explore alternatives that preserve our farmland, support sustainable growth, and prioritize the long-term interests of our community.

Thank you for considering my concerns. I respectfully request that this letter be included as part of the official record for the project's review. Please do not hesitate to contact me should you have any questions or require additional information.

Sincerely,

Danielle F. Smith

Tue 1/21/2025 11:43 AM

Concerned Tracy Resident

From: stef242@sbcglobal.net

To: bmillar@sjgov.org

To Mr. Millar,

Please don't let another contractor (Ridgeline Property Group) (Project Title: Pacific Gateway)build more warehouses, non-accredited University, VFW post, with restrictions.

Location: north and east of interstate 580 (I-580) and north of State route 132 (SR 123)

24,675,000 ft of industrial use, 160,000 of General commercial use, 93,000 ft of industrial park use. Initial development phase will consist of approximately 4 million ft. limited industrial uses in four buildings!!

Tracy does not need more traffic, more industrial buildings. We need better infrastructure, entertainment for family to keep them spending in our city, another hospital (preferably Kaiser), an updated library.

Don't let more contractors build more industrial buildings! Please we've been Tracy residents for 22+ years. It's not the Tracy it once was.

We have enough empty industrial buildings.

Please listen to the community.

Regards,

Stefanie Adams

Mon 1/20/2025 1:51 PM

Pacific Gateway Project Scoping Comment Letter

From: ahansen@delpuertowd.org

To: bmillar@sjgov.org

CC: adoud@youngwooldridge.com; ascheuber@delpuertowd.org

Mr. Millar,

Thank you for the opportunity to provide comments on the scope and content of the subject project's Draft Environmental Impact Report. I look forward to working with you as this major project moves forward. If at any time I can be of assistance to provide information about the District and/or the lands served within its boundaries, please do not hesitate to contact me directly at the number below.

Very Sincerely,

Anthea

Anthea G. Hansen

General Manager

Del Puerto Water District

PH 209-892-4470/FAX 209-892-4469

Attachment:

Del Puerto WATER District

P.O. Box 1596 Patterson, CA 95363-1596 Phone (209) 892-4470 • Fax (209) 892-4469

January 20, 2025

VIA EMAIL

Mr. Brian Millar (bmillar@sjgov.org)

San Joaquin County Community Development Department 1810 E. Hazelton Avenue

Stockton, Ca 95205

Re: Notice of Preparation and Scoping for the Draft Environmental Impact Report - Pacific Gateway Project

Dear Mr. Millar:

The following comments are submitted on behalf of Del Puerto Water District ("District") regarding the scope and content of the Draft Environmental Impact Report (DEIR) to be prepared for the Proposed Pacific Gateway Project ("Project").

As a California Water District and federal water service contractor, the jurisdictional responsibilities and expertise of the District are in the area of surface water management and distribution for agricultural purposes. The District also has jurisdictional responsibilities and expertise in the area of groundwater management and has elected to form a local multi-agency Groundwater Sustainability Agency, the DM-II GSA, which serves as the exclusive GSA for the portion of the groundwater basin underlying its boundaries. The District further assists its agricultural landowners and water users in complying with the requirements ofthe California Regional Water Quality Control Board's Irrigated Lands Regulatory Program (ILRP) for the Central Valley Region through its participation in the Westside San Joaquin River Watershed Coalition.

As the agency currently responsible for providing agricultural water service to approximately 180 acres of the land in the subject planning area, the current proposed Project raises several issues of serious, long-range importance and concern to the District. You are therefore advised that the District reserves the right to provide comments on any future DEIR for the project and may request that certain conditions be agreed to prior to final project approval. This most certainly would apply to any requirement for the District to continue water service to the Project lands within its boundaries if they are to remain in agricultural production over the course of Project buildout. If they are not to remain, the DEIR should consider all impacts associated with lands left "fallow" and awaiting development over a prolonged period of development.

Agricultural land in the State and County has been steadily disappearing over the years in the face of urban development and other pressures. It is the District's view that the protection of existing agricultural and open space lands is of critical importance not only to the District, but to the present and future residents ofthe County and State. Therefore, as a general rule, the District strongly favors the preservation of prime agricultural land and policies intended to protect agricultural lands. The proposed Project is in direct conflict with these long-standing policies. In addition to their proven food production value, it must

be noted that these agricultural lands also have significant biological and environmental value. In short, the District considers the proposed conversion of Project lands to non-agricultural purposes to be problematic and the long-term impacts associated therewith to be far-reaching and significant. To address these concerns, at a minimum, project alternatives that direct impacts away from prime farmland sites to non-agricultural or to more marginal, impaired or non-productive lands should be considered during preparation of the DEIR.

The District also discourages adjacent land uses that are incompatible with ongoing agricultural operations. It has been our experience that "Right-to-Farm" ordinances and public notices do little to reduce conflict and protect against potential liability associated with adjacent competing lands uses. Additional mitigation measures, including buffer zones and setbacks, as well as measures that address the growth inducing impacts associated with the proposed project, should be analyzed and addressed in the DEIR. Protective policies should be considered, analyzed and adopted where appropriate before finalizing the DEIR.

Ofadditional impact and concern approximately 180 acres of lands within the Project area currently support District operations and long-term water .supply planning efforts through the payment ofcertain land-based charges. Detachment ofthese lands from the District without consideration ofthis effect will create an economic hardship on the District and its remaining landowners. While we appreciate the preliminary economic analysis prepared for the project, we note that such analysis does not consider the offsetting financial impacts that this conversion oflands will cause. Please be advised that the District may seek one-time and/or ongoing compensation to offset the economic impacts associated with detachment of District lands, particularly as those impacts relate to the District's construction repayment obligations for the Central Valley Project (CVP), and the pending costs for mitigating subsidence along the Delta-Mendota Canal.

Continued urban encroachment into agricultural lands not only impairs the viability of the local agricultural economy, it also potentially threatens the quantity and quality oflocal. water supplies available for all uses. The availability of and/or the potential impacts associated with the water supply for the proposed Project need to be fully and correctly analyzed and addressed in the DEIR, as does the affect of any drainage leaving the project boundaries and potentially percolating back into the local aquifer.

Additionally, as the project boundaries will "surround" both sides ofthe Delta-Mendota Canal (DMC) in one area, and run concurrent with the south-western edge of the DMC for its entirety, the draft document should analyze the impacts to both the District and the non-

federal operating entity ofthe DMC, the San Luis & Delta-Mendota Water Authority, with respect to operational requirements, which shall not be impeded due to the Project. Again, please be advised that any impacts or mitigation costs related to DMC operations will need to be fully mitigated by the Project, and not at the expense of the remaining Landowners served by the facilities.

While the District does not own or operate any wells, District landowners utilize local groundwater supplies in conjunction with surface water supplies made available to and by the District. While the District has supported the local groundwater resource for many years through the importation of surface water supplies, the effects of the conversion of project lands to urban uses on groundwater recharge, levels, and quality needs to be analyzed and meaningful mitigation of the Project's impacts on the groundwater resource should be addressed in the DEIR. Additionally, the DEIR should address how the Project will participate locally to meet the requirements of the Sustainable Groundwater Management Act, which requires that all Subbasins reach sustainability by year 2040. As noted in the District's Pre-Application comment letter, the proposed Project boundaries are located within two adjacent Subbasins, which will need to be addressed to ensure that the Project and its future Landowners remain party to the requirements for achieving local groundwater sustainability.

Thank you for the opportunity to comment on the scope and content of the environmental information to be included in the DEIR. The District requests to be kept informed as to any actions proposed or taken by the County with regard to District lands. Ifyour office or the County has any questions or requires any additional information in this regard, please do not hesitate to contact the District.

Very truly yours,

Anthea G. Hansen, General Manager

Cc: Board of Directors Alan Doud, Esq.

Tue 1/21/2025 4:50 PM

Statement of Opposition To Pacific Gateway Project

From: jlupechaveziii@gmail.com

To: bmillar@sjgov.org

Hello Mr. Millar,

I hope you are well. My name is Jose Chavez and I would like to submit a public comment firmly opposing Ridgeline Property Group's Pacific Gateway Project along I-580 and CA-132. This project will devalue San Joaquin County's scarce farmland, further congest the City of Tracy's roads, and drive our local economy into a deeper hole with empty 4 million feet of limited industrial use buildings.

Best,

Jose Chavez

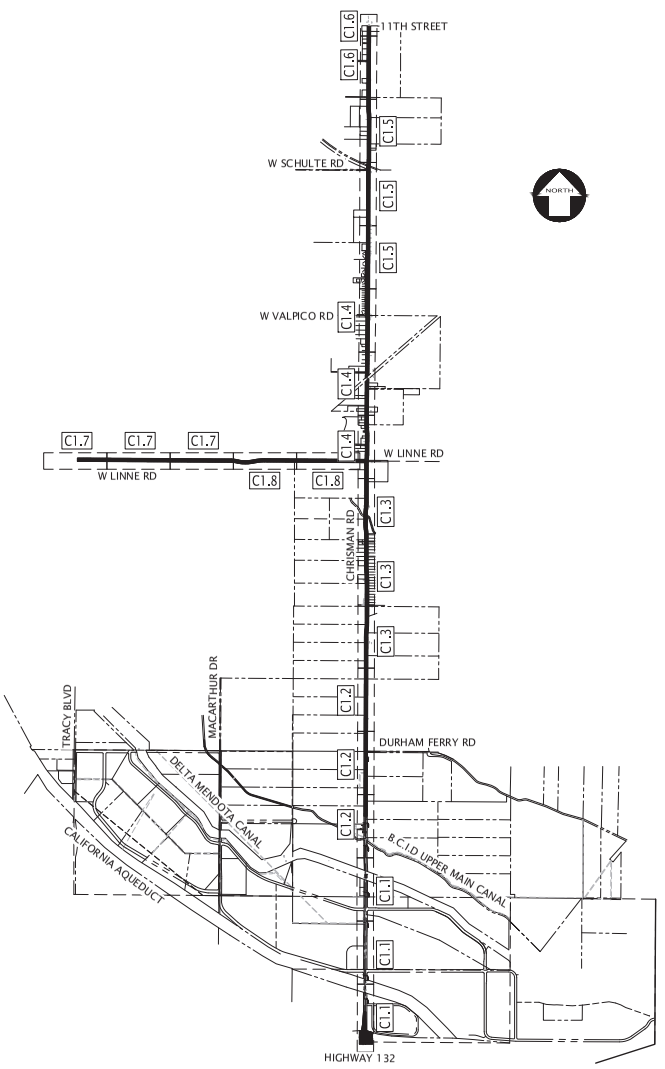
APPENDIX C

TRAFFIC STUDY AREA

FOR

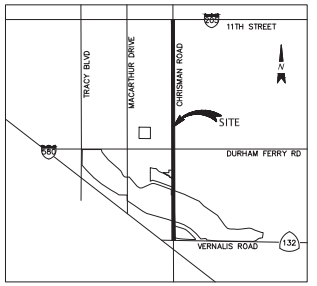
RIDGELINE PROPERTY GROUP, LLC

SAN JOAQUIN COUNTY, CALIFORNIA



SHEET LAYOUT

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

NOTE: THIS SITE HAS FIBER OPTIC LINES LOCATED ON OR ADJACENT TO IT.

NOTES

1. THIS PLOT WAS PREPARED FROM INFORMATION FURNISHED IN GUARANTEE FOR TITLE INSURANCES, PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY. NO LIABILITY IS ASSUMED FOR MATTERS OF RECORD NOT STATED IN SAID PRELIMINARY TITLE REPORT THAT MAY AFFECT THE TITLE LINES, OR EXCEPTIONS, OR EASEMENTS OF THE PROPERTY.

   - GUARANTEE NUMBER 5026900-6680754, DATED AUGUST 27, 2021
   - GUARANTEE NUMBER 5026900-6680763, DATED SEPTEMBER 08, 2021
   - GUARANTEE NUMBER 5026900-6680771, DATED SEPTEMBER 08, 2021
   - GUARANTEE NUMBER 5026900-6680757, DATED AUGUST 27, 2021
   - GUARANTEE NUMBER 5026900-6680773, DATED SEPTEMBER 23, 2021
   - GUARANTEE NUMBER 5026900-6680781, DATED AUGUST 27, 2021
   - GUARANTEE NUMBER 5026900-6680782, DATED SEPTEMBER 08, 2021
   - GUARANTEE NUMBER 5026900-6680801, DATED AUGUST 27, 2021

2. ALL DISTANCES AND ELEVATIONS SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF.

3. UTILITY INFORMATION HEREON IS PROGRESS AT THIS TIME. A REQUEST WAS MADE TO THE RESPECTIVE AGENCIES FOR INFORMATION REGARDING THE LOCATION OF THEIR FACILITIES ON THIS SITE, AS OF 10-21-2021, THEY HAD NOT RESPONDED WITH THIS INFORMATION. UNTIL WE RECEIVE THIS INFORMATION AND ARE ABLE TO DELINEATE THESE FACILITIES, ALL PARTIES SHOULD CONSIDER THIS SURVEY AS PRELIMINARY WITH REGARDS TO IRRIGATION, GAS & WATER THE LOCATION OF UTILITY FACILITIES. UPON RECEPT OF THIS INFORMATION KIER & WRIGHT WILL UPDATE THIS SURVEY AND REISSUE IT.

4. PHYSICAL ITEMS SHOWN ON THIS SURVEY ARE LIMITED TO THOSE ITEMS VISIBLE AS OF THE DATE OF THIS SURVEY. SUBSURFACE STRUCTURES, IF ANY, ARE NOT SHOWN. SAID SUBSURFACE OBJECTS MAY INCLUDE, BUT ARE NOT LIMITED TO, CONCRETE FOOTINGS, SLABS, SHORING, STRUCTURAL PILES, UTILITY VAULTS, PIPING, UNDERGROUND TANKS, AND ANY OTHER SUBSURFACE STRUCTURES NOT REVEALED BY A SURFACE INSPECTION.

5. BENCHMARK:
   NGS BENCHMARK HS0808 – ALONG CORRAL HOLLOW ROAD, IN TOP OF AND 15.1 FT SOUTHEAST OF THE NORTHWEST END OF THE NORTH CONCRETE ABUTMENT WINGWALL OF THE ROAD BRIDGE SPANNING THE CALIFORNIA AQUEDUCT, 18.0 FT WEST OF THE ROAD CENTERLINE, AND 1.0 FT ABOVE THE LEVEL OF THE ROAD. NOTE—THE MONUMENT IS ON THE ROAD RIGHT-OF-WAY.
   ELEVATION= 252.01 FEET (NAVD 88)

6. BASIS OF BEARINGS:
   THE BEARING OF NORTH 00° 31' 20" EAST TAKEN ON THE MONUMENT LINE OF MACARTHUR AS SHOWN ON THAT CERTAIN PARCEL MAP FILED FOR RECORD ON DECEMBER 24, 2007, IN BOOK 24 OF PARCEL MAPS AT PAGE 155, OFFICIAL RECORDS OF SAN JOAQUIN COUNTY WAS TAKEN AS THE BASIS FOR ALL BEARINGS SHOWN HEREON.

7. THE AERIAL MAPPING WAS PREPARED USING COMPUTER ASSISTED, PHOTOGRAMMETRIC METHODS BY COOPER AERIAL SURVEYS CO., IN PHOENIX ARIZONA. JOB TITLE GOLDEN STATE REV WITH LIDAR. IN AREAS OF DENSE VEGETATION, ACCURACY OF CONTOURS MAY DEVIATE FROM ACCEPTED ACCURACY STANDARDS. DATE OF PHOTOGRAPHY 10-17-2022, ORIGINAL COMPILED MAP SCALE 1"=40', CONTOUR INTERVAL 1 FOOT. THE GRID IS BASED ON PHOTOGRAMMETRIC METHODS COMPILED ON DIGITAL STEREO WORKSTATIONS USING AERIAL PHOTOGRAPHY. CONTROL SURVEY PERFORMED BY KIER & WRIGHT, LIVERMORE, CA.

8. THIS MAP HAD PRODUCED ACCORDING TO PROCEDURES THAT COMPLY WITH NATIONAL STANDARD FOR SPATIAL ACCURACY (NSSDA) FOR A CONTOUR INTERVAL OF 1-FOOT AND A MAP SCALE OF 1"=40', CONTOURS WITHIN VEGETATED AREAS AND SHADOW OUTLINED AREA MAY NOT MEET MAPPING STANDARDS AND SHOULD BE FIELD CHECKED. DATE OF PHOTOGRAPHY 09-20-2021.

   AS OF THE DATE OF THIS SURVEY, IT WAS OBSERVED THAT THE PROJECT SITE WAS ACTIVELY FARMED DURING OUR FIELD SURVEY. PRIOR TO ANY MASS GRADING OPERATIONS AND AFTER DEMOLITION OR SITE CLEARING AND GRUBBING, IT IS RECOMMENDED THAT AN ADDITIONAL TOPOGRAPHIC SURVEY BE PERFORMED FOR THE PURPOSE OF REVIEWING QUANTITIES WHERE SOIL CAN EXPAND OR CONTRACT.

SHEET INDEX

SHEET	DESCRIPTION
C1.0	COVER SHEET
C1.1	CHRISMAN RD
C1.2	CHRISMAN RD
C1.3	CHRISMAN RD
C1.4	CHRISMAN RD
C1.5	CHRISMAN RD
C1.6	CHRISMAN RD
C1.7	LINNE RD
C1.8	LINNE RD
C2.0	INTERSECTION STUDY AREA KEY MAP
C2.1	1 – CHRISMAN RD – 11TH ST
C2.2	3 – KASSON RD – GRANT LINE RD – 11TH ST
C2.3	4 – CHRISMAN RD – SCHULTE RD
C2.4	5 – CHRISMAN RD – VALPICO RD – TRACY ARMY DEPOT
C2.5	6 – CORRAL HOLLOW RD – LINNE RD
C2.6	7 – TRACY BLVD – LINNE RD
C2.7	8 – MACARTHUR DR – LINNE RD
C2.8	9 – CHRISMAN RD – LINNE RD
C2.9	14, 15, 16 AND 17 – S CHRISMAN RD – SR 132 & I-580 WB & EB RAMPS
C2.10	18, 19 AND 22 – BIRD RD – SR 22 WB & EB RAMPS

LEGEND

BUILDING LINE
CENTERLINE
CONCRETE CURB
MAJOR CONTOUR LINE
MINOR CONTOUR LINE
DRIVEWAY
EASEMENT LINE
EDGE OF PAVEMENT
ELECTRIC LINE
FENCE LINE
FIBER OPTICS LINE
FUEL LINE
GAS LINE–VALVE & METER
GUARD RAIL
LOT LINE
MONUMENT/MONUMENT LINE
ABBUTER'S RIGHTS RELINQUISHED
OIL LINE
OVERHEAD POWER LINE
PROPERTY LINE
RAILROAD TRACKS
SPOT ELEVATION
BACKFLOW PREVENTION DEVICE
BLOWOFF VALVE
FIRE DEPARTMENT CONNECTION
FIRE HYDRANT
GAS METER
GUY ANCHOR
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MAIL BOX
NAIL FOUND
POST INDICATOR VALVE
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RAILROAD SPIKE FOUND
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TRANSFORMER
TRAFFIC SIGN
UTILITY BOX
UTILITY LINE MARKER
WATER VALVE
WELL

ABBREVIATIONS

BC	BACK OF CURB	LIP	LIP OF GUTTER
B.C.I.D.	BANTA–CARBONA IRRIGATION DISTRICT	LP	LOW POINT
BEG	BEGIN	MGR	METAL GUARD RAIL
BFP	BACK FLOW PREVENTER	MON	MONUMENT
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BLRD	BOLLARD	N.A.P.	NOT A PART
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BW	BACK OF WALK	P–FC	PAVEMENT AT FACE OF CURB
BX	BOX	PAE	PRIVATE ACCESS EASEMENT
C–FC	CONCRETE AT FACE OF CURB	PG&E	PACIFIC GAS & ELECTRIC
CB	CATCH BASIN	PM	PARCEL MAP
CL	CENTER LINE	POC	POINT OF CONNECTION
DDCV	DOUBLE DETECTOR CHECK VALVE	PP	POWER POLE
DI	DRAIN INLET	PUE	PUBLIC UTILITY EASEMENT
E	EAST	RE	RIM ELEVATION
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TRAFFIC STUDY AREA
FOR
RIDGELINE PROPERTY GROUP, LLC
SAN JOAQUIN COUNTY, CALIFORNIA

DATE	AUGUST, 2023
SCALE	AS SHOWN
DESIGNER	CR
DRAWN BY	VB
JOB NO.	A21619-11
SHEET	C1.0
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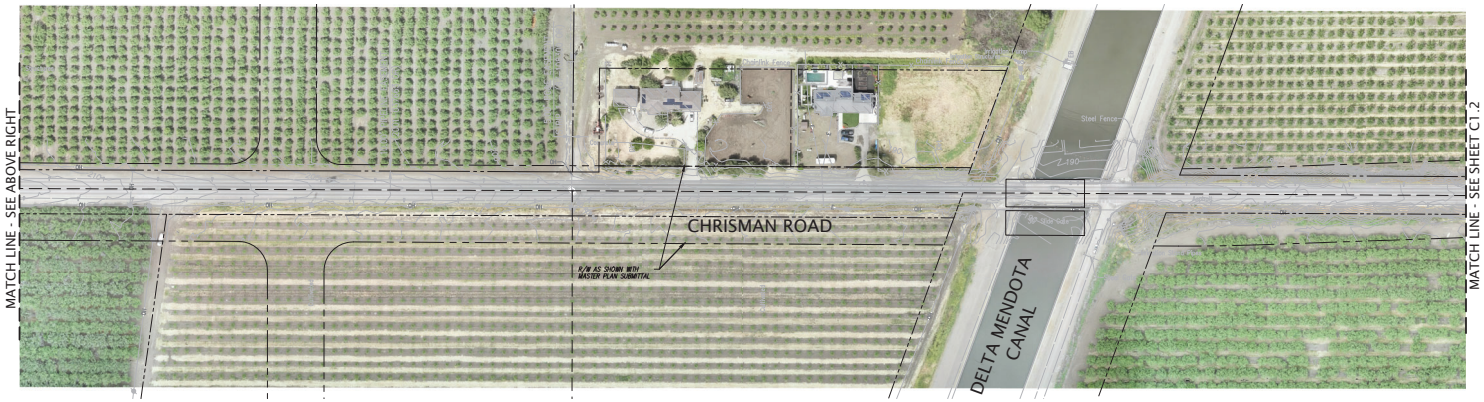

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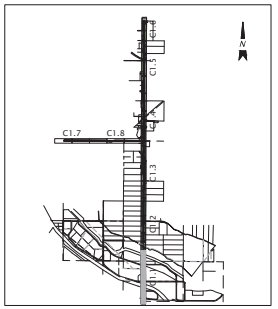

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STUDY AREA

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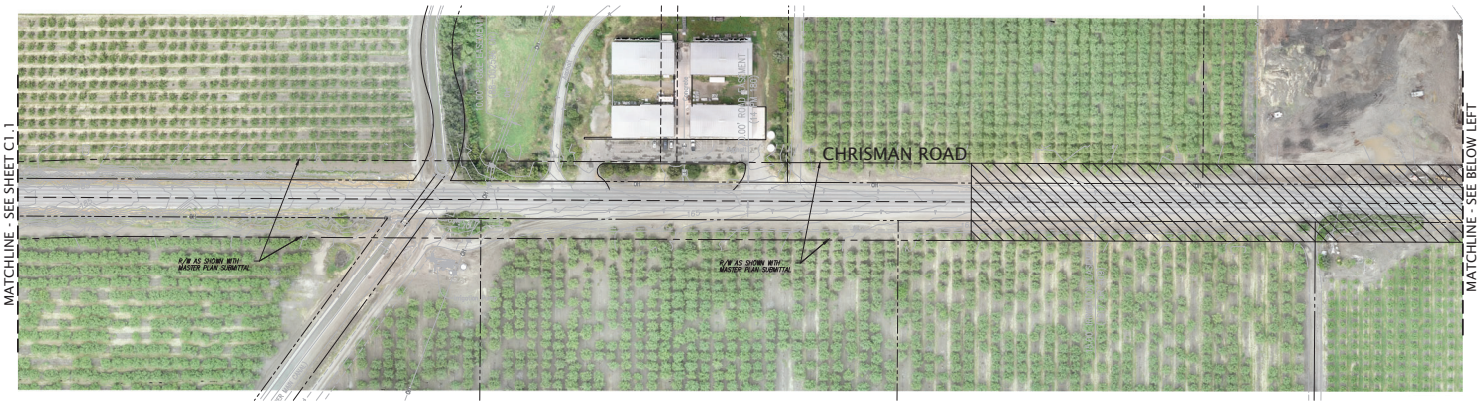
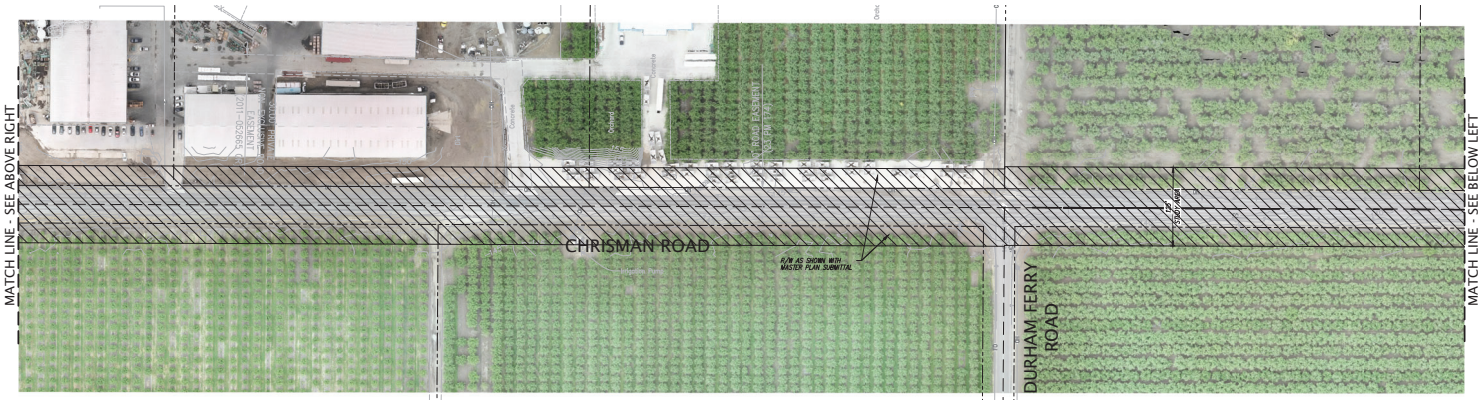
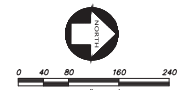
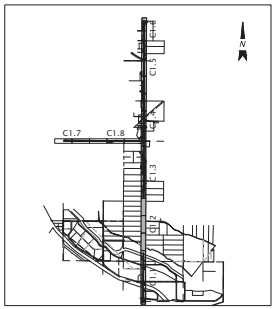
*Figure not OCR compatible











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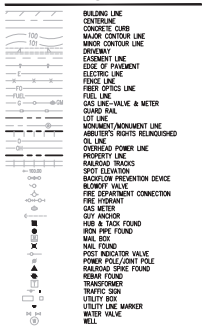

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*Figure not OCR compatible



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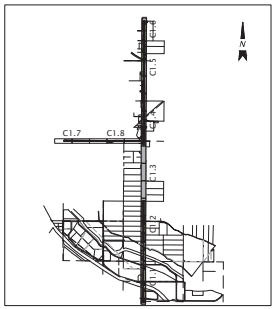

KEY MAP

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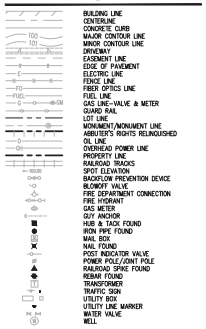

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*Figure not OCR compatible



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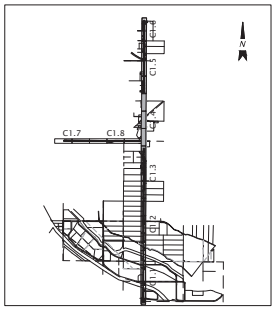

KEY MAP

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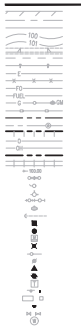

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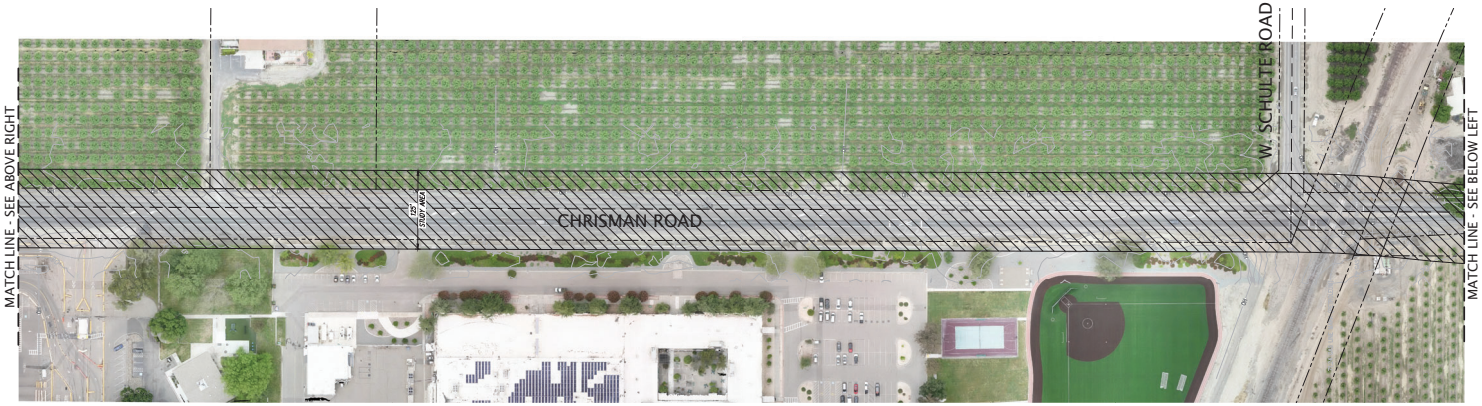
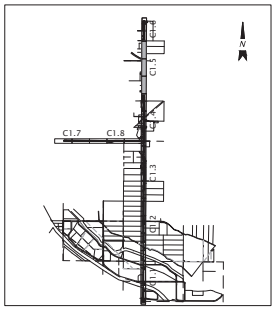
*Figure not OCR compatible





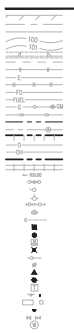






KEY MAP

LEGEND



BUILDING LINE
CENTERLINE
CONCRETE CURB
MAJOR CONTOUR LINE
MINOR CONTOUR LINE
DRIVEWAY
EASEMENT LINE
EDGE OF PAVEMENT
ELECTRIC LINE
FENCE LINE
FIBER OPTICS LINE
FUEL LINE
GAS LINE-VALVE & METER
GUARD RAIL
LOT LINE
MONUMENT/MONUMENT LINE
ABBUTER'S RIGHTS RELINQUISHED
OIL LINE
OVERHEAD POWER LINE
PROPERTY LINE
RAILROAD TRACKS
SPOT ELEVATION
BACKFLOW PREVENTION DEVICE
BLOWOFF VALVE
FIRE DEPARTMENT CONNECTION
FIRE HYDRANT
GAS METER
GUY ANCHOR
HUB & TACK FOUND
IRON PIPE FOUND
MAIL BOX
NAIL FOUND
POST INDICATOR VALVE
POWER POLE/JOINT POLE
RAILROAD SPIKE FOUND
REBAR FOUND
TRANSFORMER
TRAFFIC SIGN
UTILITY BOX
UTILITY LINE MARKER
WATER VALVE
WELL

ABBREVIATIONS

BC	BACK OF CURB	LIP	LIP OF GUTTER
B.C.I.D.	BANTA-CARBONA IRRIGATION DISTRICT	LP	LOW POINT
BEG	BEGIN	MGR	METAL GUARD RAIL
BFP	BACK FLOW PREVENTER	MON	MONUMENT
BL	BUILDING LINE	N	NORTH
BLRD	BOLLARD	N.A.P.	NOT A PART
BRC	BACK OF ROLLED CURB	NW	NORTH WEST
BS	BOTTOM OF STAIR	O.R.	OFFICIAL RECORD
BTM	BOTTOM	(P)	PER PLAN
BW	BACK OF WALK	P-FC	PAVEMENT AT FACE OF CURB
BX	BOX	PAE	PRIVATE ACCESS EASEMENT
C-FC	CONCRETE AT FACE OF CURB	PG&E	PACIFIC GAS & ELECTRIC
CB	CATCH BASIN	PM	PARCEL MAP
CL	CENTER LINE	POC	POINT OF CONNECTION
DDCV	DOUBLE DETECTOR CHECK VALVE	PP	POWER POLE
DI	DRAIN INLET	PUE	PUBLIC UTILITY EASEMENT
E	EAST	RE	RIM ELEVATION
EB	ELECTRIC BOX	ROW	RIGHT OF WAY
EG	EDGE OF GRAVEL	S	SOUTH
EMH	ELECTRICAL MANHOLE	SD	STORM DRAIN
EP	EDGE OF PAVEMENT	SDCO	STORM DRAIN CLEAN OUT
ESMT	EASEMENT	SDMH	STORM DRAIN MANHOLE
EV	ELECTRICAL VAULT	SE	SOUTH EAST
EW	EDGE OF WALK	SL	STREET LIGHT
FC	FACE OF CURB	SLB	STREET LIGHT BOX
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FDC	FIRE DEPARTMENT CONNECTION	SS	SANITARY SEWER
FF	FINISH FLOOR	SSCO	SANITARY SEWER CLEAN OUT
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FW	FACE OF WALL	TC	TOP OF CURB
GA	GUY ANCHOR	TS	TOP OF STAIR
GB	GRADE BREAK	TW	TOP OF WALL
GLM	GAS LINE MARKER	UB	UNKNOWN UTILITY BOX
GM	GAS MARKER/METER	VG	VALLEY GUTTER
HSRB	HOSE BIB	W	WEST
HDWL	HEADWALL	WB	WATER BOX
IE	INVERT ELEVATION	WM	WATER METER
JT	JOINT TRENCH	WV	WATER VALVE

LEGEND

STUDY AREA

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Phone (925) 245-8788
www.KierWright.com

CHRISMAN RD
TRAFFIC STUDY AREA
FOR
RIDGELINE PROPERTY GROUP, LLC
SAN JOAQUIN COUNTY, CALIFORNIA

DATE	AUGUST, 2023
SCALE	AS SHOWN
DESIGNER	CR
DRAWN BY	VB
JOB NO.	A21619-11
SHEET	C1.5
OF	20 SHEETS

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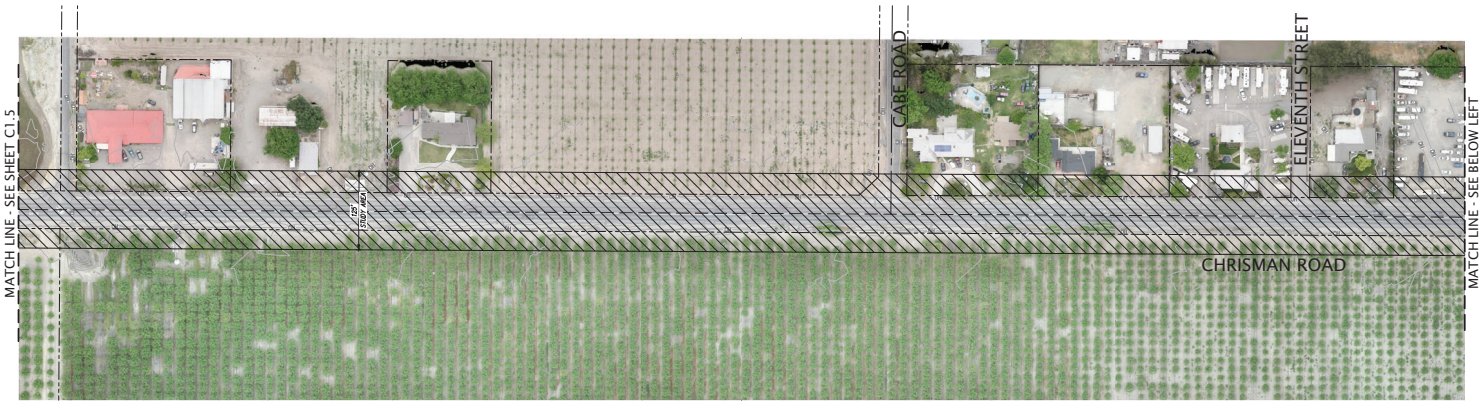
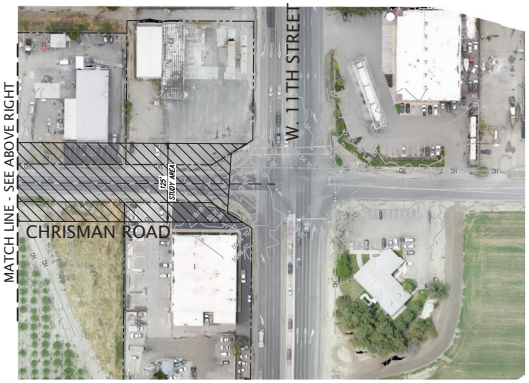
*Figure not OCR compatible





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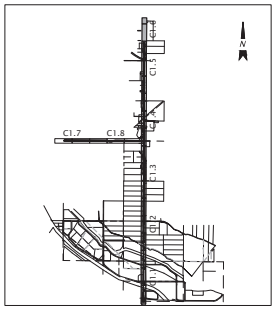

KEY MAP

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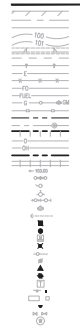

BUILDING LINE
CENTERLINE
CONCRETE CURB
MAJOR CONTOUR LINE
MINOR CONTOUR LINE
DRIVEWAY
EASEMENT LINE
EDGE OF PAVEMENT
ELECTRIC LINE
FENCE LINE
FIBER OPTICS LINE
FUEL LINE
GAS LINE-VALVE & METER
GUARD RAIL
LOT LINE
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ABBUTER'S RIGHTS RELINQUISHED
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JT	JOINT TRENCH	WV	WATER VALVE

LEGEND

STUDY AREA

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RIDGELINE PROPERTY GROUP, LLC
SAN JOAQUIN COUNTY, CALIFORNIA

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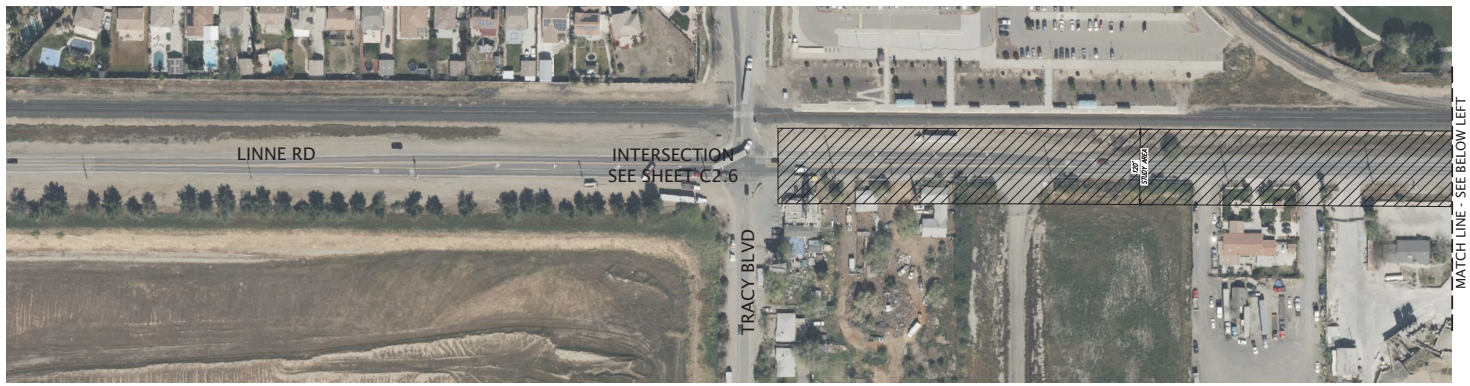
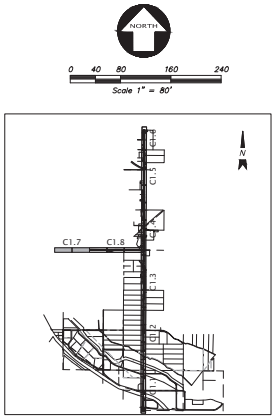
*Figure not OCR compatible







KEY MAP

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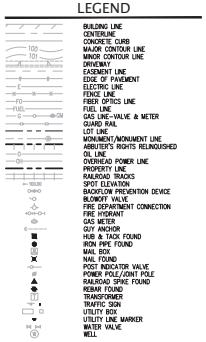

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LEGEND

STUDY AREA

NO.	BY	REVISION

NO.	BY	REVISION

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Livermore, California 94551
Phone (925) 245-8788
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LINNE RD
TRAFFIC STUDY AREA
FOR
RIDGELINE PROPERTY GROUP, LLC
SAN JOAQUIN COUNTY, CALIFORNIA

DATE	AUGUST, 2023
SCALE	AS SHOWN
DESIGNER	CR
DRAWN BY	VB
JOB NO.	A21619-11
SHEET	C1.7
OF	20 SHEETS

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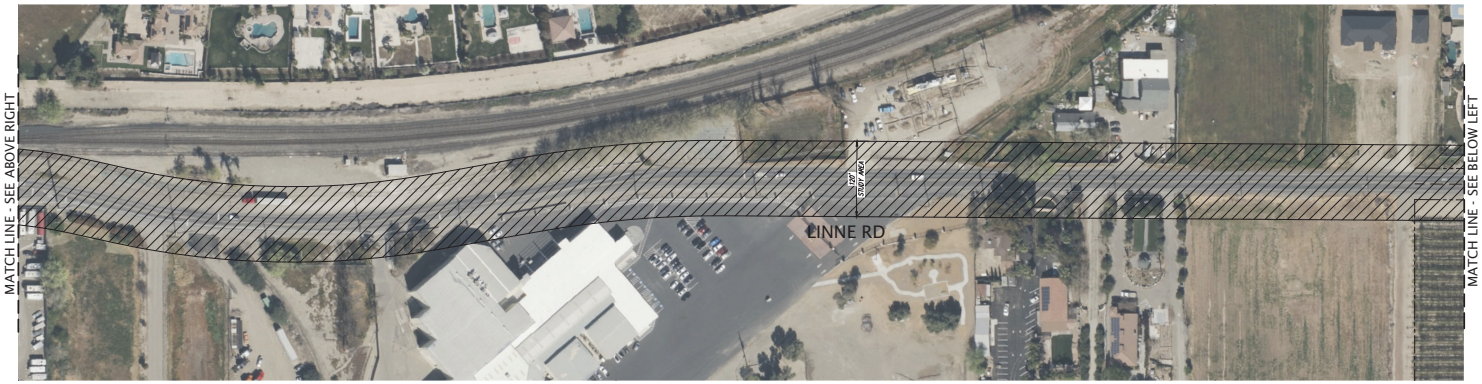
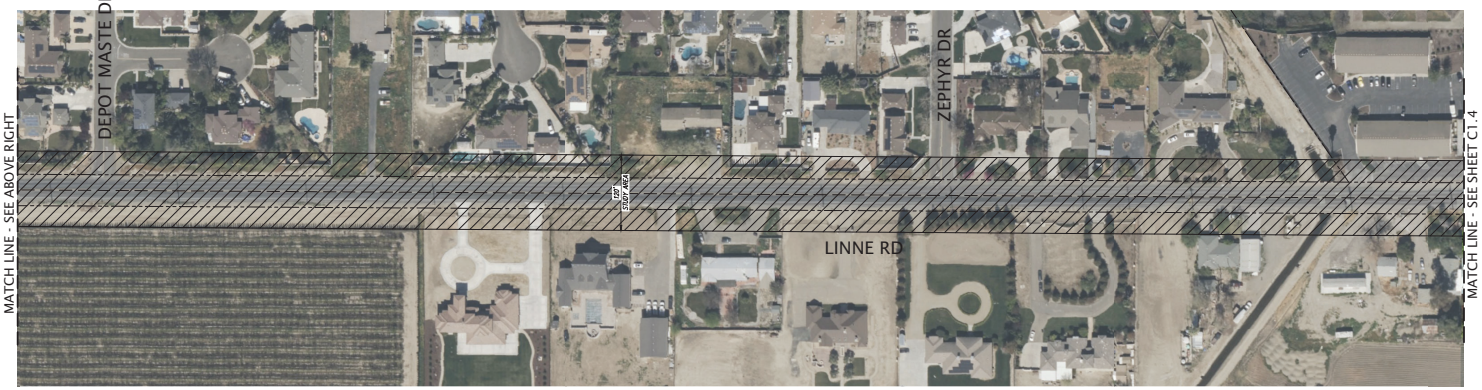
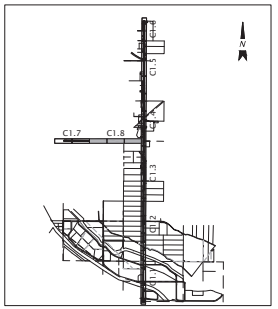
*Figure not OCR compatible





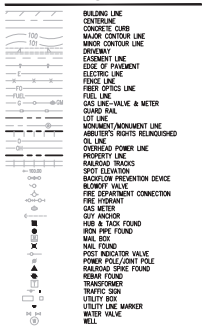






KEY MAP

LEGEND



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LEGEND

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LINNE RD
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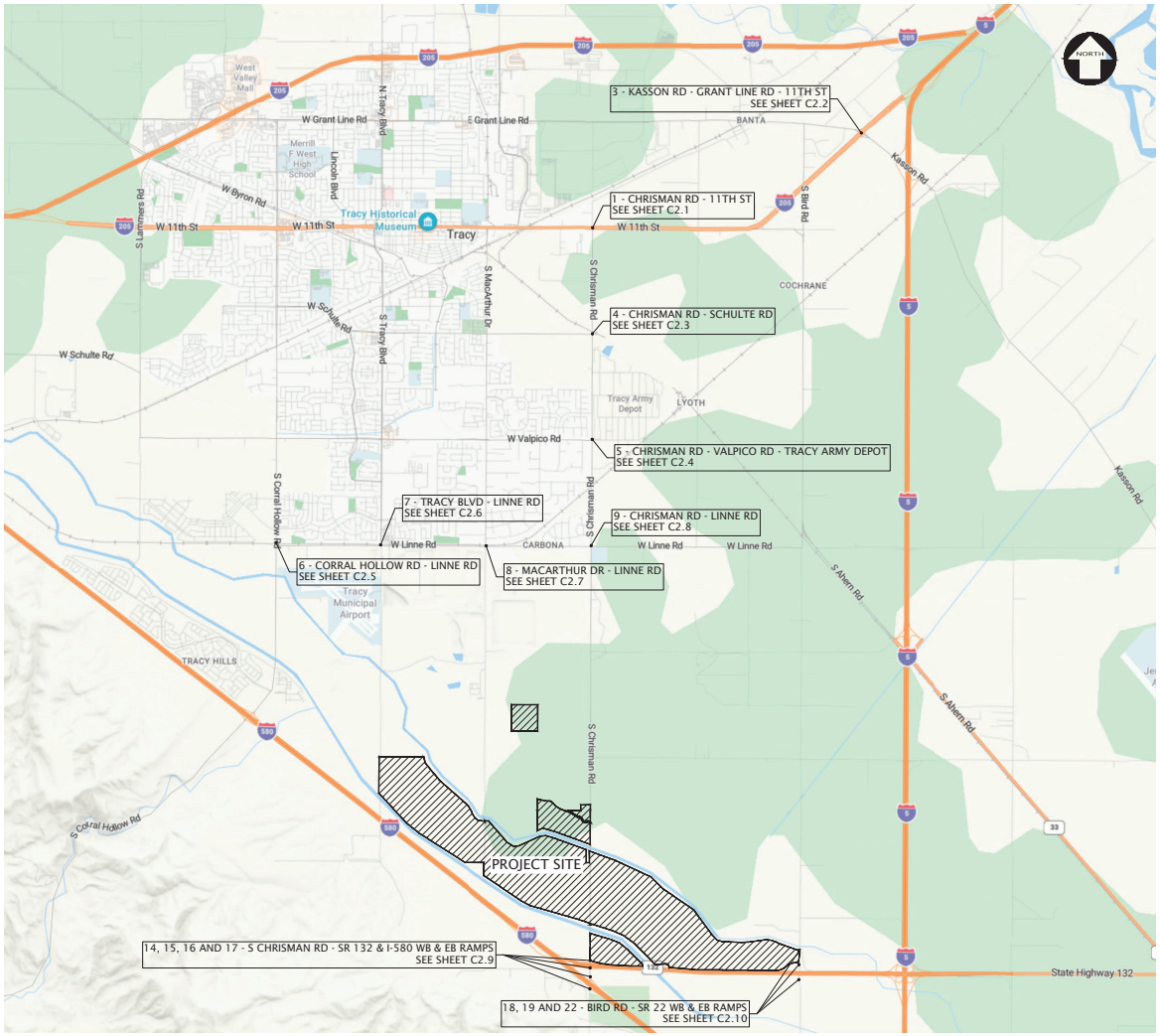
*Figure not OCR compatible

INTERSECTION STUDY AREA KEY MAP



KEY MAP
SCALE: 1" = 2500'

INTERSECTION STUDY AREA KEY MAP
TRAFFIC STUDY AREA
FOR
RIDGELINE PROPERTY GROUP, LLC
SAN JOAQUIN COUNTY, CALIFORNIA

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SHEET	C2.0
OF	20 SHEETS

*Figure not OCR compatible

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LEGEND

STUDY AREA

0 40 80 160 240

Scale 1" = 80'

NORTH

1 – CHRISMAN RD – 11TH ST

TRAFFIC STUDY AREA

FOR

RIDGELINE PROPERTY GROUP, LLC

SAN JOAQUIN COUNTY, CALIFORNIA

KIER+WRIGHT

2850 Collier Canyon Road
Livermore, California 94551

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SHEET C2.1 OF 20 SHEETS

JOB NO. A21619-11

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DESIGNED CB

SCALE AS SHOWN

DATE AUGUST 2022

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LEGEND

STUDY AREA

0 40 80 160 240

Scale 1" = 80'

NORTH

3 – KASSON RD – GRANT LINE RD – 11TH ST

TRAFFIC STUDY AREA

FOR

RIDGELINE PROPERTY GROUP, LLC

SAN JOAQUIN COUNTY, CALIFORNIA

KIER+WRIGHT

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Livermore, California 94551

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NO.	REVISION	BY	NO.	REVISION	BY
1			1		
2			2		
3			3		
4			4		
5			5		

SHEET C2.2

OF 20 SHEETS

JOB NO. A21619-11

DRAWN BY SB

DESIGNED CB

SCALE AS SHOWN

DATE AUGUST 2022

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LEGEND

STUDY AREA

0 40 80 160 240

Scale 1" = 80'

NORTH

4 – CHRISMAN RD – SCHULTE RD
TRAFFIC STUDY AREA
FOR
RIDGELINE PROPERTY GROUP, LLC

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NO.	REVISION	BY	NO.	REVISION	BY
1			1		
2			2		
3			3		
4			4		
5			5		

SHEET C2.3
OF 20 SHEETS

JOB NO. A21619-11
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DESIGNED CB
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LEGEND

STUDY AREA

0 40 80 160 240

Scale 1" = 80'

NORTH

5 – CHRISMAN RD – VALPICO RD – TRACY ARMY DEPOT
TRAFFIC STUDY AREA
FOR
RIDGELINE PROPERTY GROUP, LLC
SAN JOAQUIN COUNTY, CALIFORNIA

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1			1		
2			2		
3			3		
4			4		
5			5		

SHEET C2.4
OF 20 SHEETS

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DATE AUGUST 2025

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LEGEND

STUDY AREA

0 40 80 160 240

Scale 1" = 80'

NORTH

6 – CORRAL HOLLOW RD – LINNE RD

TRAFFIC STUDY AREA

FOR

RIDGELINE PROPERTY GROUP, LLC

SAN JOAQUIN COUNTY, CALIFORNIA

KIER+WRIGHT

2850 Collier Canyon Road
Livermore, California 94551

Phone (925) 245-8788
www.kierwright.com

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LEGEND

STUDY AREA

0 40 80 160 240
Scale 1" = 80'

NORTH

7 – TRACY BLVD – LINNE RD

TRAFFIC STUDY AREA

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LEGEND

STUDY AREA

0 40 80 160 240
Scale 1" = 80'

NORTH

8 – MACARTHUR DR – LINNE RD

TRAFFIC STUDY AREA

FOR

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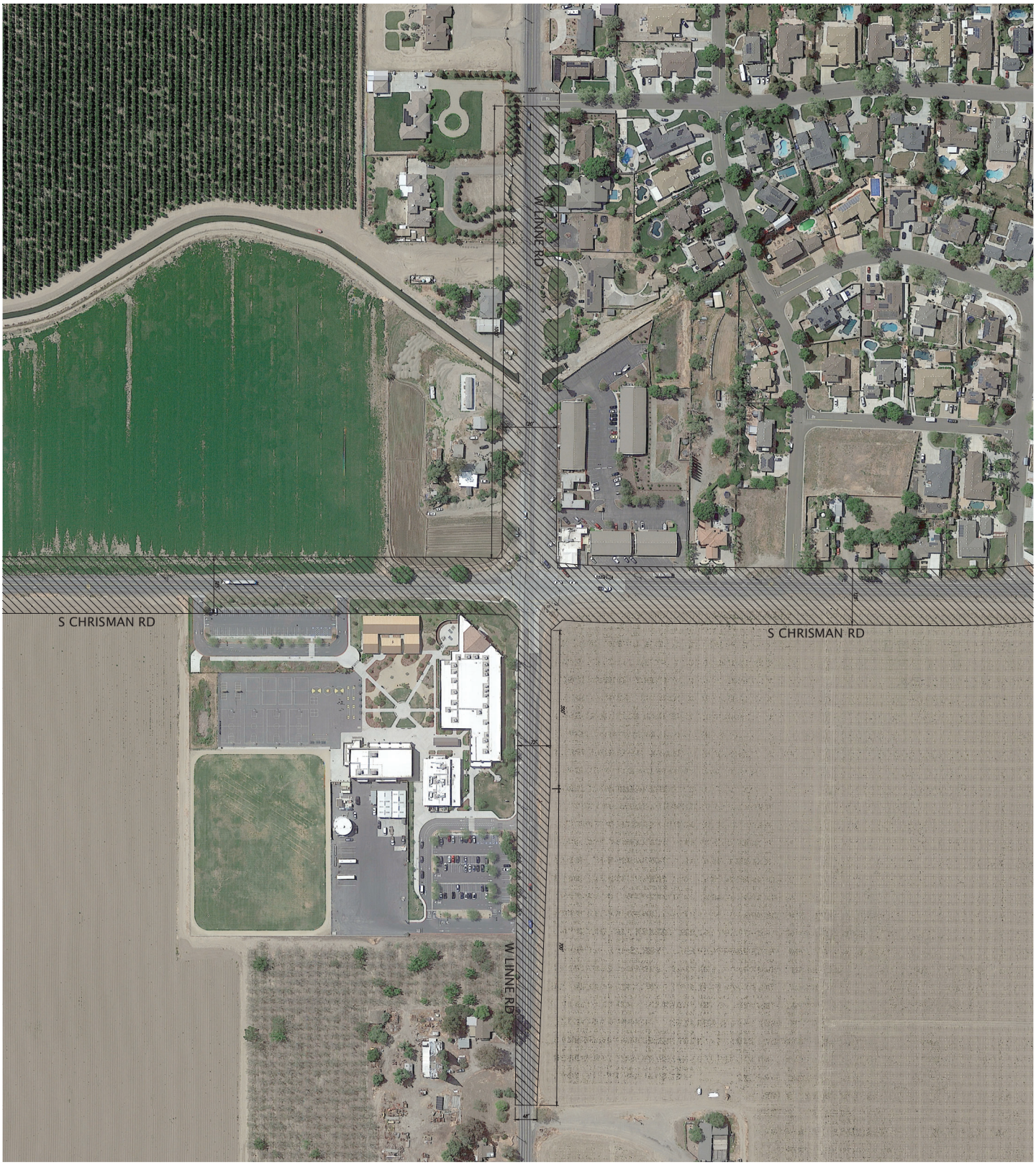

LEGEND

STUDY AREA

0 40 80 160 240

Scale 1" = 80'

NORTH

9 – CHRISMAN RD – LINNE RD

TRAFFIC STUDY AREA

FOR

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S CHRISMAN RD
S CHRISMAN RD
I-580 EB
I-580 WB
I-580 EB RAMP
I-580 WB RAMP
SR 132 EB RAMP
SR 132 WB RAMP
SR 132 EB
SR 132 WB
SR 132 EB RAMP
SR 132 WB RAMP
60'
115'
195'
60'
60'
1020'
1320'
1320'
1320

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LEGEND

STUDY AREA

Scale 1" = 150'

0 75 150 300 450

NORTH

18, 19 AND 22 – BIRD RD – SR 22 WB & EB RAMPS

TRAFFIC STUDY AREA

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Appendix D

Prepared for
Ridgeline Property Group
San Joaquin County, California

Prepared by
Ramboll Americas Engineering Solutions, Inc.
Irvine, California

Project Number
1690030668_Conv-001

Date
April 2025

PACIFIC GATEWAY PROJECT
AIR QUALITY TECHNICAL REPORT
SAN JOAQUIN COUNTY, CALIFORNIA

RAMBOLL

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Appendix G Health Risk Assessment Results

ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AB	Assembly Bill
ACC	Advanced Clean Cars
AEI	annual emissions inventory
AERMOD	American Meteorological Society/Environmental Protection Agency regulatory air dispersion model
AP-42	United States Environmental Protection Agency's Compilation of Air Pollutant Emission Factors
APCDs	Air Pollution Control Districts
AQ	air quality
AQAP	Air Quality Attainment Plan
AQMDs	Air Quality Management Districts
ATCM	Airborne Toxic Control Measure
ASFs	age sensitivity factors
AvgHP	Maximum rated average horsepower
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod®	California Emission Estimator Model®
CAP	criteria air pollutant
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CO	carbon monoxide
CO_2	carbon dioxide
cREL	chronic reference exposure level
CUP	conditional use permit
CY	cubic yard
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EF	emission factor
EIR	Environmental Impact Report

Acronym	Definition
EMFAC	EMission FACtors model
EVR	Enhanced vapor recovery
FAH	Fraction of time at home
FF	Fueling Facility
g/m^3	gram/cubic meter
GHG	greenhouse gas
HARP	Hot Spots Analysis and Reporting Program
HIA	acute hazard index
HIC	chronic hazard index
HIs	hazard indices
HQ	hazard quotient
HRA	health risk assessment
LDR	Land Disposal Restrictions
LLC	Limited Liability Company
LOS	level of service
MDO	market delivery operation
MSW	municipal solid waste
MT	metric tonnes
NAAQS	National Ambient Air Quality Standards
NED	National Elevation Datasets
NESHAPs	National Emissions Standards for Hazardous Air Pollutants
NHTSA	National Highway Traffic Safety Administration
NO	Nitric oxide
NO_2	nitrogen dioxide
NO_x	oxides of nitrogen
O_3	ozone
OEHHA	California Office of Environmental Health Hazard Assessment
OFF-ROAD	Off-road Emissions Inventory Program model
Pb	Lead
PM	particulate matter
PM10	particulate matter less than 10 microns in diameter
PM2.5	particulate matter less than 2.5 microns in diameter

Acronym	Definition
ppm	parts per million by volume
Ramboll	Ramboll US Consulting, Inc.
RCRA	Resource Conservation and Recovery Act
REL	reference exposure level
ROG	reactive organic gases
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
SAFE	Safer Affordable Fuel-Efficient
SCAQMD	South Coast Air Quality Management District
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO_2	Sulfur Dioxide
SOx	sulfur oxide
TACs	Toxic Air Contaminant
TRUs	transportation refrigeration units
USEPA	United States Environmental Protection Agency
USGS	United States Geologic Survey
VDECS	Verified Diesel Emission Control Strategies
VMT	Vehicle miles traveled
VOCs	Volatile Organic Compounds
ZEV	zero emission vehicle

1. INTRODUCTION

Ramboll Americas Engineering Solutions, Inc. (Ramboll) was asked to prepare an Air Quality (AQ) Technical Report for the proposed Pacific Gateway development in San Joaquin County, California (Project).

This AQ Technical Report analyzes the Project's impacts on air quality from construction and operations. In particular, this report describes the existing setting of the Project site, describes the relevant regulatory setting, discusses the methodology used to evaluate AQ emissions related to the Project, and evaluates potential impacts related to AQ that would be affected as a result of implementation of the Project.

1.1 Existing Conditions

The existing 1,576.7-acre site is currently developed with active agricultural uses, which include commercial scale almond and cherry orchards, as well as an agricultural processing and manufacturing facility operated by A.B. FAB, Inc. This area is designated by both the General Plan and zoning as Agricultural. The site is located in southwest San Joaquin County, northeast of the Interstate 580 (I-580) and north of State Route 132 (SR 132). The Site is approximately one mile from the southern boundary of the City of Tracy.

1.2 Project Analysis

The Project will include a variety of uses within the Specific Plan Area, including modern Class "A" industrial warehouse and distribution facilities, a university campus, commercial retail uses, business park, and a Veteran of Foreign Wars (VFW) facility. Open spaces and public facilities such as parks and pedestrian and bike facilities will also be incorporated to provide accessibility and recreational spaces for the workforce and community.

The Project includes Specific Plan zoning designations for Limited Industrial (I-L), General Commercial (C-G), Public (P-F), and Business Park (B-P) use types. The Proposed Plan will allow nonconforming existing agricultural uses to continue to operate at the adoption of the Pacific Gateway Specific Plan and until development in conformance with this Specific Plan occurs.

1.3 Mitigation Measures

The Project will include a number of mitigation measures that would help reduce criteria air pollutant and toxic air contaminant emissions associated with project construction. Those which are expected to result in a quantified AQ impact are summarized below:

MM-AQ-1 (Zero Emission (ZE) Equipment)
The Project will utilize various zero emission equipment. This includes forklift equipment and yard mules used at all industrial warehouse buildings greater than 300,000 square feet (22,993,500 square feet total). Additionally, all landscape equipment used to maintain individual building projects (24,675,000 square feet total) and Pacific Gateway master landscaping, parks and open space will be required to be zero emission.

MM-AQ-2 (Low-VOC Architectural Coatings)
The Project will utilize architectural coatings with a VOC content of a maximum of 15 g/L at all industrial warehouse buildings.

MM-AQ-3 (Tier 4 Construction Equipment)
The Project will utilize off-road diesel-powered Tier 4 construction equipment for all construction activities, where feasible.

2. ENVIRONMENTAL AND REGULATORY BACKGROUND

2.1 Criteria Air Pollutants

Criteria air pollutants (CAPs) are defined as pollutants for which the federal and state governments have established ambient AQ standards, or criteria, for outdoor concentrations to protect public health. The federal and state standards have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive people from illness or discomfort. Pollutants of concern include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), particulate matter less than 10 microns in diameter (PM_{10}), particulate matter less than 2.5 microns in diameter ($PM_{2.5}$), and lead. In California, sulfates, vinyl chloride, hydrogen sulfide, and visibility-reducing particles are also regulated as CAPs. These pollutants are discussed in the following paragraphs.

2.1.1 Ozone

O_3 is a colorless gas that is formed in the atmosphere when volatile organic compounds (VOCs), sometimes referred to as reactive organic gases, and NO_x react in the presence of ultraviolet sunlight. O_3 is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of VOCs and NO_X, the precursors of O_3, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in the San Joaquin Valley can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

2.1.2 Nitrogen Dioxide

Most NO_2, like O_3, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO_2 are collectively referred to as NO_X and are major contributors to O_3 formation. The primary sources of NO, the precursor to NO_2, include automobile exhaust and industrial sources. High concentrations of NO_2 can cause breathing difficulties and result in a brownish-red cast to the atmosphere, causing reduced visibility. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis, and some increase in bronchitis in children (2 and 3 years old) has also been observed at concentrations below 0.3 parts per million by volume (ppm).

2.1.3 Carbon Monoxide

Carbon Monoxide (CO) is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas, such as the Project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly; therefore, ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a

typical situation at dusk in urban areas between November and February. The highest levels of CO typically occur during the colder months of the year when inversion conditions, where a layer of warm air sits atop cool air, are more frequent and can trap pollutants close to the ground. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

2.1.4 Sulfur Dioxide

Sulfur Dioxide (SO_2) is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. The main sources of SO_2 are coal and oil used in power plants and industries; as such, the highest levels of SO_2 are generally found near large industrial complexes. In recent years, SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits placed on the sulfur content of fuels. SO_2 is an irritant gas that attacks the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. SO_2 can also yellow plant leaves and erode iron and steel.

2.1.5 Particulate Matter

Particulate matter (PM) pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter can form when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Fine particulate matter, or $PM_{2.5}$, is roughly 1/28 the diameter of a human hair. $PM_{2.5}$ results from fuel combustion (e.g., motor vehicles, power generation, and industrial facilities), residential fireplaces, and woodstoves. In addition, $PM_{2.5}$ can be formed in the atmosphere from gases such as sulfur oxides (SO_X), NO_X, and VOCs. Inhalable or coarse particulate matter, or PM_{10}, is about one- seventh the thickness of a human hair. Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood-burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

$PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances such as lead, sulfates, and nitrates can cause lung damage directly or be absorbed into the bloodstream, causing damage elsewhere in the body. Additionally, these substances can transport absorbed gases, such as chlorides or ammonium, into the lungs, also causing injury. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

2.1.6 Lead

Lead (Pb) in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline, the manufacturing of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of

airborne lead by nearly 95%. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities are becoming lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

2.1.7 Sulfates

Sulfates are the fully oxidized form of sulfur, which typically occur in combination with metals or hydrogen ions. Sulfates are produced from reactions of SO_2 in the atmosphere. Sulfates can result in respiratory impairment, as well as reduced visibility.

2.1.8 Vinyl Chloride

Vinyl chloride is a colorless gas with a mild, sweet odor, which has been detected near landfills, sewage plants, and hazardous waste sites, due to the microbial breakdown of chlorinated solvents. Short-term exposure to high levels of vinyl chloride in air can cause nervous system effects, such as dizziness, drowsiness, and headaches. Long-term exposure through inhalation can cause liver damage, including liver cancer.

2.1.9 Hydrogen Sulfide

Hydrogen sulfide is a colorless and flammable gas that has a characteristic odor of rotten eggs. Sources of hydrogen sulfide include geothermal power plants, petroleum refineries, sewers, and sewage treatment plants. Exposure to hydrogen sulfide can result in nuisance odors, as well as headaches and breathing difficulties at higher concentrations.

2.1.10 Visibility-Reducing Particles

Visibility-reducing particles are any particles in the air that obstruct the range of visibility. Effects of reduced visibility can include obscuring the view shed of natural scenery, reduced airport safety, and discouraging tourism. Sources of visibility-reducing particles are the same as for $PM_{2.5}$ described above.

2.2 Non-Criteria Air Pollutants

2.2.1 Toxic Air Contaminants

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. A toxic substance released into the air is considered a toxic air contaminant (TAC). Examples include certain aromatic and chlorinated hydrocarbons, certain metals, and asbestos. TACs are generated by a number of sources, including stationary sources such as dry cleaners, gas stations, combustion sources, waste processing facilities and laboratories; mobile sources such as automobiles; and area sources such as landfills. Adverse health effects associated with exposure to TACs may include carcinogenic (i.e., cancer-causing) and non-carcinogenic effects. Non-carcinogenic effects typically affect one or more target organ systems and may be experienced either on short-term (acute) or long-term (chronic) exposure to a given TAC.

2.2.2 Diesel Particulate Matter

Diesel particulate matter (DPM) is part of a complex mixture that makes up diesel exhaust. Diesel exhaust is composed of two phases, gas and particle, both of which contribute to health risks. CARB classified "particulate emissions from diesel-fueled engines" (DPM; 17 CCR 93000) as a TAC in August 1998. DPM is emitted from a broad range of diesel engines: on-road diesel engines of trucks, buses, and cars, and off-road diesel engines including locomotives, marine vessels, and heavy-duty construction equipment, among others. Approximately 70% of all airborne cancer risk in California is associated with DPM.[1] To reduce the cancer risk associated with DPM, CARB adopted a diesel risk reduction plan in 2000.

2.3 Regulatory Setting

2.3.1 Federal and State Ambient Air Quality Standards for Criteria Air Pollutants

The Federal Clean Air Act (CAA) requires the adoption of National Ambient Air Quality Standards (NAAQS), which are periodically updated, to protect the public health and welfare from the effects of air pollution. Current federal standards are set for SO_2, CO, NO_2, O_3, PM_{10}, $PM_{2.5}$, and Pb.[2]

The State of California also has established additional standards, known as the California Ambient Air Quality Standards (CAAQS), which are generally more restrictive than the NAAQS. The current NAAQS and CAAQS are shown in **Table 2-1**.

Specific geographic areas are classified as either "attainment" or "non-attainment" areas for each pollutant based upon the comparison of measured data with the NAAQS and CAAQS. Those areas designated as "non-attainment" for purposes of NAAQS compliance are required to prepare regional air quality plans, which set forth a strategy for bringing an area into compliance with the standards. These regional air quality plans developed to meet federal requirements are included in an overall program referred to as the State Implementation Plan (SIP). If the SIP is deemed acceptable, the United States Environmental Protection Agency (USEPA) will delegate responsibility for implementation pursuant to the SIP to the State and/or its air districts therein.

Whenever the USEPA revises or establishes a new NAAQS, the State and the USEPA have specific obligations to ensure that the NAAQS is met.[3] These are listed below:

- The USEPA must designate areas as meeting (attainment areas) or not meeting (non-attainment areas) the NAAQS within two years after its promulgation.
- States must submit "infrastructure SIPs" to show that they have the basic air quality management program components in place to implement the NAAQS within three years after its promulgation.

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1 CARB. 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Available at: https://ww2.arb.ca.gov/sites/default/files/classic//diesel/documents/rrpfinal.pdf. Accessed: February 2025.

2 NAAQS. Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed: February 2025.

3 USEPA. NAAQS Implementation Process. Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-implementation-process. Accessed: February 2025.

- States must submit non-attainment area SIPs that outline the strategies and emission control measures that will improve AQ and make the area meet the NAAQS within 18 to 24 months after designation.

The steps involved in the SIP process are described below.[4]

- SIPs must be developed with public input and be formally adopted by the State and submitted to the USEPA by the Governor's designee (CARB in California).
- The USEPA reviews each SIP and proposes to approve or disapprove all or part it. The public is then provided with an opportunity to comment on the USEPA's proposed action. The USEPA considers public input before taking final action on a State's plan.
- If the USEPA approves all or part of a SIP, those control measures are enforceable in federal court. In the event a State fails to submit an approvable SIP or if the USEPA disapproves a SIP, the USEPA is required to develop a Federal Implementation Plan.

Table 2-2 summarizes the attainment status of San Joaquin County (San Joaquin Valley Air Pollution Control District) for the pollutants regulated by the NAAQS and CAAQS.[5] As seen in **Table 2-2**, San Joaquin County is currently in attainment (including where unclassified) for: the federal PM_{10} standard, the federal and State CO standards, the federal and State NO_2 standards, the federal and State SO_2 standards, the federal and state lead standards, and the State visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride standards. However, as also shown in **Table 2-2**, San Joaquin County is currently designated as non-attainment for the State 1-hour O_3 standard, the federal and State 8-hour O_3 standards, the State PM_{10} standards, and the federal and State $PM_{2.5}$ standards.[6, 7, 8]

2.3.2 Federal Heavy-duty Engines and Vehicles Fuel Efficiency Standards

In 2010, President Obama issued a memorandum directing the same federal agencies to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model year 2017–2025 light-duty vehicles. The proposed standards are projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021.

In August 2017, the USEPA asked for additional information and data relevant to assessing whether the GHG emissions standards for model years 2022-2025 remain appropriate. In early 2018, the USEPA Administrator announced that the midterm evaluation for the GHG emissions standards for cars and light-duty trucks for model years 2022-2025 was

[4] USEPA. State Implementation Plan Development Process. Available at: https://www.epa.gov/criteria-air-pollutants/naaqs-implementation-process. Accessed: February 2025.

[5] USEPA. Non-attainment Areas for Criteria Pollutants (Green Book). Available at: https://www.epa.gov/green-book. Accessed: February 2025.

[6] Ibid.

[7] California standard attainment status based on CARB website. Available at: http://www.arb.ca.gov/desig/adm/adm.htm. Accessed: February 2025.

[8] SJVAPCD Attainment status. Available at: https://ww2.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/. Accessed: February 2025.

completed and stated his determination that the current standards should be revised in light of recent data. Subsequently, in 2018, the USEPA and NHTSA proposed to amend certain existing Corporate Average Fuel Economy (CAFE) standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establish new standards, covering model years 2021-2026. Compared to maintaining the post-2020 standards now in place, the pending proposal would increase U.S. fuel consumption.[9] California and other states have announced their intent to challenge federal actions that would delay or eliminate GHG reductions. In April 2020, NHTSA and EPA amended the CAFE and GHG emissions standards for passenger cars and light trucks and established new less stringent standards, covering model years 2021 through 2026.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles.

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans and all types of sizes of buses and work trucks. The final standards are expected to lower carbon dioxide emissions by approximately 1.1 billion MT and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.[10]

On September 27, 2019, the USEPA and NHTSA published the SAFE Rule (Part One).[11] The SAFE Rule (Part One) went into effect in November 2019, and revoked California's authority to set its own GHGs standards and set zero emission vehicle mandates in California. The SAFE Rule (Part One) freezes new zero emission vehicles (ZEV) sales at model year 2020 levels for year 2021 and beyond and will likely result in a lower number of future ZEVs and a corresponding greater number of future gasoline internal combustion engine vehicles. In response to the USEPA's adoption of the SAFE Rule (Part One), CARB has issued guidance regarding the adjustment of vehicle emissions factors to account for the rule's implications on criteria air pollutant and greenhouse gas emissions.[12,13] The SAFE Rule is subject to

[9] Federal Register. 2018. *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Final Rule for Model Years 2021-2026 Passenger Cars and Light Trucks*. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-final-rule. Accessed: January 2025.

[10] USEPA and NHTSA, 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed: January 2025.

[11] USEPA and NHTSA. 2019. Federal Register, Vol. 84, No. 188, *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program*. September 27. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. Accessed: January 2025.

[12] CARB. 2019. EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One. November 20. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-02/emfac_off_model_adjustment_factors_final_draft.pdf. Accessed: January 2025.

[13] CARB. 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule. June 26. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-02/emfac_off_model_co2_adjustment_factors_06262020-final.pdf. Accessed: January 2025.

ongoing litigation and on February 8, 2021, the D.C. Circuit Court of Appeals granted the Biden Administration's motion to stay litigation over Part 1 of the SAFE Rule. On April 22 and April 28, 2021, respectively, NHTSA and USEPA formally announced their intent to reconsider the Safe Rule (Part One).[14,15] A virtual public hearing for EPA's Notice of Reconsideration of SAFE I was held on June 2, 2021. The NHTSA finalized the CAFE Pre-emption rulemaking to withdraw its portions of the SAFE I Rule on December 21, 2021.[16] On March 9, 2022, USEPA reinstated California's authority under the CAA to implement its own GHG emission standards and ZEV sales mandate and entirely rescinded the SAFE Rule (Part One).

In December 2021, the USEPA finalized federal GHG emissions standards for passenger cars and light trucks for Model Years 2023 through 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and are based on sound science and grounded in a rigorous assessment of current and future technologies. The updated standards will result in avoiding more than 3 billion tons of GHG emissions through 2050.[17]

In April 2023, the EPA proposed a new, more ambitious proposed standards for national greenhouse gas emission standards from light-duty and medium-duty vehicles starting with 2027 model year vehicles.[18] On March 20, 2024, EPA finalized these standards, which will phase in over model years 2027 to 2032. These standards build upon existing rules, and leverage advances in clean car technology to realize benefits to Americans such as the improvement of public health through reduction of criteria air pollutant and greenhouse gas emissions from vehicles.[19]

On August 5, 2021, EPA announced plans to reduce greenhouse gas (GHG) emissions and other harmful air pollutants from heavy-duty trucks through a series of rulemakings over the next three years. The first rulemaking of this Clean Trucks Plan is a final rule signed on December 20, 2022, which focuses on reducing emissions that form smog and soot and will

[14] NHTSA. 2021. NHTSA Advances Biden-Harris Administration's Climate & Jobs Goals. April 22. Available at: https://www.nhtsa.gov/press-releases/nhtsa-advances-biden-harris-administrations-climate-jobs-goals. Accessed: January 2025.

[15] USEPA. 2021. Federal Register, Vol. 86, No. 80, *California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment*. April 28. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver. Accessed: January 2025.

[16] NHTSA. Available at: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy. Accessed: January 2025.

[17] USEPA. 2021. Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed: January 2025.

[18] United States Environmental Protection Agency. 2023. Proposed Rule: Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-multi-pollutant-emissions-standards-model. Accessed: January 2025.

[19] United States Environmental Protection Agency. 2023. Final Rule: Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-multi-pollutant-emissions-standards-model. Accessed: January 2025.

apply to heavy-duty engines and vehicles beginning in model year 2027.[20] Two additional rulemakings, Phase 3 greenhouse gas rule for heavy-duty engines and the multi-pollutant emissions standards for light-duty and medium-duty vehicles were signed in March 2024, and marked the completion of the Clean Trucks Plan.[21]

2.3.3 Federal Hazardous Air Pollutants Program

The 1977 CAA Amendments required the USEPA to identify National Emissions Standards for Hazardous Air Pollutants (NESHAPs) to protect the public health and welfare. Hazardous air pollutants include certain VOCs, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 CAA Amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

2.3.4 California's Air Toxics Program

The state Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner). The California TAC list identifies more than 700 pollutants, of which carcinogenic and non-carcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. In accordance with AB 2728, the state list includes the (federal) hazardous air pollutants.

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) seeks to identify and evaluate risk from air toxics sources; however, AB 2588 does not reduce the quantity of air toxics emissions. Instead, under AB 2588, TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, are required to communicate the results to the public in the form of notices and public meetings.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. The plan is anticipated to result in an 85% decrease in statewide diesel health risk in 2020 compared with the diesel risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy-Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy-Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression Ignition (Diesel) Engines and Equipment program. All of these regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. There also are several Airborne Toxic Control Measures that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 CCR 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

2.3.5 California Health and Safety Code Section 41700

This section of the Health and Safety Code states that a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public,

[20] USEPA. Regulations for Emissions from Vehicles and Engines. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks. Accessed: January 2025.

[21] USEPA. Regulations for Emissions from Vehicles and Engines. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks. Accessed: January 2025.

or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This section also applies to sources of objectionable odors.

2.3.6 California's Pavley Standards

AB 1493 ("the Pavley Standard" or AB 1493) required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016.

CARB's approach to passenger vehicles (cars and light trucks), under AB 1493, combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. This new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero emission vehicles in California. These standards will apply to all passenger and light-duty trucks used by customers, employees of and deliveries to the Project. While AB 1493 focuses on the reduction of GHG emissions, it is anticipated that this regulation would also help reduce criteria air pollutants.

2.3.7 California's Advanced Clean Cars and Advanced Clean Fleets

In January 2012, CARB approved the Advanced Clean Cars (ACC) program,[22] a new emissions control program for model year 2017 through 2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero emission vehicles. The rules will be fully implemented this year (2025), ensuring new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions. While ACC focuses on the reduction of GHG emissions, it is anticipated that this regulation would also help reduce criteria air pollutants. At the time of this writing, CARB has adopted the Advanced Clean Cars II (ACC II) regulations which "will seek to reduce criteria and greenhouse gas emissions from new light- and medium-duty vehicles beyond the 2025 model year and increase the number of ZEV for sale".[23]

In October 2022, CARB approved the Advanced Clean Fleets (ACF) regulation, which has requirements for fleets to phase in the use of ZEV from 2024 to 2042 and beyond. The fleets required to comply with the regulation include state and local government agency fleets, high-priority and federal fleets, and drayage fleets. The regulation also includes a requirement for manufacturers to only sell zero emission trucks starting in 2036. The ACF regulation is meant to complement the ACT regulation and will contribute to meeting the goals set out in Governor Newsom's EO N-79-20. In July 2024, CARB requested a waiver of pre-emption from EPA, but withdrew the waiver request on January 13, 2025.

2.3.8 California's Advanced Clean Trucks

In June 2020, CARB approved the Advanced Clean Trucks regulation, which has requirements for manufacturer ZEV sales and a one-time reporting requirement for large entities and fleets.[24] The Advanced Clean Truck Regulation is part of a holistic approach to accelerate a large-scale transition of zero emission medium-and heavy-duty vehicles from

[22] Advanced Clean Cars Program. Available at: https://ww2.arb.ca.gov/index.php/our-work/programs/advanced-clean-cars-program. Accessed: February 2025.

[23] Advanced Clean Cars II Program. Available at: https://ww2.arb.ca.gov/advanced-clean-cars-ii-meetings-workshops. Accessed: February 2025.

[24] CARB. 2020. Advanced Clean Trucks. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed: February 2025.

Class 2b to Class 8. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines are required to sell zero emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero emission truck/chassis sales need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. Large employers including retailers, manufacturers, brokers and others are required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, are required to report about their existing fleet operations. This information helps to identify future strategies to ensure that fleets purchase available zero emission trucks and place them in service where suitable to meet their needs.

2.3.9 California's Diesel Emissions Control Measures

CARB has adopted a number of Airborne Toxic Control Measures (ATCMs) to control diesel particulate emissions and emissions from in-use on- and off-road diesel-fueled vehicles. With the assistance of the Advisory Committee and its subcommittees, CARB developed and approved the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*[25] and the *Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines*.[26] Various control measures adopted by CARB to reduce diesel emissions are summarized below.

2.3.9.1 ATCM: Diesel-Fueled Commercial Motor Vehicle Idling

In July 2004, CARB initially adopted an ATCM to limit idling of diesel-fueled commercial motor vehicles (idling ATCM) and subsequently amended it in October 2005, October 2009, and December 2013. This ATCM is set forth in Title 13, California Code of Regulations, Section 2485, and requires, among other things, that drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and sleeper berth equipped trucks, not idle the vehicle's primary diesel engine longer than five minutes at any location. This anti--idling regulation helps to reduce fuel consumption by reducing engine usage. The ATCM also requires owners and motor carriers that own or dispatch these vehicles to ensure compliance with the ATCM requirements. The regulation consists of new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. Under the new engine requirements, 2008 and newer model year heavy-duty diesel engines need to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling or optionally meet a stringent oxides of nitrogen idling emission standard.

2.3.9.2 ATCM: Stationary Compression Ignition Engines

This ATCM establishes emission standards and fuel use requirements for new and in-use stationary engines used in prime and emergency back-up applications (non-agricultural) and for new stationary engines used in agricultural applications.[27] While this ATCM focuses on the

[25] CARB. 2000. Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles. Available at: https://www.arb.ca.gov/diesel/documents/rrpfinal.pdf. Accessed: February 2025.

[26] CARB. 2008. California's Diesel Risk Reduction Plan: Risk Management Guidance for the Permitting of New Stationary Diesel-Fueled Engines. Available at: https://www.arb.ca.gov/diesel/documents/rmg.htm. Accessed: February 2025.

[27] 17 CCR 93115: Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/diesel/ag/documents/finalreg112807.pdf. Accessed: February 2025.

reduction of diesel particulate emissions as a toxic, this regulation would also help reduce criteria air pollutants.

2.3.9.3 In-Use Off-Road Diesel-Fueled Fleets

These regulations reduce diesel PM and NO_x emissions from in-use, off-road heavy-duty diesel vehicles in California. Such vehicles typically are used in construction, mining, and industrial operations. The regulations, among other requirements, impose limits on idling; require all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System) and labeled; restrict the adding of older vehicles into fleets; and require fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (VDECS) (i.e., exhaust retrofits).

The requirements and compliance dates of the regulations vary by fleet size. Large fleets have compliance deadlines each year from 2014 through 2023, medium fleets each year from 2017 through 2023, and small fleets each year from 2019 through 2028.[28] In May 2008, CARB approved the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation), which was later amended in December 2009, July 2010, December 2011, and November 2022. The 2022 amendments were authorized by EPA on January 10, 2025. The overall purpose of the Off-Road Regulation is to reduce emissions of oxides of nitrogen and particulate matter from off-road diesel vehicles operating within California. The regulation applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles. The Off Road Regulation:

- Imposes limits on idling (i.e., fleets must limit unnecessary idling to 5 minutes), requires a written idling policy, and requires a disclosure when selling vehicles;
- Requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System, DOORS) and labeled;
- Restricts the adding of older vehicles into fleets starting on January 1, 2014; and
- Requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits).

The anti-idling component of this Off-Road Regulation helps to reduce fuel consumption by reducing engine usage.

The latest amendments include the following changes:[29]

- Phase-out of the oldest and highest-emitting off-road engines from operation;
- Restrict the addition of vehicles with Tier 3 and Tier 4 Interim engines;
- Require contracting entities to obtain and retain a fleet's valid Certificate of Reported Compliance prior to awarding a contract or hiring a fleet;
- Mandate the use of R99 or R100 Renewable Diesel for all fleets;

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[28] 13 CCR 2449: General Requirements for In-Use Off-Road Diesel-Fueled Fleets. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/msprog/ordiesel/documents/finalregorder-dec2011.pdf. Accessed: February 2025.

[29] CARB. 2022. Rulemaking Documents for the In-Use Off-Road Diesel-Fueled Fleets Regulation. Available at: https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/rulemaking-documents. Accessed: January 2025.

- Provide voluntary compliance flexibility options for fleets that adopt zero emission technology; and
- Provide additional flexibility for permanent low-use vehicles.

2.3.9.4 Truck and Bus Regulation

The Truck and Bus Regulation (13 CCR 2025) requires diesel trucks and buses to be upgraded to reduce emissions; newer heavier trucks and buses must meet PM filter requirements; lighter and older heavier trucks must be replaced; and, by January 1, 2023, nearly all trucks and buses were required to have 2010 model year engines or equivalent to reduce PM and NOx emissions.

The regulation applies to nearly all privately- and federally-owned diesel-fueled trucks and buses, and to privately- and publicly-owned school buses with a gross vehicle weight rating greater than 14,000 pounds. The regulation provides a variety of flexibility options tailored to fleets operating low-use vehicles, fleets operating in selected vocations like agricultural and construction, and small fleets of three or fewer trucks.

2.3.10 Local Regulations and Guidance

Air pollution often does not conform to city and/or county jurisdictional boundaries, and the State has been divided into air basins based on geographical and meteorological conditions. Air pollution within each air basin is regulated by the regional air pollution control districts/air quality management districts, in a manner that is consistent with and in furtherance of standards adopted by the USEPA and CARB. The Project site is located within the San Joaquin Valley Air Basin (SJVAB) and the jurisdictional boundaries of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

2.3.10.1 San Joaquin Valley Air Pollution Control District

District Plans

While CARB is responsible for the regulation of mobile emission sources within the state, local Air Quality Management Districts (AQMDs) and Air Pollution Control Districts (APCDs) are responsible for enforcing standards and regulating stationary sources. The Project site is located within the SJVAB and is subject to the guidelines and regulations of the SJVAPCD.

The SJVAPCD is responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient AQ standards in the SJVAB. The SJVAPCD's AQ plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control methods have worked, and to show how air pollution will be reduced. The plans also use computer modeling to estimate future levels of pollution and to demonstrate that the Valley will meet AQ goals. The most recent plans are summarized below.

2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards

In November 2018, SJVAPCD adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards.[30] This plan addresses the USEPA federal 1997 annual $PM_{2.5}$ standard and 24-hour $PM_{2.5}$ standard; the 2006 24-hour $PM_{2.5}$ standard; and the 2012 annual $PM_{2.5}$ standard. In the report, SJVAPCD included mobile source measures and a comprehensive suite of fiscally

[30] SJVAPCD. 2018. 2018 Plan for the 1997, 2006, and 2012 PM2.5 Standards. Available at: http://www.valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf. Accessed: February 2025.

responsible local measures for stationary and area sources, including measures to further reduce emissions from industrial sources, residential wood-burning and commercial charbroiling.

2016 Plan for the 2008 8-Hour Ozone Standard

In June 2016, SJVAPCD adopted the 2016 Plan for the 2008 8-hour Ozone Standard. [31] Through the comprehensive stationary and mobile source control strategies that previously have been adopted and that are now proposed in this plan, NO_x emissions in the SJVAB are expected to be reduced by over 60% between 2012 and 2031. As a result, the ambient ozone concentrations are projected to decrease dramatically in all areas of the Valley, such that future 8-hour ozone concentrations are expected to demonstrate attainment.

District Rules and Regulations

The SJVAPCD is responsible for planning, implementing, and enforcing federal and state ambient standards in the SJVAB. Below is a list of SJVAPCD rules relevant to the Project:

Regulation II: Permits

Regulation II (Rules 2010-2550) contains a series of rules covering permitting requirements within the SJVAB. SJVAPCD regulations require any person constructing, altering, replacing or operating any source which emits, may emit, or may reduce emissions to obtain an Authority to Construct or a Permit to Operate.

Rule 3135: Dust Control Plan Fee

This rule requires the applicant to submit a fee in addition to a Dust Control Plan. The purpose of this fee is to recover the SJVAPCD's cost for reviewing these plans and conducting compliance inspections.[32]

Rule 4101: Visible Emissions

This rule applies to any source operation that emits or may emit air contaminants. The purpose of this rule is to prohibit the emissions of visible air contaminants to the atmosphere.[33]

Rule 4102: Nuisance

This rule applies to any source operation that emits or may emit air contaminants or other materials. In the event that the Project or construction of the Project creates a public nuisance, it could be in violation and be subject to SJVAPCD enforcement action.[34]

[31] SJVAPCD (June 2016), "2016 Plan for the 2008 8-Hour Ozone Standard." Available at: https://www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016/Adopted-Plan.pdf. Accessed: February 2025.

[32] SJVAPCD (October 2005), "Dust Control Plan Fee," Rule 3135. Available at: https://www.valleyair.org/rules/currntrules/2018/R3135-a2.pdf. Accessed: February 2025.

[33] SJVAPCD (February 2005), "Visible Emissions," Rule 4101. Available at: https://www.valleyair.org/rules/currntrules/r4101.pdf. Accessed: February 2025.

[34] SJVAPCD (May 1992), "Nuisance," Rule 4102. Available at: http://www.valleyair.org/rules/currntrules/r4102.pdf. Accessed: February 2025.

Rule 4601: Architectural Coating

This rule limits VOC content in architectural coatings. This rule also contains requirements for architectural coatings storage, clean up and labeling.[35]

Rule 4622: Gasoline Transfer into Motor Vehicle Fuel Tanks

This rule applies to any gasoline storage and dispensing operation or mobile fueler from which gasoline is transferred into motor vehicle fuel tanks. The purpose of this rule is to limit emissions to gasoline vapors.[36]

Rule 4641: Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations

Rule 4641 applies to the manufacture and use of cutback asphalt, slow cure asphalt and emulsified asphalt for paving and maintenance operations. Asphalt paving operations associated with the Project will be subject to Rule 4641.[37]

Regulation VIII: Fugitive PM_{10} Prohibitions

Regulation VIII (Rules 8011-8081) contains a series of rules designed to reduce PM_{10} emissions (predominantly dust/dirt) generated by human activity, including construction and demolition activities, road construction, bulk materials storage, paved and unpaved roads, carryout and track out, etc. If a construction Project is 10 or more acres in area or will include moving, depositing or relocating more than 2,500 cubic yards (CY) per day of bulk materials on at least three days, then a Dust Control Plan must be submitted as specified in Section 6.3.1 of Rule 8021 (Construction, Demolition, Excavation, Extraction and Other Earthmoving Activities). Construction activities shall not commence until the SJVAPCD has approved the Dust Control Plan. The Project may also be subject to additional provisions within Rule 8021, as well as Rule 8031 (Bulk Materials), Rule 8041 (Carryout and Track Out), Rule 8051 (Open Areas), Rule 8061 (Paved and Unpaved Roads), and Rule 8071 (Unpaved Vehicle/Equipment Traffic Areas). For example, Rule 8061 places thresholds and requirements on limiting Visible Dust Emissions from unpaved road segments to 20% opacity.[38]

Rule 9510: Indirect Source Rule

This rule requires the applicants of certain development projects which equal or exceed established applicability thresholds to apply to the SJVAPCD when applying for the development's last discretionary approval.[39] The rule is applicable for a development project which upon full buildout would include 2,000 square feet of commercial space as well as a large development project which upon full buildout would include 10,000 square feet of commercial space. This Project includes a commercial space (warehouse) greater than 10,000 square feet. Projects subject to the rule are required to quantify indirect emissions

[35] SJVAPCD (April 1991), "Architectural Coatings," Rule 4601. Available at: http://www.valleyair.org/rules/currntrules/r4601.pdf. Accessed: February 2025.

[36] SJVAPCD (December 2013), "Gasoline Transfer into Motor Vehicle Fuel Tanks," Rule 4622. Available at: https://www.valleyair.org/rules/currntrules/Rule4622.pdf. Accessed: February 2025.

[37] SJVAPCD (April 1991), "Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations," Rule 4641. Available at: http://www.valleyair.org/rules/currntrules/r4641.pdf. Accessed: February 2025.

[38] SJVAPCD (November 2001), "Paved and Unpaved Roads," Rule 8061. Available at: https://www.valleyair.org/rules/currntrules/r8061.pdf. Accessed: February 2025.

[39] SJVAPCD Rule 9510 (Indirect Source Review). Available online at: https://www.valleyair.org/rules/currntrules/r9510-a.pdf. Accessed: February 2025.

(mobile source emissions), area source emissions and construction exhaust emissions and to mitigate a portion of these emissions. The Indirect Source Rule was adopted December 2005 and last amended December 2017. Rule 9510 was adopted to reduce the impacts of growth in emissions from all new development in the San Joaquin Valley. Developers of projects subject to Rule 9510 must reduce emissions occurring during construction and operational phases through on-site measures or pay off-site mitigation fees. The reductions for construction equipment exhaust emissions (for equipment greater than 50 horsepower) are 20% of the total NOx emissions and 45% of the total PM_{10} exhaust emissions. For operation, the operational baseline NOx emissions must be reduced by 33.3% and operational baseline PM_{10} emissions by 50% over a period of ten years. One hundred percent of all off-site mitigation fees are used by the SJVAPCD to fund emission reduction projects through its Incentives Programs, achieving emission reductions on behalf of the project. The emission reductions expected from the rule allow the SJVAPCD to achieve attainment of the federal AQ standards for ozone by 2031.[40]

2.4 Environmental Setting

2.4.1 Local Air Quality Monitoring Data

The Project is located within the SJVAB. The SJVAB consists of eight counties: Fresno, Kern (western and central), Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare. Cumulatively, these counties make up about 16% of California's geographic area, making the SJVAB the second largest AQ basin in the State.

The SJVAB has 37 monitoring stations to measure AQ; 24 operated by the SJVAPCD, 2 by the National Park Service, 2 by tribal groups, 9 by CARB, and 1 jointly operated by the SJVAPCD and CARB. The location of these monitoring stations can be viewed on the SJVAPCD air monitoring webpage map of air monitoring sites in operation.[41]

The monitoring stations closest to the Project site are Tracy-Airport, Stockton-Hazelton Street, Manteca-530 Fishback Rd, and Stockton-University Park. Please note that none of the monitoring stations in San Joaquin County measure SO_2, so this data is flagged as missing. The most recent four years of published data at these monitoring stations are provided in **Table 2-3**. The frequency with which the ozone and PM standards have been exceeded at the nearest monitoring sites is displayed in **Table 2-4**.

[40] SJVAPCD. 2016 Ozone Plan for 2008 8-Hour Ozone Standard. Available at: https://www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016/Adopted-Plan.pdf. Accessed: February 2025.

[41] SJVAPCD. Air Monitoring. Available at: https://valleyair.org/aqinfo/air-monitoring.htm. Accessed: December 2025.

3. SIGNIFICANCE THRESHOLDS

3.1 California Environmental Quality Act Guidelines

The analysis provided in this report evaluates the significance of the Project's criteria air pollutant emissions by reference to the following questions from Section III, Air Quality, of Appendix G of the California Environmental Quality Act (CEQA) Guidelines:[42]

Threshold 1. Would the Project conflict with or obstruct implementation of the applicable air quality plan?

Threshold 2. Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Threshold 3. Would the Project expose sensitive receptors to substantial pollutant concentrations?

Threshold 4. Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

An evaluation of the Project based on the significance thresholds discussed below is provided in subsequent sections.

3.2 San Joaquin Valley Air Pollution Control District Thresholds

The SJVAPCD has established significance thresholds[43] to assess the impacts of project-related construction and operational emissions on regional and local ambient AQ. **Table 3-1** shows the mass annual thresholds for construction and operation as adopted by the SJVAPCD for CAP and TAC emissions. As shown in **Table 3-1**, the SJVAPCD has separate operational emissions thresholds for permitted equipment and activities and non-permitted equipment and activities. Permitted equipment and activities are those which require a permit through SJVAPCD. Non-permitted equipment and activities do not require a permit and include area, energy, and mobile sources. The analysis summarized in this report estimates project-related construction and operational mass emissions and compares the emissions to these significance thresholds.

The daily thresholds represent screening-level thresholds that can be used to evaluate whether project-related emissions would cause a significant impact on AQ. For pollutants in attainment, emissions below the screening-level thresholds would not cause a significant impact. When assessing the significance of project-related impacts on AQ, impacts may be significant when on-site emission increases from construction activities or operational activities exceed the 100 pounds per day screening-level of any criteria pollutant after implementation of all enforceable mitigation measures.[44] Under such circumstance, SJVAPCD recommends that an ambient air quality analysis (AAQA) be performed. In the event that emissions exceed these daily thresholds, modeling would be required to demonstrate that

[42] California Natural Resources Agency. 2018. Appendix G of the CEQA Guidelines. Available at: http://resources.ca.gov/ceqa/docs/2018_CEQA_FINAL_TEXT_122818.pdf. Accessed: February 2025.

[43] SJVAPCD. 2015. Air Quality Thresholds of Significance – Criteria Pollutants. March 19. Available at: http://www.valleyair.org/transportation/0714-gamaqi-criteria-pollutant-thresholds-of-significance.pdf. Accessed: February 2025.

[44] SJVAPCD. 2015. GAMAQI. Available at: http://www.valleyair.org/transportation/GAMAQI.pdf. Accessed: February 2025.

the project's total AQ impacts result in ground-level concentrations that are below the CAAQS and NAAQS, including appropriate background levels.

The analysis summarized in this report estimates the maximum daily construction and operational mass emissions related to the Initial Phase of the Project against the daily significance screening thresholds. The Project at Buildout is estimated to be complete following a projected 30-year construction period, which may be subject to change based on market demand and speed at which each District is constructed.

Due to the uncertainty of the construction schedule and intensity of construction activities, only the Initial Phase has been assessed against daily significance thresholds. Remaining construction and operational impacts for the subsequent phases shall be assessed against the AAQA thresholds at the time of application when project-specific details are better understood.

3.3 Project Approach to Significance

This report, relative to Threshold 1, evaluates the Project for consistency with applicable plans related to emissions, including the regional AQ attainment plans. This report, relative to Threshold 2, quantifies the Project's emissions during construction and operations and compares those results to the applicable SJVAPCD thresholds. Relative to Threshold 3, this report includes a CO hotspots analysis and summarizes results of the Health Risk Assessment Technical Report which assesses the potential health risk impacts to sensitive receptors. This report, relative to Threshold 4, evaluates the potential for odor-generating activities from the Project.

4. AIR QUALITY EMISSIONS INVENTORY

This section describes the methodology that Ramboll used to develop the criteria air pollutant emission inventories associated with the Project, which include one-time emissions associated with construction of the Project, and annual emissions associated with operation of the Project. Construction is expected to occur from 2026 to 2056. Emissions due to operation of the Project are quantified for two buildout phases: Initial Phase in 2032 and Full Buildout in 2057. Sub-categories of operational emissions include the following: area, energy, mobile, off-road equipment, wastewater facility, and fueling facility sources.

4.1 Resources

4.1.1 California Emission Estimator Model®

Ramboll primarily utilized the California Emissions Estimator Model (CalEEMod®) Version 2022.1.1[45] methodology to assist in quantifying the criteria air pollutant emissions in the inventories presented in this report for the proposed project. CalEEMod® provides methodologies to calculate both construction emissions and operational emissions from a land use development project. It calculates daily or annual criteria air pollutant emissions. Specifically, the model methodology aids the user in the following calculations:

- One-time short-term construction emissions associated with site preparation, grading, building, paving, and architectural coating phases from off-road construction equipment, and on-road mobile equipment associated with workers, vendors, and hauling.
- Operational emissions associated with the fully built out land use development, such as on-road mobile vehicle traffic generated by the land uses, off-road emissions from landscaping equipment, natural gas usage in buildings, emissions from architectural coatings, and emissions from consumer products.

CalEEMod® is a statewide program designed to calculate both criteria pollutant and GHG emissions from development projects in California developed under the auspices of the SCAQMD, with input from other California air districts, and is currently supported by numerous lead agencies for use in quantifying the emissions associated with development projects undergoing environmental review. CalEEMod® utilizes widely accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available. These models and default estimates use sources such as the USEPA AP-42 emission factors,[46] CARB's on-road and off-road equipment emission models such as the EMission FACtor model (EMFAC) and the Emissions Inventory Program model (OFF-ROAD), and studies commissioned by California agencies such as the California Energy Commission (CEC) and CalRecycle.

As mentioned above, CalEEMod® is based upon the CARB approved OFF-ROAD and EMFAC models. OFF-ROAD[47] is an emission factor model used to calculate emission rates from

[45] SCAQMD. 2022. California Emissions Estimator Model®. Available at: http://www.caleemod.com. Accessed: February 2025.

[46] The USEPA maintains a compilation of Air Pollutant Emission Factors and process information for several air pollution source categories. The data is based on source test data, material balance studies, and engineering estimates. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors. Accessed: February 2025.

[47] CARB. 2017. Off Road Mobile Source Emission Inventory. Available at: https://ww2.arb.ca.gov/our-work/programs/msei/offroad-models. Accessed: February 2025.

off-road mobile sources (e.g., construction equipment, agricultural equipment). The off-road diesel emission factors used by CalEEMod® are based on the CARB OFFROAD2017 program. EMFAC2021[48] is the emission factor model used in CalEEMod® to calculate emissions rates from on-road vehicles (e.g., passenger vehicles).

In addition, CalEEMod® contains default values and existing regulation methodologies to use in each specific local air district region. Appropriate statewide default values can be utilized if regional default values are not defined. Ramboll used default factors for the San Joaquin County area for the emissions inventory, unless otherwise noted in the methodology descriptions below. Details regarding the specific methodologies used by CalEEMod® can be found in the CalEEMod® User's Guide and associated appendices.[49]

4.1.2 Other Resources

Ramboll directly or indirectly relied on emissions estimation guidance from government-sponsored organizations, government-commissioned studies of energy use patterns, Project-specific studies (e.g., Fehr & Peer's CEQA Transportation Impact Analysis Report[50]), and emission estimation software as described above. In cases noted below, third-party studies were also relied upon to support analyses and assumptions made outside of the approach described above.

4.2 Construction Emissions

This section describes the calculation of criteria air pollutant emissions from construction activities at the Project site. While the exact construction schedule and equipment mix may vary from the current analysis, the emissions are not expected to be higher than that calculated given the conservative assumptions included in the analysis.

The major construction phases included in this analysis are:

- Demolition: involves removing buildings or structures.
- Site Preparation: involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.
- Grading: involves the cut and fill of land to ensure the proper base and slope for the construction foundation.
- Paving: involves the laying of concrete or asphalt such as in parking lots or roads.
- Building Construction: involves the construction of structures and buildings.
- Architectural Coating: involves parking and lane striping

Ramboll primarily used CalEEMod® to quantify the construction emissions. The modeled construction schedule is shown in **Table 4-1**. Construction of the Project is expected to occur over several phases, with the construction of each Industrial Development Area (Initial, East, West, and Central) being completed prior to the commencement of the following Development Area. The construction of the University Center and Gateway Center are

[48] CARB. 2021. Mobile Source Emissions Inventory. Available at: https://ww2.arb.ca.gov/our-work/programs/msei/on-road-emfac. Accessed: February 2025.

[49] SCAQMD. 2022. California Emissions Estimator Model®. Available at: https://www.caleemod.com/. Accessed: February 2025.

[50] Fehr & Peers. 2024. Draft CEQA Transportation Impact Analysis Report For Pacific Gateway.

expected to occur on an independent schedule, concurrently with construction of the industrial development areas. This schedule serves as a reasonably representative estimate of the phasing anticipated for this project at this time, however ultimately construction scheduling will be dependent on market demand.

Construction-related emissions of ROGs, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ were estimated using CalEEMod®. PM emissions are composed of exhaust emissions and fugitive emissions. Exhaust emissions are typically emitted by a combustion engines of on-road vehicles and/or off-road equipment. Fugitive emissions are PM dust suspended in the air by wind action and construction-related activities. The construction off-road equipment list and off-road equipment specifications are based on CalEEMod® model defaults. Land use information associated with the construction of each development area can be found in CalEEMod® outputs as included in **Appendix A**.

4.2.1 Emissions from Construction Equipment

Emissions from construction equipment were calculated based on the off-road equipment engine use, the equipment list, and phase length. Since the majority of off-road construction equipment used for construction projects are diesel-fueled, CalEEMod® methodology assumes all of the equipment operates on diesel fuel. The calculations include the running exhaust emissions from off-road equipment. Since the equipment is assumed to be diesel, there are no starting emissions associated with the equipment, as these are *de minimis* for diesel-fueled equipment. CalEEMod® calculates the exhaust emissions based on default values for horsepower and load factor from CARB's OFFROAD2017.[51]

Project construction would include on-site equipment during grading/excavation and site preparation that generates fugitive dust. The construction-related equipment mix were developed using CalEEMod® defaults. The combustion and fugitive dust emissions from this equipment were calculated using CalEEMod®. PM_{10} and $PM_{2.5}$ emissions from fugitive dust will be controlled by watering consistent with Regulation VIII (Rules 8011 through 8081).

4.2.2 Emissions from On-Road Construction Trips

Construction generates on-road vehicle criteria air pollutant emissions from personal vehicles for worker and vendor commuting. These emissions are calculated in CalEEMod® based on the number of trips and vehicle miles traveled (VMT) along with emission factors from EMFAC2021. The numbers of worker and vendor trips represent defaults from CalEEMod® based on the construction equipment to be used. Haul trips associated with soil import or export are not expected for this project due to the balanced cut and fill of the site. Haul trips associated with demolition were calculated based on CalEEMod® defaults-based Project-specific demolition assumptions were based on an assessment of existing structures present within each development area as shown in **Table 4-2**.

4.2.3 Fugitive Dust

Fugitive dust contributes to PM_{10} and $PM_{2.5}$ emissions and is generated by the various construction activities occurring at the Project site including entrained road dust, grading, demolition, and truck loading. Entrained road dust is generated by vehicle travel on paved and unpaved roads. Emission factors for entrained road dust are on a "per mile" basis. In CalEEMod®, entrained road dust emission factors are based on the equations presented in

[51] SCAQMD. 2020. California Emissions Estimator Model® User's Guide, Appendix A. Available at: https://www.aqmd.gov/caleemod. Accessed: February 2025.

the Paved Roads and Unpaved Roads chapters of USEPA's AP-42 and are then multiplied by the total VMT for Project-related trips. Emissions from entrained road dust were estimated using CalEEMod® and are presented in **Appendix A**.

Fugitive dust emissions from bulldozing equipment (i.e., rubber-tired dozers), grading equipment (i.e., graders, rubber-tired dozers, and scrapers), and demolition activity occur during the Project construction. In addition, truck loading activities would generate fugitive dust emissions. The construction demolition assumptions are presented in **Table 4-2**. Emissions from these sources were estimated using CalEEMod® and are presented in **Appendix A**.

4.2.4 Architectural Coating

VOC off-gassing emissions result from evaporation of solvents contained in surface coatings. CalEEMod® was used to estimate VOC evaporative emissions from application of surface coatings and these emissions are presented in **Appendix A**. Architectural coating adjustments associated with the implementation of the low-VOC architectural coating mitigation measure are shown in **Table 4-3.**

4.2.5 Paving

CalEEMod® was used to estimate the VOC off-gassing emissions associated with asphalt paving. The emissions associated with paving are presented in **Appendix A**.

4.2.6 Total Construction Emissions

The annual and daily criteria air pollutant emissions associated with construction prior to the application of mitigation measures are shown in **Table 4-4** and **Table 4-5**, respectively. As shown in **Table 4-4**, annual criteria air pollutant emissions from construction of the Project are above the SJVAPCD significance thresholds for VOC and NOx. The daily criteria air pollutant emissions from construction of the Project are above the SJVAPCD significance thresholds for VOC (**Table 4-5**).

4.3 Operational Emissions

This section describes the calculation of criteria air pollutant emissions from Project operational activities. Operational emissions are evaluated for two scenarios: the operation of the Initial Phase land uses in 2032 and the first year of Project buildout operation in 2057.

4.3.1 Area Sources

Area sources are those emissions that are generally too small to be uniquely identified as point sources and are thus generally aggregated as a group. CalEEMod® estimates emissions for the following sources, which are included under the category of "area" sources: landscaping equipment (e.g., lawn mowers), consumer products, and architectural coatings. Criteria air pollutant emissions due to natural gas combustion in buildings, could also be considered area sources, but are reported by CalEEMod® in the emissions associated with building energy use (described below).

The criteria air pollutant emissions generated by the Project were calculated using CalEEMod® and can be viewed in **Appendix A**. The default CalEEMod® consumer products emission factor was adjusted to reflect consumer product usage in San Joaquin County and the operational years of 2032 and 2057, as shown in **Table 4-8**. Architectural coating adjustments associated with the implementation of the low-VOC architectural coating mitigation measure are shown in **Table 4-9.**

4.3.2 Energy Sources

Criteria air pollutant emissions are emitted from buildings as a result of activities for which natural gas is typically used as an energy source. Combustion of fossil fuels, such as natural gas, emits criteria air pollutants directly into the atmosphere. CEC Electricity Demand Forecast Zone (EDFZ) 4 was selected based on the CEC forecast climate zone map shown in the CalEEMod® User's Guide. The analysis assumes that the Project's land uses accord to the 2019 Title 24 Standards, as that code cycle became effective on January 1, 2020. To calculate the total building natural gas input for the Project, Ramboll utilized default values provided in CalEEMod®, which are based on the Commercial End-Use Survey (CEUS).

Criteria air pollutant emissions from the natural gas consumption were estimated in CalEEMod® and can be viewed in **Appendix A**.

4.3.3 Mobile Sources

The criteria air pollutant emissions associated with on-road mobile sources are generated from automobiles and trucks traveling to and from the Project site. The emissions associated with on-road mobile sources include running, idling and starting exhaust emissions, evaporative emissions, tire wear, brake wear, and entrained road dust. Running emissions are dependent on VMT. Starting and evaporative emissions are associated with the number of starts or time between vehicle uses and the assumptions used in determining these values are described below. Ramboll calculated Project-specific mobile source CalEEMod® inputs using trip rates and trip length information based on analyses conducted by Fehr & Peers.

The analysis includes the reductions from adopted regulatory programs, which are accounted for within the EMFAC2021 model:

- AB 1493 ("the Pavley Standard") required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 and thereafter. CalEEMod® and EMFAC2021 include emission reductions for non-commercial passenger vehicles and light-duty trucks of model year 2017 – 2025.
- The ACC program, introduced in 2012, combines the control of smog, soot causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2015 through 2025. CalEEMod® and EMFAC2021 include reductions associated with this regulation that are represented in this analysis. While ACC focuses on the reduction of GHG emissions, it is anticipated that this regulation would also help reduce criteria air pollutants.
- The USEPA/NHTSA advanced fuel economy and GHG standards (Phase 1) were adopted in 2011 for medium and heavy-duty trucks for model years 2014-2018.[52] This Heavy-Duty National Program is intended to reduce fuel use and GHG emissions from medium- and heavy-duty vehicles, semi-trucks, pickup trucks and vans, and all types and sizes of work trucks and buses in between. CalEEMod® and EMFAC2021 include reductions associated with this regulation that are represented in this analysis.

[52] USEPA, Office of Transportation and Air Quality. 2011. Available at: https://www.gpo.gov/fdsys/pkg/FR-2011-09-15/pdf/2011-20740.pdf. Accessed: February 2025.

- The USEPA/NHTSA advanced fuel economy and GHG standards (Phase 2) were adopted in 2016 for medium- and heavy-duty trucks for model years 2018 and beyond.[53] The Phase 2 program includes technology-advancing standards that substantially reduce GHG and criteria pollutant emissions and fuel consumption resulting in an ambitious, yet achievable, program that will allow manufacturers to meet the applicable standards over time, at reasonable cost, through a mix of different technologies. The Phase 2 program's standards will be phased in, beginning with model year 2021 and culminating with model year 2027.[54]
- In June 2020, CARB released EMFAC off-model adjustment factors to account for the Final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule.[55] The SAFE Rule has been incorporated into this analysis as it is incorporated in EMFAC2021.

CalEEMod® does not include reductions from regulatory programs not yet incorporated into EMFAC2021, including:

- The Advanced Clean Cars II (ACC II) was adopted in 2022 for light-duty passenger car, pickup truck, and SUV emissions starting in 2026 through 2035. The regulation would require an increasing number of zero emission vehicles and amends the low-emission vehicle regulations to increase stringency of emission standards for light-duty vehicles. EMFAC2021 does not include reductions associated with this regulation and thus reductions are not incorporated into this analysis.
- The Heavy-Duty Inspection and Maintenance (HD I/M) Program, also known as Clean Truck Check, was adopted in 2021. This regulation includes roadside emissions monitoring to screen for high-emitting vehicles, improved emissions testing procedures, periodic emissions data reporting, and compliance verification for freight contractors, seaports, and railyards. EMFAC2021 does not include reductions associated with this regulation and thus reductions are not incorporated into this analysis.
- The ACF regulation was adopted in 2023. The regulation requires qualifying fleets to reduce emissions through the phase in of zero emission vehicles and a requirement for truck manufacturers to only manufacture zero emission trucks starting in 2036. EMFAC2021 does not include reductions associated with this regulation and thus reductions are not incorporated into this analysis.

Inclusion of these additional regulation-driven reductions would reduce mobile impacts beyond what is presented in this analysis, thus mobile-related emissions presented in this report represent a conservative estimate of Project impacts.

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[53] USEPA, Office of Transportation and Air Quality. 2016. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed: February 2025.

[54] The emission reductions attributable to Phase 2 of the regulations for medium- and heavy-duty trucks were not included in the Project's emissions inventory due to the difficulty in quantifying the reductions. Excluding these reductions results in a more conservative (i.e., higher) estimate of emissions for the Project.

[55] CARB. 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide (CO_2) Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-02/emfac_off_model_co2_adjustment_factors_06262020-final.pdf. Accessed: January 2025.

4.3.3.1 Estimating Mobile Source Emissions

Mobile source emissions calculation requires trip rates and trip lengths for each different trip type in the Project (e.g., passenger vehicles and trucks).

The following sections describe the methodology to derive the necessary inputs.

Trip Generation Rates

The trip generation rates for the Project were based on Fehr & Peers data. The trip rates for the operational mobile trips are shown in **Table 4-6** and **Table 4-7**, respectively.

Trip Lengths

The Project trip lengths were primarily based on Fehr & Peers analysis and CalEEMod® defaults. The trip lengths for the operational mobile trips are shown in **Table 4-5, Table 4-6, Table B-2,** and **Table C-2**.

Fleet Mix

The fleet mixes derived based on CalEEMod® and EMFAC2021 were used to determine the mix of light-duty vehicles used for auto vehicles. The heavy-duty trucks were assumed to be heavy-heavy-duty trucks. The fleet mixes for the operational mobile trips are shown in Table B-1 and Table C-1 of Appendix B and Appendix C, respectively.

Transport Refrigeration Units

The Project includes Transport Refrigeration Units (TRUs), which are refrigeration systems powered by diesel internal combustion engines designed to refrigerate or heat perishable products that are transported in various containers, including truck vans, semi-truck trailers, shipping containers, and railcars. These TRUs account for approximately 5% of the warehouse delivery trucks. This analysis assumes that TRUs are plugged in at the loading dock. OFFROAD2021 has emission factors for TRUs, which were obtained for San Joaquin County in 2032 for the Initial Phase and 2050 for Full Buildout, as this was the latest year with available data from OFFROAD2021. Please note that this is a conservative approach since it is expected that emission factors would decrease over time due to regulations likely becoming more stringent in the future. CAP emissions from TRUs were estimated, as shown in **Table 4-13**, **Table 4-14**, and **Table 4-15**.

4.3.4 Operational Gasoline Transfer and Dispensing

Emissions from gasoline transfer and dispensing mainly occur during loading, breathing, refueling, spillage, and from hose permeation. Emission factors were obtained from SJVAPCD staff for EVR Phase I and EVR Phase II installed underground tank. These emissions which are permitted through the SJVAPCD are presented in **Table 4-10**.

4.3.5 Off-road Equipment Sources

To estimate CAP emissions from the combustion of fuel from warehouse off-road equipment, Ramboll utilized emission factors from OFFROAD2021. **Tables 4-11** identifies the emission factors and emissions used in this analysis to conservatively represent potential yard truck or forklift related emissions. Warehouse off-road equipment estimates were based on studies conducted by South Coast Air Quality Management District (South Coast AQMD) and the warehouse area associated with each development area.

4.3.6 Wastewater Treatment Plant Sources

To estimate CAP emissions from the combustion of fuel from the wastewater treatment facility diesel generator, Ramboll utilized emission factors from AP-42. **Table 4-12** identifies

the emission factors and emissions used in this analysis. Specifications for the wastewater treatment facility diesel generator were based on generators present at similar facilities.

4.3.7 Total Operational Emissions

Table 4-16 and **Table 4-17** summarize the Project's unmitigated annual and daily operational criteria air pollutant emissions, respectively. The annual criteria air pollutant emissions from operation of the Project are above the SJVAPCD significance thresholds for VOC, NOx, CO, PM_{10}, and $PM_{2.5}$ (**Table 4-16**). The daily criteria air pollutant emissions from operation of the Initial Phase of the Project are above the SJVAPCD significance thresholds for VOC (**Table 4-17**).

5. HEALTH RISK ASSESSMENT

This HRA evaluates the estimated cancer risk, non-cancer chronic hazard index (HIC), and acute hazard index (HIA) associated with construction and operation of the Project to address the SJVACPD Significance Thresholds.

5.1 Estimated Air Concentrations

To evaluate the health risks and concentration of air toxics in the surrounding area, SJVAPCD recommends estimating concentrations using air pollution dispersion modeling. The methodologies used to evaluate emissions for the Project are based on the most recent SJVAPCD Modeling and Health Risk Assessment Guidelines provided by SJVAPCD staff and the most recent Air Toxics Hot Spots Program Risk Assessment Guidelines from Office of Environmental Health Hazard Assessment (OEHHA).[56,57]

Off-site air concentrations of TACs from Project emissions are estimated using the American Meteorological Society/Environmental Protection Agency regulatory air dispersion model (AERMOD). Details on the inputs and methodology used in the dispersion modeling are discussed further in the sections below.

5.1.1 Toxic Air Contaminant Emissions

Ramboll evaluated excess lifetime cancer risk and HIC for off-site receptors from Project construction emissions. In particular, the construction HRA assesses the lifetime cancer risk and HIC associated with DPM emissions from off-road diesel construction equipment and hauling and vendor trucks during construction of the Project. Diesel exhaust, a complex mixture that includes hundreds of individual constituents, is identified by the State of California as a known carcinogen.[58,59] Under California regulatory guidelines, DPM is used as a surrogate measure of exposure for the mixture of chemicals that make up diesel exhaust as a whole. We conservatively assumed that all PM_{10} from diesel-fueled equipment and trucks is DPM. Gasoline vehicles were not included in the HRA per the direction from SJVAPCD.[60]

Additionally, Ramboll evaluated the lifetime cancer risk, HIC, and HIA analyses resulting from Project operation, which includes DPM emissions associated with warehouse delivery truck travel and idling, TRU usage, emergency generator usage, operational offroad equipment usage, and TAC emissions (e.g., benzene) from fuel transfer and dispensing. Passenger vehicles are assumed to be gasoline-fueled, hybrid, and electric vehicles. Therefore, TAC emissions associated with passenger vehicles are not included in the

[56] SJVAPCD. Health Risk Assessment Guidance Document for AB2588 and CEQA. Document provided by the SJVAPCD staff, Kyle Melching, via email dated August 4, 2021.

[57] Cal/EPA, OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. February. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: February 2025.

[58] Cal/EPA, OEHHA. 1998. Findings of the Scientific Review Panel on The Report on Diesel Exhaust, as adopted at the Panel's April 22, 1998, meeting.

[59] Cal/EPA, OEHHA. 2018. OEHHA/ARB Consolidated Table of Approved Risk Assessment Health Values. May. Available at: https://www.arb.ca.gov/toxics/healthval/contable.pdf. Accessed: February 2025.

[60] Email communication with SJVAPCD staff, Diana Walker, on August 17, 2021.

operational HRA based on the direction from the District.[61] Detailed emission calculations for the initial and full buildout HRAs are presented in **Appendix E** and **Appendix F**.

5.1.2 Air Dispersion Modeling Methodology

Ramboll used AERMOD Version 24142 to estimate ambient air concentrations and evaluate the health risks of TACs at off-site receptors. [62,63] For each receptor location, the model generates air concentrations (or air dispersion factors if unit emissions [i.e., 1 g/s] were modeled) that result from emissions from multiple sources.

Air dispersion models such as AERMOD require a variety of inputs such as source parameters, meteorological data, topography information, and receptor parameters. When site-specific information was unknown, default parameter sets that are designed to produce conservative (i.e., overestimates of) air concentrations were used.

5.1.2.1 AERMOD

AERMOD has been approved for use by USEPA, CARB, and SJVAPCD, and incorporates multiple variables in its algorithms including:

- Meteorological data representative of surface and upper air conditions;
- Local terrain data to account for elevation changes; and
- Physical specification of emission sources including information such as:
  - Location;
  - Release height; and
  - Source dimensions.

Dispersion model averaging times are specified based on the averaging times of ambient AQ standards and the AQ significance thresholds established by the appropriate regulatory agencies. For the Project construction HRA, the PERIOD averaging time (average concentration for the 5-year meteorological data set) was used to calculate chronic (long-term) health effects. No acute non-cancer toxicity has been identified for DPM.[64] Thus, an acute HI from Project construction was not calculated.

For the Project operational HRA, the 1-hour averaging time was used to evaluate acute (short-term) effects and the PERIOD averaging time (average concentration for the 5-year meteorological data set) was used to calculate chronic (long-term) health effects.

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61 Ibid.

62 USEPA. 2023. User's Guide for the AMS/EPA Regulatory Model (AERMOD). August. Available at: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_userguide.pdf. Accessed: February 2025.

63 USEPA. 2017. Guideline on Air Quality Models (Revised). 40 Code of Federal Regulations, Part 51, Appendix W. Office of Air Quality Planning and Standards. January. Available at: https://www.epa.gov/scram/clean-air-act-permit-modeling-guidance. Accessed: February 2025.

64 CARB. 2018. *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values*. August, https://www.arb.ca.gov/toxics/healthval/contable.pdf. Accessed: February 2025.

The following other options in AERMOD were selected for use in this analysis. The regulatory default option was selected based the SJVAPCD modeling recommendations,[65] which established the settings for variables such as rural modeling dispersion option, receptor heights, off-site receptor grid spacing, and emissions source parameters. The air dispersion model was run using a unit emission factor approach. The model output based on a unit emission factor approach was incorporated into a post-processing step with the calculated emission rates to estimate the air concentrations at each receptor.

5.1.2.2 Source Characterization

For the Project construction HRA, area sources covering the planned construction areas were used to represent DPM exhaust emissions from the off-road equipment, and line-volume sources were used to represent haul trucks and vendor vehicles traveling on the roadway links within or near the site boundary. Area sources[66] are used to characterize off-road construction equipment within each development area with a release height of 5 meters and an initial vertical dimension of 1.4 m. Line-volume sources were used to model haul and vendor trucks traveling on the roadway links for Initial Phase and Buildout construction. Modeled construction emission source locations are shown in **Figure 1**.[67]

For the Project operational analysis, DPM emissions from mobile sources traveling on the roadway links within or near the site boundary were modeled as line-volume sources. Point sources were used to represent on-site idling for warehouse delivery trucks and TRU emissions when in-use by warehouse delivery trucks at the warehouse loading docks. The fueling facility (FF) emission sources were modeled as point sources (loading and breathing emissions) and volume sources (refueling, hose permeation, and spillage). The emergency generator for the on-site Wastewater Treatment Plant (WWTP) was modeled as a point source. Modeled operational emission source locations are shown in **Figure 2**. Detailed source parameters and their bases were provided in **Appendix D**.

5.1.2.3 Meteorology

SJVAPCD provides AERMOD model-ready meteorological data sets for use in AQ and risk impact analyses in the SJVAB. SJVAPCD's Tracy, CA (Station ID 99008) meteorological data set was selected based on that station's close geographic proximity to the Project. The SJVAPCD meteorological data set for January 1, 2004 to December 31, 2008 was used for the analysis.[68] The meteorological station location is presented in **Figure 4**.

5.1.2.4 Land Use

The land uses surrounding the Project alignment are primarily a mix of residential and commercial areas. AERMOD offers the option of using either rural or urban dispersion

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65 SJVAPCD. 2022. Guidance for Air Dispersion Modeling. Available at: https://www.valleyair.org/busind/pto/tox_resources/Modeling_Guidance.pdf. Accessed: February 2025.

66 The modeled area is an approximate representation of the area where construction activity may occur. Slight changes to the exact boundary of the construction activity area are not anticipated to meaningfully alter the analysis findings.

67 Figure 1 shows all modeled construction roadways within and surrounding the Project. For the Initial Phase, a subset of these construction roadways were modeled based on anticipated travel to the Initial Phase construction areas. These routes were assumed to include those from Chrisman Road to Routes 132 and/or 580.

68 SJVAPCD. Meteorological Data. Available at: https://ww2.valleyair.org/permitting/air-dispersion-modeling/meteorological-data/. Accessed: February 2025.

characteristics. Selection of rural or urban dispersion characteristics depends on the predominant land use within a three-kilometer radius of the site. SJVAPCD recommends that if 50% or more of the land use types within the three-kilometer radius is classified as heavy industrial, light/moderate industrial, and/or commercial, then urban dispersion characteristics must be chosen for all Project emissions sources. Otherwise, the rural dispersion characteristics must be chosen.[69] Ramboll determined that less than 50% of the land use within the three-kilometer radius is classified as the urban land use types, and rural dispersion characteristics were therefore used for the Project.

Data specifying terrain elevations of sources and receptors are imported into the model. Elevations are based on National Elevation Datasets (NEDs) and consist of an array of regularly spaced points on a horizontal plane for which an elevation is specified. NED 1/3-arc second data used in this analysis were obtained from the United States Geologic Survey (USGS).[70]

5.1.2.5 Emission Rates

Emissions were modeled using the χ/Q ("chi over q") method, such that each source group has a unit emission rate (i.e., 1 gram per second [g/s]), and the model estimates dispersion factors (with units of [µg/m^3]/[g/s]). Actual emissions were multiplied by the dispersion factors to obtain concentrations.

For the Project construction analysis, emissions from all modeled construction sources including off-road construction equipment, off-site vendor vehicle travel, and off-site hauling vehicle travel – were assumed to occur between the hours of 7:00 AM and 7:00 PM and 6 days per week for the Project construction duration.

For the Project operational analysis, all sources, including warehouse trucks, transport refrigeration units, emergency generator, operational offroad equipment, and the fueling facility, are conservatively modeled 24 hours per day, 7 days per week.

Modeled construction and operational emissions for the Initial Phase and Buildout scenarios can be referenced in **Appendix E** and **Appendix F**, respectively.

5.1.2.6 Receptors

In order to evaluate health impacts to off-site receptors, nearby sensitive receptor populations were identified. SJVAPCD identifies the following as off-site sensitive receptors: schools, daycare facilities, hospitals, and adult/elderly care facilities.[71] The following receptors are included in the AERMOD modeling per SJVAPCD guidance:[72,73]

- 25 m x 25 m from the site boundary to 100 m from the site boundary;
- 50 m x 50 m from 100 m to 250 m from the site boundary;

[69] SJVAPCD. 2022. Guidance for Air Dispersion Modeling. Available at: https://www.valleyair.org/busind/pto/tox_resources/Modeling_Guidance.pdf. Accessed: February 2025.

[70] USGS National Elevation Dataset. Available at: https://www.mrlc.gov/tools. Accessed: February 2025.

[71] SJVAPCD. 2022. Guidance for Air Dispersion Modeling. Available at: https://www.valleyair.org/busind/pto/tox_resources/Modeling_Guidance.pdf. Accessed: February 2025.

[72] Ibid.

[73] SJVAPCD. Draft HRA Guidance. Document provided by the SJVAPCD staff, Kyle Melching, via email dated January 16, 2025.

- 100 m x 100 m from 250 m to 2,500 m from the site boundary; and
- 20 m spacing fenceline receptors at nearby properties

No sensitive receptor locations were identified within a 2,000 meter radius of the modeled site boundary.

The locations of all receptors are illustrated on **Figure 3**. Receptor heights were assumed to be ground-level based on SJVAPCD guidance.[74]

5.2 Risk Characterization Methods

The Project construction and operational HRAs was conducted in accordance with SJVAPCD risk assessment guidelines.[75] These guidelines are based on OEHHA's 2015 Air Toxics Hot Spots Program Risk Assessment Guidelines.[76] The 2015 OEHHA Guidelines include various updates that are protective of human health, particularly related to estimating potential risks in infants, children, and other sensitive receptors. Lifetime cancer risk, HIC, and HIA were calculated at each receptor. Fueling facility TAC emissions and air dispersion results were input into HARP, version 25003, the OEHHA-recommended program for completing an HRA. Health risks associated with other sources were calculated outside of HARP using equivalent methodology. Specific steps taken to complete the HRA, such as exposure assessment, dose-response, and risk characterization are described in more detail below.

5.3 Exposure Assessment

To calculate health impacts for comparison to SJVAPCD thresholds, this report assesses risk to residential and worker receptors.

Exposure Assumptions: As presented in **Table 5-1**, the exposure duration, pathways, exposure analysis methods (e.g., OEHHA 95th High End Method) evaluated in the HRA used to estimate excess lifetime cancer risks for exposed populations were selected in accordance with risk assessment guidelines from OEHHA and SJVAPCD.[77,78] A deposition rate of 0.05 m/s was used for multipathway analysis. For the construction HRA, it was conservatively assumed that exposure begins at birth (age 0), rather than at the third trimester due to higher overall intake of DPM.

Calculation of Intake: The dose estimated for each exposure pathway is a function of the concentration of a chemical and the intake of that chemical. The intake factor for inhalation, IF_{inh}, can be calculated as follows:

[74] SJVAPCD. 2022. Guidance for Air Dispersion Modeling. Available at: https://www.valleyair.org/busind/pto/tox_resources/Modeling_Guidance.pdf. Accessed: February 2025.

[75] SJVAPCD. Health Risk Assessment Guidance Document for AB2588 and CEQA. Document provided by the SJVAPCD staff, Kyle Melching, via email dated August 4, 2021.

[76] Cal/EPA, OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. February. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: February 2025.

[77] Cal/EPA, OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. February. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: February 2025.

[78] SJVAPCD. 2022. Guidance for Air Dispersion Modeling. Available at: https://www.valleyair.org/busind/pto/tox_resources/Modeling_Guidance.pdf. Accessed: February 2025.

$$IF_{inh} = \frac{DBR * FAH * EF * ED * CF}{AT}$$

Where:

IF_{inh} = Intake Factor for Inhalation (m^3/kg-day)

DBR = Daily Breathing Rate (L/kg-day)

FAH = Frequency of time at Home (unitless)

EF = Exposure Frequency (days/year)

ED = Exposure Duration (years)

CF = Conversion Factor, 0.001 (m^3/L)

AT = Averaging Time (days)

The chemical intake or dose is estimated by multiplying the inhalation intake factor, IF_{inh}, by the chemical concentration in air, C_i. When coupled with the chemical concentration, this calculation is mathematically equivalent to the dose algorithm given in the current OEHHA Hot Spots guidance.[79]

Four cancer exposure scenarios were evaluated to identify the most conservative excess lifetime cancer risk. Exposure scenario 1 begins at the start of the Initial Phase operation and continues throughout the full exposure period. Scenario 2 begins at the start of Initial Phase construction and continues through Initial Phase operation throughout the full exposure period. Scenario 3 begins at the start of full Buildout operation and continues throughout the full exposure period. Scenario 4 begins at the start of Initial Phase construction, continues through all construction phases, and extends through the full Buildout operations. Intake factors calculated for each exposure scenario are presented in **Table 5-2a** through **Table 5-2d**.

5.3.1 Age Sensitivity Factors

As a conservative and health-protective measure, the estimated excess lifetime cancer risks for a resident will be adjusted using age sensitivity factors (ASFs) that account for an "anticipated special sensitivity to carcinogens" of infants and children as recommended in the OEHHA 2009 Technical Support Document and OEHHA 2015 Air Toxics Hot Spots Program Risk Assessment Guidelines.[80,81] Cancer risk estimates were weighted by a factor of 10 for exposures that occur from the third trimester of pregnancy to two years of age and by a factor of 3 for exposures that occur from two years through 15 years of age. No weighting factor (i.e., an ASF of one, which is equivalent to no adjustment) is applied to ages 16 and older.

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[79] Cal/EPA, OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Appendix D. February. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: February 2025.

[80] Cal/EPA, OEHHA. 2009. Technical Support Document for Cancer Potency Factors: Methodologies for Derivation, Listing of Available Values, and Adjustment to Allow for Early Life Stage Exposures. May. Available online at: https://oehha.ca.gov/air/crnr/technical-support-document-cancer-potency-factors-2009. Accessed: February 2025.

[81] Cal/EPA, OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Appendix D: February. Available at: https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf. Accessed: February 2025.

5.3.2 Toxicity Assessment

The toxicity assessment characterizes the relationship between the magnitude of exposure and the nature and magnitude of adverse health effects that may result from such exposure. For purposes of calculating exposure criteria to be used in risk assessments, adverse health effects are classified into two broad categories – cancer and non-cancer endpoints. Toxicity values that are used to estimate the likelihood of adverse effects occurring in humans at different exposure levels are identified as part of the toxicity assessment component of a risk assessment. Toxicity factors in the latest HARP Health Database,[82] integrated into the HARP program, were used in this HRA. The HARP program contains the most up-to-date listing of available inhalation and oral cancer potency factors (CPFs), chronic inhalation and oral RELs, and acute RELs approved by California Environmental Protection Agency (Cal/EPA) for use in health risk assessments.

5.4 Risk Characterization

This section describes the methods used to estimate potential adverse effects associated with off-site exposures to chemicals emitted from the Project. The results of the HRA are presented in Section 5.5.

5.4.1 Estimation of Cancer Risks

Excess lifetime cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific CPF. For carcinogenic chemicals, both inhalation and non-inhalation pathways must be considered, using the CPFs in HARP. Total risk is the sum of risks attributable to each chemical considered by each pathway.

The equation used to calculate the potential excess lifetime cancer risk for the inhalation pathway is as follows:

$$Riskinh = Ci \; x \; CF \; x \; IFinh \; x \; CPFi \; x \; ASF$$

Where:

Riskinh	=	Cancer risk; the incremental probability of an individual developing cancer as a result of inhalation exposure to a particular potential carcinogen (unitless)
Ci	=	Annual average air concentration for chemical (µg/m^3)
CF	=	Conversion factor (mg/µg)
IFinh	=	Intake factor for inhalation (m^3/kg-day)
CPFi	=	Cancer potency factor for chemical (mg chemical/kg body weight-day)$^{-1}$
ASF	=	Age sensitivity factor (unitless)

[82] The latest HARP Health Database is available from ARB here: https://www.arb.ca.gov/toxics/harp/harp.htm. Accessed: February 2025.

A similar equation, using oral dose and the oral CPF, is used to calculate risks from oral exposure. Oral cancer risks include dermal absorption, incidental ingestion of soil, and mother's milk. HARP default exposure parameters were used, as described above.

5.4.1.1 Estimation of Chronic Non-Cancer Hazard Indices

The potential for exposure to result in adverse chronic non-cancer effects is evaluated by comparing the estimated annual average air concentration (which is equivalent to the average daily air concentration) to the non-cancer chronic reference exposure level (cREL) for each chemical. When calculated for a single chemical, the comparison yields a ratio termed a hazard quotient (HQ). To evaluate the potential for adverse chronic non-cancer health effects from simultaneous exposure to multiple chemicals, the HQs for all chemicals are summed, yielding a HI:

$$HQi = Ci / cREL$$

$$HI = \sum HQ$$

Where:

HI	=	Hazard index
HQi	=	Chronic hazard quotient for chemical i
Ci	=	Annual average concentration of chemical i (µg/m^3)
cRELi	=	Chronic non-cancer reference exposure level for chemical i (µg/m^3)

Estimation of non-inhalation chronic health effects uses a similar method, but the annual average air concentration is replaced by the dose calculated by HARP using the exposure parameters mentioned above, and the appropriate non-inhalation REL is used.

Estimation of an HI for each target organ (also referred to as a segregation of HI by target organ analysis) is recommended by OEHHA because the non-cancer effects of chemicals with different target organs are generally not additive.

5.5 Health Risk Results

Using the health risk assessment parameters detailed in **Table 5-1** through **Table 5-3** for the construction HRA and operational HRA, the potential health impacts during the construction and operation of the Project were estimated at the maximally impacted residential, worker, and sensitive receptors. The cancer risk, HIC, and HIA results of the construction and operational health risk assessment for initial buildout and full buildout are presented in **Table 5-4** and **Table 5-5,** respectively. Health risk results for all receptors can be referenced in **Appendix G** and **H**.

6. CO HOTSPOTS

Mobile source impacts occur on two basic scales of motion. Regionally, Project-related travel will add to regional trip generation and increase the VMT within the local airshed and the SJVAB. Locally, Project traffic will be added to the City's roadway system. There is a potential for the formation of microscale CO "hotspots" in the area immediately around points of congested traffic. Because of continued improvement in mobile emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the basin is steadily decreasing.

Projects contributing to adverse traffic impacts may result in the formation of CO hotspots. To verify that the Project would not cause or contribute to a violation of the CO standard, a screening evaluation of the potential for CO hotspots was conducted. The Pacific Gateway Local Transportation Analysis (LTA) prepared by Fehr & Peers evaluated the level of service (LOS) (i.e., increased congestion) impacts at intersections affected by the Project. The potential for CO hotspots was evaluated based on the results of the traffic analysis.

6.1 Regulatory Background

SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts indicates that the project would result in no potential to create a violation of the CO standard if neither of the following SJVAPCD screening criteria are met at any of the intersections affected by the project:[83]

- A traffic study for the project indicates that the LOS on one or more streets or at one or more intersections in the project vicinity will be reduced to LOS E or F.
- A traffic study indicates that the project will substantially worsen an already existing LOS F on one or more streets or at more or more intersections in the project vicinity.

6.2 LTA Findings

The LTA[84] prepared for this project evaluated the LOS impacts at 21 existing study intersections that may be impacted by the Project. Fehr & Peers evaluated five scenarios, which are summarized below:

- Existing Conditions (2024),
- Existing Plus Initial Phase Conditions,
- Existing Plus Project Buildout Conditions,
- Cumulative No Project Conditions, and
- Cumulative Plus Project Buildout Conditions.

Based on the analysis performed by Fehr & Peers, the LOS impacts show that several intersections have the potential to reduce to LOS E or F with the Project in the Existing Plus Initial Phase Conditions, Existing Plus Project Buildout Conditions, and Cumulative Plus Project Conditions.

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[83] SJVAPCD. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Available at: http://www.valleyair.org/transportation/GAMAQI.pdf. Accessed: February 2025.

[84] Fehr & Peers. 2024. Draft Local Transportation Analysis for Pacific Gateway.

Section 6 of the LTA describes recommended improvements to address deficient conditions in the Existing Plus Initial Phase and Existing Plus Project Buildout conditions. Similarly, Section 7 of the LTA describes recommended improvements to address deficient conditions in the Cumulative Plus Proposed Project conditions. Implementation of these recommendations are expected to restore operations at all study intersections to acceptable levels with the exception of the Chrisman Road/Eleventh Street intersection, which would continue to operate at LOS F in the Cumulative Plus Project Buildout Condition. Note that the recommended roadway and intersection improvements would be triggered by the full buildout of the proposed project in the Off-Site Improvements Study Area. The timeline of these improvements is not definitive at this time due to a variety of factors, with the main factor being that many of the proposed improvements are under the jurisdiction of entities beyond San Joaquin County and would require other agency approval. Thus, an assessment of all existing intersections operating at LOS E or F was conducted below.

Using a simplified approach, we can utilize the analysis prepared for CO attainment in the SCAB by the SCAQMD to assist in evaluating the potential for CO exceedances at the Chrisman Road/Eleventh Street intersection. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).[85] As discussed in the 1992 CO Plan, peak CO concentrations in the SCAB are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections. Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Blvd. and Imperial Highway (Lynwood); Wilshire Blvd. and Veteran Ave. (Westwood); Sunset Blvd. and Highland Ave. (Hollywood); and La Cienega Blvd. and Century Blvd. (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this intersection was 4.6 ppm, which indicates that the most stringent 1-hour CO standard (20.0 ppm) would likely not be exceeded until the daily traffic at the intersection exceeded more than 400,000 vehicles per day.[86]

An analysis of the Project's intersections shows that the highest peak hour traffic volume is anticipated to occur at the Corral Hollow Road/Linne Road intersection during Cumulative Plus Project Buildout Conditions, resulting in an hourly peak volume of 5,330 vehicles/hour. While it is not expected that this traffic volume would stay elevated for 24 hours, if we scaled this up conservatively utilizing 24 hours/day, this leads us to a daily traffic volume of approximately 127,920 vehicles at the intersection of Corral Hollow Road/Linne Road, which is well below the daily traffic volumes that would be expected to generate CO exceedances as evaluated in the 2003 AQMP. All other intersections are expected to operate at lower peak

[85] SCAQMD. 2005. Federal Attainment Plan for Carbon Monoxide. Carbon Monoxide Redesignation Request and Maintenance Plan. February. Available at: http://www.arb.ca.gov/planning/sip/sccosip05/sccosip_redesig_mplan.pdf. Accessed: February 2025.

[86] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

hourly traffic volumes and are therefore also expected to be well below the daily traffic volumes that could generate CO exceedances as evaluated in the 2003 AQMP.

7. MITIGATION MEASURES

The following mitigation measures would reduce emissions associated with the proposed project.

7.1 Description of Mitigation Measures

As described in **Section 1.3** of this report, the Project will include a number of mitigation measures intended to reduce project impacts. Quantification of criteria air pollutant emission reductions associated with these measures are described as follows.

7.1.1 MM-AQ-1 (ZE Equipment)

The project will utilize various zero emission equipment. This includes forklift equipment and yard mules used at all industrial warehouse buildings greater than 300,000 square feet (22,993,500 square feet total). As described in **Table 4-10**, off-road equipment emissions following implementation of this measure were assessed based on the forklift and yard mule usage at warehouses less than 300,000 square feet.

Additionally, all landscape equipment used to maintain individual building projects (24,675,000 square feet total) and Pacific Gateway master landscaping, parks and open space will be required to be zero emission. This aligns with the use of mitigation measure LL-1 in CalEEMod®.

7.1.2 MM-AQ-2 (Low-VOC Architectural Coatings)

The Project will utilize architectural coatings with a VOC content of a maximum of 15 g/L at all industrial warehouse buildings. As described in **Table 4-3** and **Table 4-8**, an adjusted architectural coating VOC content CalEEMod® input was calculated for construction and operational architectural coatings. This adjusted factor assumes that low-VOC content architectural coatings are applied to industrial warehouse land uses and non-industrial warehouse land uses will utilize standard architectural coatings represented by CalEEmod® defaults.

7.1.3 MM-AQ-3 (Tier 4 Construction Equipment)

The Project will utilize off-road diesel-powered Tier 4 construction equipment for all construction activities, where feasible. For the purposes of this analysis, it was assumed that all equipment greater than 50 HP would be Tier 4.

8. PROJECT INVENTORY IN CONTEXT

This section assesses the significance of the Project's emissions for purposes of CEQA.

8.1 Threshold 1

Would the Project conflict with or obstruct implementation of the applicable air quality plan?

CARB has developed a three-step approach to determine project conformity with the applicable Air Quality Attainment Plan (AQAP):

1. *Determination that an AQAP is being implemented in the area where the project is being proposed.* SJVAPCD has implemented the current, modified 2016 8-hour AQAP as approved by CARB and approved by USEPA for the 2008 8-hour O3 standard.
2. *The proposed project must be consistent with the growth assumptions of the applicable AQAP.* The San Joaquin County 2050 growth Projections[87] for the 2016 Public Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)[88] provides for future employment/population factors.
3. *The project must contain in its design all reasonably available and feasible air quality control measures.* The Project incorporates various policy and rule-required implementation measures that would reduce related emissions.

As discussed in **Section 2.3**, SJVAPCD adopted the 2016 Plan for the 2008 8-hour Ozone Standard in June 2016, which has been approved by CARB and the US EPA.SJVAPCD's air quality plans rely on information from CARB and the SJCOG to project future emissions and determine the strategies necessary for the reduction of emissions through regulatory controls. CARB mobile source emission projections and SJCOG growth projections are based on population, vehicle trends, and land use plans developed by the cities and San Joaquin County as part of the development of their general plans. As such, projects that propose development that is consistent with the growth anticipated by the general plan(s) would be consistent with the growth projections of the SIP because associated emissions of criteria pollutants in a designated non-attainment area would be accounted for in these air quality plans. If a project proposes development that is greater than anticipated in SJCOG's growth projections, the project would be considered to conflict with the regional air quality attainment plans and SIP and could potentially result in a significant air quality impact.

The County's General Plan currently designates the project site as General Agriculture (A/G), Resource Conservation (OS/RC), and Rural Service Commercial (C/RS). The project site is zoned by the County as AG-40-acres (AG-40) and Rural Service Commercial (C-RS).

The proposed project would require approval of several entitlements, including a General Plan Map Amendment from 1,556.61 acres of A/G, 19 acres of OS/RC, and 1.09 acres of C/RS to 18.5 acres of General Commercial; 4.3 acres of Industrial Park; 1,375.8 acres of Limited Industrial; 76.3 acres of university campus, and 61.8 acres of Public Facilities for

[87] San Joaquin Council of Governments, 2020. San Joaquin County Demographic and Employment Forecast. Available at: https://www.sjcog.org/DocumentCenter/View/6007/Demographic-and-Employment-Forecast-2020. Accessed: February 2025.

[88] San Joaquin Council of Governments, 2022. San Joaquin 2022 Regional Transportation Plan and Sustainable Communities Strategy. Available at: https://www.sjcog.org/608/Adopted-2022-RTPSCS-Plan. Accessed: February 2025.

open space and parks; Zone Reclassification from AG-40 and C-RS to ensure conformance with the amended General Plan land use designations; and adoption of the Pacific Gateway Specific Plan.

Given that the proposed project would require a General Plan Amendment, the proposed project has not been anticipated by the County in the General Plan. Thus, development of the project would not have been included in the growth assumptions of the SIP. Because the SIP takes into account growth assumptions to determine when and how air quality standards could be achieved, emissions that are not accounted for in the SIP have the potential to conflict with the attainment goals set forth in the SIP.

In addition, as discussed in further detail within this chapter, the proposed project incorporates various policy and rule-required implementation measures, as well as project-specific mitigation measures, that would reduce related emissions. However, even with inclusion of such measures, operational emissions associated with the Initial Phase and Specific Plan Buildout would exceed the SJVAPCD's thresholds of significance. Consequently, implementation of the proposed project could conflict with or obstruct implementation of the applicable air quality plan, and a **significant and unavoidable** impact could occur.

8.2 Threshold 2

Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?

Per **Table 2-2**, the Project region is a designated non-attainment area for ozone (the State 1-hour O_3; federal and State 8-hour O_3) and particulate matter (State PM_{10}; federal and State $PM_{2.5}$). Ozone precursors include VOC and NO_X. As discussed in **Section 4**, estimated emissions for the Project show that the annual emissions for construction (**Table 4-3** and **Table 4-4**) and on-site operations (**Table 4-12** and **Table 4-13**) would be above the SJVAPCD significance thresholds for some criteria pollutants.

Table 8-1 and **Table 8-2** summarize the Project's mitigated annual and daily construction criteria air pollutant emissions, respectively. With the implementation of mitigation measures, the annual criteria air pollutant emissions from construction of the Project are below all SJVAPCD significance thresholds (**Table 8-1**). The daily criteria air pollutant emissions from construction of the Initial Phase of the Project are below the SJVAPCD significance thresholds (**Table 8-2**).

Table 8-3 and **Table 8-4** summarize the Project's mitigated annual and daily operational criteria air pollutant emissions, respectively. With the implementation of mitigation measures and Rule 9510 reductions for NO_X and PM_{10}, the annual criteria air pollutant emissions from operation of the Project remain above the SJVAPCD significance thresholds for **VOC, NOx, CO, PM10, and PM2.5** (**Table 8-3**). The daily criteria air pollutant emissions from operation of the Initial Phase of the Project are all below the SJVAPCD significance thresholds (**Table 8-4**). Therefore, even with implementation of the following mitigation measures, the impact would remain **significant and unavoidable**.

8.3 Threshold 3

Would the Project expose sensitive receptors to substantial pollutant concentrations?

8.3.1 Health Risk Thresholds

The construction-related and operational health risk assessment results were used to assess if the Project would expose off-site receptors to substantial pollutant concentrations. As discussed in **Section 5**, the construction analysis evaluates the health risk resulting from off-road equipment DPM emissions during construction of the Project, as well as the DPM emissions from hauling and vendor trucks. The operational analysis evaluates the health risk resulting from DPM emissions from warehouse truck travel and idling, TRU travel and idling, emergency generator usage, operational offroad sources, as well as TAC emissions from fuel transfer and dispensing.

The results of the analyses show that the lifetime cancer risk, HIC, and acute hazard index of the Project-related Initial Phase construction and operational emissions are less than the SJVAPCD significance thresholds (**Table 5-4**). The results of the analyses show that the lifetime cancer risk, HIC, and acute hazard index of the cumulative construction and operational Buildout are below SJVAPCD significance thresholds (**Table 5-5**). The lifetime HIC and acute hazard index of the full operational Buildout emissions are below SJVAPCD thresholds, however the cancer risk was found to be above the SJVAPCD significance threshold (**Table 5-5**). Thus, the impact of the Initial Phase construction, Initial Phase operation, and Buildout construction would be **less than significant** and the impact of the Buildout operation would be considered **significant**.

8.3.2 Health Risk Thresholds with Potential Mitigation

As identified in **Table 5-5** and shown in **Figure 3**, an analysis of the Buildout operational emissions shows a significant cancer risk impact at the maximally impacted residential receptor.

The installation and maintenance of air filtration systems, such as those which utilize high efficiency particulate air (HEPA) filters, can reduce pollutant exposure and associated risk impacts. This mitigation measure is recommended by various guidance documents as an approach to addressing operational impacts, including the Attorney General's Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act.[89]

If the project commits to retrofitting the heating, ventilation, and air conditioning (HVAC) systems at significant residential receptor locations to utilize HEPA filters, particulate matter concentrations at these residential receptors would be reduced by 99.97%.[90] It can be assumed that a reduction in DPM-related risk approximately equal to the filtration efficiency would occur, which would result in the bracketed revised risks shown in **Table 5-5**. If this potential mitigation measure were implemented, risk at all receptors would be below the SJVAPCD significance threshold. However, this potential mitigation measure is not enforceable and thus cannot be assessed as part of this significance determination. Thus, the impact of the Buildout operation would continue to be considered **significant**.

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[89] California Department of Justice. 2022. Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act. Available at: https://oag.ca.gov/sites/all/files/agweb/pdfs/environment/warehouse-best-practices.pdf. Accessed: February 2025.

[90] United States Environmental Protection Agency. 2024. What is MERV Rating? Available at: https://www.epa.gov/indoor-air-quality-iaq/what-merv-rating. Accessed: February 2025.

8.3.3 CO Hotspots

Per **Section 6**, the Project would not result in a CO "hot spot" and a CO "hot spots" analysis is not needed to determine whether the change in the LOS of an intersection in the Project area would have the potential to result in exceedances of the CAAQS or NAAQS or expose sensitive receptors to substantial pollutant concentrations.

8.3.4 Health Effects of Criteria Air Pollutants

Significant project criteria air pollutant emissions could potentially lead to increased concentrations of pollutants in the atmosphere and could result in health effects due to the increased emissions. The following section describes the mechanism by which project-related emissions could increase the concentrations of criteria air pollutants in the atmosphere and qualitatively describes the potential health effects.

The ambient concentration of criteria pollutants is a result of complex atmospheric chemistry and emissions of pollutant precursors and direct emissions. NO_X and VOC are precursors to ozone and, and NOx, VOC, and SO_X are precursors to secondarily formed $PM_{2.5}$. Chemical and physical processes transform some of these precursors to the criteria pollutant concentrations in the atmosphere. The calculation of ozone and secondary $PM_{2.5}$ concentrations resulting from precursors is dependent on the spatial location of the criteria air pollutant emissions and how the emissions are dispersed in the atmosphere. Source apportionment, or the practice of deriving information about pollution sources and the amount they contribute to ambient air pollution levels, is also influenced by the meteorological conditions of the project location.

There are several variables which determine whether emissions of air pollutants from the project move and disperse in the atmosphere in a manner in which concentrations of criteria pollutants would become elevated and result in health impacts. A specific mass of precursor emissions does not equate to an equivalent concentration of the resultant ozone or secondary particulate matter in that area. The resulting concentration of criteria pollutants is influenced by sunlight, other pollutants in the air, complex reactions, and transport. The dispersion is based on the meteorological conditions of the source (the project), local terrain (elevation profile), and the height and size of the source. The surrounding land use, wind direction and wind speed will influence the location where the project emissions disperse. Meteorology, the presence of sunlight, and other complex chemical factors all combine to determine the ultimate concentration and location of ozone or PM formed by emissions of precursors.

The resulting health effects are further based on a complex relationship of multiple variables and factors. The calculated health effects are dependent upon the concentrations of pollutants to which the receptors are exposed, the number and type of exposure pathways for a receptor, and the intake parameters for a receptor, which vary based upon age and sensitivity (i.e. presence of pre-existing conditions). Health effects would be more likely for individuals with greater susceptibility to exposures, and also dependent on the location of receptors relative to the project site impacts whether receptors are exposed to project-related pollutants.

The following is a summary of the health effects from ozone, $PM_{2.5}$ and PM_{10}. Meteorology and terrain play major roles in ozone formation, and ideal conditions occur on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. Short-term exposures (lasting for a few hours) to ozone at levels typically observed in California can result in

health effects. When inhaled, $PM_{2.5}$ and PM_{10} can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks and cause or aggravate bronchitis and other lung diseases. Whereas PM_{10} tends to collect in the upper portion of the respiratory system, $PM_{2.5}$ is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Health effects of $PM_{2.5}$ include mortality (all causes), hospital admissions (respiratory, asthma, cardiovascular), emergency room visits (asthma), and acute myocardial infarction (non-fatal). For ozone, the endpoints are mortality, emergency room visits (respiratory) and hospital admissions (respiratory).

The SJVAPCD's Guidance for Assessing and Mitigating Air Quality Impacts establishes thresholds which are based upon scientific data that demonstrate the level of criteria air pollutant emissions that can be accommodated in the San Joaquin Valley without affecting the attainment of the CAAQS and NAAQS. As discussed in **Section 2.3.1**, the CAAQS and NAAQS are set to protect the public health and welfare from the effects of air pollution. Thus, the analyses relative to the SJVAPCD significance thresholds are an indicator for the potential health effects. The District has also adopted health risk thresholds that provide a threshold regarding the potential health effects for air pollutants. The GAMAQI states that "the District has established thresholds of significance for TACs that are extremely conservative and protective of health impacts on sensitive receptors." The CO hotspots analysis further evaluates for health effects based on the CAAQS for CO. The evaluation of the air emissions, which is a measure of potential health effects, are highlighted in **Section 7.1** through **7.3.2**.

8.4 Threshold 4

Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

8.4.1 Odors

According to SJVAPCD's *Guidance for Assessing and Mitigating Air Quality Impacts*, each project that will generate odors should be evaluated to determine the likelihood that it would result in nuisance odors. SJVAPCD recognizes the subjective nature of odor impacts and recommends that each project should be assessed on a "case-by-case" basis, taking into consideration all available pertinent information to qualitatively determine if a significant impact is likely to occur, such as information regarding the characteristics of the buffer zone between the sensitive receptor(s) and the odor source(s), local meteorological conditions, and the nature of the odor source. To facilitate the evaluation of odors, SJVAPCD has produced a list of common types of facilities, along with the distance from the source within which odors could possibly be significant. The list provides a qualitative assessment of a project's potential to adversely affect off-site receptors. The table below presents the list of common facilities and the minimum distance from the source below which the odor impacts may be significant. The Project will include the operation of one Wastewater Treatment Facility, which is a use identified by the SJVAPCD as being associated with odors. Distance to the nearest off-site receptor is less than the screening threshold provided by SJVAPCD which may indicate an odor impact. However, the wastewater treatment facility on-site will utilize a membrane bioreactor technology, which is expected to have a low odor impact relative to traditional open pond designs. Additionally, solid wastes collected during the treatment process will be transported to landfills which would minimize the potential for odor impacts. Thus, the Project is not expected to result in odors adversely affecting a substantial number of people. Because the Project's wastewater treatment facility is expected to have a low odor

impact relative to traditional wastewater treatment facilities a more detailed analysis is not needed.

SJVAPCD Screening Levels for Potential Odor Sources	
Type of Facility	**Distance**
Wastewater Treatment Facility	2 Miles
Sanitary Landfill	1 Mile
Transfer Station	1 Mile
Composting Facility	1 Mile
Petroleum Refinery	2 Miles
Asphalt Batch Plant	1 Mile
Chemical Manufacturing	1 Mile
Fiberglass Manufacturing	1 Mile
Painting/Coating Operations	1 Mile
Food Processing Facility	1 Mile
Feed Lot/Dairy	1 Mile
Rendering Plant	1 Mile

8.4.2 Valley Fever

8.4.2.1 Background

Valley Fever or *coccidioidomycosis* is one of the most studied and oldest known fungal infections. *Coccidioidomycosis* was first discovered in the early 1890s in Domingo Ezcurra, an Argentinean soldier, and in 1900 was established as a fungal disease. After an outbreak in the 1930s in the San Joaquin Valley of California, this disease was given its nickname "San Joaquin Valley Fever," often shortened further to "Valley Fever".[91]

Valley Fever is primarily a disease of the lungs caused by inhalation of spores of the *Coccidioides immitis* fungus. The *Coccidioides* fungus resides in the soil in southwestern United States, northern Mexico, and parts of Central and South America. When weather and moisture conditions are favorable, the fungus "blooms" and forms many tiny spores that lie dormant in the soil. The spores are found in the top few inches of soil, become airborne when the soil is disturbed by wind, vehicles, excavation, or other ground-moving activities, and are subsequently inhaled into the lungs. After the fungal spores have settled in the lungs, they change into a multicellular structure called a spherule. Fungal growth in the lungs occurs as the spherule grows and bursts, releasing endospores, which then develop into more spherules.

[91] Los Angeles County Department of Health Services. 2004. Coccidioidomycosis: Cases of Valley Fever on the Rise in Southern California. The Public's Health Newsletter for Medical Professionals in Los Angeles County, Volume 4, Number 3. April. Available at: http://www.publichealth.lacounty.gov/media/tph/TPHApril2004.pdf. Accessed: February 2025.

Infection occurs when the spores of the fungus become airborne and are inhaled. The fungal spores become airborne when contaminated soil is disturbed by human activities, such as construction and agricultural activities, and natural phenomenon, such as windstorms, dust storms, and earthquakes.

Valley Fever symptoms generally occur within 2-3 weeks of exposure. Approximately 60% of Valley Fever cases are mild and display flu-like symptoms or no symptoms. The remainder developed flu-like symptoms (fatigue, cough, chest pain, fever, rash, headache, and joint aches) that can last for a month and tiredness that can sometimes last for longer than a few weeks. In some cases, painful red bumps may develop. A small percentage of infected persons (<1%) can develop disseminated disease that spreads outside the lungs to the brain, bone, and skin. Without proper treatment, Valley Fever can lead to severe pneumonia, meningitis, and even death. Symptoms may appear 1 to 4 weeks after exposure.

These symptoms are not unique to Valley Fever and may be caused by other illnesses as well. Identifying and confirming this disease requires specific laboratory tests such as: (1) microscopic identification of the fungal spherules in the infected tissue, sputum, or body fluid sample; (2) growing a culture of *Coccidioides immitis* from a tissue specimen, sputum, or body fluid; (3) detection of antibodies (serological tests specifically for Valley Fever) against the fungus in blood serum or other body fluids; and (4) administering the Valley Fever skin test (called coccidioidin or spherulin), which indicates prior exposure to the fungus.

Valley Fever is not contagious, and thus cannot be passed from person to person. Most individuals who are infected will recover without treatment within 6 months and will have a life-long immunity to the fungal spores. In severe cases, such as patients with rapid and extensive primary illness, those who are at risk for dissemination of disease, and those who have disseminated disease, antifungal drug therapy is used. Only 1-2% of those exposed who seek medical attention will develop a disease that spreads to other parts of the body other than the lungs. The table below presents infection classifications and normal diagnostic spread as noted in recent research.

Range of Valley Fever Cases[92,93]

Infection Classification	Percent of Total Diagnosed Cases
Asymptomatic infections	60
Infections that resolve spontaneously (with life-long immunity)	35
Chronic disease or disease disseminated throughout the body	Up to 5

92 Hector RF, Laniado-Laborin R. 2005. Coccidioidomycosis—A Fungal Disease of the Americas. *PLoS Medicine*. 2005;2(1):e2. doi:10.1371/journal.pmed.0020002. Available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC545195. Accessed: February 2025.

93 Saubolle, Michael A., Peter P. McKellar, and Den Sussland. 2007. Epidemiologic, clinical, and diagnostic aspects of coccidioidomycosis. *Journal of clinical microbiology* 45.1: 26-30. Available at: http://jcm.asm.org/content/45/1/26.short. Accessed: February 2025.

Range of Valley Fever Cases[92,93]	
Infection Classification	**Percent of Total Diagnosed Cases**
Meningeal infection (affecting brain and/or spinal cord and requiring lifetime treatment)	0.15–0.75

Factors that affect the susceptibility to coccidioidal dissemination are race, sex, pregnancy, age, and immunosuppression. In 2023, there were 9,054 reported Valley Fever cases in California.[94] Consistent with previous years, the highest incidence of Valley fever in 2023 was reported in counties in the Central Valley and Central Coast regions of California, including Kern, Kings, San Luis Obispo, Fresno, and Tulare counties. Of the 9,054 reported cases, 350 were reported for San Joaquin County.[95]

8.4.2.2 Assessment of Valley Fever Risks

The *Coccidioides immitis* fungus spores found in soil, which are responsible for transmitting the Valley Fever, can disperse in the air when the soil is disturbed during construction activities, and then can be inhaled into the lungs. On-site construction workers potentially could be exposed to Valley Fever from fugitive dust generated during construction of the Project, notably during grading and other earthmoving activities. Construction activities are subject to SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibition). Regulation VIII is intended to reduce ambient concentrations of PM_{10} by requiring actions to prevent, reduce or mitigate anthropogenic fugitive dust emissions. By reducing fugitive dust emissions, Regulation VIII reduces potential exposure to Valley Fever. Since current long-term residents typically already have been exposed to and have developed immunity to Valley Fever, construction activities are not expected to add significantly to exposure of off-site residents to the fungus.

Operation of the Project is not expected to produce significant amounts of fugitive dust. Therefore, operational activities are not expected to add significantly to exposure of off-site residents to the fungus.

[94] California Department of Public Health. 2023. Valley Fever in California Year-end Data Dashboard. Available at: https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/ValleyFeverDashboard.aspx. Accessed: February 2025.

[95] Ibid.

TABLES

Table 2-1. Summary of NAAQS and CAAQS
Pacific Gateway
San Joaquin County, California

Pollutant	Averaging Time	California Standards[1]		National Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM_{10})[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		-		
Fine Particulate Matter ($PM_{2.5}$)[9]	24 Hour	-	-	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	9.0 µg/m^3	15.0 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	-	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	-	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		-	-	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	-	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)		Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	-		-	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	-	
	Annual Arithmetic Mean	-		0.030 ppm (for certain areas)[11]	-	
Lead (Pb)[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	-	Same as Primary Standard	High Volume Sampler and Atomic Absorption
	Calendar Quarter	-		1.5 µg/m^3 (for certain areas)[12]		
	Rolling 3-Month Average	-		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Notes:

[1] California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

[3] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[4] Methods specified by the ARB or any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

[5] National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[6] National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[7] Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

[8] On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

[9] On February 7, 2024, the national annual PM2.5 primary standard was lowered from 12.0 µg/m3 to 9.0 µg/m3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 µg/m3, as was the annual secondary standard of 15 µg/m3. The existing 24-hour PM10 standards (primary and secondary) of 150 µg/m3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

[10] To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

[11] On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

[12] The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

[13] The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

[14] In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Abbreviations:

ARB - Air Resources Board

ppm - parts per million

Table 2-1. Summary of NAAQS and CAAQS
Pacific Gateway
San Joaquin County, California

CAAQS - California Ambient Air Quality Standards
CO - carbon monoxide
lbs - pounds
$\mu g/m^3$ - micrograms per cubic meter
mg/m^3 - milligrams per cubic meter
NAAQS - National Ambient Air Quality Standards
NO_x - nitrogen oxide compounds (NO + NO_2)
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ROG - reactive organic gases
SO_x - sulfur oxide compounds
U.S. EPA - United States Environmental Protection Agency
VOC - volatile organic compounds

Table 2-2. SJVAPCD NAAQS and CAAQS Attainment Status
Pacific Gateway
San Joaquin County, California

Pollutant	Designation/Classification[1]	
	Federal Standards[2]	California Standards[3]
Ozone (1 Hour)	No Federal Standard[4]	Nonattainment/Severe
Ozone (8 Hour)	Nonattainment/Extreme[5]	Nonattainment
Respirable Particulate Matter (PM_{10})	Attainment[6]	Nonattainment
Fine Particulate Matter ($PM_{2.5}$)	Nonattainment[7]	Nonattainment
Carbon Monoxide (CO)	Attainment/Unclassified	Attainment/Unclassified
Nitrogen Dioxide (NO_2)	Attainment/Unclassified	Attainment
Sulfur Dioxide (SO_2)	Attainment/Unclassified	Attainment
Lead (Particulate)	No Designation/Classification	Attainment
Visibility Reducing Particles	No Federal Standard	Unclassified
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Vinyl Chloride	No Federal Standard	Attainment

Notes:

[1] See SJVAPCD Attainment Status. Available at: https://ww2.valleyair.org/air-quality-information/ambient-air-quality-standards-valley-attainmnet-status/. Accessed: January 2025.

[2] See 40 CFR Part 81.

[3] See CCR Title 17 Sections 60200-60210.

[4] Effective June 15, 2005, the U.S. Environmental Protection Agency (EPA) revoked the federal 1-hour ozone standard, including associated designations and classifications. EPA had previously classified the SJVAB as extreme nonattainment for this standard. EPA approved the 2004 Extreme Ozone Attainment Demonstration Plan on March 8, 2010 (effective April 7, 2010). Many applicable requirements for extreme 1-hour ozone nonattainment areas continue to apply to the SJVAB.

[5] Though the Valley was initially classified as serious nonattainment for the 1997 8-hour ozone standard, EPA approved Valley reclassification to extreme nonattainment in the Federal Register on May 5, 2010 (effective June 4, 2010).

[6] On September 25, 2008, EPA redesignated the San Joaquin Valley to attainment for the PM_{10} National Ambient Air Quality Standard (NAAQS) and approved the *2007 PM_{10} Maintenance Plan* .

[7] The Valley is designated nonattainment for the 1997 $PM_{2.5}$ NAAQS. EPA designated the Valley as nonattainment for the 2006 $PM_{2.5}$ NAAQS on November 13, 2009 (effective December 14, 2009).

Abbreviations:

CAAQS - California Ambient Air Quality Standards
CCR - California Code of Regulations
CFR - Code of Federal Regulations
CO - carbon monoxide
EPA - U.S. Environmental Protection Agency
NAAQS - National Ambient Air Quality Standards
NO_2 - nitrogen dioxide
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SJVAB - San Joaquin Valley Air Basin
SO_x - sulfur oxide compounds

Table 2-3. Local Ambient Air Quality Data (San Joaquin County)
Pacific Gateway
San Joaquin County, California

Pollutant[1,2]	Averaging Time	2020	2021	2022	2023	Most Stringent Ambient Air Quality Standard[3]	Monitoring Station
Ozone	1 hour	0.086 ppm	0.089 ppm	0.082 ppm	0.075 ppm	0.09 ppm (State)	Tracy-Airport
	8 hours	0.078 ppm	0.077 ppm	0.074 ppm	0.063 ppm	0.070 ppm (State/National)	
PM_{10}	24 hours	326.8 µg/m^3	173.5 µg/m^3	74.9 µg/m^3	71.0 µg/m^3	50 µg/m^3 (State)	Manteca-530 Fishback Rd, Stockton-Hazelton Street, Stockton-University Park, and Tracy-Airport
	Annual	39.4 µg/m^3	*	23.0 µg/m^3	19.9 µg/m^3	20 µg/m^3 (State)	
$PM_{2.5}$	24 hours	140.0 µg/m^3	58.7 µg/m^3	39.0 µg/m^3	38.0 µg/m^3	35 µg/m^3 (National)	Manteca-530 Fishback Rd
	Annual	14.7 µg/m^3	11.7 µg/m^3	10.1 µg/m^3	7.8 µg/m^3	12 µg/m^3 (National)	Manteca-530 Fishback Rd and Stockton-University Park
SO_2[4]	1 hour	*	*	*	*	75 ppb (National)	*
	24 hours	*	*	*	*	140 ppb (National)	
NO_2	1 hour	37 ppb	36 ppb	35 ppb	32 ppb	100 ppb (National)	Tracy-Airport
	Annual	4.93 ppb	4.93 ppb	4.82 ppb	4.15 ppb	30 ppb (State)	
CO	1 hour	2.7 ppm	2.2 ppm	2.6 ppm	2.2 ppm	20 ppm (State)	Stockton-Hazelton Street
	8 hours	2.2 ppm	1.6 ppm	1.7 ppm	1.4 ppm	9.0 ppm (State)	

Notes:
[1] Ozone, PM_{10}, $PM_{2.5}$ data obtained from CARB iADAM: Air Quality Data Statistics. Available at: https://www.arb.ca.gov/adam. Accessed: January 2025.
[2] NO_2, and CO data obtained from EPA AirData. Available at: https://www.epa.gov/outdoor-air-quality-data/monitor-values-report. Accessed: January 2025.
[3] Most Stringent Ambient Air Quality Standard obtained from the table of ambient air quality standards available at: https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf. Accessed: January 2025.
[4] SO_2 data not available in Tracy or San Joaquin County from CARB iADAM or EPA AirData.
[5] * = There was insufficient (or no) data available to determine the value.

Abbreviations:
CARB - California Air Resources Board
CO - carbon monoxide
EPA - Environmental Protection Agency
µg/m^3 - micrograms per cubic meter
NO_2 - nitrogen dioxide
ppb - parts per billion
ppm - parts per million
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
SO_2 - sulfur dioxide

Table 2-4. Frequency of Air Quality Standard Violations
Pacific Gateway
San Joaquin County, California

Monitoring Site	Year	Number of Days Exceeding Standard[1,2]					
		National 24-Hour PM_{10}	State 24-Hour PM_{10}	National 24-Hour $PM_{2.5}$	State 1-Hour O_3	State 8-Hour O_3	National 8-Hour O_3
Tracy-Airport (National PM_{10}, State/National O_3); Tracy-Airport, Stockton-Hazelton Street, Manteca-530 Fishback Rd, and Stockton-University Park (State PM_{10} and National $PM_{2.5}$)	2020	2	74.0	24.0	0	3	3
	2021	1	*	11.3	0	3	3
	2022	0	10.0	6.2	0	1	1
	2023	0	11.9	3.0	0	0	0

Notes:

[1] * = There was insufficient (or no) data available to determine the value.

[2] Ozone, PM_{10}, $PM_{2.5}$ data obtained from CARB iADAM: Air Quality Data Statistics. Daily exceedances for particulate matter are estimated days because PM_{10} and $PM_{2.5}$ are not monitored daily. Available at: https://www.arb.ca.gov/adam. Accessed: January 2025.

Abbreviations:

CARB - California Air Resources Board

O_3 - ozone

PM_{10} - particulate matter less than 10 microns in diameter

$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter

Table 3-1. SJVAPCD Air Quality Significance Thresholds
Pacific Gateway
San Joaquin County, California

Criteria Air Pollutant Annual Thresholds (tons/year)[1]			
		Operation	
Pollutant	Construction	Permitted Equipment and Activities	Non-Permitted Equipment and Activities
NO_X	10	10	10
VOC	10	10	10
PM_{10}	15	15	15
$PM_{2.5}$	15	15	15
SO_X	27	27	27
CO	100	100	100
Toxic Air Contaminants (TACs) Thresholds[2]			
Carcinogens	Maximum Exposed Individual Cancer Risk ≥ 20 in 1 million Chronic & Acute Hazard Index ≥ 1.0 (project increment)		
Non-Carcinogens	Acute: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual		
	Chronic: Hazard Index equals or exceeds 1 for the Maximally Exposed Individual		

Source:

[1] SJVAPCD. San Joaquin Valley Air Pollution Control District Air Quality Thresholds of Significance - Criteria Pollutants. Available at: https://ww2.valleyair.org/media/m2ecyxiw/1-cms-format-ceqa-air-quality-thresholds-of-significance-criteria-pollutants.pdf. Accessed: January 2025.

[2] SJVAPCD. San Joaquin Valley Air Pollution Control District Air Quality Thresholds of Significance - Toxic Air Contaminants. Available at: https://ww2.valleyair.org/media/2lpbkso0/2-cms-format-air-quality-thresholds-of-significance-toxic-air-contaminants.pdf. Accessed: January 2025.

Abbreviations:

$\mu g/m^3$ - micrograms per cubic meter
CO - carbon monoxide
CO_2e - carbon dioxide equivalents
GHG - greenhouse gases
lbs - pounds
MT - metric ton
NO_2 - nitrogen dioxide
NOx - nitrogen oxides
PM_{10} - respirable particulate matter
$PM_{2.5}$ - fine particulate matter
ppm - parts per million
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxides
TACs - toxic air contaminants
VOC - volatile organic compounds
yr - year

Table 4-1. Construction Schedule
Pacific Gateway
San Joaquin County, California

Development Area	CalEEMod® Phase Type[1]	Start Date[1]	End Date[1]	Phase Duration[2] (days)
Initial Phase	Site Preparation	1/1/2026	3/8/2026	57
	Grading	3/9/2026	8/25/2026	146
	Building Construction	8/26/2026	4/27/2031	1,462
	Paving	4/28/2031	8/26/2031	104
	Architectural Coating	8/27/2031	12/25/2031	104
Pacific Gateway East	Site Preparation	1/1/2032	3/28/2032	75
	Grading	3/29/2032	11/10/2032	195
	Building Construction	11/11/2032	2/1/2039	1,949
	Paving	2/2/2039	7/12/2039	138
	Architectural Coating	7/13/2039	12/20/2039	138
Pacific Gateway Central	Demolition	1/1/2038	1/5/2038	4
	Site Preparation	1/6/2038	4/25/2038	94
	Grading	4/26/2038	2/2/2039	243
	Building Construction	2/3/2039	11/11/2046	2,433
	Paving	11/12/2046	5/31/2047	173
	Architectural Coating	6/1/2047	12/19/2047	173
Pacific Gateway West[3]	Site Preparation	1/1/2047	4/19/2047	94
	Grading	4/20/2047	1/29/2048	244
	Building Construction	1/30/2048	11/10/2055	2,436
	Paving	11/11/2055	5/30/2056	173
	Architectural Coating	5/31/2056	12/18/2056	173
University Center	Demolition	1/1/2032	3/4/2032	55
	Site Preparation	3/5/2032	9/13/2032	165
	Grading	9/14/2032	1/6/2034	412
	Building Construction	1/7/2034	1/3/2047	4,067
	Paving	1/4/2047	12/22/2047	302
	Architectural Coating	12/23/2047	12/8/2048	302
Gateway Center	Site Preparation	1/1/2032	6/20/2032	147
	Grading	6/21/2032	8/23/2033	368
	Building Construction	8/24/2033	3/23/2045	3,626
	Paving	3/24/2045	2/1/2046	270
	Architectural Coating	2/2/2046	12/13/2046	270

Notes:

[1] Construction phases and duration are based on Project-specific estimates.

[2] The construction work week was assumed to be 6 days per week.

[3] Due to limitations in CalEEMod®, construction mobile and offroad equipment emission factors are not available in calendar year 2051 and beyond. Thus, calendar year 2050 was used in CalEEMod® to estimate emissions for construction activities occurring in these years.

Abbreviations:

CalEEMod® - California Emissions Estimator Model

Table 4-2. Construction Demolition Assumptions
Pacific Gateway
San Joaquin County, California

Phase Name	Size Metric	Unit Amount[1]
Phase 1 (Initial Phase)	Building sqft	0
Phase 2 (East)	Building sqft	0
Phase 3 (Central)	Building sqft	12,336
Phase 4 (West)	Building sqft	0
Phase 5 (University Center)	Building sqft	41,713
Phase 6 (Gateway Center)	Building sqft	0

Notes:

[1] Square-footage quantity based on a review of GoogleEarth.

Abbreviations:

sqft - square foot

Table 4-3. Construction Architectural Coating Assumptions
Pacific Gateway
San Joaquin County, California

Development Area	Project-specific Land Use[1]	CalEEMod® Land Use Type[1]	CalEEMod® Land Use Subtype[1]	CalEEMod® Inputs		CalEEMod® Inputs	
				Building Square Footage[1]		Coated Area	
				Quantity	Unit	Quantity	Unit
Initial Phase							
Initial Phase	Community Center (VFW Hall)	Commercial	General Office Building	11,500	sqft	23,000	sqft
Initial Phase	University	Educational	University/College (4Yr)	25,000	sqft	50,000	sqft
Initial Phase	General Industrial (Initial Phase)	Industrial	Industrial Park	3,962,000	sqft	7,924,000	sqft
Initial Phase	Public Facilities (Fire Station)	Commercial	Government Office Building	113,100	sqft	226,200	sqft
Default Architectural Coating VOC Content for Non Residential Interiors and Exterior Surfaces(g/L)						50	g/L
Mitigated VOC Content for Industrial Interiors and Exterior Surfaces(g/L)						15	g/L
Adjusted Architectural Coating VOC Content for Non Residential Surfaces (g/L)						16	g/L
Gateway Center							
Gateway Center	General Industrial	Industrial	Industrial Park	525,400	sqft	1,050,800	sqft
Gateway Center	Commercial Retail/ Service	Recreational	Hotel	174,240	sqft	348,480	sqft
Gateway Center	Retail	Retail	Gasoline/Service Station	2,259	sqft	4,518	sqft
Gateway Center	Retail	Retail	Convenience Market (24 hour)	8,000	sqft	16,000	sqft
Gateway Center	Recreational	Recreational	Fast Food Restaurant with Drive Thru	13,600	sqft	27,200	sqft
Gateway Center	Recreational	Recreational	High Turnover (Sit Down Restaurant)	14,000	sqft	28,000	sqft
Gateway Center	Recreational	Recreational	Fast food Restaurant w/o Drive Thru	4,000	sqft	8,000	sqft
Gateway Center	Commercial	Commercial	Bank (with Drive-Through)	5,000	sqft	10,000	sqft
Gateway Center	Retail	Retail	Strip Mall	5,000	sqft	10,000	sqft
Default Architectural Coating VOC Content for Non Residential Interiors and Exterior Surfaces(g/L)						50	g/L
Mitigated VOC Content for Industrial Interiors and Exterior Surfaces(g/L)						15	g/L
Adjusted Architectural Coating VOC Content for Non Residential Surfaces (g/L)						26	g/L

Notes:

[1] Land uses based on Project-specific information.

[2] Coated area was populated for each land use based on CalEEMod® defaults.

[3] The low-VOC coating project mitigation measure was assessed assuming a low-VOC architectural coating of 15 g/L was applied to industrial interiors and exterior surfaces. All other building surfaces were assumed to use standard architectural coatings based on CalEEMod® default. The Initial Phase and Gateway Center construction contains a mix of non-industrial and industrial buildings, thus an adjusted architectural coating VOC content was calculated for these construction runs. All other industrial development area construction only includes industrial buildings, therefore no adjustment is needed as the non-residential architectural coating VOC content was assumed to be 15 g/L.

[4] An adjusted non-residential interior and exterior surfaces VOC content was calculated based on the land use-specific VOC content and weighted based on the relative area of coated area between industrial and non-industrial buildings.

Abbreviations:

ksf - thousand square feet

sqft - square feet

yr - year

Table 4-4. Unmitigated Annual Criteria Air Pollutant Emission Estimates for Project Construction
Pacific Gateway
San Joaquin County, California

Scenario	Year	Annual Criteria Air Pollutant Emission Estimates[1] (tons/year)					
		VOC[2]	NO_x	CO	SO_X[3]	PM_{10}	$PM_{2.5}$
Initial Phase	2026	0.8	4.9	7.7	0.0	2.5	1.0
	2027	1.2	5.7	12.9	0.0	3.1	0.8
	2028	1.1	5.5	12.2	0.0	3.2	0.8
	2029	1.0	5.2	11.5	0.0	3.1	0.8
	2030	0.9	5.0	11.0	0.0	3.1	0.8
	2031	**10.7**	1.9	4.4	0.0	1.2	0.3
Buildout	2032	1.4	**10.2**	13.8	0.1	7.1	3.4
	2033	2.1	**12.3**	23.4	0.1	8.2	2.6
	2034	2.4	**11.7**	27.8	0.1	9.1	2.4
	2035	2.3	**11.4**	27.1	0.1	9.1	2.3
	2036	2.3	**11.1**	26.3	0.1	9.1	2.3
	2037	2.2	**10.9**	25.5	0.1	9.1	2.3
	2038	2.5	**13.1**	28.6	0.1	11.1	3.3
	2039	**19.6**	**11.0**	25.9	0.1	9.4	2.4
	2040	1.8	**10.0**	23.7	0.1	8.9	2.3
	2041	1.7	9.8	23.3	0.1	8.9	2.3
	2042	1.7	9.7	23.0	0.1	8.9	2.3
	2043	1.6	9.6	22.9	0.1	8.9	2.3
	2044	1.6	9.6	22.6	0.1	8.9	2.3
	2045	1.5	8.9	21.4	0.1	8.4	2.1
	2046	3.3	7.5	18.6	0.1	7.6	1.9
	2047	**17.8**	3.0	6.4	0.0	2.5	1.1
	2048	9.0	4.6	11.0	0.0	4.9	1.3
	2049	0.7	4.6	10.4	0.0	4.6	1.2
	2050	0.7	4.6	10.4	0.0	4.6	1.2
	2051	0.7	4.6	10.4	0.0	4.6	1.2
	2052	0.7	4.6	10.4	0.0	4.6	1.2
	2053	0.7	4.6	10.4	0.0	4.6	1.2
	2054	0.7	4.6	10.4	0.0	4.6	1.2
	2055	0.7	4.1	9.2	0.0	4.0	1.0
	2056	**15.4**	0.5	2.3	0.0	0.8	0.2
SJVAPCD Significance Thresholds[4]		**10**	**10**	**100**	**27**	**15**	**15**
Exceeds Threshold for any Year of Construction?		YES	YES	NO	NO	NO	NO

Notes:

[1] Total emissions for project construction were estimated using CalEEMod® (see Appendix A). Combustion emissions associated with construction activities occurring 2051 and beyond were estimated using calendar year 2050 due to limitations in CalEEMod®.

[2] For purposes of this analysis VOC emissions are assumed to be equal to ROG.

[3] For purposes of this analysis SO_X emissions are assumed to be equal to SO_2.

[4] SJVAPCD Air Quality Significance Thresholds. Available at: http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf. Accessed: February 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CARB - California Air Resources Board
CO - carbon monoxide
lbs - pounds
NO_x - nitrogen oxide compounds (NO + NO_2)
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
PM_{10} - particulate matter less than 10 microns in diameter
ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxide compounds
USEPA - United States Environmental Protection Agency
VOC - volatile organic compounds

Table 4-5. Unmitigated Maximum Daily On-Site Criteria Air Pollutant Emission Estimates for Project Construction - Initial Phase
Pacific Gateway
San Joaquin County, California

Scenario	Year	Max Daily Criteria Air Pollutant Emission Estimates[1]					
		VOC[2]	NO_x	CO	SO_X[3]	PM_{10}	$PM_{2.5}$
		(pounds/day)					
Initial Phase	2026	3.1	29	29	0.1	21	11
	2027	1.0	9.4	13	0.0	0.3	0.3
	2028	1.0	8.9	13	0.0	0.3	0.3
	2029	1.0	8.6	13	0.0	0.3	0.3
	2030	0.9	8.4	13	0.0	0.3	0.2
	2031	**197**	8.1	13	0.0	0.2	0.2
SJVAPCD Significance Thresholds[4]		**100**	**100**	**100**	**100**	**100**	**100**
Exceeds Threshold for any Year of Construction?		YES	NO	NO	NO	NO	NO

Notes:

[1] Total emissions for project construction were estimated using CalEEMod® (see Appendix A).

[2] For purposes of this analysis VOC emissions are assumed to be equal to ROG.

[3] For purposes of this analysis SO_X emissions are assumed to be equal to SO_2.

[4] SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts. Available at: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed: January 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CARB - California Air Resources Board
CO - carbon monoxide
lbs - pounds
NO_x - nitrogen oxide compounds (NO + NO_2)
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
PM_{10} - particulate matter less than 10 microns in diameter
ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxide compounds
USEPA - United States Environmental Protection Agency
VOC - volatile organic compounds

Table 4-6. Trip Rates, Trip Type Percentages, Trip Lengths, and Vehicle Miles Traveled by Operational Mobile Sources (Autos)
Pacific Gateway
San Joaquin County, California

Phase	Fehr & Peers Land Use Type	Land Use Type[1]	CalEEMod®		Land Use Size[1]		Daily Trips[2,3,4,5,6] (trips/day)	Daily VMT[2,4] (miles/day)	Fleet Mix[7]					
			Land Use Category[1]	Proposed Land Use Subtype[1]	Quantity	Size Metric			LDA	LDT1	LDT2	MDV	LHDT1	LHDT2
Initial	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	Commercial	General Office Building	11.5	ksf	330	3,696	52%	3%	24%	17%	3%	1%
	--	Other Surfaces	Parking	Other Non-Asphalt Surfaces	1,070.6	ksf	0	0	52%	3%	24%	17%	3%	1%
	--	VFW Parking	Parking	Parking Lot	1,038.7	ksf	0	0	52%	3%	24%	17%	3%	1%
	University (University Campus)	University	Educational	University/College (4Yr)	400.0	students	622	9,765	52%	3%	24%	17%	3%	1%
	Limited Industrial (Warehouse)[11]	General Industrial (Initial Phase)	Industrial	Industrial Park	3,962.0	ksf	4,240	167,772	52%	3%	24%	17%	3%	1%
	--	Public Facilities (Fire Station)	Commercial	Government Office Building	113.1	ksf	0	0	52%	3%	24%	17%	3%	1%
	--	Roadway	Parking	Other Asphalt Surfaces	2,917.4	ksf	0	0	52%	3%	24%	17%	3%	1%
	--	Open Space	Recreational	City Park	885.9	ksf	0	0	52%	3%	24%	17%	3%	1%
Buildout	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	Commercial	General Office Building	11.5	ksf	331	4,158	52%	3%	26%	16%	2%	1%
	--	Public Facilities (Fire Station)	Commercial	Government Office Building	113.1	ksf	0	0	52%	3%	26%	16%	2%	1%
	University (University Campus)	University	Educational	University/College (4Yr)	5,000	students	7,272	115,625	52%	3%	26%	16%	2%	1%
	Limited Industrial (Warehouse)[11]	General Industrial	Industrial	Industrial Park	24,675.0	ksf	26,402	808,575	52%	3%	26%	16%	2%	1%
	EV Charging Lot	Industrial Parking/ Non-Industrial Parking	Parking	Parking Lot	6,685.1	ksf	77	16	52%	3%	26%	16%	2%	1%
	--	Other Surfaces	Parking	Other Non-Asphalt Surfaces	4,958.8	ksf	0	0	52%	3%	26%	16%	2%	1%
	--	Open Space	Recreational	City Park	8,565.3	ksf	0	0	52%	3%	26%	16%	2%	1%
	Convenience Store/Gas Station	Retail	Retail	Gasoline/Service Station	20.0	ksf	0	0	52%	3%	26%	16%	2%	1%
	Shopping Plaza	Retail	Retail	Strip Mall	43.9	ksf	1,526	11,603	52%	3%	26%	16%	2%	1%
	Business Professional (Office)[11]	Business Park	Commercial	Office Park	93.0	ksf	1,017	29,307	52%	3%	26%	16%	2%	1%
	--	Industrial Parking/Other Surfaces/Roadway	Parking	Other Asphalt Surfaces	15,154.5	ksf	0	0	52%	3%	26%	16%	2%	1%
	Business Hotel	Commercial Retail/ Service	Recreational	Hotel	60.0	ksf	480	3,298	52%	3%	26%	16%	2%	1%
	Fast-Food Restaurant with Drive-Through Window	Recreational	Recreational	Fast Food Restaurant with Drive Thru	13.6	ksf	6,348	43,597	52%	3%	26%	16%	2%	1%
	Sit-Down Restaurant	Recreational	Recreational	High Turnover (Sit Down Restaurant)	14.0	ksf	856	5,886	52%	3%	26%	16%	2%	1%
	Fast Casual Restaurant	Recreational	Recreational	Fast Food Restaurant w/o Drive Thru	4.0	ksf	389	2,676	52%	3%	26%	16%	2%	1%
	--	Parking	Parking	Unenclosed parking with elevator	874	spaces	0	0	52%	3%	26%	16%	2%	1%
	Convenience Store/Gas Station	Retail	Retail	Convenience Market (24 hour)	8.0	ksf	2,762	18,976	52%	3%	26%	16%	2%	1%
	Bank with Drive-Through Window	Commercial	Commercial	Bank (with Drive-Through)	5.0	ksf	502	3,450	52%	3%	26%	16%	2%	1%
	--	University	Residential	Apartments (Mid Rise)	1,600	dwelling un	0	0	52%	3%	26%	16%	2%	1%

Table 4-6. Trip Rates, Trip Type Percentages, Trip Lengths, and Vehicle Miles Traveled by Operational Mobile Sources (Autos)
Pacific Gateway
San Joaquin County, California

Phase	Fehr & Peers Land Use Type	Land Use Type[1]	Project Trip Rates[8] (trips/size metric/day)			% Trip Type[9]			Average Non-Residential Trip Lengths[10] (miles/trip)		
			Weekday	Saturday	Sunday	Primary %	Diverted %	Pass-By %	H-W	W-O	O-O
Initial	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	28.69565	28.69565	28.69565	100%	0%	0%	11.2	11.2	11.2
	--	Other Surfaces	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	--	VFW Parking	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	University (University Campus)	University	1.55500	1.55500	1.55500	100%	0%	0%	15.7	15.7	15.7
	Limited Industrial (Warehouse)[11]	General Industrial (Initial Phase)	1.07017	1.07017	1.07017	100%	0%	0%	39.6	39.6	39.6
	--	Public Facilities (Fire Station)	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	--	Roadway	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	--	Open Space	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
Buildout	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	28.8	28.8	28.8	100%	0%	0%	12.6	12.6	12.6
	--	Public Facilities (Fire Station)	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	University (University Campus)	University	1.5	1.5	1.5	100%	0%	0%	15.9	15.9	15.9
	Limited Industrial (Warehouse)[11]	General Industrial	1.1	1.1	1.1	100%	0%	0%	30.6	30.6	30.6
	EV Charging Lot	Industrial Parking/ Non-Industrial Parking	0.0	0.0	0.0	100%	0%	0%	0.2	0.2	0.2
	--	Other Surfaces	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	--	Open Space	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	Convenience Store/Gas Station	Retail	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	Shopping Plaza	Retail	34.8	34.8	34.8	100%	0%	0%	7.6	7.6	7.6
	Business Professional (Office)[11]	Business Park	10.9	10.9	10.9	100%	0%	0%	28.8	28.8	28.8
	--	Industrial Parking/Other Surfaces/Roadway	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	Business Hotel	Commercial Retail/ Service	8.0	8.0	8.0	100%	0%	0%	6.9	6.9	6.9
	Fast-Food Restaurant with Drive-Through Window	Recreational	466.8	466.8	466.8	100%	0%	0%	6.9	6.9	6.9
	Sit-Down Restaurant	Recreational	61.1	61.1	61.1	100%	0%	0%	6.9	6.9	6.9
	Fast Casual Restaurant	Recreational	97.3	97.3	97.3	100%	0%	0%	6.9	6.9	6.9
	--	Parking	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	Convenience Store/Gas Station	Retail	345.3	345.3	345.3	100%	0%	0%	6.9	6.9	6.9
	Bank with Drive-Through Window	Commercial	100.4	100.4	100.4	100%	0%	0%	6.9	6.9	6.9
	--	University	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0

Notes:

[1] Land uses are based on Project-specific information.

[2] Daily trips and VMT are based on data provided by Fehr & Peers.

[3] Internal trips within the Gateway Center and University Center were not included in the total daily trips for autos because these trips are assumed to be non-auto trips (i.e., walk or bike), based on information from Fehr & Peers.

[4] Land uses with zero trips are not expected to generate any new trips, based on data provided by Fehr & Peers.

[5] Total pass-by trips provided by Fehr & Peers within the Gateway Center development area were distributed to each land use based on the ratio of gross trips.

[6] Total University trips, including trips from the University and University apartments, provided by Fehr & Peers were assigned to the University/College (4Yr) CalEEMod Land Use Subtype.

[7] Fleet mix is based on auto-specific vehicle types. See Tables B-1 and C-1 for fleet mix calculations.

[8] Project trip rates are based on total daily trips divided by land use size. Project trip rates were conservatively assumed to apply to both weekday and weekend travel.

[9] The trip type was set to 100% primary to align with the VMT and trip data from Fehr & Peers.

[10] Average non-residential trip Lengths were calculated based on total daily VMT divided by total daily trips.

[11] Total primary auto trips for Limited Industrial (Warehouse) and Office autos were provided by Fehr & Peers. Total Daily VMT was calculated based on home-based work VMT provided by Fehr & Peers. W-O and O-O VMT were calculated based on CalEEMod defaults. See Tables B-2 and C-2 for detailed calculations.

Abbreviations

CalEEMod® - California Emissions Estimator Model
H-W - home-work
ksf - thousand square feet
LDA - Light-Duty Automobile
LDT - Light-Duty Truck
LHDT - Light Heavy-Duty Truck
MDV - Medium-Duty Vehicle
O-O - other-other
VFW - Veterans of Foreign Wars
VMT - vehicle miles travelled
W-O - work-other
Yr - year

Table 4-7. Trip Rates, Trip Type Percentages, Trip Lengths, and Vehicle Miles Traveled by Operational Mobile Sources (Trucks)
Pacific Gateway
San Joaquin County, California

Phase	Fehr & Peers Land Use Type	Land Use Type[1]	CalEEMod®		Land Use Size[1]		Daily Trips[2,3,4,5] (trips/day)	Daily VMT[2] (miles/day)	Fleet Mix[6]	Project Trip Rates[7] (trips/size metric/day)		
			Land Use Category[1]	Proposed Land Use Subtype[1]	Quantity	Size Metric			HHDT	Weekday	Saturday	Sunday
Initial	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	Commercial	General Office Building	11.5	ksf	0	0	100%	0.0	0.0	0.0
	--	Industrial Parking/Other Surfaces	Parking	Other Non-Asphalt Surfaces	1,070.6	ksf	0	0	100%	0.0	0.0	0.0
	--	VFW Parking	Parking	Parking Lot	1,038.7	ksf	0	0	100%	0.0	0.0	0.0
	University (University Campus)	University	Educational	University/College (4Yr)	400.0	students	2	86	100%	0.00500	0.00500	0.00500
	Limited Industrial (Warehouse)	General Industrial (Initial Phase)	Industrial	Industrial Park	3,962.0	ksf	1,782	76,448	100%	0.44977	0.44977	0.44977
	--	Public Facilities (Fire Station)	Commercial	Government Office Building	113.1	ksf	0	0	100%	0.0	0.0	0.0
	--	Roadway	Parking	Other Asphalt Surfaces	2,917.4	ksf	0	0	100%	0.0	0.0	0.0
	--	Open Space	Recreational	City Park	885.9	ksf	0	0	100%	0.0	0.0	0.0
Buildout	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	Commercial	General Office Building	11.5	ksf	0	0	100%	0.0	0.0	0.0
	--	Public Facilities (Fire Station)	Commercial	Government Office Building	113.1	ksf	0	0	100%	0.0	0.0	0.0
	University (University Campus)	University	Educational	University/College (4Yr)	5,000	students	20	880	100%	0.004	0.004	0.004
	Limited Industrial (Warehouse)	General Industrial	Industrial	Industrial Park	24,675.0	ksf	11,103	488,532	100%	0.45	0.45	0.45
	EV Charging Lot	Industrial Parking/Non-Industrial Parking	Parking	Parking Lot	6,685.1	ksf	288	58	100%	0.04	0.04	0.04
	--	Other Surfaces	Parking	Other Non-Asphalt Surfaces	4,958.8	ksf	0	0	100%	0.00	0.00	0.00
	--	Open Space	Recreational	City Park	8,565.3	ksf	0	0	100%	0.00	0.00	0.00
	Convenience Store/Gas Station	Retail	Retail	Gasoline/Service Station	20.0	ksf	720	144	100%	36.00	36.00	36.00
	Shopping Plaza	Retail	Retail	Strip Mall	43.9	ksf	20	880	100%	0.46	0.46	0.46
	Business Professional (Office)	Business Park	Commercial	Office Park	93.0	ksf	8	352	100%	0.09	0.09	0.09
	--	Industrial Parking/Other Surfaces/Roadway	Parking	Other Asphalt Surfaces	15,154.5	ksf	0	0	100%	0.00	0.00	0.00
	Business Hotel	Commercial Retail/ Service	Recreational	Hotel	60.0	ksf	2	88	100%	0.03	0.03	0.03
	Fast-Food Restaurant with Drive-Through Windo	Recreational	Recreational	Fast Food Restaurant with Drive Thru	13.6	ksf	10	440	100%	0.74	0.74	0.74
	Sit-Down Restaurant	Recreational	Recreational	High Turnover (Sit Down Restaurant)	14.0	ksf	2	88	100%	0.14	0.14	0.14
	Fast Casual Restaurant	Recreational	Recreational	Fast Food Restaurant w/o Drive Thru	4.0	ksf	2	88	100%	0.50	0.50	0.50
	--	Parking	Parking	Unenclosed parking with elevator	874	spaces	0	0	100%	0.00	0.00	0.00
	Convenience Store/Gas Station	Retail	Retail	Convenience Market (24 hour)	8.0	ksf	4	176	100%	0.50	0.50	0.50
	Bank with Drive-Through Window	Commercial	Commercial	Bank (with Drive-Through)	5.0	ksf	0	0	100%	0.00	0.00	0.00
	--	University	Residential	Apartments (Mid Rise)	1,600	dwelling units	0	0	100%	0.00	0.00	0.00

Table 4-7. Trip Rates, Trip Type Percentages, Trip Lengths, and Vehicle Miles Traveled by Operational Mobile Sources (Trucks)
Pacific Gateway
San Joaquin County, California

Phase	Fehr & Peers Land Use Type	Land Use Type[1]	% Trip Type[8]			Average Non-Residential Trip Lengths[9] (miles/trip)		
			Primary %	Diverted %	Pass-By %	H-W	W-O	O-O
Initial	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	100%	0%	0%	0.0	0.0	0.0
	--	Industrial Parking/Other Surfaces	100%	0%	0%	0.0	0.0	0.0
	--	VFW Parking	100%	0%	0%	0.0	0.0	0.0
	University (University Campus)	University	100%	0%	0%	42.9	42.9	42.9
	Limited Industrial (Warehouse)	General Industrial (Initial Phase)	100%	0%	0%	42.9	42.9	42.9
	--	Public Facilities (Fire Station)	100%	0%	0%	0.0	0.0	0.0
	--	Roadway	100%	0%	0%	0.0	0.0	0.0
	--	Open Space	100%	0%	0%	0.0	0.0	0.0
Buildout	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	100%	0%	0%	0.0	0.0	0.0
	--	Public Facilities (Fire Station)	100%	0%	0%	0.0	0.0	0.0
	University (University Campus)	University	100%	0%	0%	44.0	44.0	44.0
	Limited Industrial (Warehouse)	General Industrial	100%	0%	0%	44.0	44.0	44.0
	EV Charging Lot	Industrial Parking/Non-Industrial Parking	100%	0%	0%	0.2	0.2	0.2
	--	Other Surfaces	100%	0%	0%	0.0	0.0	0.0
	--	Open Space	100%	0%	0%	0.0	0.0	0.0
	Convenience Store/Gas Station	Retail	100%	0%	0%	0.2	0.2	0.2
	Shopping Plaza	Retail	100%	0%	0%	44.0	44.0	44.0
	Business Professional (Office)	Business Park	100%	0%	0%	44.0	44.0	44.0
	--	Industrial Parking/Other Surfaces/Roadway	100%	0%	0%	0.0	0.0	0.0
	Business Hotel	Commercial Retail/ Service	100%	0%	0%	44.0	44.0	44.0
	Fast-Food Restaurant with Drive-Through Windo	Recreational	100%	0%	0%	44.0	44.0	44.0
	Sit-Down Restaurant	Recreational	100%	0%	0%	44.0	44.0	44.0
	Fast Casual Restaurant	Recreational	100%	0%	0%	44.0	44.0	44.0
	--	Parking	100%	0%	0%	0.0	0.0	0.0
	Convenience Store/Gas Station	Retail	100%	0%	0%	44.0	44.0	44.0
	Bank with Drive-Through Window	Commercial	100%	0%	0%	0.0	0.0	0.0
	--	University	100%	0%	0%	0.0	0.0	0.0

Notes:

[1] Land uses are based on Project-specific information.

[2] Daily Trips and VMT are based on data provided by Fehr & Peers.

[3] Land uses with zero trips are not expected to generate any new trips, based on data provided by Fehr & Peers.

[4] Total pass-by trips provided by Fehr & Peers within the Gateway Center development area were distributed to each land use based on the ratio of gross trips.

[5] Total University trips, including trips from the University and University apartments, provided by Fehr & Peers were assigned to the University/College (4Yr) CalEEMod Land Use Subtype.

[6] Fleet mix is based on truck-specific vehicle types. See Tables B-1 and C-1 for fleet mix calculations.

[7] Project trip rates are based on total daily trips divided by land use size. Project trip rates were conservatively assumed to apply to both weekday and weekend travel.

[8] The trip type was set to 100% primary to align with the VMT and trip data from Fehr & Peers.

[9] Average Non-Residential Trip Lengths were calculated based on total daily VMT divided by total daily trips.

Abbreviations

CalEEMod® - California Emissions Estimator Model
HHDT - Heavy Heavy-Duty Truck
H-W - home-work
ksf - thousand square feet
MHDT - Medium Heavy-Duty Truck
O-O - other-other
VFW - Veterans of Foreign Wars
VMT - vehicle miles travelled
W-O - work-other
Yr - year

Table 4-8. Operational Consumer Product Emission Factor Adjustment
Pacific Gateway
San Joaquin County, California

Year	County	Countywide Consumer Products VOC Inventory (tons/day)[1]	County Population[2]	Total County Building Area (sqft)[3]	Consumer Products VOC EF (lb/sqft/day)
2020	San Joaquin	5.259	776,068	716,622,646	1.47E-05
2032	San Joaquin	5.958	869,577	802,969,031	0.0000148
2057	San Joaquin	7.754	989,186	913,416,206	0.0000170

Notes:

[1] ROG consumer products inventory obtained from California Emissions Projection Analysis Model for San Joaquin County (CEPAM2019v1.03). Available at: https://ww2.arb.ca.gov/applications/cepam2019v103-standard-emission-tool. Accessed: February 2025.

[2] Population estimates obtained from Department of Finance Population Projections for San Joaquin County. Available at: https://dof.ca.gov/forecasting/demographics/projections/. Accessed: February 2025.

[3] Total building square footage in San Joaquin County for 2020 was obtained from FEMA HAZUS-MH software (version 6.0). Building square footage in 2032 was estimated by assuming the ratio of building square footage per population stays constant. Available at: https://msc.fema.gov/portal/resources/hazus. Accessed: February 2025.

Abbreviations:

lb - pound

ROG - Reactive Organic Compounds

EF - emission factor

sqft - square foot

Table 4-9. Operational Architectural Coating Assumptions
Pacific Gateway
San Joaquin County, California

Development Area	Project-specific Land Use[1]	CalEEMod® Land Use Type[1]	CalEEMod® Land Use Subtype[1]	CalEEMod® Inputs		CalEEMod® Inputs	
				Building Square Footage[1]		Coated Area	
				Quantity	Unit	Quantity	Unit
Initial Phase							
Initial Phase	Community Center (VFW Hall)	Commercial	General Office Building	11,500	sqft	23,000	sqft
Initial Phase	University	Educational	University/College (4Yr)	25,000	sqft	50,000	sqft
Initial Phase	General Industrial (Initial Phase)	Industrial	Industrial Park	3,962,000	sqft	7,924,000	sqft
Initial Phase	Public Facilities (Fire Station)	Commercial	Government Office Building	113,097	sqft	226,194	sqft
Default Architectural Coating VOC Content for Non Residential Interiors and Exterior Surfaces (g/L)[3]						50	g/L
Mitigated VOC Content for Industrial Interiors and Exterior Surfaces (g/L)[3]						15	g/L
Adjusted Architectural Coating VOC Content for Non Residential Surfaces (g/L)[4]						16	g/L
Buildout							
Buildout	Community Center (VFW Hall)	Commercial	General Office Building	11,500	sqft	23,000	sqft
Buildout	Public Facilities (Fire Station)	Commercial	Government Office Building	113,100	sqft	226,200	sqft
Buildout	General Industrial	Industrial	Industrial Park	24,675,000	sqft	49,350,000	sqft
Buildout	Business Park	Commercial	Office Park	93,000	sqft	186,000	sqft
Buildout	University	Educational	University/College (4Yr)	918,987	sqft	1,837,974	sqft
Buildout	Commercial Retail/ Service	Recreational	Hotel	60,000	sqft	120,000	sqft
Buildout	Retail	Retail	Gasoline/Service Station	2,259	sqft	4,518	sqft
Buildout	Retail	Retail	Convenience Market (24 hour)	8,000	sqft	16,000	sqft
Buildout	Recreational	Recreational	Fast Food Restaurant with Drive Thru	13,600	sqft	27,200	sqft
Buildout	Recreational	Recreational	High Turnover (Sit Down Restaurant)	14,000	sqft	28,000	sqft
Buildout	Recreational	Recreational	Fast Food Restaurant w/o Drive Thru	4,000	sqft	8,000	sqft
Buildout	Commercial	Commercial	Bank (with Drive-Through)	5,000	sqft	10,000	sqft
Buildout	Retail	Retail	Strip Mall	43,900	sqft	87,800	sqft
Default Architectural Coating VOC Content for Non Residential Interiors and Exterior Surfaces (g/L)						50	g/L
Mitigated VOC Content for Industrial Interiors and Exterior Surfaces (g/L)						15	g/L
Adjusted Architectural Coating VOC Content for Non Residential Surfaces (g/L)[4]						17	g/L

Notes:

[1] Land uses based on Project-specific information and supplemented with CalEEMod® defaults building square footages where Project-specific information was not available.

[2] Coated area was populated for each land use based on CalEEMod® defaults.

[3] The low-VOC coating project mitigation measure was assessed assuming a low-VOC architectural coating of 15 g/L was applied to industrial interiors and exterior surfaces. All other building surfaces were assumed to use standard architectural coatings based on CalEEMod® default.

[4] An adjusted non-residential interior and exterior surfaces VOC content was calculated based on the land use-specific VOC content and weighted based on the relative area of coated area between industrial and non-industrial buildings.

Abbreviations:

ksf - thousand square feet sqft - square feet yr - year

Table 4-10. Fueling Facility Operational VOC Emissions
Pacific Gateway
San Joaquin County, California

VOC Emission Factor[1] (lb/1,000 gallons)						Emissions[2] (tons/year)
Loading	**Breathing**	**Refueling**	**Hose Permeation**	**Spillage**	**Total**	
0.15	0.024	0.356	0.009	0.24	**0.779**	**10.0**

Notes:

[1] Emission factors obtained from SJVAPCD staff via email on July 25, 2024 for EVR Phase I and EVR Phase II Installed Underground Tank.

[2] Emissions are estimated assuming an annual throughput of 25.6 million gallons per year.

Abbreviations:

EVR - enhanced vapor recovery

lb - pounds

SJVAPCD - San Joaquin Valley Air Pollution Control District

VOC - volatile organic compounds

Table 4-11. Offroad Equipment Criteria Air Pollutant Emission Calculations
Pacific Gateway
San Joaquin County, California

OFFROAD Equipment	Fuel Type	Project Phase Details			Average Combustion Equipment Usage[1,2]		Mitigated Average Combustion Equipment Usage[1,2,3]		OFFROAD2021 EFs[3,4] (lbs/hr)						Unmitigated Emissions[5] (tons/yr)						Mitigated Emissions[3,5] (tons/yr)					
		Project Phase	Operation Year	Project Land Use	Equipment Population	Annual Hours of Use	Equipment Population	Annual Hours of Use	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Yard Truck	Diesel	Initial Phase	2032	General Industrial (Initial Phase)	15	21,450	1	1,430	0.029	0.083	0.362	0.001	0.004	0.004	0.31	0.89	3.88	0.01	0.04	0.04	0.02	0.06	0.26	0.00	0.00	0.00
		Pacific Gateway East	2057	General Industrial	26	37,180	2	2,860	0.029	0.034	0.372	0.001	0.002	0.002	0.54	0.63	6.92	0.01	0.04	0.04	0.04	0.05	0.53	0.00	0.00	0.00
		Pacific Gateway West	2057	General Industrial	23	32,890	0	0	0.029	0.034	0.372	0.001	0.002	0.002	0.48	0.56	6.12	0.01	0.04	0.03	0.00	0.00	0.00	0.00	0.00	0.00
		Pacific Gateway Central	2057	General Industrial	25	35,750	2	2,860	0.029	0.034	0.372	0.001	0.002	0.002	0.52	0.60	6.65	0.01	0.04	0.04	0.04	0.05	0.53	0.00	0.00	0.00
		Gateway Center	2057	General Industrial	2	2,860	2	2,860	0.029	0.034	0.372	0.001	0.002	0.002	0.04	0.05	0.53	0.00	0.00	0.00	0.04	0.05	0.53	0.00	0.00	0.00
Forklift	Diesel	Initial Phase	2032	General Industrial (Initial Phase)	475	1,388,285	19	55,217	0.008	0.057	0.136	0.000	0.002	0.002	5.85	39.38	94.74	0.16	1.19	1.10	0.23	1.57	3.77	0.01	0.05	0.04
		Pacific Gateway East	2057	General Industrial	859	2,509,661	56	162,525	0.008	0.041	0.136	0.000	0.001	0.001	10.15	51.03	171.01	0.28	0.96	0.88	0.66	3.30	11.07	0.02	0.06	0.06
		Pacific Gateway West	2057	General Industrial	740	2,161,576	0	0	0.008	0.041	0.136	0.000	0.001	0.001	8.74	43.95	147.29	0.24	0.83	0.76	0.00	0.00	0.00	0.00	0.00	0.00
		Pacific Gateway Central	2057	General Industrial	823	2,402,508	64	185,815	0.008	0.041	0.136	0.000	0.001	0.001	9.71	48.85	163.70	0.27	0.92	0.85	0.75	3.78	12.66	0.02	0.07	0.07
		Gateway Center	2057	General Industrial	63	184,090	64	185,641	0.008	0.041	0.136	0.000	0.001	0.001	0.74	3.74	12.54	0.02	0.07	0.06	0.75	3.77	12.65	0.02	0.07	0.07
														Total Offroad Emissions (Initial Phase)	6.17	40.27	98.62	0.17	1.23	1.13	0.25	1.63	4.03	0.01	0.05	0.05
														Total Offroad Emissions (Buildout)	37.10	189.68	613.37	1.01	4.14	3.80	2.54	12.63	42.01	0.07	0.26	0.24

Notes:

[1] SCAQMD Rule 2305 Second Draft Staff Report, Chapter 3. Warehouses greater than 200,000 sqft operate an average of 3.6 yard trucks per million square feet of warehouse space, and the off-road yard trucks are estimated to operate for 1,430 hours per year. Available at: http://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/pr-2305_sr_2nd-draft_4-7-21_clean.pdf. Accessed: January 2025.

[2] LBA Logistics EIR 2021. Appendix B. Based on a 2014 SCAQMD Survey, an average of 0.12 forklifts per 1,000 square feet. Forklifts are assumed to operate 8 hours per day, 365 days per yet. Available at: https://files.ceqanet.opr.ca.gov/266135-4/attachment/ZZ4NAT7Mt9jFgb_-p1Zq8FKUksmhz0jHLSja_j4XbcjAR_uh1pdylTl-isnTBffLgeF50tlWW5ZWRdMW0. Accessed: January 2025.

[3] To represent the project mitigation measure regarding zero-emission forklift and yard truck equipment, the following assumptions were made. A total of 157,583 square feet of industrial warehouse was assumed to utilize combustion-based equipment in the Initial Phase and a total of 1,681,500 square feet of industrial warehouse was assumed to utilize combustion-based equipment in Project Buildout based on Project-specific information for buildings under this threshold. The remainder of these equipment were assumed to be zero-emission equipment.

[4] Emission factors obtained from OFFROAD2021 emissions output for Calendar Years 2032 and 2050, Yard Goats and Forklifts in San Joaquin Valley. Emission factors are not available after calendar year 2050. Therefore, calendar year 2050 emission factors were used to represent emission factors for calendar year 2057.

[5] Emissions estimated using OFFROAD2021 emission factors and annual hours of use for each equipment.

Abbreviations:

CO - carbon monoxide
lbs - pounds
hr(s) - hour(s)
MSF - million square feet
NOx - oxides of nitrogen
$PM_{2.5}$ - particulate matter with diameter of 2.5 microns or less
PM_{10} - particulate matter with diameter of 10 microns or less
SOx - oxides of sulfur
tsf - thousand square feet
VOC - volatile organic compounds
yr - year

Constants:

3.6	yard trucks/MSF[1]
1,430	hrs/yr[1]
0.12	forklifts/tsf[2]
2,920	hrs/yr[2]
1000	ft/tsf
	sqft of ZE operational equipment land use

Table 4-12. Wastewater Treatment Plant Emergency Diesel Generator Criteria Air Pollutant Emissions
Pacific Gateway
San Joaquin County, California

Equipment Name	Generator Parameters			Annual Emissions, Using AP-42 EFs (lb/year)				
	Hours per Year[1]	Diesel Consumption Rate (gal/hr)[2]	Annual Diesel Throughput (gal)	PM	NOx	CO	SOx	VOC
Emergency Diesel Generator	200	39.9	7,973	338	4,769	1,028	315	392

AP-42 Emission Factors

Pollutant	Provided EF (lb/hp-hr)[3]	Brake Horsepower EF (lb/bhp-hr)	Fuel EF (lb/gal)
PM-10	2.20E-03	2.17E-03	0.0425
NOx	3.10E-02	3.06E-02	0.5982
CO	6.68E-03	6.59E-03	0.1289
SOx	2.05E-03	2.02E-03	0.0396
TOC	2.51E-03	2.48E-03	0.0485
Aldehydes	4.63E-04	4.57E-04	0.0089

Notes:

[1]Emergency generator hours per year taken from SJVAPCD Rule 4701 Section 3.22, which states that "Any internal combustion engine used exclusively for non-utility electric power generation or any other emergency engine, approved by the APCO, and limited by permit condition to operate no more than 200 hours per calendar year for non-emergency purposes and not used in conjunction with any voluntary utility demand reduction program." Available at: https://ww2.valleyair.org/media/1danj2d0/rule-4701.pdf. Accessed: January 2025.

[2]Expected diesel consumption rate taken as an average of similar units.

[3]AP-42 emission factors obtained from Table 3-3-1 of AP-42 Section 3.3: Gasoline and Diesel Industrial Engines. Available at: https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed: January 2025.

[4]Liquid fuel consumption factor from Table 1 in AQMD Guidelines for Calculating Emissions form Internal Combustion Engines. Available at: https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidelines-for-calculating-emissions-from-internal-combustion-engines.pdf?sfvrsn=6. Accessed: January 2025.

[5]The ratio of TOG to VOC was provided by the EPA SPECIATE Data Browser for Profile Code 0008 for Reciprocating Diesel Engine. Available at: https://www.epa.gov/air-emissions-modeling/speciate-0. Accessed: January 2025.

Conversion Factors:

5.11E-05	Mgal/bhp-hr, liquid fuel consumption factor[4]
1.168224	lb TOG/lb VOC ratio[5]
0.001	Mgal/gal
0.986	hp/bhp
0.4536	kg/lb

Abbreviations:

APCO - Air Pollution Control Officer
AQMD - South Coast Air Quality Management District
bhp - brake horsepower
CO - carbon monoxide
EF - emission factor
gal - gallon
hp - horsepower
hr - hour
kg - kilogram
lb - pound
Mgal - 1,000 gallons
NOx - oxides of nitrogen
PM - particulate matter
PM-10 - particulate matter less than 10 microns in diameter
SJVAPCD - San Joaquin Valley Air Pollution Control District
SOx - oxides of sulfur
TOC - total organic carbon
TOG - total organic gasses
VOC - volatile organic compounds

Table 4-13. TRU Criteria Air Pollutant Emission Calculations at Initial Buildout
Pacific Gateway
San Joaquin County, California

Emission Factor[1,2] (g/bhp-hr)	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
	1.96	1.62	0.26	0.002	0.02	0.01

Scenario	Annual Number of Round Trips with TRUs[3]	Annual Average TRU Emissions (tons/year)					
		VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
General Industrial	16,261	4.65	3.83	0.61	0.004	0.036	0.033

Notes:

[1] Emission factors obtained from OFFROAD2021 emissions output for Calendar Year 2032, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin Valley.

[2] SO_X emission factors based on sulfur content of ultra-low sulfur diesel fuel (15 ppm) and fuel consumption from OFFROAD2021.

[3] Approximately 5% of trucks for the Land Use, General Industrial are assumed to be equipped with TRUs. The number of trucks equipped with TRUs for the Land Use type, University are assumed to be insignificant and are therefore not included in the estimation of TRU round trips.

[4] Horsepower is based on SJVAPCD Guidance for Air Dispersion Modeling, Appendix A, Section 2.3.1 Transportation Refrigeration unit (TRU), Modeling Parameters. Available at: http://valleyair.org/busind/pto/tox_resources/modeling%20guidance%20w_o%20pic.pdf. Accessed: January 2025.

[5] Load factor obtained from CARB 2021 Update to Emissions Inventory for Transport Refrigeration Units. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/apph.pdf. Accessed: January 2025.

[6] TRU Cycle Duration is based on 2 hours of off-site loading time, 2 hours of on-site unloading time, plus the duration of the on-site and off-site transit. Assumptions based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

Abbreviations:

CARB - California Air Resources Board
CO - carbon dioxide
NOx - oxides of nitrogen
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ppm - parts per million
SJVAPCD - San Joaquin Valley Air Pollution Control District
SOx - sulfur oxide compounds
TRU - transportation refrigeration unit
VOCs - Volatile Organic Compounds

Constants:

Horsepower [4]	50	bhp
Load Factor [5]	0.38	
TRU Cycle Duration [6]	417	minutes
Fuel Consumption[2]	0.039	gal/hp-hr
Fuel Sulfur Content[2]	15	ppm
Density of Diesel	3,221	g/gal

Conversion Factors:

453.592	g/lb
1000000	g/MT
60	min/hr
365	day/year
2000	lb/ton

Table 4-14. TRU Criteria Air Pollutant On-Site Emission Calculations at Initial Buildout
Pacific Gateway
San Joaquin County, California

Emission Factor[1,2] (g/bhp-hr)	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
	1.96	1.62	0.26	0.002	0.02	0.01

Scenario	Number of Daily Round Trips with TRUs[3]	Daily On-Site TRU Emissions (lbs/day)					
		VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
General Industrial	45	7.67	6.32	1.00	0.01	0.06	0.05

Notes:

[1] Emission factors obtained from OFFROAD2021 emissions output for Calendar Year 2032, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin Valley.

[2] SO_X emission factors based on sulfur content of ultra-low sulfur diesel fuel (15 ppm) and fuel consumption from OFFROAD2021.

[3] Approximately 5% of trucks for the Land Use, General Industrial are assumed to be equipped with TRUs. The number of trucks equipped with TRUs for the Land Use type, University are assumed to be insignificant and are therefore not included in the estimation of TRU round trips.

[4] Horsepower is based on SJVAPCD Guidance for Air Dispersion Modeling, Appendix A, Section 2.3.1 Transportation Refrigeration unit (TRU), Modeling Parameters. Available at: http://valleyair.org/busind/pto/tox_resources/modeling%20guidance%20w_o%20pic.pdf. Accessed: January 2025.

[5] Load factor obtained from CARB 2021 Update to Emissions Inventory for Transport Refrigeration Units. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/apph.pdf. Accessed: January 2025.

[6] TRU Cycle Duration is based on 2 hours of on-site unloading time, plus the duration of the on-site transit. Assumptions based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

Abbreviations:

CARB - California Air Resources Board
CO - carbon dioxide
NOx - oxides of nitrogen
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ppm - parts per million
SJVAPCD - San Joaquin Valley Air Pollution Control District
SOx - sulfur oxide compounds
TRU - transportation refrigeration unit
VOCs - Volatile Organic Compounds

Constants:

Horsepower [4]	50	bhp
Load Factor [5]	0.38	
TRU Cycle Duration [6]	126	minutes
Fuel Consumption[2]	0.039	gal/hp-hr
Fuel Sulfur Content[2]	15	ppm
Density of Diesel	3,221	g/gal

Conversion Factors:

453.592	g/lb
1000000	g/MT
60	min/hr
365	day/year
2000	lb/ton

Table 4-15. TRU Criteria Air Pollutant Emission Calculations at Full Buildout
Pacific Gateway
San Joaquin County, California

Emission Factor[1,2] (g/bhp-hr)	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
	1.97	1.32	0.26	0.002	0.01	0.01

Scenario	Annual Number of Round Trips with TRUs[3]	Annual Average TRU Emissions (tons/year)					
		VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
General Industrial	101,315	29.41	19.67	3.83	0.028	0.215	0.198

Notes:
[1] Emission factors obtained from OFFROAD2021 emissions output for Calendar Year 2050, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin Valley. Emission factors are not available after calendar year 2050. Therefore, calendar year 2050 emission factors were used to represent emission factors for calendar year 2057.
[2] SO_X emission factors based on sulfur content of ultra-low sulfur diesel fuel (15 ppm) and fuel consumption from OFFROAD2021.

[3] Approximately 5% of trucks for the Land Use, General Industrial are assumed to be equipped with TRUs. The number of trucks equipped with TRUs for the Land Use type, University are assumed to be insignificant and are therefore not included in the estimation of TRU round trips.

[4] Horsepower is based on SJVAPCD Guidance for Air Dispersion Modeling, section 2.3.1 Transportation Refrigeration unit (TRU), Modeling Parameters. Available at: http://valleyair.org/busind/pto/tox_resources/modeling%20guidance%20w_o%20pic.pdf. Accessed: January 2025.

[5] Load factor obtained from CARB 2021 Update to Emissions Inventory for Transport Refrigeration Units. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/apph.pdf. Accessed: January 2025.

[6] TRU Cycle Duration is based on 2 hours of off-site loading time, 2 hours of on-site unloading time, plus the duration of the on-site and off-site transit. Assumptions based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

Abbreviations:

CARB - California Air Resources Board
CO - carbon dioxide
NOx - oxides of nitrogen
PM_{10} - particulate matter less than 10 microns in diameter
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
ppm - parts per million
SJVAPCD - San Joaquin Valley Air Pollution Control District
SOx - sulfur oxide compounds
TRU - transportation refrigeration unit
VOCs - Volatile Organic Compounds

Constants:

Horsepower [4]	50	bhp
Load Factor [5]	0.38	
TRU Cycle Duration [6]	422	minutes
Fuel Consumption[2]	0.039	gal/hp-hr
Fuel Sulfur Content[2]	15	ppm
Density of Diesel	3,221	g/gal

Conversion Factors:

453.592	g/lb
1000000	g/MT
60	min/hr
365	day/year
2000	lb/ton

Table 4-16. Unmitigated Annual Criteria Air Pollutant Emission Estimates for Project Operation
Pacific Gateway
San Joaquin County, California

Emission Category	Annual Criteria Air Pollutant Emission Estimates[1] (tons/year)					
	VOC[2]	NO_x	CO	SO_X[3]	PM_{10}	$PM_{2.5}$
Initial Phase						
Area[4]	14.9	0.1	16.1	0.0	0.0	0.0
Energy[4]	0.3	5.8	4.9	0.0	0.5	0.5
Mobile[4]	2.8	49.5	58.9	0.6	37.0	10.2
TRU[5]	4.6	3.8	0.6	0.0	0.0	0.0
Offroad Equipment[6]	6.2	40.3	98.6	0.2	1.2	1.1
Wastewater Facility[7]	0.2	2.4	0.5	0.2	0.2	0.2
Fueling Facility[8]	--	--	--	--	--	--
Total Annual Emissions (tons/year)	**29.0**	**101.9**	**179.6**	**1.0**	**38.9**	**12.0**
Full Buildout[9]						
Area[4]	113.7	1.8	128.0	0.1	2.4	2.2
Energy[4]	2.2	39.0	32.3	0.3	3.0	3.0
Mobile[4]	14.9	261.5	298.8	3.2	223.3	61.3
TRU[5]	29.4	19.7	3.8	0.0	0.2	0.2
Offroad Equipment[6]	37.1	189.7	613.4	1.0	4.1	3.8
Wastewater Facility[7]	0.2	2.4	0.5	0.2	0.2	0.2
Fueling Facility[8]	10.0	--	--	--	--	--
Total Annual Emissions (tons/year)	**207.5**	**513.9**	**1076.8**	**4.7**	**233.2**	**70.7**
SJVAPCD Significance Thresholds[10]	**10**	**10**	**100**	**27**	**15**	**15**
Initial Phase Exceeds Threshold?	YES	YES	YES	NO	YES	NO
Buildout Exceeds Threshold?	YES	YES	YES	NO	YES	YES

Notes:

[1] Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.

[2] For purposes of this analysis VOC emissions are assumed to be equal to ROG.

[3] For purposes of this analysis SO_X emissions are assumed to be equal to SO_2.

[4] Total area, energy, and mobile emissions were estimated using CalEEMod® (see Appendix A).

[5] TRU emissions were calculated as shown in Table 4-13 and Table 4-15 for detailed calculations.

[6] Offroad equipment emissions include emissions from on-site yard trucks and forklifts, see Table 4-11 for detailed calculations.

[7] Wastewater facility emissions include emissions from an on-site emergency diesel generator, see Table 4-12 for detailed calculations.

[8] Fueling facility emissions were calculated for the Project Buildout, see Table 4-10 for detailed calculations.

[9] Please note that the "Buildout" phase includes all land uses, inclusive of the land uses in the "Initial Phase".

[10] SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts. Available at: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed: January 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
EMFAC - EMission FACtors model
lbs - pounds
NO_x - nitrogen oxide compounds (NO + NO_2)
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
PM_{10} - particulate matter less than 10 microns in diameter
ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxide compounds
VOC - volatile organic compounds

Table 4-17. Unmitigated Maximum On-Site Criteria Air Pollutant Emission Estimates for Project Operation - Initial Phase
Pacific Gateway
San Joaquin County, California

Emission Category	Max Daily Criteria Air Pollutant Emission Estimates[1]					
	VOC[2]	NO_x	CO	SO_X[3]	PM_{10}	$PM_{2.5}$
	(pounds/day)					
Initial Phase						
Area[4]	96.2	1.5	179.0	0.0	0.3	0.2
Energy[4]	1.8	31.9	26.8	0.2	2.4	2.4
TRU	7.7	6.3	1.0	0.0	0.1	0.1
Mobile[5]	0.9	12.2	22.9	0.2	10.8	3.0
Offroad Equipment[6]	33.8	220.7	540.4	0.9	6.8	6.2
Wastewater Facility[7]	1.1	13.1	2.8	0.9	0.9	0.9
Fueling Facility	--	--	--	--	--	--
Total Daily Emissions (lbs/day)	**141.4**	**285.7**	**772.9**	**2.2**	**21.3**	**12.8**
SJVAPCD Significance Thresholds[8]	**100**	**100**	**100**	**100**	**100**	**100**
Exceeds Threshold?	YES	YES	YES	NO	NO	NO

Conversion Factor:

365	days/year
2,000	lb/ton

Notes:

[1] Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.

[2] For purposes of this analysis VOC emissions are assumed to be equal to ROG.

[3] For purposes of this analysis SO_X emissions are assumed to be equal to SO_2.

[4] Total area and energy emissions were estimated using CalEEMod® (see Appendix A).

[5] On-road mobile emissions were estimated using CalEEMod®. The on-site portion of on-road mobile emissions was estimated by taking a ratio of mobile emissions based on an assumption of the on-site trip distance (2 miles) and the average auto and truck trip lengths. TRU emissions were estimated as shown in Table 4-14.

[6] Offroad equipment emissions include emissions from on-site yard trucks and forklifts, see Table 4-11 for detailed calculations.

[7] Wastewater facility emissions include emissions from an on-site emergency diesel generator, see Table 4-12 for detailed calculations.

[8] SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts. Available at: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed: January 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
EMFAC - EMission FACtors model
lbs - pounds
NO_x - nitrogen oxide compounds (NO + NO_2)
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
PM_{10} - particulate matter less than 10 microns in diameter
ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxide compounds
VOC - volatile organic compounds

Table 5-1. Exposure Parameters
Pacific Gateway
San Joaquin County, California

Receptor Type	Receptor Age Group	Exposure Parameters						
		Daily Breathing Rate (DBR)[1,2,3]	Annual Exposure Duration (ED)[2]	Fraction of Time at Home (FAH)[3]	Exposure Frequency (EF)[4]	Averaging Time (AT)	Intake Factor, Inhalation (IF_{inh})	Age Sensitivity Factor (ASF)[5]
		(L/kg-day)	(years)	(unitless)	(days/year)	(days)	(m^3/kg-day)	(unitless)
Resident[6]	3rd Trimester	361	1.0	1.00	350	25,550	0.0049	10
	Age 0-<2 Years	1,090	1.0	1.00		25,550	0.0149	10
	Age 2-<9 Years	861	1.0	1.00		25,550	0.0118	3
	Age 10-<16 Years	745	1.0	1.00		25,550	0.0102	3
	Age 16-30 Years	335	1.0	1.00		25,550	0.0046	1
	Age 31-70 Years	290	1.0	1.00		25,550	0.0040	1
Worker[7]	Age 16-70 Years	230	1.0	--	250	25,550	0.0023	1

Notes:

[1] Daily breathing rates for residents and worker reflect default breathing rates from SJVAPCD Draft Health Risk Assessment Guidance.

Resident: 95th percentile 24-hour daily breathing rate for all age groups;
Worker: 95th percentile 8-hour breathing rate for age 16-70 years.

[2] Annual exposure duration represents one full year. The exposure duration for all years is 1, as the health risk assessment is based on annual emissions.

[3.] Fraction of time spent at home is conservatively assumed to be 1 (i.e., 24 hours/day) for all resident age groups based on the SJVAPCD Draft HRA Guidance confirmed by Kyle Melching on January 17, 2025.

[4] Exposure frequency was determined as follows:

Resident: reflects default residential exposure frequency from OEHHA (OEHHA 2015).

Worker: reflects default worker exposure frequency from OEHHA (OEHHA 2015).

[5] ASFs account for an "anticipated special sensitivity to carcinogens" of infants and children as recommended in the OEHHA Technical Support Document (OEHHA 2015) and current OEHHA guidance (OEHHA 2015). This approach is consistent with the cancer risk adjustment factor calculations recommended by SJVAPCD.

[6] A resident receptor is assumed to be exposed for 70 years, in accordance with SJVAPCD Draft Health Risk Assessment Guidance.

[7] A worker receptor is assumed to be exposed for 40 years, in accordance with SJVAPCD Draft Health Risk Assessment Guidance.

Calculations:

IF_{inh} = DBR * FAH * EF * ED * CF / AT

CF = 0.001 (m^3/L)

Abbreviations:

kg - kilogram

L - liter

m^3 - cubic meter

OEHHA - Office of Environmental Health Hazard Assessment

SJVAPCD - San Joaquin Valley Air Pollution Control District

References:

SJVAPCD. Draft Health Risk Assessment Guidance Document. Email communication between Ramboll and Kyle Melching.

OEHHA. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines. Guidance Manual for Preparation of Health Risk Assessments. February.

Table 5-2a. Age Sensitivity Weighted Intake Factors by Year and Age Bin for Exposure Scenario 1
Pacific Gateway
San Joaquin County, California

	Resident							Worker	
	Fraction of Year in Age Bin[2]						Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]	Fraction of Year in Age Bin[2]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]
Year[1]	3rd T	0-2	2-<9	9-<16	16-<30	30-<70	(m^3/kg-day)	16-70	(m^3/kg-day)
2032	0.25	0.75					0.12	1	0.0023
2033		1					0.15	1	0.0023
2034		0.25	0.75				0.064	1	0.0023
2035			1				0.035	1	0.0023
2036			1				0.035	1	0.0023
2037			1				0.035	1	0.0023
2038			1				0.035	1	0.0023
2039			1				0.035	1	0.0023
2040			1				0.035	1	0.0023
2041			0.25	0.75			0.032	1	0.0023
2042				1			0.031	1	0.0023
2043				1			0.031	1	0.0023
2044				1			0.031	1	0.0023
2045				1			0.031	1	0.0023
2046				1			0.031	1	0.0023
2047				1			0.031	1	0.0023
2048				0.25	0.75		0.011	1	0.0023
2049					1		0.0046	1	0.0023
2050					1		0.0046	1	0.0023
2051					1		0.0046	1	0.0023
2052					1		0.0046	1	0.0023
2053					1		0.0046	1	0.0023
2054					1		0.0046	1	0.0023
2055					1		0.0046	1	0.0023
2056					1		0.0046	1	0.0023
2057					1		0.0046	1	0.0023
2058					1		0.0046	1	0.0023
2059					1		0.0046	1	0.0023
2060					1		0.0046	1	0.0023
2061					1		0.0046	1	0.0023
2062					0.25	0.75	0.0041	1	0.0023
2063						1	0.0040	1	0.0023
2064						1	0.0040	1	0.0023
2065						1	0.0040	1	0.0023
2066						1	0.0040	1	0.0023
2067						1	0.0040	1	0.0023
2068						1	0.0040	1	0.0023
2069						1	0.0040	1	0.0023
2070						1	0.0040	1	0.0023
2071						1	0.0040	1	0.0023
2072						1	0.0040		
2073						1	0.0040		
2074						1	0.0040		
2075						1	0.0040		

Table 5-2a. Age Sensitivity Weighted Intake Factors by Year and Age Bin for Exposure Scenario 1
Pacific Gateway
San Joaquin County, California

	Resident							Worker	
	Fraction of Year in Age Bin[2]						Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]	Fraction of Year in Age Bin[2]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]
Year[1]	3rd T	0-2	2-<9	9-<16	16-<30	30-<70	(m^3/kg-day)	16-70	(m^3/kg-day)
2076						1	0.0040		
2077						1	0.0040		
2078						1	0.0040		
2079						1	0.0040		
2080						1	0.0040		
2081						1	0.0040		
2082						1	0.0040		
2083						1	0.0040		
2084						1	0.0040		
2085						1	0.0040		
2086						1	0.0040		
2087						1	0.0040		
2088						1	0.0040		
2089						1	0.0040		
2090						1	0.0040		
2091						1	0.0040		
2092						1	0.0040		
2093						1	0.0040		
2094						1	0.0040		
2095						1	0.0040		
2096						1	0.0040		
2097						1	0.0040		
2098						1	0.0040		
2099						1	0.0040		
2100						1	0.0040		
2101						1	0.0040		
2102						0.25	9.8E-04		

Notes:

[1] Exposure Scenario 1 begins at the start of operation, following the initial phase, and continues throughout the full exposure period. Only offsite receptors are evaluated in this scenario.

[2] The exposure duration for all years is 1, as the health risk assessment is based on annual emissions. While the 3rd Trimester is only 3 months, the exposure duration for the first year is set to 1 since annual average concentrations are used to calculate risks.

[3] The Intake Factors have been multiplied by the Age Sensitivity Factors and weighted by the exposure duration for each age bin.

[4] Intake Factors are based on exposure assumptions in Table 5-1.

Abbreviations:

kg - kilogram

m^3 - cubic meter

T - trimester

Table 5-2b. Age Sensitivity Weighted Intake Factors by Year and Age Bin for Exposure Scenario 2
Pacific Gateway
San Joaquin County, California

	Resident							Worker	
	Fraction of Year in Age Bin[2]						Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]	Fraction of Year in Age Bin[2]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]
Year[1]	3rd T	0-2	2-<9	9-<16	16-<30	30-<70	(m^3/kg-day)	16-70	(m^3/kg-day)
2026	0.25	0.75					0.12	1	0.0023
2027		1					0.15	1	0.0023
2028		0.25	0.75				0.064	1	0.0023
2029			1				0.035	1	0.0023
2030			1				0.035	1	0.0023
2031			1				0.035	1	0.0023
2032			1				0.035	1	0.0023
2033			1				0.035	1	0.0023
2034			1				0.035	1	0.0023
2035			0.25	0.75			0.032	1	0.0023
2036				1			0.031	1	0.0023
2037				1			0.031	1	0.0023
2038				1			0.031	1	0.0023
2039				1			0.031	1	0.0023
2040				1			0.031	1	0.0023
2041				1			0.031	1	0.0023
2042				0.25	0.75		0.011	1	0.0023
2043					1		0.0046	1	0.0023
2044					1		0.0046	1	0.0023
2045					1		0.0046	1	0.0023
2046					1		0.0046	1	0.0023
2047					1		0.0046	1	0.0023
2048					1		0.0046	1	0.0023
2049					1		0.0046	1	0.0023
2050					1		0.0046	1	0.0023
2051					1		0.0046	1	0.0023
2052					1		0.0046	1	0.0023
2053					1		0.0046	1	0.0023
2054					1		0.0046	1	0.0023
2055					1		0.0046	1	0.0023
2056					0.25	0.75	0.0041	1	0.0023
2057						1	0.0040	1	0.0023
2058						1	0.0040	1	0.0023
2059						1	0.0040	1	0.0023
2060						1	0.0040	1	0.0023
2061						1	0.0040	1	0.0023
2062						1	0.0040	1	0.0023
2063						1	0.0040	1	0.0023
2064						1	0.0040	1	0.0023
2065						1	0.0040	1	0.0023
2066						1	0.0040		
2067						1	0.0040		
2068						1	0.0040		
2069						1	0.0040		

Table 5-2b. Age Sensitivity Weighted Intake Factors by Year and Age Bin for Exposure Scenario 2
Pacific Gateway
San Joaquin County, California

	Resident							Worker	
	Fraction of Year in Age Bin[2]						Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]	Fraction of Year in Age Bin[2]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]
Year[1]	3rd T	0-2	2-<9	9-<16	16-<30	30-<70	(m^3/kg-day)	16-70	(m^3/kg-day)
2070						1	0.0040		
2071						1	0.0040		
2072						1	0.0040		
2073						1	0.0040		
2074						1	0.0040		
2075						1	0.0040		
2076						1	0.0040		
2077						1	0.0040		
2078						1	0.0040		
2079						1	0.0040		
2080						1	0.0040		
2081						1	0.0040		
2082						1	0.0040		
2083						1	0.0040		
2084						1	0.0040		
2085						1	0.0040		
2086						1	0.0040		
2087						1	0.0040		
2088						1	0.0040		
2089						1	0.0040		
2090						1	0.0040		
2091						1	0.0040		
2092						1	0.0040		
2093						1	0.0040		
2094						1	0.0040		
2095						1	0.0040		
2096						0.25	9.9E-04		

Notes:

[1] Exposure Scenario 2 begins at the start of initial-phase construction, and continues throughout the full exposure period. Only offsite receptors are evaluated in this scenario.

[2] The exposure duration for all years is 1, as the health risk assessment is based on annual emissions. While the 3rd Trimester is only 3 months, the exposure duration for the first year is set to 1 since annual average concentrations are used to calculate risks.

[3] The Intake Factors have been multiplied by the Age Sensitivity Factors and weighted by the exposure duration for each age bin.

[4] Intake Factors are based on exposure assumptions in Table 5-1.

Abbreviations:

kg - kilogram

m^3 - cubic meter

T - trimester

Table 5-2c. Age Sensitivity Weighted Intake Factors by Year and Age Bin for Exposure Scenario 3
Pacific Gateway
San Joaquin County, California

	Resident							Worker	
	Fraction of Year in Age Bin[2]						Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]	Fraction of Year in Age Bin[2]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]
Year[1]	3rd T	0-2	2-<9	9-<16	16-<30	30-<70	(m^3/kg-day)	16-70	(m^3/kg-day)
2057	0.25	0.75					0.12	1	0.0023
2058		1					0.15	1	0.0023
2059		0.25	0.75				0.064	1	0.0023
2060			1				0.035	1	0.0023
2061			1				0.035	1	0.0023
2062			1				0.035	1	0.0023
2063			1				0.035	1	0.0023
2064			1				0.035	1	0.0023
2065			1				0.035	1	0.0023
2066			0.25	0.75			0.032	1	0.0023
2067				1			0.031	1	0.0023
2068				1			0.031	1	0.0023
2069				1			0.031	1	0.0023
2070				1			0.031	1	0.0023
2071				1			0.031	1	0.0023
2072				1			0.031	1	0.0023
2073				0.25	0.75		0.011	1	0.0023
2074					1		0.0046	1	0.0023
2075					1		0.0046	1	0.0023
2076					1		0.0046	1	0.0023
2077					1		0.0046	1	0.0023
2078					1		0.0046	1	0.0023
2079					1		0.0046	1	0.0023
2080					1		0.0046	1	0.0023
2081					1		0.0046	1	0.0023
2082					1		0.0046	1	0.0023
2083					1		0.0046	1	0.0023
2084					1		0.0046	1	0.0023
2085					1		0.0046	1	0.0023
2086					1		0.0046	1	0.0023
2087					0.25	0.75	0.0041	1	0.0023
2088						1	0.0040	1	0.0023
2089						1	0.0040	1	0.0023
2090						1	0.0040	1	0.0023
2091						1	0.0040	1	0.0023
2092						1	0.0040	1	0.0023
2093						1	0.0040	1	0.0023
2094						1	0.0040	1	0.0023
2095						1	0.0040	1	0.0023
2096						1	0.0040	1	0.0023
2097						1	0.0040		
2098						1	0.0040		
2099						1	0.0040		
2100						1	0.0040		

Table 5-2c. Age Sensitivity Weighted Intake Factors by Year and Age Bin for Exposure Scenario 3
Pacific Gateway
San Joaquin County, California

	Resident							Worker	
	Fraction of Year in Age Bin[2]						Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]	Fraction of Year in Age Bin[2]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]
Year[1]	3rd T	0-2	2-<9	9-<16	16-<30	30-<70	(m^3/kg-day)	16-70	(m^3/kg-day)
2101						1	0.0040		
2102						1	0.0040		
2103						1	0.0040		
2104						1	0.0040		
2105						1	0.0040		
2106						1	0.0040		
2107						1	0.0040		
2108						1	0.0040		
2109						1	0.0040		
2110						1	0.0040		
2111						1	0.0040		
2112						1	0.0040		
2113						1	0.0040		
2114						1	0.0040		
2115						1	0.0040		
2116						1	0.0040		
2117						1	0.0040		
2118						1	0.0040		
2119						1	0.0040		
2120						1	0.0040		
2121						1	0.0040		
2122						1	0.0040		
2123						1	0.0040		
2124						1	0.0040		
2125						1	0.0040		
2126						1	0.0040		
2127						0.25	9.9E-04		

Notes:

[1] Exposure Scenario 3 begins at the start of full buildout operation, and continues throughout the full exposure period. Only offsite receptors are evaluated in this scenario.

[2] The exposure duration for all years is 1, as the health risk assessment is based on annual emissions. While the 3rd Trimester is only 3 months, the exposure duration for the first year is set to 1 since annual average concentrations are used to calculate risks.

[3] The Intake Factors have been multiplied by the Age Sensitivity Factors and weighted by the exposure duration for each age bin.

[4] Intake Factors are based on exposure assumptions in Table 5-1.

Abbreviations:

kg - kilogram

m^3 - cubic meter

T - trimester

Table 5-2d. Age Sensitivity Weighted Intake Factors by Year and Age Bin for Exposure Scenario 4
Pacific Gateway
San Joaquin County, California

	Resident							Worker	
	Fraction of Year in Age Bin[2]						Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]	Fraction of Year in Age Bin[2]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]
Year[1]	3rd T	0-2	2-<9	9-<16	16-<30	30-<70	(m^3/kg-day)	16-70	(m^3/kg-day)
2026	0.25	0.75					0.12	1	0.0023
2027		1					0.15	1	0.0023
2028		0.25	0.75				0.064	1	0.0023
2029			1				0.035	1	0.0023
2030			1				0.035	1	0.0023
2031			1				0.035	1	0.0023
2032			1				0.035	1	0.0023
2033			1				0.035	1	0.0023
2034			1				0.035	1	0.0023
2035			0.25	0.75			0.032	1	0.0023
2036				1			0.031	1	0.0023
2037				1			0.031	1	0.0023
2038				1			0.031	1	0.0023
2039				1			0.031	1	0.0023
2040				1			0.031	1	0.0023
2041				1			0.031	1	0.0023
2042				0.25	0.75		0.011	1	0.0023
2043					1		0.0046	1	0.0023
2044					1		0.0046	1	0.0023
2045					1		0.0046	1	0.0023
2046					1		0.0046	1	0.0023
2047					1		0.0046	1	0.0023
2048					1		0.0046	1	0.0023
2049					1		0.0046	1	0.0023
2050					1		0.0046	1	0.0023
2051					1		0.0046	1	0.0023
2052					1		0.0046	1	0.0023
2053					1		0.0046	1	0.0023
2054					1		0.0046	1	0.0023
2055					1		0.0046	1	0.0023
2056					0.25	0.75	0.0041	1	0.0023
2057						1	0.0040	1	0.0023
2058						1	0.0040	1	0.0023
2059						1	0.0040	1	0.0023
2060						1	0.0040	1	0.0023
2061						1	0.0040	1	0.0023
2062						1	0.0040	1	0.0023
2063						1	0.0040	1	0.0023
2064						1	0.0040	1	0.0023
2065						1	0.0040	1	0.0023
2066						1	0.0040		
2067						1	0.0040		
2068						1	0.0040		
2069						1	0.0040		

Table 5-2d. Age Sensitivity Weighted Intake Factors by Year and Age Bin for Exposure Scenario 4
Pacific Gateway
San Joaquin County, California

	Resident							Worker	
	Fraction of Year in Age Bin[2]						Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]	Fraction of Year in Age Bin[2]	Age Sensitivity Weighted Intake Factor by Year, Inhalation[3,4]
Year[1]	3rd T	0-2	2-<9	9-<16	16-<30	30-<70	(m^3/kg-day)	16-70	(m^3/kg-day)
2070						1	0.0040		
2071						1	0.0040		
2072						1	0.0040		
2073						1	0.0040		
2074						1	0.0040		
2075						1	0.0040		
2076						1	0.0040		
2077						1	0.0040		
2078						1	0.0040		
2079						1	0.0040		
2080						1	0.0040		
2081						1	0.0040		
2082						1	0.0040		
2083						1	0.0040		
2084						1	0.0040		
2085						1	0.0040		
2086						1	0.0040		
2087						1	0.0040		
2088						1	0.0040		
2089						1	0.0040		
2090						1	0.0040		
2091						1	0.0040		
2092						1	0.0040		
2093						1	0.0040		
2094						1	0.0040		
2095						1	0.0040		
2096						0.25	9.9E-04		

Notes:

[1] Exposure Scenario 4 begins at the start of initial-phase construction, continues through all construction phases, and extends through the full buildout operations. Only offsite receptors are evaluated in this scenario.

[2] The exposure duration for all years is 1, as the health risk assessment is based on annual emissions. While the 3rd Trimester is only 3 months, the exposure duration for the first year is set to 1 since annual average concentrations are used to calculate risks.

[3] The Intake Factors have been multiplied by the Age Sensitivity Factors and weighted by the exposure duration for each age bin.

[4] Intake Factors are based on exposure assumptions in Table 5-1.

Abbreviations:

kg - kilogram

m^3 - cubic meter

T - trimester

Table 5-3. Health Risk Assessment Options Used in HARP2 ADMRT Tool
Pacific Gateway
San Joaquin County, California

HARP2 Risk Analyses Screen/ Option Title		Options Chosen[1]				
		Residential Cancer Risk Run	**Residential Chronic Risk Run**	**Worker Cancer Risk Run**	**Worker Chronic Risk Run**	**Acute Risk Run**
Select Risk Scenario	Analysis Type	Cancer Risk	Chronic Risk (Non-cancer)	Cancer Risk	Chronic Risk (Non-cancer)	Acute Risk (Non-cancer)
	Receptor Type	Individual Resident		Worker		N/A
	Exposure Duration	Scenario 3: 70-Year (3rd trimester) Scenario 4: 40-Year (30 years old)	N/A	Scenario 3: 40-Year (16 start age) Scenario 4: 10-Year (46 start age)	N/A	N/A
	Intake Rate Percentile	95th percentile (High End)		95th percentile (High End)		N/A
Select Pathways to Evaluate	Tab "Pathways to Evaluate"	User Defined Select deposition rate of 0.05 m/s		Select "Worker Pathways" Select deposition rate of 0.05 m/s		Default Inhalation Only Pathway
	Tab "Inh"	Uncheck "Apply fraction of time spent at home (FAH) to ages greater than or equal to 16 years"		Check box "Use Adjustment Factors" with worker adjustment factor (WAF) = 1.5[2]		Use Defaults (No Change)
	Tab "Soil"	Use Defaults (No Change)		Use Defaults (No Change)		N/A
	Tab "Derm"	Warm Climate		Warm Climate		N/A
	Tab "MMlk"	Use Defaults (No Change)		N/A	N/A	N/A
	Tab "HG Produce"	Use Defaults (No Change)		N/A	N/A	N/A
	Tab "Pig, Chicken, & Egg"	Use Defaults (No Change)		N/A	N/A	N/A

Notes:

[1] HARP2 options were chosen based on SJVAPCD's Draft HRA Guidance provided to Ramboll by Kyle Melching (SJVAPCD) on August 4, 2021.

[2] Annual concentration adjustment factor for workers is set based on the assumed schedule of 16 hours per day.

Abbreviations:

ADMRT - Air Dispersion Modeling and Risk Tool
HARP - Hotspots Analysis and Reporting Program
HRA - health risk assessment
m/s - meters per second
N/A - not applicable
SJVAPCD - San Joaquin Valley Air Pollution Control District
WAF - worker adjustment factor

Table 5-4. Initial Buildout - Health Risk Assessment Results
Pacific Gateway
San Joaquin Valley, California

Scenario	Receptor Type	Maximum Estimated Cancer Risk (in a million)	Maximum Estimated Chronic Hazard Index	Maximum Estimated Acute Hazard Index
Scenario 1 - Initial Buildout, Operation Only	Resident	11.8	2.2E-03	--
	Worker	9.7	2.0E-02	--
Scenario 2 - Initial Buildout, Construction and Operation	Resident	7.4	1.2E-02	--
	Worker	8.2	2.3E-02	--
SJVAPCD Threshold[1]		**20**	**1.0**	**1.0**

Notes:

[1] SJVAPCD Air Quality Thresholds of Significance-Toxic Air Contaminants. Available at: https://ww2.valleyair.org/media/2lpbkso0/2-cms-format-air-quality-thresholds-of-significance-toxic-air-contaminants.pdf. Accessed: February 2025.

Abbreviations:

HRA - health risk assessment

SJVAPCD - San Joaquin Valley Air Pollution Control District

Table 5-5. Full Buildout - Health Risk Assessment Results
Pacific Gateway
San Joaquin Valley, California

Scenario	Receptor Type	Maximum Estimated Cancer Risk (in a million)[1]	Maximum Estimated Chronic Hazard Index[1]	Maximum Estimated Acute Hazard Index
Scenario 3 - Full Buildout, Operation Only	Resident	41.3 [19.7]	1.0E-02 [4.0E-03]	3.6E-02
	Worker	10.4	2.1E-02	2.2E-01
Scenario 4 - Full Buildout, Construction and Operation	Resident	9.2	3.0E-02	3.6E-02
	Worker	2.4	3.6E-02	2.2E-01
SJVAPCD Threshold[2]		**20**	**1.0**	**1.0**

Notes:

[1] The bracketed risk represents the maximum estimated cancer risk and chronic hazard index with the potential application of the high efficiency particulate air (HEPA) filter mitigation at significant residential receptor locations as discussed in Section 8.3.2 of the Air Quality Technical Report.

[2] SJVAPCD Air Quality Thresholds of Significance-Toxic Air Contaminants. Available at: https://ww2.valleyair.org/media/2lpbkso0/2-cms-format-air-quality-thresholds-of-significance-toxic-air-contaminants.pdf. Accessed: February 2025.

Abbreviations:

HEPA - high efficiency particulate air

HRA - health risk assessment

SJVAPCD - San Joaquin Valley Air Pollution Control District

Table 8-1. Mitigated Annual Criteria Air Pollutant Emission Estimates for Project Construction
Pacific Gateway
San Joaquin County, California

Scenario	Year	Annual Criteria Air Pollutant Emission Estimates[1,2]					
		VOC[3]	NO_x	CO	SO_x[4]	PM_{10}	$PM_{2.5}$
		(tons/year)					
Initial Phase	2026	0.5	2.2	8.4	0.0	2.4	0.9
	2027	1.1	4.7	13.2	0.0	3.1	0.8
	2028	1.0	4.6	12.5	0.0	3.1	0.8
	2029	0.9	4.3	11.9	0.0	3.1	0.8
	2030	0.9	4.1	11.3	0.0	3.1	0.8
	2031	4.2	1.5	4.5	0.0	1.2	0.3
Buildout	2032	0.5	2.6	16.5	0.1	6.8	3.1
	2033	1.5	7.7	26.4	0.1	8.0	2.4
	2034	2.2	9.5	28.8	0.1	9.0	2.3
	2035	2.1	9.4	28.1	0.1	9.1	2.3
	2036	2.1	9.2	27.4	0.1	9.1	2.3
	2037	2.0	9.0	26.6	0.1	9.1	2.3
	2038	2.1	9.5	31.5	0.1	11.0	3.2
	2039	7.8	8.8	27.3	0.1	9.4	2.4
	2040	1.6	8.2	24.9	0.1	8.9	2.2
	2041	1.5	8.1	24.5	0.1	8.8	2.2
	2042	1.5	8.0	24.2	0.1	8.8	2.2
	2043	1.5	7.9	24.1	0.1	8.8	2.2
	2044	1.5	7.9	23.9	0.1	8.9	2.2
	2045	1.4	7.3	22.4	0.1	8.4	2.1
	2046	2.3	6.4	19.4	0.1	7.6	1.9
	2047	6.4	1.2	8.7	0.0	2.5	1.1
	2048	8.9	4.0	11.6	0.0	4.9	1.3
	2049	0.7	4.1	10.8	0.0	4.6	1.2
	2050	0.7	4.1	10.8	0.0	4.6	1.2
	2051	0.7	4.1	10.8	0.0	4.6	1.2
	2052	0.7	4.1	10.8	0.0	4.6	1.2
	2053	0.7	4.1	10.8	0.0	4.6	1.2
	2054	0.7	4.1	10.8	0.0	4.6	1.2
	2055	0.6	3.6	9.6	0.0	4.0	1.0
	2056	5.4	0.3	2.4	0.0	0.8	0.2
SJVAPCD Significance Thresholds[5]		**10**	**10**	**100**	**27**	**15**	**15**
Exceeds Threshold for any Year of Construction?		NO	NO	NO	NO	NO	NO

Notes:

[1] Total emissions for project construction were estimated using CalEEMod® (see Appendix A). Combustion emissions associated with construction activities occuring 2051 and beyond were estimated using calendar year 2050 due to limitations in CalEEMod®.

[2] Emission reductions associated with the Tier 4 construction equipment estimated in CalEEMod® for equipment greater than 50 HP. Emission reductions associated with the low-VOC architectural coatings mitigation measure was estimated in CalEEMod® based on an adjusted VOC content as shown in Table 4-3. See Appendix A for further details.

[3] For purposes of this analysis VOC emissions are assumed to be equal to ROG.

[4] For purposes of this analysis SO_x emissions are assumed to be equal to SO_2.

[5] SJVAPCD Air Quality Significance Thresholds. Available at: http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf. Accessed: February 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CARB - California Air Resources Board
CO - carbon monoxide
lbs - pounds
NO_x - nitrogen oxide compounds (NO + NO_2)
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
PM_{10} - particulate matter less than 10 microns in diameter
ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxide compounds
USEPA - United States Environmental Protection Agency
VOC - volatile organic compounds

Table 8-2. Mitigated Maximum Daily On-Site Criteria Air Pollutant Emission Estimates for Project Construction - Initial Phase
Pacific Gateway
San Joaquin County, California

Scenario	Year	Max Daily Criteria Air Pollutant Emission Estimates[1,2]					
		VOC[3]	NO_x	CO	SO_x[4]	PM_{10}	$PM_{2.5}$
		(pounds/day)					
Initial Phase	2026	0.8	5	35	0.1	20	10
	2027	0.5	3.1	15	0.0	0.1	0.1
	2028	0.4	3.0	15	0.0	0.1	0.1
	2029	0.4	3.0	15	0.0	0.1	0.1
	2030	0.4	3.0	15	0.0	0.1	0.1
	2031	72	3.0	15	0.0	0.1	0.1
SJVAPCD Significance Thresholds[5]		**100**	**100**	**100**	**100**	**100**	**100**
Exceeds Threshold for any Year of Construction?		NO	NO	NO	NO	NO	NO

Notes:

[1] Total emissions for project construction were estimated using CalEEMod ® (see Appendix A).

[2] Emission reductions associated with the Tier 4 construction equipment estimated in CalEEMod ® for equipment greater than 50 HP. See Appendix A for details.

[3] For purposes of this analysis VOC emissions are assumed to be equal to ROG.

[4] For purposes of this analysis SO_x emissions are assumed to be equal to SO_2.

[5] SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts. Available at: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed: January 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CARB - California Air Resources Board
CO - carbon monoxide
lbs - pounds
NO_x - nitrogen oxide compounds (NO + NO_2)
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
PM_{10} - particulate matter less than 10 microns in diameter
ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxide compounds
USEPA - United States Environmental Protection Agency
VOC - volatile organic compounds

Table 8-3. Mitigated Annual Criteria Air Pollutant Emission Estimates for Project Operation
Pacific Gateway
San Joaquin County, California

Emission Category	Annual Criteria Air Pollutant Emission Estimates[1] (tons/year)					
	VOC[2]	**NO_x**	**CO**	**SO_x[3]**	**PM_{10}**	**$PM_{2.5}$**
Initial Phase						
Area[4,5]	11.6	0.0	0.0	0.0	0.0	0.0
Energy[4]	0.3	5.8	4.9	0.0	0.5	0.5
Mobile[4]	2.8	49.5	58.9	0.6	37.0	10.2
TRU[6]	4.6	3.8	0.6	0.0	0.0	0.0
Offroad Equipment[7]	0.3	1.6	4.0	0.0	0.1	0.0
Wastewater Facility[8]	0.2	2.4	0.5	0.2	0.2	0.2
Fueling Facility[9]	--	--	--	--	--	--
Total Annual Emissions	**19.8**	**63.1**	**68.9**	**0.8**	**37.7**	**10.9**
Required Annual Emissions Reduction from Rule 9510 Compliance[10]	**--**	25.5	**--**	**--**	19.4	**--**
Estimated Annual Emissions Reduction from Mitigation Measures[10]	**--**	38.8	**--**	**--**	1.2	**--**
Additional Annual Emissions Reductions from Rule 9510 Compliance[10]	**--**	0.0	**--**	**--**	18.2	**--**
Total with Rule Compliance	**19.8**	**63.1**	**68.9**	**0.8**	**19.4**	**10.9**
Full Buildout[10]						
Area[4,5]	91.8	0.8	15.0	0.1	2.2	2.1
Energy[4]	2.2	39.0	32.3	0.3	3.0	3.0
Mobile[4]	14.9	261.5	298.8	3.2	223.3	61.3
TRU[6]	29.4	19.7	3.8	0.0	0.2	0.2
Offroad Equipment[7]	2.5	12.6	42.0	0.1	0.3	0.2
Wastewater Facility[8]	0.2	2.4	0.5	0.2	0.2	0.2
Fueling Facility[9]	10.0	--	--	--	--	--
Total Annual Emissions (tons/year)	**151.0**	**335.9**	**392.4**	**3.8**	**229.1**	**67.0**
Required Annual Emissions Reduction from Rule 9510 Compliance[10]	--	128.5	--	--	116.6	--
Estimated Annual Emissions Reduction from Mitigation Measures[10]	--	178.0	--	--	4.1	--
Additional Annual Emissions Reductions from Rule 9510 Compliance[10]	--	0.0	--	--	112.5	--
Total with Rule Compliance	**151.0**	**335.9**	**392.4**	**3.8**	**116.6**	**67.0**
SJVAPCD Significance Thresholds[12]	**10**	**10**	**100**	**27**	**15**	**15**
Initial Phase Exceeds Threshold?	**YES**	**YES**	**NO**	**NO**	**YES**	**NO**
Buildout Exceeds Threshold?	**YES**	**YES**	**YES**	**NO**	**YES**	**YES**
Initial Phase with Rule Compliance Exceeds Threshold?	**YES**	**YES**	**NO**	**NO**	**YES**	**NO**
Buildout with Rule Compliance Exceeds Threshold?	**YES**	**YES**	**YES**	**NO**	**YES**	**YES**

Notes:

[1] Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.

[2] For purposes of this analysis VOC emissions are assumed to be equal to ROG.

[3] For purposes of this analysis SO_x emissions are assumed to be equal to SO_2.

[4] Total area, energy, and mobile emissions were estimated using CalEEMod® (see Appendix A).

[5] Mitigated area emissions incorporate the zero emission landscaping equipment mitigation measure using mitigation measure LL-1 in CalEEMod®. The low-VOC architectural coatings measure was estimated in CalEEMod® based on an adjusted VOC content as shown in Table 4-9.

[6] TRU emissions were calculated as shown in Table 4-13 and Table 4-15 for detailed calculations.

Table 8-3. Mitigated Annual Criteria Air Pollutant Emission Estimates for Project Operation
Pacific Gateway
San Joaquin County, California

[7] Offroad equipment emissions include emissions from on-site yard trucks and forklifts, see Table 4-11 for detailed calculations.

[8] Wastewater facility emissions include emissions from an on-site emergency diesel generator, see Table 4-12 for detailed calculations.

[9] Fueling facility emissions were calculated for the Project Buildout, see Table 4-10 for detailed calculations.

[10] Please note that the "Buildout" phase includes all land uses, inclusive of the land uses in the "Initial Phase".

[11] The annual emissions reductions from Rule 9510 compliance for NOx and PM_{10} are calculated using the SJVAPCD Indirect Source Rule Fee Estimator available at: https://ww2.valleyair.org/media/q2jdhwze/fee-estimator.xlsm. Accessed: March 2025. The anticipated emissions reductions due to the implementation of mitigation measures was subtracted from the Rule 9510 emissions reduction requirement to estimate the remaining emissions reductions needed to meet Rule 9510 requirements.

[12] SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts. Available at: https://www.valleyair.org/media/g4nl3p0g/gamaqi.pdf. Accessed: January 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
EMFAC - EMission FACtors model
lbs - pounds
NO_x - nitrogen oxide compounds (NO + NO_2)
$PM_{2.5}$ - particulate matter less than 2.5 microns in diameter
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ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxide compounds
VOC - volatile organic compounds

Table 8-4. Mitigated Maximum On-Site Criteria Air Pollutant Emission Estimates for Project Operation - Initial Phase
Pacific Gateway
San Joaquin County, California

Emission Category	Max Daily Criteria Air Pollutant Emission Estimates[1]					
	VOC[2]	NO_x	CO	SO_X[3]	PM_{10}	$PM_{2.5}$
	(pounds/day)					
Initial Phase						
Area[4]	63.3	0.0	0.0	0.0	0.0	0.0
Energy[4]	1.8	31.9	26.8	0.2	2.4	2.4
TRU	7.7	6.3	1.0	0.0	0.1	0.1
Mobile[5]	0.9	12.2	22.9	0.2	10.8	3.0
Offroad Equipment[6]	1.4	8.9	22.1	0.0	0.3	0.3
Wastewater Facility[7]	1.1	13.1	2.8	0.9	0.9	0.9
Fueling Facility	--	--	--	--	--	--
Total Daily Emissions (lbs/day)	**76.0**	**72.5**	**75.6**	**1.3**	**14.5**	**6.6**
SJVAPCD Significance Thresholds[8]	**100**	**100**	**100**	**100**	**100**	**100**
Exceeds Threshold?	NO	NO	NO	NO	NO	NO

Conversion Factor:

365	days/year
2,000	lb/ton

Notes:

[1] Emissions totals may not add up due to rounding. Emissions shown as zero may be non-zero values; however, they are below a meaningful reporting level for this analysis.

[2] For purposes of this analysis VOC emissions are assumed to be equal to ROG.

[3] For purposes of this analysis SO_X emissions are assumed to be equal to SO_2.

[4] Mitigated area emissions incorporate the zero emission landscaping equipment mitigation measure using mitigation measure LL-1 in CalEEMod®. The low-VOC architectural coatings measure was estimated in CalEEMod® based on an adjusted VOC content as shown in Table 4-8.

[5] On-road mobile emissions were estimated using CalEEMod®. The on-site portion of on-road mobile emissions was estimated by taking a ratio of mobile emissions based on an assumption of the on-site trip distance (2 miles) and the average auto and truck trip lengths. TRU emissions were estimated as shown in Table 4-14.

[6] Offroad equipment emissions include emissions from on-site yard trucks and forklifts. The offroad equipment emissions were evaluated including the zero-emission forklift and yard truck measure as shown in Table 4-11.

[7] Wastewater facility emissions include emissions from an on-site emergency diesel generator.

[8] SJVAPCD Guidance for Assessing and Mitigating Air Quality Impacts. Available at: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed: January 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CO - carbon monoxide
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lbs - pounds
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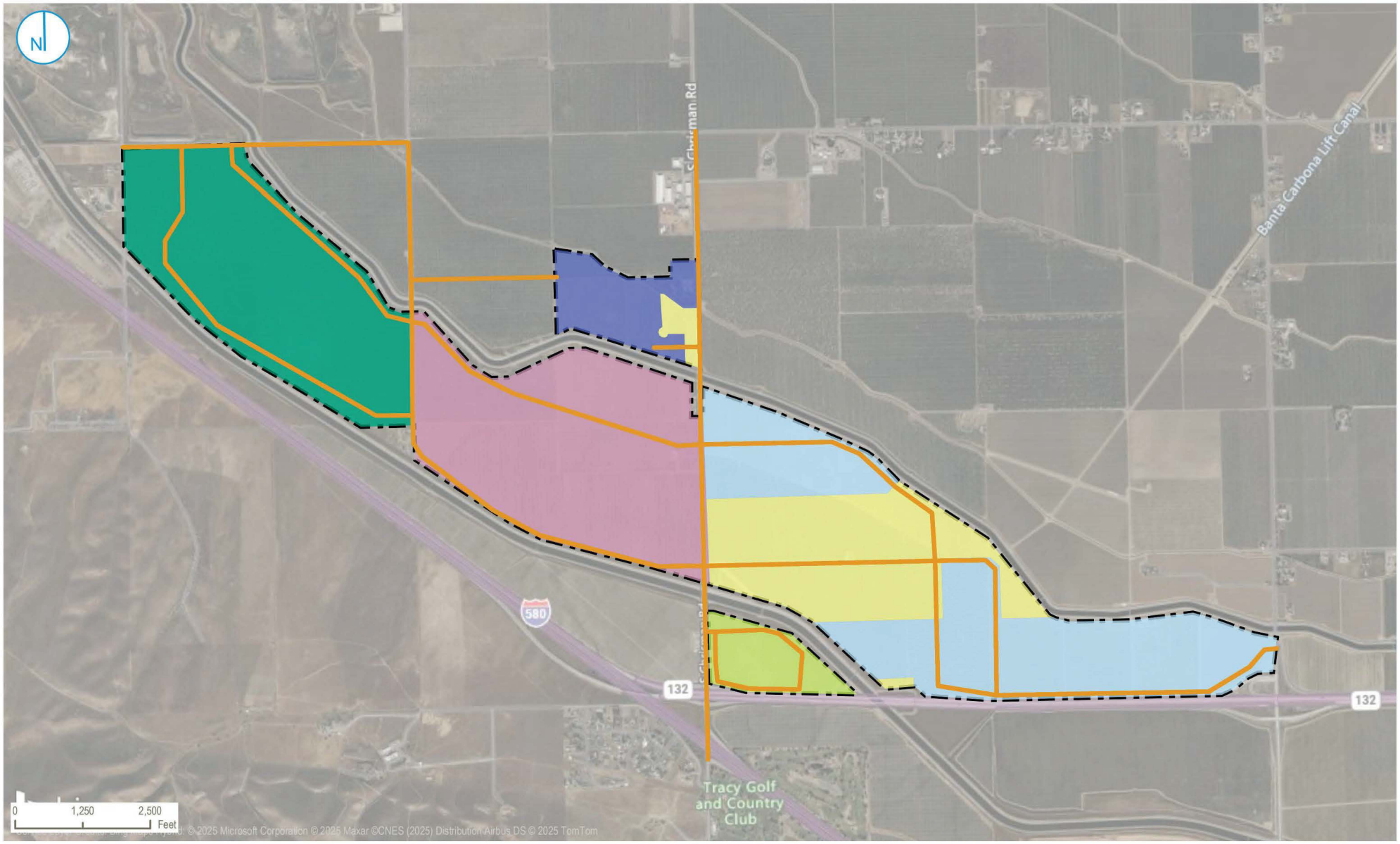
ROG - reactive organic gases
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_2 - sulfur dioxide
SO_x - sulfur oxide compounds
VOC - volatile organic compounds

FIGURES



Project Boundary

Vendor/Hauling Truck On-Road Sources

Offroad Construction Equipment

Off Road - Pacific Gateway West

Off Road - Pacific Gateway Central

Off Road - Pacific Gateway East

Off Road - Initial Phase of Development

Off Road - Gateway Center

Off Road - University Center

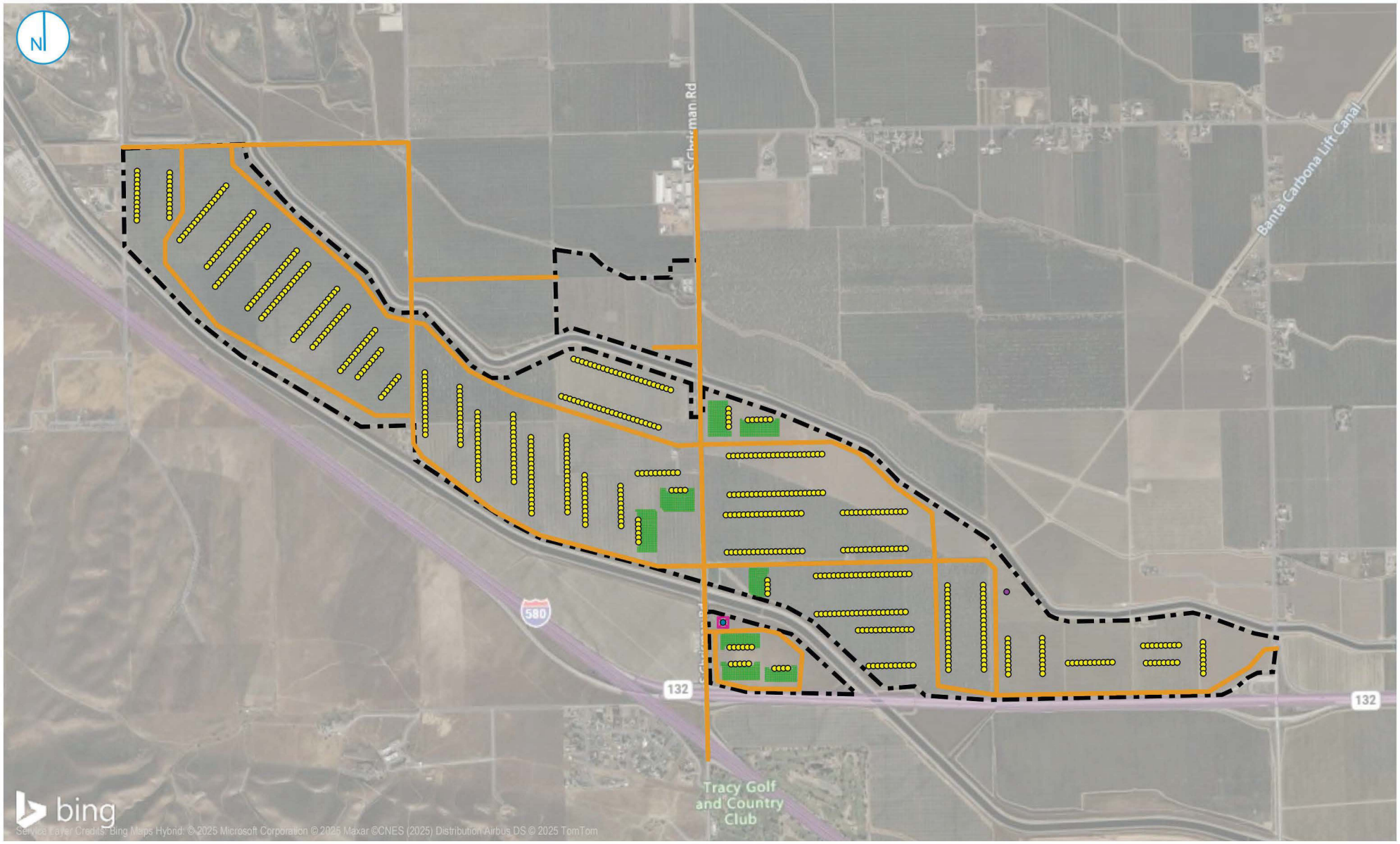
MODELED CONSTRUCTION SOURCES

Pacific Gateway
San Joaquin County, California

FIGURE 01

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL



- Project Boundary
- GDF Refueling and Spilliage
- Offroad Operational Equipment
- Warehouse Delivery Truck and TRU On-Road Sources
- GDF Breathing and Loading
- TRU and Truck Idling
- Emergency Generator

0 1,250 2,500 Feet

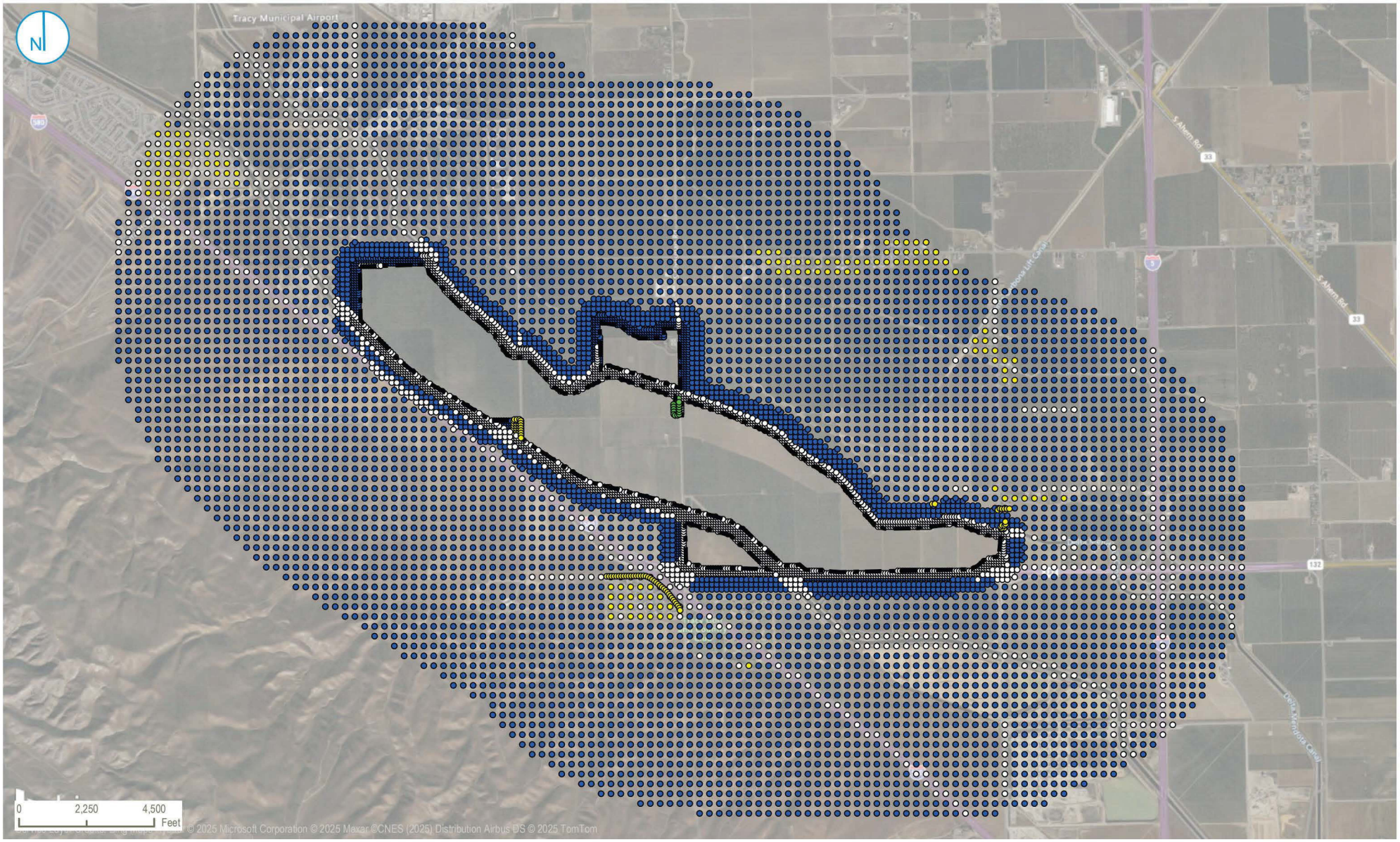
MODELED OPERATION SOURCES

Pacific Gateway
San Joaquin County, California

FIGURE 02

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL



- Project Boundary
- Worker
- Residential
- Roadway/Waterway
- Significantly Impacted Receptors

MODELED RECEPTORS

Pacific Gateway
San Joaquin County, California

FIGURE 03

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

PROJECT: 1690030668 | DATED: 2/13/2025 | DESIGNER: ATAYLOR

C:\Users\ataylor\Ramboll\Western GIS Graphics Portal - General\Projects\Pacific Gateway\20250213_ReportFigures\20250213_ReportFigures.aprx\Figure 04 - Meteorological Station Location



Project Boundary

Meteorological Station

METEOROLOGICAL STATION LOCATION

FIGURE 04

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

Pacific Gateway
San Joaquin County, California

RAMBOLL

APPENDIX A
CALEEMOD® OUTPUT

Pacific Gateway (Initial Phase Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Construction)
Construction Start Date	1/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	198	198	36.9	103	0.16	1.12	19.5	20.2	1.03	4.80	5.42	—	36,659	36,659	0.76	3.41	99.3	37,792
Mit.	73.4	73.2	30.1	105	0.16	0.38	19.5	19.9	0.37	4.80	5.17	—	36,659	36,659	0.76	3.41	99.3	37,792
% Reduced	63%	63%	18%	-2%	—	66%	—	1%	64%	—	5%	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	198	198	39.4	86.2	0.16	1.24	19.8	21.0	1.14	10.1	11.3	—	35,182	35,182	0.83	3.44	2.58	36,232
Mit.	73.2	73.2	32.7	88.2	0.16	0.38	19.8	19.9	0.37	10.1	10.3	—	35,182	35,182	0.83	3.44	2.58	36,232
% Reduced	63%	63%	17%	-2%	—	70%	—	5%	68%	—	9%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	59.0	58.8	31.2	70.8	0.14	0.84	16.7	17.2	0.78	4.50	5.27	—	29,922	29,922	0.65	2.95	32.7	30,850
Mit.	23.2	23.0	25.8	72.5	0.14	0.32	16.7	17.0	0.31	4.50	4.69	—	29,922	29,922	0.65	2.95	32.7	30,850
% Reduced	61%	61%	17%	-2%	—	62%	—	1%	60%	—	11%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.8	10.7	5.69	12.9	0.02	0.15	3.05	3.14	0.14	0.82	0.96	—	4,954	4,954	0.11	0.49	5.41	5,108
Mit.	4.23	4.20	4.71	13.2	0.02	0.06	3.05	3.11	0.06	0.82	0.86	—	4,954	4,954	0.11	0.49	5.41	5,108
% Reduced	61%	61%	17%	-2%	—	62%	—	1%	60%	—	11%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.55	8.39	36.9	103	0.16	1.12	19.5	20.2	1.03	4.80	5.42	—	36,659	36,659	0.76	3.41	99.3	37,792
2027	9.16	7.99	34.8	97.0	0.16	0.61	19.5	20.2	0.58	4.80	5.38	—	36,022	36,022	0.72	3.41	88.3	37,143
2028	8.21	7.65	33.5	91.4	0.16	0.57	19.5	20.1	0.55	4.80	5.34	—	35,282	35,282	0.72	3.25	78.1	36,348
2029	7.83	6.68	31.8	86.4	0.16	0.55	19.5	20.1	0.52	4.80	5.32	—	34,526	34,526	0.68	2.81	68.7	35,448
2030	7.49	6.40	30.3	82.0	0.16	0.53	19.5	20.1	0.51	4.80	5.31	—	33,774	33,774	0.55	2.67	60.7	34,644

2031	198	198	29.3	78.0	0.16	0.51	19.5	20.1	0.36	4.80	5.16	—	32,987	32,987	0.51	2.54	53.0	33,808
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.10	7.87	39.4	86.2	0.16	1.24	19.8	21.0	1.14	10.1	11.3	—	35,182	35,182	0.83	3.44	2.58	36,232
2027	8.23	7.49	37.4	80.9	0.16	0.61	19.5	20.2	0.58	4.80	5.38	—	34,573	34,573	0.83	3.44	2.29	35,623
2028	7.74	6.68	35.5	76.7	0.16	0.57	19.5	20.1	0.55	4.80	5.34	—	33,865	33,865	0.80	3.31	2.02	34,873
2029	7.44	6.28	34.2	72.6	0.16	0.55	19.5	20.1	0.52	4.80	5.32	—	33,139	33,139	0.76	3.29	1.78	34,141
2030	7.07	5.95	32.7	69.2	0.16	0.53	19.5	20.1	0.51	4.80	5.31	—	32,414	32,414	0.62	3.12	1.57	33,360
2031	198	198	31.2	65.6	0.16	0.51	19.5	20.1	0.36	4.80	5.16	—	31,651	31,651	0.59	2.98	1.37	32,556
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.81	4.12	27.0	42.3	0.08	0.84	12.7	13.5	0.78	4.50	5.27	—	14,235	14,235	0.38	1.07	13.0	14,575
2027	7.06	6.42	31.2	70.8	0.14	0.52	16.7	17.2	0.50	4.09	4.59	—	29,922	29,922	0.65	2.95	32.7	30,850
2028	6.67	5.77	30.0	66.7	0.14	0.49	16.7	17.2	0.47	4.11	4.58	—	29,388	29,388	0.65	2.80	28.9	30,267
2029	6.34	5.36	28.4	63.3	0.14	0.47	16.7	17.2	0.45	4.09	4.54	—	28,680	28,680	0.62	2.79	25.4	29,552
2030	6.12	5.11	27.1	60.1	0.14	0.45	16.7	17.1	0.44	4.09	4.53	—	28,052	28,052	0.50	2.67	22.4	28,884
2031	59.0	58.8	10.5	24.1	0.05	0.20	6.16	6.36	0.16	1.50	1.66	—	9,958	9,958	0.18	0.70	7.00	10,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.88	0.75	4.93	7.72	0.01	0.15	2.32	2.47	0.14	0.82	0.96	—	2,357	2,357	0.06	0.18	2.16	2,413
2027	1.29	1.17	5.69	12.9	0.02	0.09	3.05	3.14	0.09	0.75	0.84	—	4,954	4,954	0.11	0.49	5.41	5,108
2028	1.22	1.05	5.48	12.2	0.02	0.09	3.05	3.14	0.09	0.75	0.84	—	4,866	4,866	0.11	0.46	4.79	5,011
2029	1.16	0.98	5.18	11.5	0.02	0.09	3.05	3.13	0.08	0.75	0.83	—	4,748	4,748	0.10	0.46	4.21	4,893
2030	1.12	0.93	4.95	11.0	0.02	0.08	3.05	3.13	0.08	0.75	0.83	—	4,644	4,644	0.08	0.44	3.72	4,782
2031	10.8	10.7	1.91	4.40	0.01	0.04	1.12	1.16	0.03	0.27	0.30	—	1,649	1,649	0.03	0.12	1.16	1,685

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.79	7.78	30.1	105	0.16	0.38	19.5	19.9	0.37	4.80	5.17	—	36,659	36,659	0.76	3.41	99.3	37,792
2027	8.44	7.42	28.5	99.0	0.16	0.37	19.5	19.9	0.37	4.80	5.16	—	36,022	36,022	0.72	3.41	88.3	37,143
2028	7.52	7.10	27.6	93.4	0.16	0.36	19.5	19.9	0.36	4.80	5.16	—	35,282	35,282	0.72	3.25	78.1	36,348
2029	7.16	6.16	26.2	88.4	0.16	0.36	19.5	19.9	0.36	4.80	5.15	—	34,526	34,526	0.68	2.81	68.7	35,448
2030	6.85	5.89	24.9	84.0	0.16	0.36	19.5	19.9	0.35	4.80	5.15	—	33,774	33,774	0.55	2.67	60.7	34,644
2031	73.4	73.2	24.2	80.1	0.16	0.35	19.5	19.9	0.22	4.80	5.01	—	32,987	32,987	0.51	2.54	53.0	33,808
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.35	7.26	32.7	88.2	0.16	0.38	19.8	19.9	0.37	10.1	10.3	—	35,182	35,182	0.83	3.44	2.58	36,232
2027	7.50	6.91	31.1	83.0	0.16	0.37	19.5	19.9	0.37	4.80	5.16	—	34,573	34,573	0.83	3.44	2.29	35,623
2028	7.06	6.13	29.6	78.7	0.16	0.36	19.5	19.9	0.36	4.80	5.16	—	33,865	33,865	0.80	3.31	2.02	34,873
2029	6.77	5.75	28.6	74.7	0.16	0.36	19.5	19.9	0.36	4.80	5.15	—	33,139	33,139	0.76	3.29	1.78	34,141
2030	6.43	5.44	27.3	71.2	0.16	0.36	19.5	19.9	0.35	4.80	5.15	—	32,414	32,414	0.62	3.12	1.57	33,360
2031	73.2	73.2	26.0	67.7	0.16	0.35	19.5	19.9	0.22	4.80	5.01	—	31,651	31,651	0.59	2.98	1.37	32,556
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.97	2.63	12.0	45.9	0.08	0.20	12.7	12.9	0.20	4.50	4.69	—	14,235	14,235	0.38	1.07	13.0	14,575
2027	6.44	5.92	25.8	72.5	0.14	0.32	16.7	17.0	0.31	4.09	4.41	—	29,922	29,922	0.65	2.95	32.7	30,850
2028	6.08	5.30	25.0	68.4	0.14	0.31	16.7	17.0	0.31	4.11	4.42	—	29,388	29,388	0.65	2.80	28.9	30,267
2029	5.77	4.91	23.6	65.0	0.14	0.31	16.7	17.0	0.31	4.09	4.40	—	28,680	28,680	0.62	2.79	25.4	29,552
2030	5.57	4.68	22.5	61.8	0.14	0.31	16.7	17.0	0.30	4.09	4.40	—	28,052	28,052	0.50	2.67	22.4	28,884
2031	23.2	23.0	7.98	24.9	0.05	0.12	6.16	6.28	0.08	1.50	1.58	—	9,958	9,958	0.18	0.70	7.00	10,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.54	0.48	2.19	8.38	0.01	0.04	2.32	2.35	0.04	0.82	0.86	—	2,357	2,357	0.06	0.18	2.16	2,413
2027	1.18	1.08	4.71	13.2	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,954	4,954	0.11	0.49	5.41	5,108
2028	1.11	0.97	4.56	12.5	0.02	0.06	3.05	3.11	0.06	0.75	0.81	—	4,866	4,866	0.11	0.46	4.79	5,011

2029	1.05	0.90	4.31	11.9	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,748	4,748	0.10	0.46	4.21	4,893
2030	1.02	0.85	4.11	11.3	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,644	4,644	0.08	0.44	3.72	4,782
2031	4.23	4.20	1.46	4.54	0.01	0.02	1.12	1.15	0.01	0.27	0.29	—	1,649	1,649	0.03	0.12	1.16	1,685

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	4.55	4.50	0.01	0.19	—	0.19	0.18	—	0.18	—	827	827	0.03	0.01	—	830

Dust From Material Movement	—	—	—	—	—	—	3.07	3.07	—	1.58	1.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.83	0.82	< 0.005	0.04	—	0.04	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Dust From Material Movement	—	—	—	—	—	—	0.56	0.56	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.04	23.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80	3.80	< 0.005	< 0.005	0.01	3.85

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.57	3.48	28.2	0.05	0.13	—	0.13	0.13	—	0.13	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.54	4.40	0.01	0.02	—	0.02	0.02	—	0.02	—	827	827	0.03	0.01	—	830
Dust From Material Movement	—	—	—	—	—	—	3.07	3.07	—	1.58	1.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	137	137	0.01	< 0.005	—	137
Dust From Material Movement	—	—	—	—	—	—	0.56	0.56	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.04	23.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80	3.80	< 0.005	< 0.005	0.01	3.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	10.9	11.0	0.02	0.45	—	0.45	0.41	—	0.41	—	2,639	2,639	0.11	0.02	—	2,648

Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.46	1.46	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.99	2.01	< 0.005	0.08	—	0.08	0.08	—	0.08	—	437	437	0.02	< 0.005	—	438
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.1	67.1	< 0.005	< 0.005	0.11	68.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.79	4.74	35.4	0.06	0.17	—	0.17	0.16	—	0.16	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.79	4.74	35.4	0.06	0.17	—	0.17	0.16	—	0.16	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.31	1.90	14.2	0.02	0.07	—	0.07	0.07	—	0.07	—	2,639	2,639	0.11	0.02	—	2,648
Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.46	1.46	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.35	2.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	437	437	0.02	< 0.005	—	438
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.1	67.1	< 0.005	< 0.005	0.11	68.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.96	3.90	0.01	0.11	—	0.11	0.10	—	0.10	—	721	721	0.03	0.01	—	723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	119	119	< 0.005	< 0.005	—	120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.28	6.72	4.32	82.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,527	15,527	0.30	0.56	53.3	15,755
Vendor	0.99	0.60	22.7	7.62	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,735	18,735	0.36	2.82	46.0	19,631
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.87	6.23	5.44	65.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,034	14,034	0.38	0.60	1.38	14,224
Vendor	0.96	0.57	24.1	7.89	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,751	18,751	0.36	2.82	1.20	19,602
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.05	1.87	1.47	20.1	0.00	0.00	4.31	4.31	0.00	1.01	1.01	—	4,324	4,324	0.10	0.18	6.92	4,387
Vendor	0.29	0.18	7.11	2.33	0.04	0.08	1.54	1.62	0.08	0.43	0.51	—	5,633	5,633	0.11	0.85	5.99	5,895

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.27	3.67	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	716	716	0.02	0.03	1.14	726
Vendor	0.05	0.03	1.30	0.42	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	933	933	0.02	0.14	0.99	976
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.47	3.12	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.47	3.12	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	0.94	4.50	0.01	0.03	—	0.03	0.03	—	0.03	—	721	721	0.03	0.01	—	723

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	0.82	< 0.005	0.01	—	0.01	0.01	—	0.01	—	119	119	< 0.005	< 0.005	—	120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.28	6.72	4.32	82.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,527	15,527	0.30	0.56	53.3	15,755
Vendor	0.99	0.60	22.7	7.62	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,735	18,735	0.36	2.82	46.0	19,631
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.87	6.23	5.44	65.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,034	14,034	0.38	0.60	1.38	14,224
Vendor	0.96	0.57	24.1	7.89	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,751	18,751	0.36	2.82	1.20	19,602
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.05	1.87	1.47	20.1	0.00	0.00	4.31	4.31	0.00	1.01	1.01	—	4,324	4,324	0.10	0.18	6.92	4,387
Vendor	0.29	0.18	7.11	2.33	0.04	0.08	1.54	1.62	0.08	0.43	0.51	—	5,633	5,633	0.11	0.85	5.99	5,895
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.27	3.67	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	716	716	0.02	0.03	1.14	726
Vendor	0.05	0.03	1.30	0.42	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	933	933	0.02	0.14	0.99	976
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	8.05	11.1	0.02	0.29	—	0.29	0.27	—	0.27	—	2,055	2,055	0.08	0.02	—	2,062
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.47	2.02	< 0.005	0.05	—	0.05	0.05	—	0.05	—	340	340	0.01	< 0.005	—	341

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.94	6.38	3.79	76.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,281	15,281	0.26	0.56	47.9	15,504
Vendor	0.99	0.58	21.7	7.31	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,343	18,343	0.36	2.82	40.4	19,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.04	5.89	4.92	60.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,817	13,817	0.38	0.60	1.24	14,006
Vendor	0.96	0.57	23.1	7.58	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,360	18,360	0.36	2.82	1.05	19,211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.18	5.05	3.73	53.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	12,138	12,138	0.26	0.51	17.7	12,316
Vendor	0.83	0.49	19.4	6.37	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	15,729	15,729	0.31	2.42	14.9	16,472
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.92	0.68	9.73	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	2,010	2,010	0.04	0.09	2.94	2,039
Vendor	0.15	0.09	3.54	1.16	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,604	2,604	0.05	0.40	2.47	2,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.45	3.08	15.0	0.02	0.10	—	0.10	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.45	3.08	15.0	0.02	0.10	—	0.10	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.39	2.64	12.8	0.02	0.09	—	0.09	0.08	—	0.08	—	2,055	2,055	0.08	0.02	—	2,062
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.48	2.34	< 0.005	0.02	—	0.02	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.94	6.38	3.79	76.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,281	15,281	0.26	0.56	47.9	15,504
Vendor	0.99	0.58	21.7	7.31	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,343	18,343	0.36	2.82	40.4	19,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.04	5.89	4.92	60.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,817	13,817	0.38	0.60	1.24	14,006
Vendor	0.96	0.57	23.1	7.58	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,360	18,360	0.36	2.82	1.05	19,211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.18	5.05	3.73	53.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	12,138	12,138	0.26	0.51	17.7	12,316
Vendor	0.83	0.49	19.4	6.37	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	15,729	15,729	0.31	2.42	14.9	16,472
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.92	0.68	9.73	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	2,010	2,010	0.04	0.09	2.94	2,039
Vendor	0.15	0.09	3.54	1.16	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,604	2,604	0.05	0.40	2.47	2,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.85	7.67	11.1	0.02	0.26	—	0.26	0.24	—	0.24	—	2,061	2,061	0.08	0.02	—	2,068
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.40	2.03	< 0.005	0.05	—	0.05	0.04	—	0.04	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.19	6.08	3.72	71.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,985	14,985	0.26	0.56	42.9	15,202
Vendor	0.84	0.58	20.9	6.99	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,900	17,900	0.36	2.67	35.2	18,740
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.74	5.14	4.39	56.5	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,551	13,551	0.34	0.60	1.11	13,740
Vendor	0.82	0.55	22.2	7.25	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,916	17,916	0.36	2.69	0.91	18,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.96	4.45	3.68	49.5	0.00	0.00	12.3	12.3	0.00	2.89	2.89	—	11,937	11,937	0.26	0.48	15.9	12,104
Vendor	0.69	0.48	18.7	6.11	0.12	0.23	4.41	4.64	0.23	1.22	1.45	—	15,391	15,391	0.31	2.30	13.0	16,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.81	0.67	9.03	0.00	0.00	2.25	2.25	0.00	0.53	0.53	—	1,976	1,976	0.04	0.08	2.63	2,004
Vendor	0.13	0.09	3.41	1.12	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,548	2,548	0.05	0.38	2.16	2,665
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.44	3.04	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.50	0.44	3.04	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.38	2.61	12.8	0.02	0.08	—	0.08	0.08	—	0.08	—	2,061	2,061	0.08	0.02	—	2,068
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.48	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.19	6.08	3.72	71.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,985	14,985	0.26	0.56	42.9	15,202
Vendor	0.84	0.58	20.9	6.99	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,900	17,900	0.36	2.67	35.2	18,740
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.14	4.39	56.5	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,551	13,551	0.34	0.60	1.11	13,740
Vendor	0.82	0.55	22.2	7.25	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,916	17,916	0.36	2.69	0.91	18,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.96	4.45	3.68	49.5	0.00	0.00	12.3	12.3	0.00	2.89	2.89	—	11,937	11,937	0.26	0.48	15.9	12,104
Vendor	0.69	0.48	18.7	6.11	0.12	0.23	4.41	4.64	0.23	1.22	1.45	—	15,391	15,391	0.31	2.30	13.0	16,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.81	0.67	9.03	0.00	0.00	2.25	2.25	0.00	0.53	0.53	—	1,976	1,976	0.04	0.08	2.63	2,004
Vendor	0.13	0.09	3.41	1.12	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,548	2,548	0.05	0.38	2.16	2,665
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.36	11.1	0.02	0.24	—	0.24	0.22	—	0.22	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.34	2.02	< 0.005	0.04	—	0.04	0.04	—	0.04	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.85	5.29	3.23	66.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,708	14,708	0.23	0.11	38.2	14,786
Vendor	0.82	0.43	20.0	6.83	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,421	17,421	0.36	2.67	30.5	18,257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.51	4.91	4.32	52.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,304	13,304	0.30	0.60	0.99	13,491
Vendor	0.78	0.40	21.3	7.07	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,438	17,438	0.36	2.67	0.79	18,244
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.66	4.18	3.22	46.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,687	11,687	0.23	0.48	14.1	11,850
Vendor	0.69	0.36	17.8	5.94	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,939	14,939	0.31	2.29	11.3	15,640
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.85	0.76	0.59	8.44	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,935	1,935	0.04	0.08	2.33	1,962
Vendor	0.13	0.07	3.25	1.08	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,473	2,473	0.05	0.38	1.88	2,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.44	3.02	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.44	3.02	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.37	2.59	12.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.85	5.29	3.23	66.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,708	14,708	0.23	0.11	38.2	14,786
Vendor	0.82	0.43	20.0	6.83	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,421	17,421	0.36	2.67	30.5	18,257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.51	4.91	4.32	52.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,304	13,304	0.30	0.60	0.99	13,491
Vendor	0.78	0.40	21.3	7.07	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,438	17,438	0.36	2.67	0.79	18,244
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.66	4.18	3.22	46.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,687	11,687	0.23	0.48	14.1	11,850
Vendor	0.69	0.36	17.8	5.94	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,939	14,939	0.31	2.29	11.3	15,640
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.76	0.59	8.44	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,935	1,935	0.04	0.08	2.33	1,962
Vendor	0.13	0.07	3.25	1.08	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,473	2,473	0.05	0.38	1.88	2,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.81	7.19	11.0	0.02	0.22	—	0.22	0.21	—	0.21	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.31	2.02	< 0.005	0.04	—	0.04	0.04	—	0.04	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.55	5.02	2.74	62.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,463	14,463	0.23	0.11	33.8	14,537
Vendor	0.82	0.43	19.2	6.68	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,914	16,914	0.22	2.54	26.9	17,702
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.17	4.61	3.83	49.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,086	13,086	0.30	0.56	0.87	13,262
Vendor	0.78	0.40	20.5	6.90	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,931	16,931	0.22	2.54	0.70	17,693
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	3.95	2.80	43.2	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,494	11,494	0.23	0.48	12.5	11,656
Vendor	0.69	0.36	17.2	5.81	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,504	14,504	0.19	2.18	9.94	15,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.72	0.51	7.89	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,903	1,903	0.04	0.08	2.07	1,930
Vendor	0.13	0.07	3.13	1.06	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,401	2,401	0.03	0.36	1.65	2,511
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.48	0.43	3.00	14.9	0.02	0.09	—	0.09	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.43	3.00	14.9	0.02	0.09	—	0.09	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.37	2.57	12.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.55	5.02	2.74	62.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,463	14,463	0.23	0.11	33.8	14,537
Vendor	0.82	0.43	19.2	6.68	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,914	16,914	0.22	2.54	26.9	17,702
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.17	4.61	3.83	49.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,086	13,086	0.30	0.56	0.87	13,262
Vendor	0.78	0.40	20.5	6.90	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,931	16,931	0.22	2.54	0.70	17,693
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	3.95	2.80	43.2	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,494	11,494	0.23	0.48	12.5	11,656
Vendor	0.69	0.36	17.2	5.81	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,504	14,504	0.19	2.18	9.94	15,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.72	0.51	7.89	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,903	1,903	0.04	0.08	2.07	1,930
Vendor	0.13	0.07	3.13	1.06	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,401	2,401	0.03	0.36	1.65	2,511
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.30	0.25	2.21	3.50	0.01	0.07	—	0.07	0.06	—	0.06	—	653	653	0.03	0.01	—	655
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.05	0.05	0.40	0.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	108	108	< 0.005	< 0.005	—	108
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.25	4.72	2.67	58.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,207	14,207	0.19	0.11	29.8	14,276
Vendor	0.82	0.43	18.5	6.51	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,383	16,383	0.22	2.40	23.2	17,127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.34	3.31	46.2	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	12,854	12,854	0.26	0.56	0.77	13,029
Vendor	0.78	0.40	19.7	6.59	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,400	16,400	0.22	2.40	0.60	17,122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.22	1.19	0.87	12.9	0.00	0.00	3.91	3.91	0.00	0.92	0.92	—	3,588	3,588	0.06	0.03	3.50	3,603
Vendor	0.22	0.11	5.24	1.76	0.04	0.07	1.40	1.47	0.04	0.39	0.42	—	4,465	4,465	0.06	0.65	2.73	4,664
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.16	2.35	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	594	594	0.01	0.01	0.58	596
Vendor	0.04	0.02	0.96	0.32	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	739	739	0.01	0.11	0.45	772
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.43	2.99	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.43	2.99	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.13	0.12	0.81	4.06	0.01	0.02	—	0.02	0.02	—	0.02	—	653	653	0.03	0.01	—	655
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.74	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.25	4.72	2.67	58.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,207	14,207	0.19	0.11	29.8	14,276
Vendor	0.82	0.43	18.5	6.51	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,383	16,383	0.22	2.40	23.2	17,127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.34	3.31	46.2	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	12,854	12,854	0.26	0.56	0.77	13,029
Vendor	0.78	0.40	19.7	6.59	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,400	16,400	0.22	2.40	0.60	17,122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.22	1.19	0.87	12.9	0.00	0.00	3.91	3.91	0.00	0.92	0.92	—	3,588	3,588	0.06	0.03	3.50	3,603
Vendor	0.22	0.11	5.24	1.76	0.04	0.07	1.40	1.47	0.04	0.39	0.42	—	4,465	4,465	0.06	0.65	2.73	4,664
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.16	2.35	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	594	594	0.01	0.01	0.58	596
Vendor	0.04	0.02	0.96	0.32	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	739	739	0.01	0.11	0.45	772

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	6.13	9.88	0.01	0.21	—	0.21	0.19	—	0.19	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.75	2.82	< 0.005	0.06	—	0.06	0.05	—	0.05	—	430	430	0.02	< 0.005	—	432
Paving	0.66	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.32	0.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	71.3	71.3	< 0.005	< 0.005	—	71.5
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.26	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.03	33.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	0.01	5.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Paving (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.37	0.33	2.27	10.6	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.65	3.01	< 0.005	0.02	—	0.02	0.02	—	0.02	—	430	430	0.02	< 0.005	—	432
Paving	0.66	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	71.3	71.3	< 0.005	< 0.005	—	71.5
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.26	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.03	33.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	0.01	5.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	197	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	197	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.0	38.0	< 0.005	< 0.005	—	38.2
Architectural Coatings	56.1	56.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.30	6.30	< 0.005	< 0.005	—	6.32
Architectural Coatings	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	0.94	0.53	11.7	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,841	2,841	0.04	0.02	5.95	2,855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.66	9.23	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,571	2,571	0.05	0.11	0.15	2,606
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.18	2.70	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	751	751	0.01	0.01	0.73	754
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.49	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.12	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	72.2	72.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	72.2	72.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.0	38.0	< 0.005	< 0.005	—	38.2
Architectural Coatings	20.6	20.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.30	6.30	< 0.005	< 0.005	—	6.32
Architectural Coatings	3.75	3.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	0.94	0.53	11.7	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,841	2,841	0.04	0.02	5.95	2,855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.66	9.23	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,571	2,571	0.05	0.11	0.15	2,606
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.18	2.70	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	751	751	0.01	0.01	0.73	754
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.49	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.12	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2026	3/7/2026	6.00	57.0	—
Grading	Grading	3/9/2026	8/25/2026	6.00	146	—
Building Construction	Building Construction	8/26/2026	4/26/2031	6.00	1,462	—
Paving	Paving	4/28/2031	8/26/2031	6.00	104	—
Architectural Coating	Architectural Coating	8/27/2031	12/25/2031	6.00	104	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,714	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	674	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	343	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,714	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	674	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	343	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	6,167,400	2,055,800	303,575

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	85.5	0.00	—
Grading	—	—	438	0.00	—
Paving	0.00	0.00	0.00	0.00	116

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

General Office Building	0.00	0%
Other Non-Asphalt Surfaces	24.6	0%
Parking Lot	24.6	100%
University/College (4yr)	0.00	0%
Industrial Park	0.00	0%
Government Office Building	0.00	0%
Other Asphalt Surfaces	67.0	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2

Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954

Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4

Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

Pacific Gateway (Remaining East Development Area Construction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Remaining East Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	7,162	1000sqft	235	7,162,300	1,362,000	—	—	—
Parking Lot	1,649	1000sqft	37.8	0.00	0.00	—	—	—

Other Non-Asphalt Surfaces	1,104	1000sqft	25.3	0.00	0.00	—	—	—
City Park	36.4	Acre	36.4	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	3,554	1000sqft	81.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	255	254	41.5	117	0.26	0.79	34.2	34.7	0.73	8.40	8.82	—	53,440	53,440	0.82	4.17	68.8	54,772
Mit.	86.2	86.0	36.8	119	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	53,440	53,440	0.82	4.17	68.8	54,772
% Reduced	66%	66%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	255	254	46.7	101	0.26	0.93	34.2	34.7	0.85	10.1	11.0	—	52,333	52,333	0.95	4.40	2.08	53,671
Mit.	86.2	86.0	41.8	103	0.26	0.32	34.2	34.5	0.31	10.1	10.2	—	52,333	52,333	0.95	4.40	2.08	53,671
% Reduced	66%	66%	10%	-2%	—	66%	—	< 0.5%	63%	—	7%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	97.9	97.7	37.4	84.9	0.22	0.67	29.3	29.6	0.62	7.19	7.53	—	44,307	44,307	0.76	3.57	25.5	45,416
Mit.	34.1	33.9	33.4	86.7	0.22	0.27	29.3	29.6	0.27	7.19	7.45	—	44,307	44,307	0.76	3.57	25.5	45,416
% Reduced	65%	65%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.9	17.8	6.83	15.5	0.04	0.12	5.35	5.41	0.11	1.31	1.37	—	7,335	7,335	0.13	0.59	4.21	7,519
Mit.	6.22	6.19	6.09	15.8	0.04	0.05	5.35	5.40	0.05	1.31	1.36	—	7,335	7,335	0.13	0.59	4.21	7,519
% Reduced	65%	65%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.10	2.61	19.4	26.4	0.06	0.79	9.37	10.2	0.73	3.69	4.42	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	9.86	9.12	41.5	117	0.26	0.44	34.2	34.7	0.42	8.40	8.82	—	53,440	53,440	0.82	4.17	68.8	54,772
2034	9.38	8.64	40.2	113	0.26	0.43	34.2	34.7	0.41	8.40	8.81	—	52,318	52,318	0.75	4.17	58.6	53,637
2035	9.23	8.56	39.2	108	0.26	0.42	34.2	34.6	0.40	8.40	8.80	—	51,282	51,282	0.75	3.93	49.6	52,522
2036	8.99	8.25	38.3	104	0.26	0.40	34.2	34.6	0.39	8.40	8.79	—	50,350	50,350	0.75	3.93	41.6	51,582
2037	8.64	7.91	36.8	102	0.26	0.39	34.2	34.6	0.38	8.40	8.78	—	49,524	49,524	0.75	3.93	34.5	50,750
2038	8.43	7.70	36.0	99.9	0.26	0.39	34.2	34.6	0.38	8.40	8.77	—	48,697	48,697	0.75	3.70	28.6	49,846
2039	255	254	5.32	16.1	0.01	0.11	5.05	5.06	0.10	1.18	1.19	—	4,696	4,696	0.06	0.04	2.98	4,712
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2032	9.88	8.86	46.7	101	0.26	0.93	34.2	34.7	0.85	10.1	11.0	—	52,333	52,333	0.95	4.40	2.08	53,671
2033	9.30	8.51	44.5	96.6	0.26	0.44	34.2	34.7	0.42	8.40	8.82	—	51,165	51,165	0.89	4.17	1.78	52,430
2034	8.95	8.23	43.4	92.7	0.26	0.43	34.2	34.7	0.41	8.40	8.81	—	50,073	50,073	0.89	4.17	1.52	51,339
2035	8.80	8.08	42.1	89.7	0.26	0.42	34.2	34.6	0.40	8.40	8.80	—	49,064	49,064	0.89	3.93	1.29	50,259
2036	8.64	7.93	40.4	87.0	0.26	0.40	34.2	34.6	0.39	8.40	8.79	—	48,155	48,155	0.82	3.93	1.08	49,349
2037	8.36	7.65	39.4	84.2	0.26	0.39	34.2	34.6	0.38	8.40	8.78	—	47,351	47,351	0.82	3.93	0.89	48,544
2038	8.02	6.53	38.8	81.9	0.26	0.39	34.2	34.6	0.38	8.40	8.77	—	46,546	46,546	0.79	3.70	0.74	47,668
2039	255	254	38.2	80.2	0.26	0.38	34.2	34.6	0.37	8.40	8.77	—	45,908	45,908	0.79	3.70	0.61	47,031
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.51	3.03	20.4	31.7	0.07	0.67	13.2	13.8	0.62	5.06	5.67	—	11,052	11,052	0.30	0.57	4.25	11,232
2033	7.96	7.32	37.4	84.9	0.22	0.38	29.2	29.6	0.36	7.17	7.53	—	44,307	44,307	0.76	3.57	25.5	45,416
2034	7.60	6.96	35.6	81.1	0.22	0.37	29.2	29.6	0.35	7.17	7.52	—	43,365	43,365	0.70	3.57	21.7	44,468
2035	7.58	6.89	34.7	78.7	0.22	0.36	29.2	29.6	0.34	7.17	7.51	—	42,494	42,494	0.70	3.37	18.3	43,534
2036	7.47	6.84	33.9	76.1	0.22	0.35	29.3	29.6	0.34	7.19	7.52	—	41,825	41,825	0.70	3.38	15.4	42,866
2037	7.16	6.53	33.1	73.6	0.22	0.34	29.2	29.6	0.33	7.17	7.50	—	41,017	41,017	0.70	3.37	12.8	42,052
2038	6.92	6.29	32.5	72.4	0.22	0.33	29.2	29.6	0.32	7.17	7.49	—	40,323	40,323	0.65	3.17	10.6	41,294
2039	97.9	97.7	5.36	14.9	0.03	0.07	4.51	4.58	0.07	1.09	1.15	—	5,748	5,748	0.10	0.30	1.26	5,841
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.64	0.55	3.72	5.79	0.01	0.12	2.40	2.52	0.11	0.92	1.04	—	1,830	1,830	0.05	0.09	0.70	1,860
2033	1.45	1.34	6.83	15.5	0.04	0.07	5.33	5.40	0.07	1.31	1.37	—	7,335	7,335	0.13	0.59	4.21	7,519
2034	1.39	1.27	6.50	14.8	0.04	0.07	5.33	5.40	0.06	1.31	1.37	—	7,179	7,179	0.12	0.59	3.59	7,362
2035	1.38	1.26	6.34	14.4	0.04	0.06	5.33	5.40	0.06	1.31	1.37	—	7,035	7,035	0.12	0.56	3.03	7,208
2036	1.36	1.25	6.19	13.9	0.04	0.06	5.35	5.41	0.06	1.31	1.37	—	6,925	6,925	0.12	0.56	2.55	7,097
2037	1.31	1.19	6.04	13.4	0.04	0.06	5.33	5.39	0.06	1.31	1.37	—	6,791	6,791	0.12	0.56	2.12	6,962
2038	1.26	1.15	5.94	13.2	0.04	0.06	5.33	5.39	0.06	1.31	1.37	—	6,676	6,676	0.11	0.52	1.75	6,837
2039	17.9	17.8	0.98	2.72	< 0.005	0.01	0.82	0.84	0.01	0.20	0.21	—	952	952	0.02	0.05	0.21	967

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	9.28	8.66	36.8	119	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	53,440	53,440	0.82	4.17	68.8	54,772
2034	8.82	8.19	35.6	115	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	52,318	52,318	0.75	4.17	58.6	53,637
2035	8.68	8.13	34.8	111	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	51,282	51,282	0.75	3.93	49.6	52,522
2036	8.46	7.83	34.1	107	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	50,350	50,350	0.75	3.93	41.6	51,582
2037	8.12	7.50	32.7	104	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	49,524	49,524	0.75	3.93	34.5	50,750
2038	7.92	7.30	32.1	102	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	48,697	48,697	0.75	3.70	28.6	49,846
2039	86.2	86.0	2.16	16.1	0.01	0.05	5.05	5.06	0.05	1.18	1.19	—	4,696	4,696	0.06	0.04	2.98	4,712
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	9.28	8.39	41.8	103	0.26	0.32	34.2	34.5	0.31	10.1	10.2	—	52,333	52,333	0.95	4.40	2.08	53,671
2033	8.71	8.05	39.8	98.7	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	51,165	51,165	0.89	4.17	1.78	52,430
2034	8.38	7.78	38.9	94.8	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	50,073	50,073	0.89	4.17	1.52	51,339
2035	8.25	7.65	37.7	91.9	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	49,064	49,064	0.89	3.93	1.29	50,259
2036	8.11	7.52	36.3	89.3	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	48,155	48,155	0.82	3.93	1.08	49,349
2037	7.85	7.25	35.4	86.6	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	47,351	47,351	0.82	3.93	0.89	48,544
2038	7.51	6.13	34.8	84.3	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	46,546	46,546	0.79	3.70	0.74	47,668
2039	86.2	86.0	34.4	82.7	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	45,908	45,908	0.79	3.70	0.61	47,031
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	1.66	1.54	7.86	37.6	0.07	0.13	13.2	13.3	0.13	5.06	5.19	—	11,052	11,052	0.30	0.57	4.25	11,232
2033	7.46	6.92	33.4	86.7	0.22	0.27	29.2	29.5	0.27	7.17	7.44	—	44,307	44,307	0.76	3.57	25.5	45,416
2034	7.11	6.58	31.7	82.9	0.22	0.27	29.2	29.5	0.27	7.17	7.44	—	43,365	43,365	0.70	3.57	21.7	44,468

2035	7.11	6.52	31.0	80.6	0.22	0.27	29.2	29.5	0.27	7.17	7.43	—	42,494	42,494	0.70	3.37	18.3	43,534
2036	7.02	6.48	30.3	78.0	0.22	0.27	29.3	29.6	0.27	7.19	7.45	—	41,825	41,825	0.70	3.38	15.4	42,866
2037	6.71	6.18	29.7	75.7	0.22	0.27	29.2	29.5	0.26	7.17	7.43	—	41,017	41,017	0.70	3.37	12.8	42,052
2038	6.49	5.95	29.2	74.5	0.22	0.27	29.2	29.5	0.26	7.17	7.43	—	40,323	40,323	0.65	3.17	10.6	41,294
2039	34.1	33.9	3.88	15.4	0.03	0.04	4.51	4.56	0.04	1.09	1.13	—	5,748	5,748	0.10	0.30	1.26	5,841
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.30	0.28	1.43	6.87	0.01	0.02	2.40	2.43	0.02	0.92	0.95	—	1,830	1,830	0.05	0.09	0.70	1,860
2033	1.36	1.26	6.09	15.8	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,335	7,335	0.13	0.59	4.21	7,519
2034	1.30	1.20	5.79	15.1	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,179	7,179	0.12	0.59	3.59	7,362
2035	1.30	1.19	5.65	14.7	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,035	7,035	0.12	0.56	3.03	7,208
2036	1.28	1.18	5.53	14.2	0.04	0.05	5.35	5.40	0.05	1.31	1.36	—	6,925	6,925	0.12	0.56	2.55	7,097
2037	1.23	1.13	5.41	13.8	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	6,791	6,791	0.12	0.56	2.12	6,962
2038	1.18	1.09	5.32	13.6	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	6,676	6,676	0.11	0.52	1.75	6,837
2039	6.22	6.19	0.71	2.80	< 0.005	0.01	0.82	0.83	0.01	0.20	0.21	—	952	952	0.02	0.05	0.21	967

3. Construction Emissions Details

3.1. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.56	4.58	5.29	0.01	0.19	—	0.19	0.17	—	0.17	—	1,088	1,088	0.04	0.01	—	1,092
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	2.08	2.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.84	0.97	< 0.005	0.03	—	0.03	0.03	—	0.03	—	180	180	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	—	0.74	0.74	—	0.38	0.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.02	27.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.52	4.52	< 0.005	< 0.005	< 0.005	4.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.53	5.82	0.01	0.02	—	0.02	0.02	—	0.02	—	1,088	1,088	0.04	0.01	—	1,092
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	2.08	2.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	1.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	180	180	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	—	0.74	0.74	—	0.38	0.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.02	27.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.52	4.52	< 0.005	< 0.005	< 0.005	4.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	10.4	13.8	0.03	0.42	—	0.42	0.39	—	0.39	—	3,524	3,524	0.14	0.03	—	3,536
Dust From Material Movement	—	—	—	—	—	—	4.92	4.92	—	1.95	1.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.89	2.51	0.01	0.08	—	0.08	0.07	—	0.07	—	583	583	0.02	< 0.005	—	585
Dust From Material Movement	—	—	—	—	—	—	0.90	0.90	—	0.36	0.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.07	81.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	13.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.39	2.50	18.9	0.03	0.08	—	0.08	0.08	—	0.08	—	3,524	3,524	0.14	0.03	—	3,536
Dust From Material Movement	—	—	—	—	—	—	4.92	4.92	—	1.95	1.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	3.45	0.01	0.01	—	0.01	0.01	—	0.01	—	583	583	0.02	< 0.005	—	585
Dust From Material Movement	—	—	—	—	—	—	0.90	0.90	—	0.36	0.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.07	81.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	13.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.94	1.53	< 0.005	0.03	—	0.03	0.02	—	0.02	—	287	287	0.01	< 0.005	—	288
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.49	7.29	5.73	77.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,273	22,273	0.46	0.20	1.18	22,345
Vendor	1.33	0.68	33.1	11.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	27,663	27,663	0.39	4.18	0.90	28,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.89	0.87	0.57	9.43	0.00	0.00	3.01	3.01	0.00	0.71	0.71	—	2,734	2,734	0.05	0.02	2.36	2,744
Vendor	0.17	0.09	3.88	1.35	0.03	0.03	1.07	1.10	0.03	0.30	0.32	—	3,311	3,311	0.05	0.50	1.79	3,463
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.10	1.72	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	453	453	0.01	< 0.005	0.39	454
Vendor	0.03	0.02	0.71	0.25	0.01	0.01	0.20	0.20	0.01	0.05	0.06	—	548	548	0.01	0.08	0.30	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.98	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.36	1.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.07	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.49	7.29	5.73	77.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,273	22,273	0.46	0.20	1.18	22,345
Vendor	1.33	0.68	33.1	11.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	27,663	27,663	0.39	4.18	0.90	28,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.57	9.43	0.00	0.00	3.01	3.01	0.00	0.71	0.71	—	2,734	2,734	0.05	0.02	2.36	2,744
Vendor	0.17	0.09	3.88	1.35	0.03	0.03	1.07	1.10	0.03	0.30	0.32	—	3,311	3,311	0.05	0.50	1.79	3,463
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.10	1.72	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	453	453	0.01	< 0.005	0.39	454
Vendor	0.03	0.02	0.71	0.25	0.01	0.01	0.20	0.20	0.01	0.05	0.06	—	548	548	0.01	0.08	0.30	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.90	0.75	6.57	11.0	0.02	0.17	—	0.17	0.16	—	0.16	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.16	0.14	1.20	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.62	7.49	3.76	93.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	24,276	24,276	0.33	0.20	39.7	24,383
Vendor	1.20	0.75	30.1	10.9	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,767	26,767	0.39	3.95	29.1	27,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	6.96	4.88	72.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,969	21,969	0.40	0.20	1.03	22,040
Vendor	1.09	0.68	32.0	11.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,798	26,798	0.39	3.95	0.75	27,986
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.08	5.96	4.01	64.5	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,298	19,298	0.34	0.17	14.7	19,372
Vendor	0.98	0.60	26.8	9.43	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,955	22,955	0.33	3.39	10.8	23,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.09	0.73	11.8	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,195	3,195	0.06	0.03	2.43	3,207
Vendor	0.18	0.11	4.90	1.72	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,800	3,800	0.06	0.56	1.78	3,971
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.62	7.49	3.76	93.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	24,276	24,276	0.33	0.20	39.7	24,383
Vendor	1.20	0.75	30.1	10.9	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,767	26,767	0.39	3.95	29.1	27,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	6.96	4.88	72.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,969	21,969	0.40	0.20	1.03	22,040
Vendor	1.09	0.68	32.0	11.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,798	26,798	0.39	3.95	0.75	27,986
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.08	5.96	4.01	64.5	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,298	19,298	0.34	0.17	14.7	19,372
Vendor	0.98	0.60	26.8	9.43	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,955	22,955	0.33	3.39	10.8	23,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.09	0.73	11.8	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,195	3,195	0.06	0.03	2.43	3,207
Vendor	0.18	0.11	4.90	1.72	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,800	3,800	0.06	0.56	1.78	3,971
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.88	0.74	6.45	10.9	0.02	0.16	—	0.16	0.15	—	0.15	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.18	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	7.02	3.69	89.2	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,972	23,972	0.27	0.20	34.2	24,072
Vendor	1.20	0.75	29.0	10.6	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,949	25,949	0.39	3.95	24.5	27,160
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	4.81	69.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,696	21,696	0.40	0.20	0.89	21,766
Vendor	1.09	0.68	31.1	11.0	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,980	25,980	0.39	3.95	0.63	27,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.62	3.28	60.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,057	19,057	0.28	0.17	12.7	19,128
Vendor	0.98	0.60	25.9	9.23	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,253	22,253	0.33	3.39	9.04	23,279
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.03	0.60	11.1	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,155	3,155	0.05	0.03	2.10	3,167
Vendor	0.18	0.11	4.73	1.68	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,684	3,684	0.06	0.56	1.50	3,854

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	7.02	3.69	89.2	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,972	23,972	0.27	0.20	34.2	24,072
Vendor	1.20	0.75	29.0	10.6	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,949	25,949	0.39	3.95	24.5	27,160
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	4.81	69.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,696	21,696	0.40	0.20	0.89	21,766
Vendor	1.09	0.68	31.1	11.0	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,980	25,980	0.39	3.95	0.63	27,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.62	3.28	60.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,057	19,057	0.28	0.17	12.7	19,128
Vendor	0.98	0.60	25.9	9.23	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,253	22,253	0.33	3.39	9.04	23,279
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.03	0.60	11.1	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,155	3,155	0.05	0.03	2.10	3,167
Vendor	0.18	0.11	4.73	1.68	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,684	3,684	0.06	0.56	1.50	3,854
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.02	6.96	3.69	85.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,702	23,702	0.27	0.20	29.3	23,797
Vendor	1.20	0.75	28.1	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,184	25,184	0.39	3.71	20.3	26,320
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.69	6.56	4.75	66.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,452	21,452	0.40	0.20	0.76	21,522
Vendor	1.09	0.68	30.0	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,215	25,215	0.39	3.71	0.53	26,332
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.56	3.28	58.8	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,842	18,842	0.28	0.17	10.8	18,911
Vendor	0.98	0.60	25.2	9.01	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	21,597	21,597	0.33	3.18	7.51	22,562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.02	0.60	10.7	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,120	3,120	0.05	0.03	1.79	3,131
Vendor	0.18	0.11	4.59	1.64	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,576	3,576	0.06	0.53	1.24	3,735
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.02	6.96	3.69	85.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,702	23,702	0.27	0.20	29.3	23,797
Vendor	1.20	0.75	28.1	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,184	25,184	0.39	3.71	20.3	26,320
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.69	6.56	4.75	66.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,452	21,452	0.40	0.20	0.76	21,522
Vendor	1.09	0.68	30.0	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,215	25,215	0.39	3.71	0.53	26,332
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.56	3.28	58.8	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,842	18,842	0.28	0.17	10.8	18,911
Vendor	0.98	0.60	25.2	9.01	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	21,597	21,597	0.33	3.18	7.51	22,562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.02	0.60	10.7	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,120	3,120	0.05	0.03	1.79	3,131
Vendor	0.18	0.11	4.59	1.64	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,576	3,576	0.06	0.53	1.24	3,735
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	3.63	81.5	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,459	23,459	0.27	0.20	24.9	23,550
Vendor	1.17	0.73	27.5	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,494	24,494	0.39	3.71	16.6	25,627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.56	6.43	3.89	63.7	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,233	21,233	0.33	0.20	0.65	21,301
Vendor	1.09	0.68	29.4	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,526	24,526	0.39	3.71	0.43	25,643
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.64	5.52	3.23	56.2	0.00	0.00	21.6	21.6	0.00	5.07	5.07	—	18,701	18,701	0.29	0.17	9.27	18,769
Vendor	0.98	0.60	24.5	9.03	0.20	0.20	7.67	7.88	0.20	2.12	2.32	—	21,064	21,064	0.34	3.19	6.17	22,030
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.03	1.01	0.59	10.3	0.00	0.00	3.95	3.95	0.00	0.92	0.92	—	3,096	3,096	0.05	0.03	1.53	3,107
Vendor	0.18	0.11	4.48	1.65	0.04	0.04	1.40	1.44	0.04	0.39	0.42	—	3,487	3,487	0.06	0.53	1.02	3,647
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	3.63	81.5	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,459	23,459	0.27	0.20	24.9	23,550
Vendor	1.17	0.73	27.5	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,494	24,494	0.39	3.71	16.6	25,627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.56	6.43	3.89	63.7	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,233	21,233	0.33	0.20	0.65	21,301
Vendor	1.09	0.68	29.4	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,526	24,526	0.39	3.71	0.43	25,643
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.64	5.52	3.23	56.2	0.00	0.00	21.6	21.6	0.00	5.07	5.07	—	18,701	18,701	0.29	0.17	9.27	18,769
Vendor	0.98	0.60	24.5	9.03	0.20	0.20	7.67	7.88	0.20	2.12	2.32	—	21,064	21,064	0.34	3.19	6.17	22,030
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.03	1.01	0.59	10.3	0.00	0.00	3.95	3.95	0.00	0.92	0.92	—	3,096	3,096	0.05	0.03	1.53	3,107
Vendor	0.18	0.11	4.48	1.65	0.04	0.04	1.40	1.44	0.04	0.39	0.42	—	3,487	3,487	0.06	0.53	1.02	3,647

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.49	6.36	2.84	79.4	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,247	23,247	0.27	0.20	21.1	23,334
Vendor	1.17	0.73	26.9	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,880	23,880	0.39	3.71	13.4	25,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	3.82	61.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,042	21,042	0.33	0.20	0.55	21,110
Vendor	1.09	0.68	28.6	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,912	23,912	0.39	3.71	0.35	25,029
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.34	5.22	3.16	54.1	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,482	18,482	0.28	0.17	7.82	18,548
Vendor	0.98	0.60	24.0	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,480	20,480	0.33	3.18	4.97	21,442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.95	0.58	9.88	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,060	3,060	0.05	0.03	1.29	3,071
Vendor	0.18	0.11	4.37	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,391	3,391	0.06	0.53	0.82	3,550
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.49	6.36	2.84	79.4	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,247	23,247	0.27	0.20	21.1	23,334
Vendor	1.17	0.73	26.9	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,880	23,880	0.39	3.71	13.4	25,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	3.82	61.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,042	21,042	0.33	0.20	0.55	21,110
Vendor	1.09	0.68	28.6	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,912	23,912	0.39	3.71	0.35	25,029
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.34	5.22	3.16	54.1	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,482	18,482	0.28	0.17	7.82	18,548
Vendor	0.98	0.60	24.0	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,480	20,480	0.33	3.18	4.97	21,442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.95	0.58	9.88	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,060	3,060	0.05	0.03	1.29	3,071
Vendor	0.18	0.11	4.37	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,391	3,391	0.06	0.53	0.82	3,550
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	2.77	77.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,972	22,972	0.27	0.20	17.8	23,056
Vendor	1.17	0.73	26.4	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,328	23,328	0.39	3.48	10.7	24,385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.96	5.04	3.82	59.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,790	20,790	0.33	0.20	0.46	20,858
Vendor	1.09	0.68	28.0	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,360	23,360	0.36	3.48	0.28	24,406
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.11	5.00	3.16	52.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,261	18,261	0.23	0.17	6.59	18,325
Vendor	0.98	0.60	23.5	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,007	20,007	0.33	2.98	3.98	20,908
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.93	0.91	0.58	9.66	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,023	3,023	0.04	0.03	1.09	3,034
Vendor	0.18	0.11	4.28	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,312	3,312	0.06	0.49	0.66	3,461
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	2.77	77.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,972	22,972	0.27	0.20	17.8	23,056
Vendor	1.17	0.73	26.4	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,328	23,328	0.39	3.48	10.7	24,385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.96	5.04	3.82	59.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,790	20,790	0.33	0.20	0.46	20,858
Vendor	1.09	0.68	28.0	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,360	23,360	0.36	3.48	0.28	24,406
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.11	5.00	3.16	52.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,261	18,261	0.23	0.17	6.59	18,325
Vendor	0.98	0.60	23.5	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,007	20,007	0.33	2.98	3.98	20,908
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.93	0.91	0.58	9.66	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,023	3,023	0.04	0.03	1.09	3,034
Vendor	0.18	0.11	4.28	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,312	3,312	0.06	0.49	0.66	3,461
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.51	0.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	180	180	0.01	< 0.005	—	181
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.09	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.8	29.8	< 0.005	< 0.005	—	29.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.83	4.91	3.76	57.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,644	20,644	0.33	0.20	0.39	20,712
Vendor	1.09	0.68	27.7	10.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	22,868	22,868	0.36	3.48	0.22	23,914
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.36	0.27	4.48	0.00	0.00	1.89	1.89	0.00	0.44	0.44	—	1,590	1,590	0.02	0.01	0.48	1,595
Vendor	0.09	0.05	2.01	0.75	0.02	0.02	0.67	0.69	0.02	0.19	0.20	—	1,717	1,717	0.03	0.26	0.28	1,796
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	263	263	< 0.005	< 0.005	0.08	264
Vendor	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.12	0.13	< 0.005	0.03	0.04	—	284	284	< 0.005	0.04	0.05	297
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	1.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	180	180	0.01	< 0.005	—	181
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.8	29.8	< 0.005	< 0.005	—	29.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.83	4.91	3.76	57.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,644	20,644	0.33	0.20	0.39	20,712
Vendor	1.09	0.68	27.7	10.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	22,868	22,868	0.36	3.48	0.22	23,914
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.43	0.36	0.27	4.48	0.00	0.00	1.89	1.89	0.00	0.44	0.44	—	1,590	1,590	0.02	0.01	0.48	1,595
Vendor	0.09	0.05	2.01	0.75	0.02	0.02	0.67	0.69	0.02	0.19	0.20	—	1,717	1,717	0.03	0.26	0.28	1,796
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	263	263	< 0.005	< 0.005	0.08	264
Vendor	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.12	0.13	< 0.005	0.03	0.04	—	284	284	< 0.005	0.04	0.05	297
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Paving (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.31	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.31	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	2.01	3.69	0.01	0.04	—	0.04	0.04	—	0.04	—	571	571	0.02	< 0.005	—	573
Paving	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.37	0.67	< 0.005	0.01	—	0.01	0.01	—	0.01	—	94.6	94.6	< 0.005	< 0.005	—	94.9
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.07	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	< 0.005	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	0.01	40.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.60	6.60	< 0.005	< 0.005	< 0.005	6.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Paving (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.27	2.14	10.5	0.01	0.05	—	0.05	0.05	—	0.05	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.27	2.14	10.5	0.01	0.05	—	0.05	0.05	—	0.05	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.10	0.81	3.96	0.01	0.02	—	0.02	0.02	—	0.02	—	571	571	0.02	< 0.005	—	573
Paving	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.72	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.6	94.6	< 0.005	< 0.005	—	94.9
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.07	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	< 0.005	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	0.01	40.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.60	6.60	< 0.005	< 0.005	< 0.005	6.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Architectural Coating (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	253	253	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	253	253	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.5	50.5	< 0.005	< 0.005	—	50.7
Architectural Coatings	95.8	95.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.36	8.36	< 0.005	< 0.005	—	8.39
Architectural Coatings	17.5	17.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.01	0.55	15.1	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,562	4,562	0.05	0.04	2.98	4,578
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	0.98	0.75	11.5	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,129	4,129	0.07	0.04	0.08	4,142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.37	0.27	4.51	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,600	1,600	0.02	0.02	0.49	1,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	265	265	< 0.005	< 0.005	0.08	266
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Architectural Coating (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	84.9	84.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	84.9	84.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.5	50.5	< 0.005	< 0.005	—	50.7
Architectural Coatings	32.1	32.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.36	8.36	< 0.005	< 0.005	—	8.39
Architectural Coatings	5.86	5.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.01	0.55	15.1	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,562	4,562	0.05	0.04	2.98	4,578

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	0.98	0.75	11.5	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,129	4,129	0.07	0.04	0.08	4,142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.37	0.27	4.51	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,600	1,600	0.02	0.02	0.49	1,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	265	265	< 0.005	< 0.005	0.08	266
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2032	3/28/2032	6.00	75.0	—
Grading	Grading	3/29/2032	11/10/2032	6.00	195	—
Building Construction	Building Construction	11/11/2032	2/1/2039	6.00	1,949	—
Paving	Paving	2/2/2039	7/12/2039	6.00	138	—
Architectural Coating	Architectural Coating	7/13/2039	12/20/2039	6.00	138	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3,008	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,174	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	602	11.9	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3,008	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,174	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	602	11.9	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	10,743,450	3,581,150	378,390

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	113	0.00	—
Grading	—	—	585	0.00	—
Paving	0.00	0.00	0.00	0.00	145

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	37.8	100%

Other Non-Asphalt Surfaces	25.3	0%
City Park	0.00	0%
Other Asphalt Surfaces	81.6	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2

Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708

Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0

Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific construction schedule.

Pacific Gateway (Central Development Area Construction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Central Development Area Construction)
Construction Start Date	1/1/2038
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	6,857	1000sqft	198	6,856,500	1,786,304	—	—	—
Parking Lot	1,823	1000sqft	41.9	0.00	0.00	—	—	—

Other Asphalt Surfaces	4,015	1000sqft	92.2	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	1,299	1000sqft	29.8	0.00	0.00	—	—	—
City Park	72.4	Acre	72.4	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	196	196	34.1	93.9	0.25	0.61	32.8	33.1	0.56	10.1	10.7	—	46,095	46,095	0.70	3.54	22.4	47,189
Mit.	67.6	67.4	30.3	96.4	0.25	0.30	32.8	33.1	0.30	10.1	10.2	—	46,095	46,095	0.70	3.54	22.4	47,189
% Reduced	66%	66%	11%	-3%	—	51%	—	< 0.5%	47%	—	4%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	196	196	36.9	77.3	0.25	0.61	32.8	33.1	0.56	10.1	10.7	—	44,051	44,051	0.76	3.54	0.58	45,125
Mit.	67.5	67.4	33.0	79.8	0.25	0.30	32.8	33.1	0.30	10.1	10.2	—	44,051	44,051	0.76	3.54	0.58	45,125
% Reduced	66%	66%	10%	-3%	—	51%	—	< 0.5%	47%	—	4%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	93.8	93.8	29.9	67.0	0.21	0.47	28.1	28.4	0.43	6.88	7.19	—	37,798	37,798	0.60	3.04	7.55	38,727
Mit.	32.8	32.8	26.6	69.1	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	37,798	37,798	0.60	3.04	7.55	38,727
% Reduced	65%	65%	11%	-3%	—	45%	—	< 0.5%	41%	—	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.1	17.1	5.45	12.2	0.04	0.09	5.12	5.18	0.08	1.26	1.31	—	6,258	6,258	0.10	0.50	1.25	6,412
Mit.	5.98	5.98	4.86	12.6	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,258	6,258	0.10	0.50	1.25	6,412
% Reduced	65%	65%	11%	-3%	—	45%	—	< 0.5%	41%	—	1%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.69	2.26	16.5	23.7	0.06	0.61	19.8	20.4	0.56	10.1	10.7	—	6,749	6,749	0.27	0.05	0.12	6,772
2039	7.79	6.33	34.1	93.9	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	46,095	46,095	0.70	3.54	22.4	47,189
2040	7.46	6.09	33.7	92.1	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	45,538	45,538	0.64	3.54	18.2	46,627
2041	7.33	5.96	33.1	91.0	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	45,045	45,045	0.64	3.54	14.8	46,131
2042	7.14	5.70	32.8	89.8	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	44,608	44,608	0.64	3.31	12.0	45,624
2043	6.94	5.55	32.4	88.8	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	44,227	44,227	0.64	3.31	9.61	45,240
2044	6.62	5.41	32.0	87.8	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	43,899	43,899	0.64	3.25	7.71	44,892
2045	6.48	5.34	31.7	87.7	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	43,615	43,615	0.64	3.25	6.16	44,606
2046	6.42	5.27	31.6	86.8	0.25	0.34	32.8	33.1	0.33	8.04	8.37	—	43,370	43,370	0.64	3.25	4.90	44,360
2047	196	196	5.02	14.1	0.01	0.07	4.84	4.84	0.07	1.13	1.14	—	4,368	4,368	0.06	0.03	0.61	4,377

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.69	2.26	17.9	23.6	0.07	0.61	19.8	20.4	0.56	10.1	10.7	—	7,866	7,866	0.27	0.71	0.08	8,081
2039	7.59	6.15	36.9	77.3	0.25	0.50	32.8	33.1	0.46	8.04	8.40	—	44,051	44,051	0.76	3.54	0.58	45,125
2040	7.26	5.83	36.3	76.0	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	43,508	43,508	0.76	3.54	0.47	44,582
2041	7.07	5.63	35.9	74.8	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	43,026	43,026	0.70	3.54	0.38	44,099
2042	7.00	5.57	34.6	73.4	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	42,599	42,599	0.70	3.31	0.31	43,604
2043	6.87	5.50	34.2	73.1	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	42,226	42,226	0.70	3.31	0.25	43,232
2044	6.44	5.30	33.8	72.0	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	41,905	41,905	0.70	3.31	0.20	42,911
2045	5.62	5.20	33.7	71.7	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	41,628	41,628	0.70	3.31	0.16	42,633
2046	5.55	5.10	33.4	71.6	0.25	0.34	32.8	33.1	0.33	8.04	8.37	—	41,388	41,388	0.70	3.31	0.13	42,393
2047	196	196	5.02	11.0	0.01	0.07	4.84	4.84	0.07	1.13	1.14	—	3,966	3,966	0.06	0.04	0.02	3,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.25	1.89	12.9	19.3	0.05	0.47	10.7	11.2	0.43	4.80	5.23	—	5,438	5,438	0.22	0.05	0.06	5,458
2039	6.10	4.93	29.1	63.5	0.20	0.33	26.2	26.5	0.32	6.53	6.84	—	35,235	35,235	0.57	2.76	7.55	36,080
2040	6.29	5.10	29.9	67.0	0.21	0.32	28.1	28.4	0.31	6.88	7.19	—	37,798	37,798	0.60	3.04	6.77	38,727
2041	6.05	4.87	29.3	65.8	0.21	0.31	28.0	28.3	0.30	6.86	7.16	—	37,280	37,280	0.60	3.03	5.48	38,204
2042	5.93	4.76	29.0	64.7	0.21	0.31	28.0	28.3	0.30	6.86	7.16	—	36,912	36,912	0.60	2.84	4.42	37,778
2043	5.87	4.64	28.7	64.4	0.21	0.30	28.0	28.3	0.30	6.86	7.16	—	36,591	36,591	0.60	2.84	3.56	37,456
2044	5.58	4.58	28.5	63.7	0.21	0.30	28.1	28.4	0.29	6.88	7.17	—	36,414	36,414	0.60	2.85	2.86	37,280
2045	5.50	4.45	28.0	63.4	0.21	0.30	28.0	28.3	0.29	6.86	7.15	—	36,075	36,075	0.55	2.84	2.27	36,937
2046	4.89	4.03	24.7	55.8	0.19	0.26	24.2	24.4	0.25	5.93	6.18	—	31,144	31,144	0.48	2.45	1.57	31,889
2047	93.8	93.8	2.38	8.92	0.01	0.03	2.33	2.36	0.02	0.55	0.57	—	2,497	2,497	0.04	0.02	0.13	2,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.41	0.35	2.35	3.53	0.01	0.09	1.95	2.04	0.08	0.88	0.95	—	900	900	0.04	0.01	0.01	904
2039	1.11	0.90	5.31	11.6	0.04	0.06	4.78	4.84	0.06	1.19	1.25	—	5,834	5,834	0.09	0.46	1.25	5,973
2040	1.15	0.93	5.45	12.2	0.04	0.06	5.12	5.18	0.06	1.26	1.31	—	6,258	6,258	0.10	0.50	1.12	6,412

2041	1.10	0.89	5.35	12.0	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,172	6,172	0.10	0.50	0.91	6,325
2042	1.08	0.87	5.29	11.8	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,111	6,111	0.10	0.47	0.73	6,255
2043	1.07	0.85	5.24	11.8	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,058	6,058	0.10	0.47	0.59	6,201
2044	1.02	0.83	5.19	11.6	0.04	0.05	5.12	5.17	0.05	1.26	1.31	—	6,029	6,029	0.10	0.47	0.47	6,172
2045	1.00	0.81	5.12	11.6	0.04	0.05	5.11	5.16	0.05	1.25	1.31	—	5,973	5,973	0.09	0.47	0.38	6,115
2046	0.89	0.74	4.51	10.2	0.03	0.05	4.41	4.46	0.05	1.08	1.13	—	5,156	5,156	0.08	0.41	0.26	5,280
2047	17.1	17.1	0.43	1.63	< 0.005	< 0.005	0.42	0.43	< 0.005	0.10	0.10	—	413	413	0.01	< 0.005	0.02	415

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.79	0.77	4.61	35.9	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,749	6,749	0.27	0.05	0.12	6,772
2039	7.29	5.94	30.3	96.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	46,095	46,095	0.70	3.54	22.4	47,189
2040	6.97	5.71	29.9	94.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	45,538	45,538	0.64	3.54	18.2	46,627
2041	6.84	5.58	29.4	93.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	45,045	45,045	0.64	3.54	14.8	46,131
2042	6.65	5.33	29.1	92.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,608	44,608	0.64	3.31	12.0	45,624
2043	6.46	5.18	28.8	91.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,227	44,227	0.64	3.31	9.61	45,240
2044	6.15	5.05	28.5	90.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,899	43,899	0.64	3.25	7.71	44,892
2045	6.02	4.98	28.2	90.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,615	43,615	0.64	3.25	6.16	44,606
2046	5.96	4.92	28.2	89.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,370	43,370	0.64	3.25	4.90	44,360
2047	67.6	67.4	2.09	14.1	0.01	0.04	4.84	4.84	0.04	1.13	1.14	—	4,368	4,368	0.06	0.03	0.61	4,377
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.83	0.76	10.4	35.7	0.07	0.15	19.8	19.9	0.14	10.1	10.2	—	7,866	7,866	0.27	0.71	0.08	8,081
2039	7.09	5.76	33.0	79.8	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,051	44,051	0.76	3.54	0.58	45,125

2040	6.77	5.44	32.5	78.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,508	43,508	0.76	3.54	0.47	44,582
2041	6.58	5.25	32.2	77.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,026	43,026	0.70	3.54	0.38	44,099
2042	6.52	5.19	30.9	76.0	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	42,599	42,599	0.70	3.31	0.31	43,604
2043	6.39	5.13	30.6	75.7	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	42,226	42,226	0.70	3.31	0.25	43,232
2044	5.97	4.94	30.3	74.7	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,905	41,905	0.70	3.31	0.20	42,911
2045	5.15	4.85	30.2	74.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,628	41,628	0.70	3.31	0.16	42,633
2046	5.09	4.74	30.0	74.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,388	41,388	0.70	3.31	0.13	42,393
2047	67.5	67.4	2.09	11.0	0.01	0.04	4.84	4.84	0.04	1.13	1.14	—	3,966	3,966	0.06	0.04	0.02	3,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.61	0.59	3.49	28.6	0.05	0.10	10.7	10.8	0.10	4.80	4.90	—	5,438	5,438	0.22	0.05	0.06	5,458
2039	5.58	4.52	25.4	66.4	0.20	0.24	26.2	26.4	0.24	6.53	6.77	—	35,235	35,235	0.57	2.76	7.55	36,080
2040	5.86	4.78	26.6	69.1	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	37,798	37,798	0.60	3.04	6.77	38,727
2041	5.63	4.54	26.1	68.0	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	37,280	37,280	0.60	3.03	5.48	38,204
2042	5.52	4.44	25.8	66.9	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,912	36,912	0.60	2.84	4.42	37,778
2043	5.46	4.33	25.6	66.7	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,591	36,591	0.60	2.84	3.56	37,456
2044	5.18	4.26	25.4	66.0	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	36,414	36,414	0.60	2.85	2.86	37,280
2045	5.11	4.14	25.0	65.8	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,075	36,075	0.55	2.84	2.27	36,937
2046	4.52	3.75	21.8	57.9	0.19	0.23	24.2	24.4	0.22	5.93	6.15	—	31,144	31,144	0.48	2.45	1.57	31,889
2047	32.8	32.8	1.34	9.19	0.01	0.02	2.33	2.34	0.02	0.55	0.56	—	2,497	2,497	0.04	0.02	0.13	2,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.11	0.11	0.64	5.22	0.01	0.02	1.95	1.97	0.02	0.88	0.89	—	900	900	0.04	0.01	0.01	904
2039	1.02	0.82	4.63	12.1	0.04	0.04	4.78	4.82	0.04	1.19	1.24	—	5,834	5,834	0.09	0.46	1.25	5,973
2040	1.07	0.87	4.86	12.6	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,258	6,258	0.10	0.50	1.12	6,412
2041	1.03	0.83	4.77	12.4	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,172	6,172	0.10	0.50	0.91	6,325
2042	1.01	0.81	4.71	12.2	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,111	6,111	0.10	0.47	0.73	6,255
2043	1.00	0.79	4.67	12.2	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,058	6,058	0.10	0.47	0.59	6,201
2044	0.94	0.78	4.64	12.1	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,029	6,029	0.10	0.47	0.47	6,172
2045	0.93	0.76	4.57	12.0	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	5,973	5,973	0.09	0.47	0.38	6,115

2046	0.83	0.68	3.99	10.6	0.03	0.04	4.41	4.45	0.04	1.08	1.12	—	5,156	5,156	0.08	0.41	0.26	5,280
2047	5.98	5.98	0.24	1.68	< 0.005	< 0.005	0.42	0.43	< 0.005	0.10	0.10	—	413	413	0.01	< 0.005	0.02	415

3. Construction Emissions Details

3.1. Demolition (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.60	12.4	13.2	0.03	0.40	—	0.40	0.37	—	0.37	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	7.35	7.35	—	1.11	1.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.5	37.5	< 0.005	< 0.005	—	37.7
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.22	6.22	< 0.005	< 0.005	—	6.24
Demoliti on	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	< 0.005	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	0.09	5.50	1.38	0.04	0.07	1.53	1.61	0.07	0.42	0.49	—	4,336	4,336	0.05	0.68	0.08	4,539
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	47.5	47.5	< 0.005	0.01	0.01	49.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	< 0.005	8.23

3.2. Demolition (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.58	4.90	18.2	0.03	0.07	—	0.07	0.07	—	0.07	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	7.35	7.35	—	1.11	1.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.5	37.5	< 0.005	< 0.005	—	37.7
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.22	6.22	< 0.005	< 0.005	—	6.24
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	< 0.005	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	0.09	5.50	1.38	0.04	0.07	1.53	1.61	0.07	0.42	0.49	—	4,336	4,336	0.05	0.68	0.08	4,539
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	47.5	47.5	< 0.005	0.01	0.01	49.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	< 0.005	8.23

3.3. Site Preparation (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	16.5	20.3	0.05	0.61	—	0.61	0.56	—	0.56	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	16.5	20.3	0.05	0.61	—	0.61	0.56	—	0.56	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.25	5.23	0.01	0.16	—	0.16	0.15	—	0.15	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	0.10	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.9	31.9	< 0.005	< 0.005	0.01	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.28	5.28	< 0.005	< 0.005	< 0.005	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.67	7.29	0.01	0.03	—	0.03	0.03	—	0.03	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	226	226	0.01	< 0.005	—	227

Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	0.10	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.9	31.9	< 0.005	< 0.005	0.01	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.28	5.28	< 0.005	< 0.005	< 0.005	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.57	2.16	14.3	23.2	0.06	0.52	—	0.52	0.48	—	0.48	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.57	2.16	14.3	23.2	0.06	0.52	—	0.52	0.48	—	0.48	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.51	1.27	8.42	13.6	0.04	0.30	—	0.30	0.28	—	0.28	—	3,872	3,872	0.16	0.03	—	3,886
Dust From Material Movement	—	—	—	—	—	—	5.40	5.40	—	2.15	2.15	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	1.54	2.48	0.01	0.06	—	0.06	0.05	—	0.05	—	641	641	0.03	0.01	—	643
Dust From Material Movement	—	—	—	—	—	—	0.99	0.99	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	< 0.005	0.12	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	138	138	< 0.005	< 0.005	< 0.005	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	83.2	83.2	< 0.005	< 0.005	0.03	83.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	< 0.005	13.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.59	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.59	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.44	0.43	2.69	20.8	0.04	0.08	—	0.08	0.08	—	0.08	—	3,872	3,872	0.16	0.03	—	3,886
Dust From Material Movement	—	—	—	—	—	—	5.40	5.40	—	2.15	2.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.08	0.49	3.79	0.01	0.01	—	0.01	0.01	—	0.01	—	641	641	0.03	0.01	—	643
Dust From Material Movement	—	—	—	—	—	—	0.99	0.99	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	< 0.005	0.12	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	138	138	< 0.005	< 0.005	< 0.005	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	83.2	83.2	< 0.005	< 0.005	0.03	83.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	< 0.005	13.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.52	2.12	13.8	22.7	0.06	0.50	—	0.50	0.46	—	0.46	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.16	1.07	1.76	< 0.005	0.04	—	0.04	0.04	—	0.04	—	511	511	0.02	< 0.005	—	513

Dust From Material Movement	—	—	—	—	—	—	0.71	0.71	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.20	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	84.6	84.6	< 0.005	< 0.005	—	84.9
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.38	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	137	137	< 0.005	< 0.005	< 0.005	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	< 0.005	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.81

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.58	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.36	2.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	511	511	0.02	< 0.005	—	513
Dust From Material Movement	—	—	—	—	—	—	0.71	0.71	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	84.6	84.6	< 0.005	< 0.005	—	84.9
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.38	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	137	137	< 0.005	< 0.005	< 0.005	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	< 0.005	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.28	9.67	0.02	0.11	—	0.11	0.10	—	0.10	—	1,869	1,869	0.08	0.02	—	1,875
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.96	1.77	< 0.005	0.02	—	0.02	0.02	—	0.02	—	309	309	0.01	< 0.005	—	310
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.71	4.83	2.65	72.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,837	21,837	0.25	0.19	14.2	21,914
Vendor	1.12	0.70	24.7	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,861	21,861	0.35	3.33	8.12	22,870
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.58	4.70	3.60	55.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,762	19,762	0.32	0.19	0.37	19,828
Vendor	1.05	0.65	26.5	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,891	21,891	0.35	3.33	0.21	22,893
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.30	3.61	2.71	44.5	0.00	0.00	18.8	18.8	0.00	4.40	4.40	—	15,790	15,790	0.20	0.15	4.81	15,844
Vendor	0.85	0.52	20.0	7.49	0.18	0.18	6.66	6.84	0.18	1.84	2.02	—	17,054	17,054	0.27	2.60	2.74	17,837
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.49	8.13	0.00	0.00	3.43	3.43	0.00	0.80	0.80	—	2,614	2,614	0.03	0.02	0.80	2,623
Vendor	0.16	0.10	3.65	1.37	0.03	0.03	1.22	1.25	0.03	0.34	0.37	—	2,823	2,823	0.05	0.43	0.45	2,953
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.32	2.29	11.6	0.02	0.06	—	0.06	0.06	—	0.06	—	1,869	1,869	0.08	0.02	—	1,875
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.42	2.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	309	309	0.01	< 0.005	—	310
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.71	4.83	2.65	72.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,837	21,837	0.25	0.19	14.2	21,914
Vendor	1.12	0.70	24.7	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,861	21,861	0.35	3.33	8.12	22,870
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.58	4.70	3.60	55.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,762	19,762	0.32	0.19	0.37	19,828
Vendor	1.05	0.65	26.5	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,891	21,891	0.35	3.33	0.21	22,893
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.30	3.61	2.71	44.5	0.00	0.00	18.8	18.8	0.00	4.40	4.40	—	15,790	15,790	0.20	0.15	4.81	15,844
Vendor	0.85	0.52	20.0	7.49	0.18	0.18	6.66	6.84	0.18	1.84	2.02	—	17,054	17,054	0.27	2.60	2.74	17,837
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.49	8.13	0.00	0.00	3.43	3.43	0.00	0.80	0.80	—	2,614	2,614	0.03	0.02	0.80	2,623
Vendor	0.16	0.10	3.65	1.37	0.03	0.03	1.22	1.25	0.03	0.34	0.37	—	2,823	2,823	0.05	0.43	0.45	2,953
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.39	4.57	2.59	70.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,703	21,703	0.19	0.19	11.9	21,777
Vendor	1.12	0.72	24.4	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,438	21,438	0.35	3.33	6.35	22,445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.38	3.60	53.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,642	19,642	0.32	0.19	0.31	19,707
Vendor	1.05	0.65	26.0	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,469	21,469	0.35	3.33	0.16	22,470
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.52	3.82	2.33	48.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,302	17,302	0.22	0.16	4.42	17,360
Vendor	0.94	0.60	21.8	8.26	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	18,437	18,437	0.30	2.86	2.35	19,300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.70	0.43	8.77	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,864	2,864	0.04	0.03	0.73	2,874
Vendor	0.17	0.11	3.98	1.51	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	3,052	3,052	0.05	0.47	0.39	3,195
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.39	4.57	2.59	70.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,703	21,703	0.19	0.19	11.9	21,777
Vendor	1.12	0.72	24.4	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,438	21,438	0.35	3.33	6.35	22,445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.38	3.60	53.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,642	19,642	0.32	0.19	0.31	19,707
Vendor	1.05	0.65	26.0	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,469	21,469	0.35	3.33	0.16	22,470
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.52	3.82	2.33	48.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,302	17,302	0.22	0.16	4.42	17,360
Vendor	0.94	0.60	21.8	8.26	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	18,437	18,437	0.30	2.86	2.35	19,300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.70	0.43	8.77	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,864	2,864	0.04	0.03	0.73	2,874
Vendor	0.17	0.11	3.98	1.51	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	3,052	3,052	0.05	0.47	0.39	3,195

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.44	2.59	69.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,589	21,589	0.19	0.19	9.89	21,660
Vendor	1.12	0.72	23.9	9.49	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,060	21,060	0.35	3.33	4.90	22,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	3.53	52.7	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,538	19,538	0.25	0.19	0.26	19,602
Vendor	1.05	0.65	25.7	9.81	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,091	21,091	0.35	3.33	0.13	22,092
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.29	3.59	2.33	46.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,163	17,163	0.22	0.16	3.66	17,221
Vendor	0.94	0.60	21.3	8.26	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	18,062	18,062	0.30	2.85	1.82	18,922
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.42	8.57	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,842	2,842	0.04	0.03	0.61	2,851
Vendor	0.17	0.11	3.89	1.51	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,990	2,990	0.05	0.47	0.30	3,133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.44	2.59	69.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,589	21,589	0.19	0.19	9.89	21,660
Vendor	1.12	0.72	23.9	9.49	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,060	21,060	0.35	3.33	4.90	22,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	3.53	52.7	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,538	19,538	0.25	0.19	0.26	19,602
Vendor	1.05	0.65	25.7	9.81	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,091	21,091	0.35	3.33	0.13	22,092
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.29	3.59	2.33	46.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,163	17,163	0.22	0.16	3.66	17,221
Vendor	0.94	0.60	21.3	8.26	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	18,062	18,062	0.30	2.85	1.82	18,922
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.42	8.57	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,842	2,842	0.04	0.03	0.61	2,851
Vendor	0.17	0.11	3.89	1.51	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,990	2,990	0.05	0.47	0.30	3,133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	2.59	68.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,488	21,488	0.19	0.19	8.18	21,558
Vendor	1.12	0.72	23.6	9.26	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,723	20,723	0.35	3.10	3.77	21,661
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.01	4.13	2.78	51.5	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,448	19,448	0.25	0.19	0.21	19,511
Vendor	1.05	0.65	25.2	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,754	20,754	0.35	3.10	0.10	21,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.18	3.48	2.27	46.0	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,083	17,083	0.22	0.16	3.03	17,140
Vendor	0.94	0.60	21.0	8.07	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,774	17,774	0.30	2.66	1.40	18,576
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.64	0.41	8.40	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,828	2,828	0.04	0.03	0.50	2,838
Vendor	0.17	0.11	3.84	1.47	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,943	2,943	0.05	0.44	0.23	3,075
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	2.59	68.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,488	21,488	0.19	0.19	8.18	21,558
Vendor	1.12	0.72	23.6	9.26	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,723	20,723	0.35	3.10	3.77	21,661
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.01	4.13	2.78	51.5	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,448	19,448	0.25	0.19	0.21	19,511
Vendor	1.05	0.65	25.2	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,754	20,754	0.35	3.10	0.10	21,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.18	3.48	2.27	46.0	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,083	17,083	0.22	0.16	3.03	17,140
Vendor	0.94	0.60	21.0	8.07	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,774	17,774	0.30	2.66	1.40	18,576
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.64	0.41	8.40	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,828	2,828	0.04	0.03	0.50	2,838
Vendor	0.17	0.11	3.84	1.47	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,943	2,943	0.05	0.44	0.23	3,075
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.53	67.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,401	21,401	0.19	0.19	6.72	21,470
Vendor	1.12	0.70	23.3	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,429	20,429	0.35	3.10	2.88	21,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.78	51.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,370	19,370	0.25	0.19	0.17	19,433
Vendor	1.05	0.65	24.9	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,460	20,460	0.35	3.10	0.07	21,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.13	3.37	2.27	45.8	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,014	17,014	0.22	0.16	2.49	17,071
Vendor	0.94	0.60	20.8	8.09	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,522	17,522	0.30	2.66	1.07	18,323
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.62	0.41	8.36	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,817	2,817	0.04	0.03	0.41	2,826
Vendor	0.17	0.11	3.80	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,901	2,901	0.05	0.44	0.18	3,034

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.53	67.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,401	21,401	0.19	0.19	6.72	21,470
Vendor	1.12	0.70	23.3	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,429	20,429	0.35	3.10	2.88	21,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.78	51.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,370	19,370	0.25	0.19	0.17	19,433
Vendor	1.05	0.65	24.9	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,460	20,460	0.35	3.10	0.07	21,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.13	3.37	2.27	45.8	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,014	17,014	0.22	0.16	2.49	17,071
Vendor	0.94	0.60	20.8	8.09	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,522	17,522	0.30	2.66	1.07	18,323
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.62	0.41	8.36	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,817	2,817	0.04	0.03	0.41	2,826
Vendor	0.17	0.11	3.80	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,901	2,901	0.05	0.44	0.18	3,034
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.82	3.94	2.53	66.3	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,330	21,330	0.19	0.13	5.53	21,378
Vendor	0.87	0.70	23.0	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,173	20,173	0.35	3.10	2.18	21,109
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.72	50.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,305	19,305	0.25	0.19	0.14	19,368
Vendor	0.82	0.65	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,204	20,204	0.35	3.10	0.06	21,138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.03	3.33	2.28	45.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,004	17,004	0.22	0.16	2.05	17,060
Vendor	0.75	0.58	20.6	8.11	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	17,350	17,350	0.30	2.67	0.81	18,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.61	0.42	8.24	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,815	2,815	0.04	0.03	0.34	2,825
Vendor	0.14	0.11	3.76	1.48	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	2,872	2,872	0.05	0.44	0.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.82	3.94	2.53	66.3	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,330	21,330	0.19	0.13	5.53	21,378
Vendor	0.87	0.70	23.0	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,173	20,173	0.35	3.10	2.18	21,109
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.72	50.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,305	19,305	0.25	0.19	0.14	19,368
Vendor	0.82	0.65	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,204	20,204	0.35	3.10	0.06	21,138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.03	3.33	2.28	45.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,004	17,004	0.22	0.16	2.05	17,060
Vendor	0.75	0.58	20.6	8.11	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	17,350	17,350	0.30	2.67	0.81	18,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.61	0.42	8.24	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,815	2,815	0.04	0.03	0.34	2,825
Vendor	0.14	0.11	3.76	1.48	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	2,872	2,872	0.05	0.44	0.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.79	0.66	5.50	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.53	66.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,268	21,268	0.19	0.13	4.53	21,315
Vendor	0.87	0.70	22.7	9.31	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,951	19,951	0.35	3.10	1.62	20,886
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.87	3.81	2.72	50.0	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,248	19,248	0.25	0.19	0.12	19,312
Vendor	0.82	0.62	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,982	19,982	0.35	3.10	0.04	20,916
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.97	3.21	2.22	44.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	16,908	16,908	0.16	0.16	1.67	16,963
Vendor	0.75	0.58	20.3	8.11	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,112	17,112	0.30	2.66	0.60	17,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.59	0.40	8.19	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,799	2,799	0.03	0.03	0.28	2,808
Vendor	0.14	0.11	3.71	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,833	2,833	0.05	0.44	0.10	2,966
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.53	66.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,268	21,268	0.19	0.13	4.53	21,315
Vendor	0.87	0.70	22.7	9.31	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,951	19,951	0.35	3.10	1.62	20,886
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.87	3.81	2.72	50.0	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,248	19,248	0.25	0.19	0.12	19,312
Vendor	0.82	0.62	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,982	19,982	0.35	3.10	0.04	20,916
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.97	3.21	2.22	44.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	16,908	16,908	0.16	0.16	1.67	16,963
Vendor	0.75	0.58	20.3	8.11	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,112	17,112	0.30	2.66	0.60	17,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.59	0.40	8.19	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,799	2,799	0.03	0.03	0.28	2,808
Vendor	0.14	0.11	3.71	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,833	2,833	0.05	0.44	0.10	2,966

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.72	8.96	0.02	0.09	—	0.09	0.08	—	0.08	—	1,773	1,773	0.07	0.01	—	1,779
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.12	0.10	0.86	1.64	< 0.005	0.02	—	0.02	0.01	—	0.01	—	294	294	0.01	< 0.005	—	295
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.63	3.81	2.53	65.4	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,215	21,215	0.19	0.13	3.71	21,261
Vendor	0.87	0.70	22.7	9.34	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,759	19,759	0.35	3.10	1.18	20,694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.81	3.68	2.72	49.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,201	19,201	0.25	0.19	0.10	19,264
Vendor	0.82	0.65	24.3	9.61	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,790	19,790	0.35	3.10	0.03	20,724
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.28	2.68	1.92	38.6	0.00	0.00	17.8	17.8	0.00	4.18	4.18	—	14,556	14,556	0.14	0.14	1.19	14,603
Vendor	0.62	0.50	17.5	6.98	0.17	0.17	6.32	6.49	0.17	1.75	1.91	—	14,626	14,626	0.26	2.30	0.38	15,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.49	0.35	7.05	0.00	0.00	3.25	3.25	0.00	0.76	0.76	—	2,410	2,410	0.02	0.02	0.20	2,418
Vendor	0.11	0.09	3.20	1.27	0.03	0.03	1.15	1.18	0.03	0.32	0.35	—	2,421	2,421	0.04	0.38	0.06	2,536
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.31	2.17	11.0	0.02	0.06	—	0.06	0.05	—	0.05	—	1,773	1,773	0.07	0.01	—	1,779
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.40	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	294	294	0.01	< 0.005	—	295
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.63	3.81	2.53	65.4	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,215	21,215	0.19	0.13	3.71	21,261
Vendor	0.87	0.70	22.7	9.34	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,759	19,759	0.35	3.10	1.18	20,694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.81	3.68	2.72	49.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,201	19,201	0.25	0.19	0.10	19,264
Vendor	0.82	0.65	24.3	9.61	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,790	19,790	0.35	3.10	0.03	20,724
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.28	2.68	1.92	38.6	0.00	0.00	17.8	17.8	0.00	4.18	4.18	—	14,556	14,556	0.14	0.14	1.19	14,603
Vendor	0.62	0.50	17.5	6.98	0.17	0.17	6.32	6.49	0.17	1.75	1.91	—	14,626	14,626	0.26	2.30	0.38	15,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.49	0.35	7.05	0.00	0.00	3.25	3.25	0.00	0.76	0.76	—	2,410	2,410	0.02	0.02	0.20	2,418
Vendor	0.11	0.09	3.20	1.27	0.03	0.03	1.15	1.18	0.03	0.32	0.35	—	2,421	2,421	0.04	0.38	0.06	2,536
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	5.02	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.59	1.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.01	< 0.005	—	178
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Paving (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.03	0.03	0.24	1.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	177	177	0.01	< 0.005	—	178
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Paving (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.77	3.44	< 0.005	0.03	—	0.03	0.02	—	0.02	—	536	536	0.02	< 0.005	—	538
Paving	0.72	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.03	0.32	0.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	< 0.005	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.01	6.01	< 0.005	< 0.005	< 0.005	6.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Paving (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.74	3.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	0.72	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	< 0.005	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.01	6.01	< 0.005	< 0.005	< 0.005	6.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Architectural Coating (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	195	195	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	195	195	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	92.5	92.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	16.9	16.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.75	0.51	13.0	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	4,234	4,234	0.04	0.03	0.61	4,244
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.54	9.95	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	3,832	3,832	0.05	0.04	0.02	3,845
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.25	4.87	0.00	0.00	2.28	2.28	0.00	0.54	0.54	—	1,862	1,862	0.02	0.02	0.12	1,868
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.89	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	308	308	< 0.005	< 0.005	0.02	309
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Architectural Coating (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	66.6	66.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	66.6	66.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5

Architect Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	5.76	5.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.75	0.51	13.0	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	4,234	4,234	0.04	0.03	0.61	4,244
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.54	9.95	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	3,832	3,832	0.05	0.04	0.02	3,845
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.25	4.87	0.00	0.00	2.28	2.28	0.00	0.54	0.54	—	1,862	1,862	0.02	0.02	0.12	1,868
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.04	0.89	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	308	308	< 0.005	< 0.005	0.02	309
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2038	1/5/2038	6.00	4.00	—
Site Preparation	Site Preparation	1/6/2038	4/25/2038	6.00	94.0	—
Grading	Grading	4/26/2038	2/2/2039	6.00	243	—
Building Construction	Building Construction	2/3/2039	11/11/2046	6.00	2,433	—
Paving	Paving	11/12/2046	5/31/2047	6.00	173	—
Architectural Coating	Architectural Coating	6/1/2047	12/19/2047	6.00	173	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—

Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	82.8	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,880	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,124	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	576	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	82.8	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,880	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,124	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	576	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	10,284,750	3,428,250	428,369

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	28,754	—
Site Preparation	—	—	141	0.00	—
Grading	—	—	729	0.00	—
Paving	0.00	0.00	0.00	0.00	164

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	41.9	100%
Other Asphalt Surfaces	92.2	100%
Other Non-Asphalt Surfaces	29.8	0%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005
2047	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1

Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100

Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—

Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific construction schedule.
Construction: Architectural Coatings	—

Pacific Gateway (West Development Area Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (West Development Area Construction)
Construction Start Date	1/1/2047
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	6,169	1000sqft	174	6,168,900	1,386,500	—	—	—
Parking Lot	1,331	1000sqft	30.5	0.00	0.00	—	—	—

Other Non-Asphalt Surfaces	899	1000sqft	20.6	0.00	0.00	—	—	—
City Park	58.5	Acre	58.5	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	3,750	1000sqft	86.1	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	188	185	61.6	182	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
Mit.	71.2	69.1	52.2	188	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
% Reduced	62%	63%	15%	-3%	—	13%	—	< 0.5%	11%	—	< 0.5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	186	185	64.9	149	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
Mit.	69.6	69.0	55.6	155	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
% Reduced	63%	63%	14%	-4%	—	13%	—	< 0.5%	11%	—	< 0.5%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	91.7	90.9	49.8	120	0.37	0.53	51.0	51.5	0.51	12.5	13.0	—	63,623	63,623	0.99	4.47	1.41	64,982
Mit.	36.0	35.5	43.3	125	0.37	0.46	51.0	51.4	0.46	12.5	12.9	—	63,623	63,623	0.99	4.47	1.41	64,982
% Reduced	61%	61%	13%	-4%	—	12%	—	< 0.5%	10%	—	< 0.5%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.7	16.6	9.10	21.8	0.07	0.10	9.30	9.40	0.09	2.27	2.37	—	10,533	10,533	0.16	0.74	0.23	10,758
Mit.	6.57	6.47	7.91	22.8	0.07	0.08	9.30	9.39	0.08	2.27	2.36	—	10,533	10,533	0.16	0.74	0.23	10,758
% Reduced	61%	61%	13%	-4%	—	12%	—	< 0.5%	10%	—	< 0.5%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	2.26	1.90	11.8	21.0	0.06	0.35	19.8	20.2	0.33	10.1	10.5	—	6,743	6,743	0.27	0.05	0.02	6,766
2048	5.80	4.75	28.6	78.8	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	38,913	38,913	0.58	2.93	2.82	39,803
2049	5.74	4.70	28.6	78.8	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	38,778	38,778	0.58	2.72	2.28	39,607
2050	188	185	61.6	182	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	175	175	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	2.25	1.90	11.8	20.9	0.06	0.35	19.8	20.2	0.33	10.1	10.5	—	6,729	6,729	0.27	0.05	< 0.005	6,752
2048	4.99	4.65	30.3	65.0	0.23	0.32	29.5	29.8	0.30	7.23	7.54	—	37,136	37,136	0.64	2.98	0.07	38,041
2049	4.93	4.59	30.3	65.0	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	37,004	37,004	0.64	2.78	0.06	37,849
2050	186	185	64.9	149	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	1.77	1.77	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	175	175	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	1.92	1.61	9.50	17.1	0.05	0.29	10.7	11.0	0.27	4.83	5.10	—	5,442	5,442	0.22	0.04	0.01	5,461
2048	4.09	3.78	24.2	54.0	0.18	0.27	23.9	24.1	0.26	5.95	6.21	—	30,173	30,173	0.48	2.37	0.97	30,890
2049	4.22	3.91	25.2	56.9	0.19	0.27	25.2	25.4	0.26	6.18	6.43	—	32,069	32,069	0.50	2.38	0.84	32,793
2050	91.7	90.9	49.8	120	0.37	0.53	51.0	51.5	0.51	12.5	13.0	—	63,623	63,623	0.99	4.47	1.41	64,982
2051	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	22.7	22.7	—	5.67	5.67	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.21	0.21	—	—	—	—	19.5	19.5	—	4.87	4.87	—	0.00	0.00	0.00	0.00	—	0.00
2056	83.5	83.5	—	—	—	—	3.89	3.89	—	0.97	0.97	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.35	0.29	1.73	3.13	0.01	0.05	1.96	2.01	0.05	0.88	0.93	—	901	901	0.04	0.01	< 0.005	904
2048	0.75	0.69	4.41	9.85	0.03	0.05	4.36	4.41	0.05	1.09	1.13	—	4,995	4,995	0.08	0.39	0.16	5,114
2049	0.77	0.71	4.60	10.4	0.04	0.05	4.59	4.64	0.05	1.13	1.17	—	5,309	5,309	0.08	0.39	0.14	5,429

2050	16.7	16.6	9.10	21.8	0.07	0.10	9.30	9.40	0.09	2.27	2.37	—	10,533	10,533	0.16	0.74	0.23	10,758
2051	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	4.14	4.14	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.04	0.04	—	—	—	—	3.55	3.55	—	0.89	0.89	—	0.00	0.00	0.00	0.00	—	0.00
2056	15.2	15.2	—	—	—	—	0.71	0.71	—	0.18	0.18	—	0.00	0.00	0.00	0.00	—	0.00

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.78	0.75	4.58	35.8	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,743	6,743	0.27	0.05	0.02	6,766
2048	5.35	4.41	25.3	81.8	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	38,913	38,913	0.58	2.93	2.82	39,803
2049	5.29	4.36	25.3	81.8	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	38,778	38,778	0.58	2.72	2.28	39,607
2050	71.2	69.1	52.2	188	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	59.2	59.2	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.77	0.75	4.59	35.7	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,729	6,729	0.27	0.05	< 0.005	6,752
2048	4.55	4.31	27.0	68.0	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	37,136	37,136	0.64	2.98	0.07	38,041

2049	4.49	4.25	27.0	68.0	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	37,004	37,004	0.64	2.78	0.06	37,849
2050	69.6	69.0	55.6	155	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	1.77	1.77	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	59.2	59.2	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.60	0.58	3.43	28.8	0.05	0.10	10.7	10.8	0.10	4.83	4.93	—	5,442	5,442	0.22	0.04	0.01	5,461
2048	3.64	3.43	21.1	57.3	0.18	0.23	23.9	24.1	0.23	5.95	6.18	—	30,173	30,173	0.48	2.37	0.97	30,890
2049	3.84	3.62	22.4	59.4	0.19	0.24	25.2	25.4	0.24	6.18	6.41	—	32,069	32,069	0.50	2.38	0.84	32,793
2050	36.0	35.5	43.3	125	0.37	0.46	51.0	51.4	0.46	12.5	12.9	—	63,623	63,623	0.99	4.47	1.41	64,982
2051	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	22.7	22.7	—	5.67	5.67	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.21	0.21	—	—	—	—	19.5	19.5	—	4.87	4.87	—	0.00	0.00	0.00	0.00	—	0.00
2056	28.7	28.7	—	—	—	—	3.89	3.89	—	0.97	0.97	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.11	0.11	0.63	5.26	0.01	0.02	1.96	1.98	0.02	0.88	0.90	—	901	901	0.04	0.01	< 0.005	904
2048	0.66	0.63	3.85	10.5	0.03	0.04	4.36	4.40	0.04	1.09	1.13	—	4,995	4,995	0.08	0.39	0.16	5,114
2049	0.70	0.66	4.08	10.8	0.04	0.04	4.59	4.64	0.04	1.13	1.17	—	5,309	5,309	0.08	0.39	0.14	5,429
2050	6.57	6.47	7.91	22.8	0.07	0.08	9.30	9.39	0.08	2.27	2.36	—	10,533	10,533	0.16	0.74	0.23	10,758
2051	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	4.14	4.14	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00

2055	0.04	0.04	—	—	—	—	3.55	3.55	—	0.89	0.89	—	0.00	0.00	0.00	0.00	—	0.00
2056	5.24	5.24	—	—	—	—	0.71	0.71	—	0.18	0.18	—	0.00	0.00	0.00	0.00	—	0.00

3. Construction Emissions Details

3.1. Site Preparation (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.16	1.82	11.8	17.4	0.05	0.35	—	0.35	0.33	—	0.33	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.16	1.82	11.8	17.4	0.05	0.35	—	0.35	0.33	—	0.33	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	3.03	4.49	0.01	0.09	—	0.09	0.08	—	0.08	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.55	0.82	< 0.005	0.02	—	0.02	0.02	—	0.02	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.40	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.02	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	< 0.005	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	< 0.005	30.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.09	5.09	< 0.005	< 0.005	< 0.005	5.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.67	7.29	0.01	0.03	—	0.03	0.03	—	0.03	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.40	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.02	129

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	< 0.005	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	< 0.005	30.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.09	5.09	< 0.005	< 0.005	< 0.005	5.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	10.7	20.6	0.06	0.34	—	0.34	0.31	—	0.31	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	10.7	20.6	0.06	0.34	—	0.34	0.31	—	0.31	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.12	6.46	12.4	0.04	0.20	—	0.20	0.19	—	0.19	—	3,965	3,965	0.16	0.03	—	3,979
Dust From Material Movement	—	—	—	—	—	—	5.53	5.53	—	2.20	2.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.21	1.18	2.26	0.01	0.04	—	0.04	0.03	—	0.03	—	657	657	0.03	0.01	—	659

Dust From Material Movement	—	—	—	—	—	—	1.01	1.01	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	147	147	< 0.005	< 0.005	0.02	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.35	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	82.0	82.0	< 0.005	< 0.005	0.01	82.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	< 0.005	13.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.43	2.75	21.3	0.04	0.08	—	0.08	0.08	—	0.08	—	3,965	3,965	0.16	0.03	—	3,979
Dust From Material Movement	—	—	—	—	—	—	5.53	5.53	—	2.20	2.20	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.50	3.88	0.01	0.01	—	0.01	0.01	—	0.01	—	657	657	0.03	0.01	—	659
Dust From Material Movement	—	—	—	—	—	—	1.01	1.01	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	147	147	< 0.005	< 0.005	0.02	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.35	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	82.0	82.0	< 0.005	< 0.005	0.01	82.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	< 0.005	13.6

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.20	1.84	10.5	20.1	0.06	0.32	—	0.32	0.30	—	0.30	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.71	1.37	< 0.005	0.02	—	0.02	0.02	—	0.02	—	449	449	0.02	< 0.005	—	451
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.13	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.4	74.4	< 0.005	< 0.005	—	74.6
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.27	9.27	< 0.005	< 0.005	< 0.005	9.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.31	2.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	449	449	0.02	< 0.005	—	451
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.4	74.4	< 0.005	< 0.005	—	74.6

Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.27	9.27	< 0.005	< 0.005	< 0.005	9.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.26	12.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.26	12.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.60	4.96	9.46	0.02	0.09	—	0.09	0.08	—	0.08	—	1,897	1,897	0.08	0.02	—	1,903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.90	1.73	< 0.005	0.02	—	0.02	0.01	—	0.01	—	314	314	0.01	< 0.005	—	315
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.11	3.37	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	19,017	19,017	0.17	0.11	2.27	19,058
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,499	17,499	0.31	2.79	0.55	18,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.37	3.31	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,212	17,212	0.23	0.17	0.06	17,269
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,527	17,527	0.31	2.79	0.01	18,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.58	1.84	36.5	0.00	0.00	17.2	17.2	0.00	4.02	4.02	—	13,959	13,959	0.14	0.14	0.78	14,004
Vendor	0.60	0.48	16.6	6.57	0.16	0.16	6.09	6.25	0.16	1.68	1.84	—	13,858	13,858	0.25	2.21	0.19	14,523
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.34	6.67	0.00	0.00	3.13	3.13	0.00	0.73	0.73	—	2,311	2,311	0.02	0.02	0.13	2,319
Vendor	0.11	0.09	3.04	1.20	0.03	0.03	1.11	1.14	0.03	0.31	0.34	—	2,294	2,294	0.04	0.37	0.03	2,404
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.33	2.32	11.8	0.02	0.06	—	0.06	0.06	—	0.06	—	1,897	1,897	0.08	0.02	—	1,903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.42	2.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	314	314	0.01	< 0.005	—	315
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.11	3.37	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	19,017	19,017	0.17	0.11	2.27	19,058
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,499	17,499	0.31	2.79	0.55	18,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.37	3.31	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,212	17,212	0.23	0.17	0.06	17,269
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,527	17,527	0.31	2.79	0.01	18,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.58	1.84	36.5	0.00	0.00	17.2	17.2	0.00	4.02	4.02	—	13,959	13,959	0.14	0.14	0.78	14,004
Vendor	0.60	0.48	16.6	6.57	0.16	0.16	6.09	6.25	0.16	1.68	1.84	—	13,858	13,858	0.25	2.21	0.19	14,523
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.34	6.67	0.00	0.00	3.13	3.13	0.00	0.73	0.73	—	2,311	2,311	0.02	0.02	0.13	2,319
Vendor	0.11	0.09	3.04	1.20	0.03	0.03	1.11	1.14	0.03	0.31	0.34	—	2,294	2,294	0.04	0.37	0.03	2,404
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.76	6.22	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.90	0.76	6.22	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.65	5.34	10.2	0.02	0.09	—	0.09	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	0.97	1.87	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.05	3.31	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,992	18,992	0.17	0.11	1.89	19,032
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,390	17,390	0.31	2.59	0.39	18,170
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.26	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,189	17,189	0.23	0.17	0.05	17,246
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,418	17,418	0.31	2.59	0.01	18,198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.74	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,099	15,099	0.15	0.15	0.70	15,147
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,916	14,916	0.27	2.22	0.14	15,584
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.50	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,500	2,500	0.02	0.02	0.12	2,508
Vendor	0.12	0.09	3.26	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,469	2,469	0.04	0.37	0.02	2,580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2049) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.05	3.31	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,992	18,992	0.17	0.11	1.89	19,032
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,390	17,390	0.31	2.59	0.39	18,170
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.26	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,189	17,189	0.23	0.17	0.05	17,246
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,418	17,418	0.31	2.59	0.01	18,198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.74	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,099	15,099	0.15	0.15	0.70	15,147
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,916	14,916	0.27	2.22	0.14	15,584
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.51	0.50	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,500	2,500	0.02	0.02	0.12	2,508
Vendor	0.12	0.09	3.26	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,469	2,469	0.04	0.37	0.02	2,580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.65	5.31	10.2	0.02	0.09	—	0.09	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	0.97	1.87	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.69	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,083	15,083	0.15	0.15	0.59	15,131
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,835	14,835	0.27	2.22	0.10	15,504
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.49	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,497	2,497	0.02	0.02	0.10	2,505
Vendor	0.12	0.09	3.25	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,456	2,456	0.04	0.37	0.02	2,567
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.69	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,083	15,083	0.15	0.15	0.59	15,131
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,835	14,835	0.27	2.22	0.10	15,504
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.49	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,497	2,497	0.02	0.02	0.10	2,505
Vendor	0.12	0.09	3.25	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,456	2,456	0.04	0.37	0.02	2,567
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2051) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.14. Building Construction (2051) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.15. Building Construction (2052) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.5	17.5	—	4.37	4.37	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.21	5.21	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.19	3.19	—	0.80	0.80	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.16. Building Construction (2052) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.5	17.5	—	4.37	4.37	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	5.21	5.21	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.19	3.19	—	0.80	0.80	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.17. Building Construction (2053) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.18. Building Construction (2053) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.19. Building Construction (2054) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—

Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.20. Building Construction (2054) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.21. Building Construction (2055) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	15.0	15.0	—	3.74	3.74	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	4.47	4.47	—	1.12	1.12	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	2.73	2.73	—	0.68	0.68	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.82	0.82	—	0.20	0.20	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.22. Building Construction (2055) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	15.0	15.0	—	3.74	3.74	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	4.47	4.47	—	1.12	1.12	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	2.73	2.73	—	0.68	0.68	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.82	0.82	—	0.20	0.20	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.23. Building Construction_2055 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.66	0.56	4.56	8.80	0.02	0.08	—	0.08	0.07	—	0.07	—	1,766	1,766	0.07	0.01	—	1,772
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.12	0.10	0.83	1.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	292	292	0.01	< 0.005	—	293
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.40	2.32	1.72	34.0	0.00	0.00	16.0	16.0	0.00	3.74	3.74	—	12,969	12,969	0.13	0.13	0.51	13,010
Vendor	0.56	0.45	15.3	6.12	0.15	0.15	5.67	5.82	0.15	1.57	1.72	—	12,756	12,756	0.23	1.91	0.08	13,330
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.42	0.31	6.20	0.00	0.00	2.92	2.92	0.00	0.68	0.68	—	2,147	2,147	0.02	0.02	0.08	2,154
Vendor	0.10	0.08	2.80	1.12	0.03	0.03	1.03	1.06	0.03	0.29	0.31	—	2,112	2,112	0.04	0.32	0.01	2,207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction_2055 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.34	0.31	2.16	11.0	0.02	0.06	—	0.06	0.05	—	0.05	—	1,766	1,766	0.07	0.01	—	1,772
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.39	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	292	292	0.01	< 0.005	—	293
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.40	2.32	1.72	34.0	0.00	0.00	16.0	16.0	0.00	3.74	3.74	—	12,969	12,969	0.13	0.13	0.51	13,010
Vendor	0.56	0.45	15.3	6.12	0.15	0.15	5.67	5.82	0.15	1.57	1.72	—	12,756	12,756	0.23	1.91	0.08	13,330
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.42	0.31	6.20	0.00	0.00	2.92	2.92	0.00	0.68	0.68	—	2,147	2,147	0.02	0.02	0.08	2,154
Vendor	0.10	0.08	2.80	1.12	0.03	0.03	1.03	1.06	0.03	0.29	0.31	—	2,112	2,112	0.04	0.32	0.01	2,207

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2055) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.26. Paving (2055) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.27. Paving (2056) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.63	0.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.28. Paving (2056) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.63	0.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.29. Paving_2055 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.59	1.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	182	182	0.01	< 0.005	—	183
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.1	30.1	< 0.005	< 0.005	—	30.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Paving_2055 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	1.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	182	182	0.01	< 0.005	—	183

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.1	30.1	< 0.005	< 0.005	—	30.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Paving_2056 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.71	3.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	530	530	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.31	0.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	87.7	87.7	< 0.005	< 0.005	—	88.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	< 0.005	35.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.91	5.91	< 0.005	< 0.005	< 0.005	5.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Paving_2056 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.73	3.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	530	530	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	87.7	87.7	< 0.005	< 0.005	—	88.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	< 0.005	35.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.91	5.91	< 0.005	< 0.005	< 0.005	5.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Architectural Coating (2056) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	82.9	82.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	3.85	3.85	—	0.96	0.96	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.70	0.70	—	0.18	0.18	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.34. Architectural Coating (2056) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	28.1	28.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.12	5.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.85	3.85	—	0.96	0.96	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.70	0.70	—	0.18	0.18	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.35. Architectural Coating_2056 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	82.9	82.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.57	1.28	0.89	23.4	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	7,589	7,589	0.07	0.05	0.63	7,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.28	0.98	17.8	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	6,868	6,868	0.09	0.07	0.02	6,891
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.60	0.44	8.74	0.00	0.00	4.11	4.11	0.00	0.96	0.96	—	3,336	3,336	0.03	0.03	0.13	3,347

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.60	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	552	552	0.01	0.01	0.02	554
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Architectural Coating_2056 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	28.1	28.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	5.12	5.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.57	1.28	0.89	23.4	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	7,589	7,589	0.07	0.05	0.63	7,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.28	0.98	17.8	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	6,868	6,868	0.09	0.07	0.02	6,891
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.60	0.44	8.74	0.00	0.00	4.11	4.11	0.00	0.96	0.96	—	3,336	3,336	0.03	0.03	0.13	3,347
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.60	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	552	552	0.01	0.01	0.02	554
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2047	4/19/2047	6.00	94.0	—
Grading	Grading	4/20/2047	1/29/2048	6.00	244	—
Building Construction	Building Construction	1/30/2048	11/10/2055	6.00	2,436	—
Building Construction_2055	Building Construction	1/1/2050	11/10/2050	6.00	269	—
Paving	Paving	11/11/2055	5/30/2056	6.00	173	—
Paving_2055	Paving	11/11/2050	12/31/2050	6.00	44.0	—
Paving_2056	Paving	1/1/2050	5/30/2050	6.00	128	—
Architectural Coating	Architectural Coating	5/31/2056	12/18/2056	6.00	173	—
Architectural Coating_2056	Architectural Coating	5/31/2050	12/18/2050	6.00	173	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction_2055	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction_2055	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction_2055	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction_2055	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction_2055	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2055	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving_2055	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving_2055	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2056	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving_2056	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving_2056	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating_2056	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction_2055	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction_2055	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction_2055	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction_2055	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction_2055	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2055	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving_2055	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving_2055	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Paving_2056	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving_2056	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving_2056	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating_2056	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,011	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT

Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Building Construction_2055	—	—	—	—
Building Construction_2055	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction_2055	Vendor	1,011	9.10	HHDT,MHDT
Building Construction_2055	Hauling	0.00	20.0	HHDT
Building Construction_2055	Onsite truck	—	—	HHDT
Paving_2055	—	—	—	—
Paving_2055	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2055	Vendor	—	9.10	HHDT,MHDT
Paving_2055	Hauling	0.00	20.0	HHDT
Paving_2055	Onsite truck	—	—	HHDT
Paving_2056	—	—	—	—
Paving_2056	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2056	Vendor	—	9.10	HHDT,MHDT
Paving_2056	Hauling	0.00	20.0	HHDT
Paving_2056	Onsite truck	—	—	HHDT
Architectural Coating_2056	—	—	—	—
Architectural Coating_2056	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating_2056	Vendor	—	9.10	HHDT,MHDT
Architectural Coating_2056	Hauling	0.00	20.0	HHDT
Architectural Coating_2056	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,011	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Building Construction_2055	—	—	—	—

Building Construction_2055	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction_2055	Vendor	1,011	9.10	HHDT,MHDT
Building Construction_2055	Hauling	0.00	20.0	HHDT
Building Construction_2055	Onsite truck	—	—	HHDT
Paving_2055	—	—	—	—
Paving_2055	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2055	Vendor	—	9.10	HHDT,MHDT
Paving_2055	Hauling	0.00	20.0	HHDT
Paving_2055	Onsite truck	—	—	HHDT
Paving_2056	—	—	—	—
Paving_2056	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2056	Vendor	—	9.10	HHDT,MHDT
Paving_2056	Hauling	0.00	20.0	HHDT
Paving_2056	Onsite truck	—	—	HHDT
Architectural Coating_2056	—	—	—	—
Architectural Coating_2056	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating_2056	Vendor	—	9.10	HHDT,MHDT
Architectural Coating_2056	Hauling	0.00	20.0	HHDT
Architectural Coating_2056	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	9,253,350	3,084,450	358,586

Architectural Coating_2056	0.00	0.00	9,253,350	3,084,450	358,586

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	141	0.00	—
Grading	—	—	732	0.00	—
Paving	0.00	0.00	0.00	0.00	137
Paving_2055	0.00	0.00	0.00	0.00	137
Paving_2056	0.00	0.00	0.00	0.00	137

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	30.5	100%
Other Non-Asphalt Surfaces	20.6	0%
City Park	0.00	0%
Other Asphalt Surfaces	86.1	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2047	0.00	204	0.03	< 0.005
2048	0.00	204	0.03	< 0.005

2049	0.00	204	0.03	< 0.005
2050	0.00	204	0.03	< 0.005
2051	0.00	204	0.03	< 0.005
2052	0.00	204	0.03	< 0.005
2053	0.00	204	0.03	< 0.005
2054	0.00	204	0.03	< 0.005
2055	0.00	204	0.03	< 0.005
2056	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project-specific schedule.
Land Use	Land uses are based on Project-specific information.
Construction: Architectural Coatings	—

Pacific Gateway (Gateway Center Development Area Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Gateway Center Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	525	1000sqft	15.8	525,400	163,561	—	—	—
Parking Lot	510	1000sqft	11.7	0.00	0.00	—	—	—

Other Asphalt Surfaces	583	1000sqft	13.4	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	132	1000sqft	3.00	0.00	0.00	—	—	—
City Park	9.00	Acre	9.00	0.00	0.00	0.00	—	—
Hotel	120	Room	0.60	174,240	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	5.00	1000sqft	0.40	5,000	13,196	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.7	14.6	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	7,848	7,848	0.27	0.46	7.34	7,998
Mit.	8.34	8.30	6.60	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	7,848	7,848	0.27	0.46	7.34	7,998
% Reduced	43%	43%	70%	-36%	—	85%	—	4%	83%	—	7%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.7	14.6	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	7,607	7,607	0.27	0.46	0.19	7,750
Mit.	8.32	8.30	6.92	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	7,607	7,607	0.27	0.46	0.19	7,750
% Reduced	43%	43%	69%	-37%	—	85%	—	4%	83%	—	7%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.9	10.9	17.8	22.5	0.05	0.73	12.2	13.0	0.67	5.76	6.44	—	6,467	6,467	0.21	0.40	2.31	6,592
Mit.	6.21	6.18	5.67	27.9	0.05	0.11	12.2	12.4	0.11	5.76	5.87	—	6,467	6,467	0.21	0.40	2.31	6,592
% Reduced	43%	43%	68%	-24%	—	85%	—	5%	84%	—	9%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	1.99	3.26	4.11	0.01	0.13	2.23	2.37	0.12	1.05	1.18	—	1,071	1,071	0.03	0.07	0.38	1,091
Mit.	1.13	1.13	1.03	5.10	0.01	0.02	2.23	2.25	0.02	1.05	1.07	—	1,071	1,071	0.03	0.07	0.38	1,091
% Reduced	43%	43%	68%	-24%	—	85%	—	5%	84%	—	9%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	3.02	2.55	18.6	25.8	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	7,848	7,848	0.27	0.46	7.34	7,998
2034	1.92	1.69	11.0	23.4	0.05	0.22	3.64	3.86	0.20	0.89	1.10	—	7,728	7,728	0.17	0.46	6.25	7,877
2035	1.89	1.67	10.8	22.9	0.05	0.20	3.64	3.85	0.19	0.89	1.09	—	7,617	7,617	0.17	0.44	5.29	7,758
2036	1.84	1.62	10.5	22.4	0.05	0.19	3.64	3.84	0.18	0.89	1.08	—	7,517	7,517	0.17	0.44	4.43	7,657
2037	1.79	1.57	10.2	22.0	0.05	0.18	3.64	3.83	0.17	0.89	1.06	—	7,429	7,429	0.17	0.44	3.68	7,568
2038	1.76	1.54	10.0	21.8	0.05	0.18	3.64	3.82	0.16	0.89	1.06	—	7,340	7,340	0.17	0.41	3.04	7,471
2039	1.72	1.42	9.84	21.5	0.05	0.17	3.64	3.82	0.16	0.89	1.05	—	7,271	7,271	0.16	0.41	2.49	7,401
2040	1.68	1.39	9.73	21.2	0.05	0.17	3.64	3.81	0.16	0.89	1.05	—	7,208	7,208	0.16	0.41	2.03	7,338
2041	1.66	1.37	9.61	21.1	0.05	0.16	3.64	3.81	0.15	0.89	1.05	—	7,153	7,153	0.16	0.41	1.65	7,282
2042	1.64	1.34	9.53	20.9	0.05	0.16	3.64	3.80	0.15	0.89	1.04	—	7,104	7,104	0.16	0.39	1.33	7,225
2043	1.61	1.31	9.44	20.8	0.05	0.15	3.64	3.80	0.14	0.89	1.04	—	7,062	7,062	0.16	0.39	1.07	7,182
2044	1.56	1.29	9.34	20.6	0.05	0.15	3.64	3.79	0.14	0.89	1.03	—	7,025	7,025	0.16	0.38	0.86	7,143
2045	0.80	0.71	5.08	10.1	0.01	0.08	0.13	0.20	0.07	0.03	0.10	—	1,621	1,621	0.06	0.01	0.02	1,627
2046	14.7	14.6	0.80	2.54	< 0.005	< 0.005	0.54	0.54	< 0.005	0.13	0.13	—	604	604	0.01	< 0.005	0.08	605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,744	6,744	0.27	0.05	0.01	6,767
2033	3.02	2.55	18.6	25.7	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	7,607	7,607	0.27	0.46	0.19	7,750
2034	1.87	1.65	11.4	21.3	0.05	0.22	3.64	3.86	0.20	0.89	1.10	—	7,490	7,490	0.18	0.46	0.16	7,633
2035	1.84	1.62	11.1	20.9	0.05	0.20	3.64	3.85	0.19	0.89	1.09	—	7,382	7,382	0.18	0.44	0.14	7,517
2036	1.81	1.59	10.7	20.5	0.05	0.19	3.64	3.84	0.18	0.89	1.08	—	7,285	7,285	0.17	0.44	0.11	7,420
2037	1.76	1.54	10.5	20.1	0.05	0.18	3.64	3.83	0.17	0.89	1.06	—	7,198	7,198	0.17	0.44	0.10	7,334
2038	1.72	1.42	10.3	19.8	0.05	0.18	3.64	3.82	0.16	0.89	1.06	—	7,112	7,112	0.17	0.41	0.08	7,240
2039	1.70	1.40	10.1	19.6	0.05	0.17	3.64	3.82	0.16	0.89	1.05	—	7,044	7,044	0.17	0.41	0.06	7,172
2040	1.66	1.36	10.0	19.5	0.05	0.17	3.64	3.81	0.16	0.89	1.05	—	6,983	6,983	0.17	0.41	0.05	7,111

2041	1.63	1.33	9.92	19.3	0.05	0.16	3.64	3.81	0.15	0.89	1.05	—	6,929	6,929	0.16	0.41	0.04	7,057
2042	1.62	1.32	9.74	19.1	0.05	0.16	3.64	3.80	0.15	0.89	1.04	—	6,881	6,881	0.16	0.39	0.03	7,002
2043	1.60	1.31	9.65	19.0	0.05	0.15	3.64	3.80	0.14	0.89	1.04	—	6,840	6,840	0.16	0.39	0.03	6,960
2044	1.54	1.28	9.54	18.9	0.05	0.15	3.64	3.79	0.14	0.89	1.03	—	6,804	6,804	0.16	0.39	0.02	6,924
2045	1.44	1.26	9.48	18.8	0.05	0.14	3.64	3.79	0.14	0.89	1.03	—	6,773	6,773	0.16	0.39	0.02	6,893
2046	14.7	14.6	5.04	9.97	0.01	0.07	0.54	0.54	0.07	0.13	0.13	—	1,611	1,611	0.06	0.01	< 0.005	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	2.72	2.30	17.8	22.5	0.05	0.73	12.2	13.0	0.67	5.76	6.44	—	5,261	5,261	0.21	0.04	0.11	5,279
2033	2.25	1.92	13.8	20.9	0.05	0.48	6.28	6.75	0.44	2.31	2.75	—	6,062	6,062	0.20	0.17	1.03	6,119
2034	1.60	1.40	9.57	18.4	0.04	0.19	3.11	3.30	0.17	0.76	0.94	—	6,467	6,467	0.15	0.40	2.31	6,592
2035	1.58	1.38	9.34	18.1	0.04	0.18	3.11	3.29	0.16	0.76	0.93	—	6,374	6,374	0.15	0.38	1.96	6,492
2036	1.56	1.37	9.10	17.8	0.04	0.17	3.12	3.29	0.16	0.77	0.92	—	6,307	6,307	0.15	0.38	1.65	6,425
2037	1.51	1.32	8.90	17.4	0.04	0.16	3.11	3.27	0.15	0.76	0.91	—	6,216	6,216	0.15	0.38	1.36	6,333
2038	1.48	1.29	8.77	17.2	0.04	0.15	3.11	3.26	0.14	0.76	0.90	—	6,141	6,141	0.14	0.35	1.13	6,252
2039	1.45	1.19	8.61	17.0	0.04	0.15	3.11	3.26	0.14	0.76	0.90	—	6,083	6,083	0.14	0.35	0.92	6,193
2040	1.43	1.18	8.47	16.9	0.04	0.14	3.12	3.26	0.13	0.77	0.90	—	6,047	6,047	0.14	0.36	0.75	6,157
2041	1.40	1.15	8.35	16.7	0.04	0.14	3.11	3.25	0.13	0.76	0.89	—	5,984	5,984	0.14	0.35	0.61	6,094
2042	1.38	1.13	8.27	16.6	0.04	0.14	3.11	3.25	0.13	0.76	0.89	—	5,943	5,943	0.14	0.33	0.49	6,046
2043	1.37	1.11	8.20	16.5	0.04	0.13	3.11	3.24	0.12	0.76	0.89	—	5,907	5,907	0.14	0.33	0.40	6,010
2044	1.33	1.10	8.14	16.4	0.04	0.13	3.12	3.25	0.12	0.77	0.89	—	5,892	5,892	0.14	0.33	0.32	5,995
2045	0.83	0.72	5.18	10.3	0.02	0.08	0.78	0.86	0.07	0.19	0.26	—	2,386	2,386	0.07	0.08	0.06	2,413
2046	10.9	10.9	0.97	2.42	< 0.005	0.01	0.40	0.41	0.01	0.09	0.10	—	543	543	0.01	< 0.005	0.03	545
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.50	0.42	3.26	4.11	0.01	0.13	2.23	2.37	0.12	1.05	1.18	—	871	871	0.03	0.01	0.02	874
2033	0.41	0.35	2.51	3.81	0.01	0.09	1.15	1.23	0.08	0.42	0.50	—	1,004	1,004	0.03	0.03	0.17	1,013
2034	0.29	0.26	1.75	3.36	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,071	1,071	0.02	0.07	0.38	1,091
2035	0.29	0.25	1.70	3.30	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,055	1,055	0.02	0.06	0.32	1,075
2036	0.28	0.25	1.66	3.24	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,044	1,044	0.02	0.06	0.27	1,064

2037	0.28	0.24	1.62	3.18	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,029	1,029	0.02	0.06	0.23	1,049
2038	0.27	0.24	1.60	3.15	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,017	1,017	0.02	0.06	0.19	1,035
2039	0.27	0.22	1.57	3.10	0.01	0.03	0.57	0.59	0.02	0.14	0.16	—	1,007	1,007	0.02	0.06	0.15	1,025
2040	0.26	0.21	1.54	3.08	0.01	0.03	0.57	0.60	0.02	0.14	0.16	—	1,001	1,001	0.02	0.06	0.12	1,019
2041	0.25	0.21	1.52	3.05	0.01	0.03	0.57	0.59	0.02	0.14	0.16	—	991	991	0.02	0.06	0.10	1,009
2042	0.25	0.21	1.51	3.02	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	984	984	0.02	0.06	0.08	1,001
2043	0.25	0.20	1.50	3.01	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	978	978	0.02	0.06	0.07	995
2044	0.24	0.20	1.48	3.00	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	975	975	0.02	0.06	0.05	993
2045	0.15	0.13	0.95	1.88	< 0.005	0.01	0.14	0.16	0.01	0.03	0.05	—	395	395	0.01	0.01	0.01	400
2046	1.99	1.99	0.18	0.44	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	89.9	89.9	< 0.005	< 0.005	< 0.005	90.2

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	1.40	1.30	6.60	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	7,848	7,848	0.27	0.46	7.34	7,998
2034	1.35	1.24	6.46	25.5	0.05	0.10	3.64	3.75	0.10	0.89	1.00	—	7,728	7,728	0.17	0.46	6.25	7,877
2035	1.34	1.24	6.37	25.1	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,617	7,617	0.17	0.44	5.29	7,758
2036	1.31	1.20	6.29	24.7	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,517	7,517	0.17	0.44	4.43	7,657
2037	1.28	1.17	6.14	24.4	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,429	7,429	0.17	0.44	3.68	7,568
2038	1.25	1.15	6.06	24.2	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,340	7,340	0.17	0.41	3.04	7,471
2039	1.22	1.03	6.00	24.0	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,271	7,271	0.16	0.41	2.49	7,401
2040	1.18	1.00	5.96	23.8	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,208	7,208	0.16	0.41	2.03	7,338
2041	1.17	0.99	5.90	23.6	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,153	7,153	0.16	0.41	1.65	7,282
2042	1.15	0.96	5.86	23.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,104	7,104	0.16	0.39	1.33	7,225
2043	1.13	0.94	5.83	23.4	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,062	7,062	0.16	0.39	1.07	7,182

2044	1.09	0.93	5.79	23.3	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,025	7,025	0.16	0.38	0.86	7,143
2045	0.54	0.51	2.10	10.8	0.01	0.04	0.13	0.17	0.04	0.03	0.07	—	1,621	1,621	0.06	0.01	0.02	1,627
2046	8.34	8.30	0.80	2.54	< 0.005	< 0.005	0.54	0.54	< 0.005	0.13	0.13	—	604	604	0.01	< 0.005	0.08	605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.81	0.78	4.72	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,744	6,744	0.27	0.05	0.01	6,767
2033	1.34	1.23	6.92	35.8	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	7,607	7,607	0.27	0.46	0.19	7,750
2034	1.31	1.20	6.81	23.4	0.05	0.10	3.64	3.75	0.10	0.89	1.00	—	7,490	7,490	0.18	0.46	0.16	7,633
2035	1.29	1.19	6.68	23.1	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,382	7,382	0.18	0.44	0.14	7,517
2036	1.28	1.17	6.52	22.8	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,285	7,285	0.17	0.44	0.11	7,420
2037	1.25	1.14	6.42	22.5	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,198	7,198	0.17	0.44	0.10	7,334
2038	1.21	1.02	6.35	22.3	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,112	7,112	0.17	0.41	0.08	7,240
2039	1.20	1.01	6.31	22.1	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,044	7,044	0.17	0.41	0.06	7,172
2040	1.16	0.97	6.25	22.0	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,983	6,983	0.17	0.41	0.05	7,111
2041	1.14	0.95	6.21	21.8	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,929	6,929	0.16	0.41	0.04	7,057
2042	1.13	0.95	6.07	21.7	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,881	6,881	0.16	0.39	0.03	7,002
2043	1.12	0.94	6.03	21.7	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,840	6,840	0.16	0.39	0.03	6,960
2044	1.07	0.92	6.00	21.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,804	6,804	0.16	0.39	0.02	6,924
2045	0.98	0.91	5.99	21.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,773	6,773	0.16	0.39	0.02	6,893
2046	8.32	8.30	2.10	10.7	0.01	0.04	0.54	0.54	0.04	0.13	0.13	—	1,611	1,611	0.06	0.01	< 0.005	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.59	0.58	3.20	27.9	0.05	0.11	12.2	12.4	0.10	5.76	5.87	—	5,261	5,261	0.21	0.04	0.11	5,279
2033	0.85	0.81	4.68	27.1	0.05	0.11	6.28	6.39	0.11	2.31	2.42	—	6,062	6,062	0.20	0.17	1.03	6,119
2034	1.11	1.02	5.67	20.2	0.04	0.09	3.11	3.20	0.09	0.76	0.85	—	6,467	6,467	0.15	0.40	2.31	6,592
2035	1.11	1.01	5.58	20.0	0.04	0.09	3.11	3.20	0.09	0.76	0.85	—	6,374	6,374	0.15	0.38	1.96	6,492
2036	1.10	1.01	5.51	19.8	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	6,307	6,307	0.15	0.38	1.65	6,425
2037	1.07	0.98	5.43	19.5	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,216	6,216	0.15	0.38	1.36	6,333

2038	1.04	0.95	5.37	19.3	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,141	6,141	0.14	0.35	1.13	6,252
2039	1.03	0.86	5.31	19.1	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,083	6,083	0.14	0.35	0.92	6,193
2040	1.00	0.85	5.22	19.1	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	6,047	6,047	0.14	0.36	0.75	6,157
2041	0.98	0.82	5.16	18.9	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,984	5,984	0.14	0.35	0.61	6,094
2042	0.97	0.81	5.13	18.8	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,943	5,943	0.14	0.33	0.49	6,046
2043	0.96	0.80	5.10	18.8	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,907	5,907	0.14	0.33	0.40	6,010
2044	0.93	0.79	5.08	18.7	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	5,892	5,892	0.14	0.33	0.32	5,995
2045	0.57	0.51	2.53	11.3	0.02	0.05	0.78	0.83	0.04	0.19	0.24	—	2,386	2,386	0.07	0.08	0.06	2,413
2046	6.21	6.18	0.75	2.47	< 0.005	0.01	0.40	0.41	0.01	0.09	0.10	—	543	543	0.01	< 0.005	0.03	545
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.11	0.10	0.58	5.10	0.01	0.02	2.23	2.25	0.02	1.05	1.07	—	871	871	0.03	0.01	0.02	874
2033	0.16	0.15	0.85	4.95	0.01	0.02	1.15	1.17	0.02	0.42	0.44	—	1,004	1,004	0.03	0.03	0.17	1,013
2034	0.20	0.19	1.03	3.69	0.01	0.02	0.57	0.58	0.02	0.14	0.16	—	1,071	1,071	0.02	0.07	0.38	1,091
2035	0.20	0.18	1.02	3.65	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,055	1,055	0.02	0.06	0.32	1,075
2036	0.20	0.18	1.01	3.60	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	1,044	1,044	0.02	0.06	0.27	1,064
2037	0.19	0.18	0.99	3.55	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,029	1,029	0.02	0.06	0.23	1,049
2038	0.19	0.17	0.98	3.53	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,017	1,017	0.02	0.06	0.19	1,035
2039	0.19	0.16	0.97	3.49	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,007	1,007	0.02	0.06	0.15	1,025
2040	0.18	0.15	0.95	3.48	0.01	0.02	0.57	0.59	0.02	0.14	0.15	—	1,001	1,001	0.02	0.06	0.12	1,019
2041	0.18	0.15	0.94	3.45	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	991	991	0.02	0.06	0.10	1,009
2042	0.18	0.15	0.94	3.43	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	984	984	0.02	0.06	0.08	1,001
2043	0.18	0.15	0.93	3.42	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	978	978	0.02	0.06	0.07	995
2044	0.17	0.14	0.93	3.42	0.01	0.02	0.57	0.59	0.02	0.14	0.15	—	975	975	0.02	0.06	0.05	993
2045	0.10	0.09	0.46	2.07	< 0.005	0.01	0.14	0.15	0.01	0.03	0.04	—	395	395	0.01	0.01	0.01	400
2046	1.13	1.13	0.14	0.45	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	89.9	89.9	< 0.005	< 0.005	< 0.005	90.2

3. Construction Emissions Details

3.1. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.30	1.09	8.97	10.4	0.02	0.37	—	0.37	0.34	—	0.34	—	2,133	2,133	0.09	0.02	—	2,140

Dust From Material Movement	—	—	—	—	—	—	7.92	7.92	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.64	1.89	< 0.005	0.07	—	0.07	0.06	—	0.06	—	353	353	0.01	< 0.005	—	354
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	0.05	53.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.85	8.85	< 0.005	< 0.005	0.01	8.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	1.04	11.4	0.02	0.04	—	0.04	0.04	—	0.04	—	2,133	2,133	0.09	0.02	—	2,140
Dust From Material Movement	—	—	—	—	—	—	7.92	7.92	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.19	2.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	353	353	0.01	< 0.005	—	354
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	0.05	53.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.85	8.85	< 0.005	< 0.005	0.01	8.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.39	1.17	8.84	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	3,005	3,005	0.12	0.02	—	3,015
Dust From Material Movement	—	—	—	—	—	—	4.19	4.19	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.25	0.21	1.61	2.14	0.01	0.07	—	0.07	0.06	—	0.06	—	498	498	0.02	< 0.005	—	499
Dust From Material Movement	—	—	—	—	—	—	0.77	0.77	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	69.1	69.1	< 0.005	< 0.005	0.06	69.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.34	2.13	16.1	0.03	0.07	—	0.07	0.06	—	0.06	—	3,005	3,005	0.12	0.02	—	3,015
Dust From Material Movement	—	—	—	—	—	—	4.19	4.19	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.39	2.94	0.01	0.01	—	0.01	0.01	—	0.01	—	498	498	0.02	< 0.005	—	499
Dust From Material Movement	—	—	—	—	—	—	0.77	0.77	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	69.1	69.1	< 0.005	< 0.005	0.06	69.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.64	1.38	10.2	13.9	0.03	0.41	—	0.41	0.37	—	0.37	—	3,640	3,640	0.15	0.03	—	3,653
Dust From Material Movement	—	—	—	—	—	—	5.08	5.08	—	2.02	2.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.87	2.54	0.01	0.07	—	0.07	0.07	—	0.07	—	603	603	0.02	< 0.005	—	605

Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.6	82.6	< 0.005	< 0.005	0.06	82.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.01	13.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.40	2.58	19.5	0.03	0.08	—	0.08	0.08	—	0.08	—	3,640	3,640	0.15	0.03	—	3,653
Dust From Material Movement	—	—	—	—	—	—	5.08	5.08	—	2.02	2.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	3.56	0.01	0.01	—	0.01	0.01	—	0.01	—	603	603	0.02	< 0.005	—	605
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.6	82.6	< 0.005	< 0.005	0.06	82.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.01	13.7

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.34	3.90	0.01	0.06	—	0.06	0.06	—	0.06	—	732	732	0.03	0.01	—	734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.05	0.43	0.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	< 0.005	< 0.005	—	122
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.79	0.40	9.88	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,577	2,577	0.04	0.02	4.21	2,588
Vendor	0.13	0.08	3.23	1.17	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,875	2,875	0.04	0.42	3.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.74	0.52	7.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,332	2,332	0.04	0.02	0.11	2,339
Vendor	0.12	0.07	3.43	1.20	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,878	2,878	0.04	0.42	0.08	3,006
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.15	2.44	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	729	729	0.01	0.01	0.56	732
Vendor	0.04	0.02	1.03	0.36	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	878	878	0.01	0.13	0.41	917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.09	121
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	145	145	< 0.005	0.02	0.07	152
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.13	0.91	4.55	0.01	0.02	—	0.02	0.02	—	0.02	—	732	732	0.03	0.01	—	734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.17	0.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	121	121	< 0.005	< 0.005	—	122
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.81	0.79	0.40	9.88	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,577	2,577	0.04	0.02	4.21	2,588
Vendor	0.13	0.08	3.23	1.17	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,875	2,875	0.04	0.42	3.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.74	0.52	7.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,332	2,332	0.04	0.02	0.11	2,339
Vendor	0.12	0.07	3.43	1.20	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,878	2,878	0.04	0.42	0.08	3,006
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.15	2.44	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	729	729	0.01	0.01	0.56	732
Vendor	0.04	0.02	1.03	0.36	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	878	878	0.01	0.13	0.41	917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.09	121
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	145	145	< 0.005	0.02	0.07	152
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.45	10.9	0.02	0.16	—	0.16	0.15	—	0.15	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.18	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.75	0.39	9.46	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,544	2,544	0.03	0.02	3.63	2,555
Vendor	0.13	0.08	3.11	1.14	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,787	2,787	0.04	0.42	2.63	2,917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.72	0.71	0.51	7.32	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,303	2,303	0.04	0.02	0.09	2,310
Vendor	0.12	0.07	3.34	1.18	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,790	2,790	0.04	0.42	0.07	2,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.60	0.35	6.46	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,023	2,023	0.03	0.02	1.34	2,030
Vendor	0.11	0.06	2.78	0.99	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,390	2,390	0.04	0.36	0.97	2,500
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.18	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	335	335	< 0.005	< 0.005	0.22	336
Vendor	0.02	0.01	0.51	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	396	396	0.01	0.06	0.16	414
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.75	0.39	9.46	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,544	2,544	0.03	0.02	3.63	2,555
Vendor	0.13	0.08	3.11	1.14	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,787	2,787	0.04	0.42	2.63	2,917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.51	7.32	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,303	2,303	0.04	0.02	0.09	2,310
Vendor	0.12	0.07	3.34	1.18	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,790	2,790	0.04	0.42	0.07	2,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.60	0.35	6.46	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,023	2,023	0.03	0.02	1.34	2,030
Vendor	0.11	0.06	2.78	0.99	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,390	2,390	0.04	0.36	0.97	2,500
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.18	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	335	335	< 0.005	< 0.005	0.22	336
Vendor	0.02	0.01	0.51	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	396	396	0.01	0.06	0.16	414
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.39	9.05	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,516	2,516	0.03	0.02	3.11	2,526
Vendor	0.13	0.08	3.02	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,705	2,705	0.04	0.40	2.18	2,827
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.70	0.50	7.03	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,277	2,277	0.04	0.02	0.08	2,284
Vendor	0.12	0.07	3.22	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,708	2,708	0.04	0.40	0.06	2,828
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.59	0.35	6.24	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,000	2,000	0.03	0.02	1.15	2,007
Vendor	0.11	0.06	2.70	0.97	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,320	2,320	0.04	0.34	0.81	2,423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11	0.11	0.06	1.14	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	331	331	< 0.005	< 0.005	0.19	332
Vendor	0.02	0.01	0.49	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	384	384	0.01	0.06	0.13	401
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.39	9.05	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,516	2,516	0.03	0.02	3.11	2,526
Vendor	0.13	0.08	3.02	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,705	2,705	0.04	0.40	2.18	2,827
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.70	0.50	7.03	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,277	2,277	0.04	0.02	0.08	2,284
Vendor	0.12	0.07	3.22	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,708	2,708	0.04	0.40	0.06	2,828
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.59	0.35	6.24	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,000	2,000	0.03	0.02	1.15	2,007
Vendor	0.11	0.06	2.70	0.97	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,320	2,320	0.04	0.34	0.81	2,423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.14	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	331	331	< 0.005	< 0.005	0.19	332
Vendor	0.02	0.01	0.49	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	384	384	0.01	0.06	0.13	401
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.38	8.65	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,490	2,490	0.03	0.02	2.64	2,500
Vendor	0.13	0.08	2.96	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,631	2,631	0.04	0.40	1.79	2,752
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.68	0.41	6.76	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,254	2,254	0.04	0.02	0.07	2,261
Vendor	0.12	0.07	3.16	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,634	2,634	0.04	0.40	0.05	2,754
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.34	5.96	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,985	1,985	0.03	0.02	0.98	1,992
Vendor	0.11	0.06	2.64	0.97	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,262	2,262	0.04	0.34	0.66	2,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.09	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	329	329	0.01	< 0.005	0.16	330
Vendor	0.02	0.01	0.48	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	375	375	0.01	0.06	0.11	392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.38	8.65	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,490	2,490	0.03	0.02	2.64	2,500
Vendor	0.13	0.08	2.96	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,631	2,631	0.04	0.40	1.79	2,752
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.68	0.41	6.76	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,254	2,254	0.04	0.02	0.07	2,261
Vendor	0.12	0.07	3.16	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,634	2,634	0.04	0.40	0.05	2,754
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.34	5.96	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,985	1,985	0.03	0.02	0.98	1,992
Vendor	0.11	0.06	2.64	0.97	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,262	2,262	0.04	0.34	0.66	2,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.09	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	329	329	0.01	< 0.005	0.16	330
Vendor	0.02	0.01	0.48	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	375	375	0.01	0.06	0.11	392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.67	0.30	8.42	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,467	2,467	0.03	0.02	2.24	2,477
Vendor	0.13	0.08	2.89	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,565	2,565	0.04	0.40	1.44	2,686
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.41	6.50	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,233	2,233	0.04	0.02	0.06	2,241
Vendor	0.12	0.07	3.07	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,568	2,568	0.04	0.40	0.04	2,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.57	0.55	0.34	5.74	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,962	1,962	0.03	0.02	0.83	1,969
Vendor	0.11	0.06	2.57	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,200	2,200	0.04	0.34	0.53	2,303
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.05	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	325	325	< 0.005	< 0.005	0.14	326
Vendor	0.02	0.01	0.47	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	364	364	0.01	0.06	0.09	381
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.67	0.30	8.42	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,467	2,467	0.03	0.02	2.24	2,477
Vendor	0.13	0.08	2.89	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,565	2,565	0.04	0.40	1.44	2,686
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.41	6.50	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,233	2,233	0.04	0.02	0.06	2,241
Vendor	0.12	0.07	3.07	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,568	2,568	0.04	0.40	0.04	2,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.55	0.34	5.74	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,962	1,962	0.03	0.02	0.83	1,969
Vendor	0.11	0.06	2.57	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,200	2,200	0.04	0.34	0.53	2,303
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.05	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	325	325	< 0.005	< 0.005	0.14	326
Vendor	0.02	0.01	0.47	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	364	364	0.01	0.06	0.09	381

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.29	8.21	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,438	2,438	0.03	0.02	1.89	2,447
Vendor	0.13	0.08	2.83	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,505	2,505	0.04	0.37	1.15	2,619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.41	6.26	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,207	2,207	0.04	0.02	0.05	2,214
Vendor	0.12	0.07	3.01	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,509	2,509	0.04	0.37	0.03	2,621
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.34	5.62	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,938	1,938	0.02	0.02	0.70	1,945
Vendor	0.11	0.06	2.52	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,149	2,149	0.04	0.32	0.43	2,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.03	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	321	321	< 0.005	< 0.005	0.12	322
Vendor	0.02	0.01	0.46	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	356	356	0.01	0.05	0.07	372
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.29	8.21	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,438	2,438	0.03	0.02	1.89	2,447
Vendor	0.13	0.08	2.83	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,505	2,505	0.04	0.37	1.15	2,619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.41	6.26	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,207	2,207	0.04	0.02	0.05	2,214
Vendor	0.12	0.07	3.01	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,509	2,509	0.04	0.37	0.03	2,621
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.34	5.62	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,938	1,938	0.02	0.02	0.70	1,945
Vendor	0.11	0.06	2.52	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,149	2,149	0.04	0.32	0.43	2,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.03	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	321	321	< 0.005	< 0.005	0.12	322
Vendor	0.02	0.01	0.46	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	356	356	0.01	0.05	0.07	372
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	5.81	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.06	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.29	7.99	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,421	2,421	0.03	0.02	1.58	2,430
Vendor	0.13	0.08	2.77	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,453	2,453	0.04	0.37	0.91	2,566
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.52	0.40	6.11	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,191	2,191	0.04	0.02	0.04	2,198
Vendor	0.12	0.07	2.97	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,456	2,456	0.04	0.37	0.02	2,568
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.44	0.33	5.43	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,925	1,925	0.02	0.02	0.59	1,931
Vendor	0.11	0.06	2.47	0.92	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,103	2,103	0.03	0.32	0.34	2,200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	0.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	319	319	< 0.005	< 0.005	0.10	320
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	348	348	0.01	0.05	0.06	364
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.29	7.99	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,421	2,421	0.03	0.02	1.58	2,430
Vendor	0.13	0.08	2.77	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,453	2,453	0.04	0.37	0.91	2,566
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.52	0.40	6.11	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,191	2,191	0.04	0.02	0.04	2,198
Vendor	0.12	0.07	2.97	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,456	2,456	0.04	0.37	0.02	2,568
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.52	0.44	0.33	5.43	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,925	1,925	0.02	0.02	0.59	1,931
Vendor	0.11	0.06	2.47	0.92	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,103	2,103	0.03	0.32	0.34	2,200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	0.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	319	319	< 0.005	< 0.005	0.10	320
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	348	348	0.01	0.05	0.06	364
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.51	0.29	7.79	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,406	2,406	0.02	0.02	1.32	2,414
Vendor	0.13	0.08	2.74	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,405	2,405	0.04	0.37	0.71	2,518
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.40	5.97	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,178	2,178	0.04	0.02	0.03	2,185
Vendor	0.12	0.07	2.92	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,409	2,409	0.04	0.37	0.02	2,521
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.26	5.33	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,918	1,918	0.02	0.02	0.49	1,925
Vendor	0.11	0.07	2.44	0.93	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,068	2,068	0.03	0.32	0.26	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.97	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	318	318	< 0.005	< 0.005	0.08	319
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	342	342	0.01	0.05	0.04	358

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.51	0.29	7.79	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,406	2,406	0.02	0.02	1.32	2,414
Vendor	0.13	0.08	2.74	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,405	2,405	0.04	0.37	0.71	2,518
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.40	5.97	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,178	2,178	0.04	0.02	0.03	2,185
Vendor	0.12	0.07	2.92	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,409	2,409	0.04	0.37	0.02	2,521
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.26	5.33	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,918	1,918	0.02	0.02	0.49	1,925
Vendor	0.11	0.07	2.44	0.93	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,068	2,068	0.03	0.32	0.26	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.97	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	318	318	< 0.005	< 0.005	0.08	319
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	342	342	0.01	0.05	0.04	358
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.29	7.67	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,394	2,394	0.02	0.02	1.10	2,401
Vendor	0.13	0.08	2.68	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,363	2,363	0.04	0.37	0.55	2,476
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.39	5.84	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,166	2,166	0.03	0.02	0.03	2,173
Vendor	0.12	0.07	2.88	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,366	2,366	0.04	0.37	0.01	2,479
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.40	0.26	5.21	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,903	1,903	0.02	0.02	0.41	1,909
Vendor	0.11	0.07	2.39	0.93	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,026	2,026	0.03	0.32	0.20	2,123
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	0.95	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	315	315	< 0.005	< 0.005	0.07	316
Vendor	0.02	0.01	0.44	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	335	335	0.01	0.05	0.03	351
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.29	7.67	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,394	2,394	0.02	0.02	1.10	2,401
Vendor	0.13	0.08	2.68	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,363	2,363	0.04	0.37	0.55	2,476
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.39	5.84	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,166	2,166	0.03	0.02	0.03	2,173
Vendor	0.12	0.07	2.88	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,366	2,366	0.04	0.37	0.01	2,479
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.40	0.26	5.21	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,903	1,903	0.02	0.02	0.41	1,909
Vendor	0.11	0.07	2.39	0.93	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,026	2,026	0.03	0.32	0.20	2,123
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	0.95	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	315	315	< 0.005	< 0.005	0.07	316
Vendor	0.02	0.01	0.44	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	335	335	0.01	0.05	0.03	351
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.29	7.56	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,382	2,382	0.02	0.02	0.91	2,390
Vendor	0.13	0.08	2.64	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,325	2,325	0.04	0.35	0.42	2,430
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.31	5.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,156	2,156	0.03	0.02	0.02	2,163
Vendor	0.12	0.07	2.83	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,328	2,328	0.04	0.35	0.01	2,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.46	0.39	0.25	5.10	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,894	1,894	0.02	0.02	0.34	1,900
Vendor	0.11	0.07	2.36	0.90	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,994	1,994	0.03	0.30	0.16	2,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	314	314	< 0.005	< 0.005	0.06	315
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	330	330	0.01	0.05	0.03	345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.29	7.56	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,382	2,382	0.02	0.02	0.91	2,390
Vendor	0.13	0.08	2.64	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,325	2,325	0.04	0.35	0.42	2,430
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.31	5.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,156	2,156	0.03	0.02	0.02	2,163
Vendor	0.12	0.07	2.83	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,328	2,328	0.04	0.35	0.01	2,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.39	0.25	5.10	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,894	1,894	0.02	0.02	0.34	1,900
Vendor	0.11	0.07	2.36	0.90	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,994	1,994	0.03	0.30	0.16	2,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	314	314	< 0.005	< 0.005	0.06	315
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	330	330	0.01	0.05	0.03	345

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.28	7.45	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,373	2,373	0.02	0.02	0.75	2,380
Vendor	0.13	0.08	2.61	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,292	2,292	0.04	0.35	0.32	2,397
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.31	5.68	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,148	2,148	0.03	0.02	0.02	2,155
Vendor	0.12	0.07	2.79	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,295	2,295	0.04	0.35	0.01	2,400
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.37	0.25	5.08	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,886	1,886	0.02	0.02	0.28	1,893
Vendor	0.11	0.07	2.33	0.91	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,966	1,966	0.03	0.30	0.12	2,056
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.05	313
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	325	325	0.01	0.05	0.02	340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.28	7.45	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,373	2,373	0.02	0.02	0.75	2,380
Vendor	0.13	0.08	2.61	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,292	2,292	0.04	0.35	0.32	2,397
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.31	5.68	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,148	2,148	0.03	0.02	0.02	2,155
Vendor	0.12	0.07	2.79	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,295	2,295	0.04	0.35	0.01	2,400
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.37	0.25	5.08	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,886	1,886	0.02	0.02	0.28	1,893
Vendor	0.11	0.07	2.33	0.91	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,966	1,966	0.03	0.30	0.12	2,056
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.05	313
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	325	325	0.01	0.05	0.02	340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.44	0.28	7.35	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,365	2,365	0.02	0.01	0.61	2,370
Vendor	0.10	0.08	2.58	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,263	2,263	0.04	0.35	0.24	2,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.30	5.57	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,140	2,140	0.03	0.02	0.02	2,147
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,267	2,267	0.04	0.35	0.01	2,371
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.37	0.25	5.00	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,885	1,885	0.02	0.02	0.23	1,892
Vendor	0.08	0.06	2.31	0.91	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	1,946	1,946	0.03	0.30	0.09	2,037
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.91	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.04	313
Vendor	0.02	0.01	0.42	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	322	322	0.01	0.05	0.02	337
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.44	0.28	7.35	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,365	2,365	0.02	0.01	0.61	2,370
Vendor	0.10	0.08	2.58	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,263	2,263	0.04	0.35	0.24	2,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.30	5.57	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,140	2,140	0.03	0.02	0.02	2,147
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,267	2,267	0.04	0.35	0.01	2,371
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.45	0.37	0.25	5.00	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,885	1,885	0.02	0.02	0.23	1,892
Vendor	0.08	0.06	2.31	0.91	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	1,946	1,946	0.03	0.30	0.09	2,037
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.91	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.04	313
Vendor	0.02	0.01	0.42	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	322	322	0.01	0.05	0.02	337
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.24	2.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	462	462	0.02	< 0.005	—	463
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.03	0.23	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.4	76.4	< 0.005	< 0.005	—	76.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.30	5.54	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,134	2,134	0.03	0.02	0.01	2,141
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,242	2,242	0.04	0.35	< 0.005	2,347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.12	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	421	421	< 0.005	< 0.005	0.04	423
Vendor	0.02	0.01	0.51	0.20	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	431	431	0.01	0.07	0.02	451
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	69.7	69.7	< 0.005	< 0.005	0.01	70.0
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	71.4	71.4	< 0.005	0.01	< 0.005	74.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.56	2.87	< 0.005	0.01	—	0.01	0.01	—	0.01	—	462	462	0.02	< 0.005	—	463
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.4	76.4	< 0.005	< 0.005	—	76.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.30	5.54	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,134	2,134	0.03	0.02	0.01	2,141
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,242	2,242	0.04	0.35	< 0.005	2,347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.08	0.06	1.12	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	421	421	< 0.005	< 0.005	0.04	423
Vendor	0.02	0.01	0.51	0.20	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	431	431	0.01	0.07	0.02	451
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	69.7	69.7	< 0.005	< 0.005	0.01	70.0
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	71.4	71.4	< 0.005	0.01	< 0.005	74.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Paving (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	3.37	6.45	0.01	0.05	—	0.05	0.05	—	0.05	—	1,004	1,004	0.04	0.01	—	1,007
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.61	1.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	166	166	0.01	< 0.005	—	167
Paving	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	68.3	68.3	< 0.005	< 0.005	0.01	68.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	< 0.005	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.34. Paving (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.09	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.09	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.18	0.16	1.39	6.95	0.01	0.03	—	0.03	0.03	—	0.03	—	1,004	1,004	0.04	0.01	—	1,007
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	1.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	166	166	0.01	< 0.005	—	167
Paving	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	68.3	68.3	< 0.005	< 0.005	0.01	68.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	< 0.005	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Paving (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	5.02	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.38	0.73	< 0.005	0.01	—	0.01	0.01	—	0.01	—	114	114	< 0.005	< 0.005	—	114
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.07	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.9
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.70	7.70	< 0.005	< 0.005	< 0.005	7.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Paving (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	114	114	< 0.005	< 0.005	—	114
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.9
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.70	7.70	< 0.005	< 0.005	< 0.005	7.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Architectural Coating (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	14.5	14.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	14.5	14.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Architectural Coatings	10.7	10.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.4	16.4	< 0.005	< 0.005	—	16.4
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.45	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	470	470	< 0.005	< 0.005	0.08	471
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.11	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	426	426	0.01	< 0.005	< 0.005	427
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.86	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	323	323	< 0.005	< 0.005	0.03	324
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	53.4	53.4	< 0.005	< 0.005	< 0.005	53.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.38. Architectural Coating (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Architectural Coatings	6.01	6.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.4	16.4	< 0.005	< 0.005	—	16.4

Architect Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.45	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	470	470	< 0.005	< 0.005	0.08	471
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.11	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	426	426	0.01	< 0.005	< 0.005	427
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.86	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	323	323	< 0.005	< 0.005	0.03	324
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	53.4	53.4	< 0.005	< 0.005	< 0.005	53.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2032	6/20/2032	6.00	147	—
Grading	Grading	6/21/2032	8/23/2033	6.00	368	—
Building Construction	Building Construction	8/24/2033	3/23/2045	6.00	3,626	—
Paving	Paving	3/24/2045	2/1/2046	6.00	270	—
Architectural Coating	Architectural Coating	2/2/2046	12/13/2046	6.00	270	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29

Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	319	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	126	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2

Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	63.9	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	319	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	126	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2

Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	63.9	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,153,860	384,620	73,487

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	221	0.00	—
Grading	—	—	1,104	0.00	—
Paving	0.00	0.00	0.00	0.00	28.1

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	11.7	100%
Other Asphalt Surfaces	13.4	100%
Other Non-Asphalt Surfaces	3.00	0%
City Park	0.00	0%
Hotel	0.00	0%
Gasoline/Service Station	0.00	0%
Convenience Market (24 hour)	0.00	0%
Fast Food Restaurant with Drive Thru	0.00	0%
High Turnover (Sit Down Restaurant)	0.00	0%
Fast Food Restaurant w/o Drive Thru	0.00	0%
Bank (with Drive-Through)	0.00	0%
Strip Mall	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005

2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3

Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528

Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

Pacific Gateway (University Center Development Area Construction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (University Center Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
Strip Mall	38.9	1000sqft	1.80	38,900	39,795	—	—	—

Parking Lot	334	1000sqft	7.70	0.00	0.00	—	—	—
University/College (4yr)	4,600	Student	35.9	1,354,200	1,126,852	1,126,852	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Other Asphalt Surfaces	335	1000sqft	7.70	0.00	0.00	—	—	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Other Non-Asphalt Surfaces	454	1000sqft	10.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.5	56.4	22.3	73.6	0.12	0.93	19.8	20.7	0.85	10.1	11.0	—	28,048	28,048	0.42	1.73	31.5	28,606
Mit.	56.5	56.4	17.0	75.8	0.12	0.17	19.8	19.9	0.17	10.1	10.2	—	28,048	28,048	0.42	1.73	31.5	28,606
% Reduced	—	—	24%	-3%	—	81%	—	4%	80%	—	7%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	56.4	56.4	23.1	61.0	0.12	0.93	19.8	20.7	0.85	10.1	11.0	—	26,615	26,615	0.51	1.73	0.82	27,145
Mit.	56.4	56.4	18.5	63.1	0.12	0.17	19.8	19.9	0.17	10.1	10.2	—	26,615	26,615	0.51	1.73	0.82	27,145
% Reduced	—	—	20%	-4%	—	81%	—	4%	80%	—	7%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	45.4	45.4	18.9	52.8	0.10	0.72	16.8	17.0	0.66	5.56	6.21	—	22,814	22,814	0.40	1.46	11.5	23,271
Mit.	45.4	45.4	14.8	54.8	0.10	0.15	16.8	17.0	0.15	5.56	5.65	—	22,814	22,814	0.40	1.46	11.5	23,271
% Reduced	—	—	21%	-4%	—	79%	—	< 0.5%	78%	—	9%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.29	8.28	3.44	9.64	0.02	0.13	3.07	3.11	0.12	1.01	1.13	—	3,777	3,777	0.07	0.24	1.90	3,853
Mit.	8.29	8.28	2.71	9.99	0.02	0.03	3.07	3.10	0.03	1.01	1.03	—	3,777	3,777	0.07	0.24	1.90	3,853
% Reduced	—	—	21%	-4%	—	79%	—	< 0.5%	78%	—	9%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	3.02	2.55	18.6	25.8	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	6,758	6,758	0.27	0.05	0.26	6,781
2034	6.05	5.62	21.5	73.6	0.12	0.29	19.6	19.9	0.27	4.76	5.03	—	28,048	28,048	0.42	1.73	31.5	28,606
2035	5.95	5.57	21.0	71.0	0.12	0.27	19.6	19.9	0.26	4.76	5.02	—	27,568	27,568	0.42	1.64	26.8	28,094
2036	5.80	5.37	20.5	68.5	0.12	0.26	19.6	19.9	0.25	4.76	5.01	—	27,137	27,137	0.42	1.64	22.5	27,658
2037	5.57	5.15	19.6	66.9	0.12	0.25	19.6	19.9	0.24	4.76	5.00	—	26,756	26,756	0.42	1.64	18.8	27,274
2038	5.44	5.02	19.3	65.6	0.12	0.25	19.6	19.9	0.23	4.76	4.99	—	26,359	26,359	0.42	1.54	15.6	26,845

2039	5.22	4.30	18.9	64.2	0.12	0.24	19.6	19.9	0.23	4.76	4.98	—	26,059	26,059	0.41	1.54	12.9	26,542
2040	5.00	4.13	18.7	62.9	0.12	0.24	19.6	19.9	0.22	4.76	4.98	—	25,793	25,793	0.37	1.54	10.5	26,273
2041	4.91	4.05	18.4	62.2	0.12	0.23	19.6	19.9	0.22	4.76	4.98	—	25,558	25,558	0.37	1.54	8.62	26,036
2042	4.78	3.87	18.2	61.5	0.12	0.23	19.6	19.9	0.22	4.76	4.97	—	25,350	25,350	0.37	1.45	7.01	25,798
2043	4.65	3.77	18.0	60.7	0.12	0.22	19.6	19.9	0.21	4.76	4.97	—	25,169	25,169	0.37	1.45	5.67	25,616
2044	4.49	3.68	17.8	60.1	0.12	0.22	19.6	19.9	0.21	4.76	4.96	—	25,014	25,014	0.37	1.41	4.58	25,447
2045	4.40	3.63	17.6	60.0	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	24,879	24,879	0.37	1.41	3.69	25,312
2046	4.35	3.59	17.6	59.4	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	24,764	24,764	0.37	1.41	2.96	25,195
2047	0.70	0.61	5.02	10.0	0.01	0.07	0.13	0.20	0.07	0.03	0.09	—	1,621	1,621	0.06	0.01	0.02	1,626
2048	56.5	56.4	1.07	9.74	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,937	2,937	0.03	0.02	0.34	2,944
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,744	6,744	0.27	0.11	0.03	6,767
2033	3.02	2.55	18.6	25.7	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	6,742	6,742	0.27	0.05	0.01	6,765
2034	5.80	5.38	23.1	61.0	0.12	0.68	19.6	19.9	0.62	4.76	5.03	—	26,615	26,615	0.51	1.73	0.82	27,145
2035	5.70	5.28	22.4	59.1	0.12	0.27	19.6	19.9	0.26	4.76	5.02	—	26,152	26,152	0.51	1.64	0.69	26,654
2036	5.60	5.18	21.4	57.3	0.12	0.26	19.6	19.9	0.25	4.76	5.01	—	25,736	25,736	0.46	1.64	0.58	26,237
2037	5.41	5.00	20.9	55.6	0.12	0.25	19.6	19.9	0.24	4.76	5.00	—	25,368	25,368	0.46	1.64	0.49	25,869
2038	5.19	4.28	20.6	54.1	0.12	0.25	19.6	19.9	0.23	4.76	4.99	—	24,986	24,986	0.45	1.54	0.40	25,458
2039	5.10	4.19	20.3	53.1	0.12	0.24	19.6	19.9	0.23	4.76	4.98	—	24,696	24,696	0.45	1.54	0.33	25,168
2040	4.88	3.98	20.0	52.2	0.12	0.24	19.6	19.9	0.22	4.76	4.98	—	24,439	24,439	0.45	1.54	0.27	24,911
2041	4.75	3.85	19.8	51.4	0.12	0.23	19.6	19.9	0.22	4.76	4.98	—	24,211	24,211	0.41	1.54	0.22	24,682
2042	4.71	3.80	19.0	50.5	0.12	0.23	19.6	19.9	0.22	4.76	4.97	—	24,010	24,010	0.41	1.45	0.18	24,452
2043	4.62	3.75	18.8	50.3	0.12	0.22	19.6	19.9	0.21	4.76	4.97	—	23,834	23,834	0.41	1.45	0.15	24,277
2044	4.39	3.62	18.6	49.5	0.12	0.22	19.6	19.9	0.21	4.76	4.96	—	23,684	23,684	0.41	1.45	0.12	24,126
2045	3.84	3.56	18.5	49.3	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,553	23,553	0.41	1.45	0.10	23,996
2046	3.79	3.48	18.4	49.2	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,441	23,441	0.41	1.45	0.08	23,883
2047	56.4	56.4	18.2	49.0	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,345	23,345	0.41	1.45	0.06	23,788

2048	56.4	56.4	1.10	7.68	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,671	2,671	0.04	0.03	0.01	2,680
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	2.62	2.21	17.6	21.2	0.04	0.72	11.5	12.2	0.66	5.56	6.21	—	4,792	4,792	0.19	0.05	0.15	4,812
2033	2.59	2.18	15.9	22.1	0.05	0.63	8.03	8.66	0.58	3.17	3.74	—	5,782	5,782	0.23	0.05	0.10	5,802
2034	4.88	4.51	18.9	52.8	0.10	0.25	16.6	16.9	0.24	4.04	4.28	—	22,814	22,814	0.40	1.46	11.5	23,271
2035	4.90	4.50	18.5	51.8	0.10	0.24	16.8	17.0	0.22	4.06	4.28	—	22,699	22,699	0.40	1.40	9.89	23,138
2036	4.83	4.46	18.0	50.1	0.10	0.23	16.8	17.0	0.21	4.07	4.28	—	22,401	22,401	0.40	1.41	8.36	22,839
2037	4.62	4.26	17.6	48.6	0.10	0.22	16.8	17.0	0.21	4.06	4.26	—	22,021	22,021	0.40	1.40	6.96	22,457
2038	4.47	4.11	17.4	47.8	0.10	0.21	16.8	17.0	0.20	4.06	4.26	—	21,691	21,691	0.36	1.32	5.79	22,100
2039	4.35	3.57	17.0	46.6	0.10	0.21	16.8	17.0	0.20	4.06	4.25	—	21,440	21,440	0.35	1.32	4.77	21,848
2040	4.22	3.47	16.5	46.0	0.10	0.20	16.8	17.0	0.19	4.07	4.26	—	21,276	21,276	0.35	1.33	3.92	21,685
2041	4.06	3.31	16.2	45.2	0.10	0.20	16.8	17.0	0.19	4.06	4.25	—	21,022	21,022	0.35	1.32	3.19	21,428
2042	3.98	3.24	16.0	44.5	0.10	0.20	16.8	17.0	0.19	4.06	4.25	—	20,848	20,848	0.35	1.24	2.59	21,229
2043	3.94	3.16	15.9	44.3	0.10	0.19	16.8	17.0	0.18	4.06	4.24	—	20,696	20,696	0.35	1.24	2.10	21,077
2044	3.79	3.12	15.7	43.8	0.10	0.19	16.8	17.0	0.18	4.07	4.25	—	20,623	20,623	0.35	1.25	1.70	21,004
2045	3.73	3.03	15.5	43.6	0.10	0.18	16.8	17.0	0.18	4.06	4.23	—	20,454	20,454	0.32	1.24	1.36	20,833
2046	3.61	2.96	15.5	43.5	0.10	0.18	16.8	17.0	0.17	4.06	4.23	—	20,357	20,357	0.32	1.24	1.10	20,736
2047	1.79	1.72	4.30	8.77	0.01	0.06	0.31	0.37	0.06	0.07	0.13	—	1,559	1,559	0.05	0.02	0.02	1,567
2048	45.4	45.4	0.87	6.36	< 0.005	< 0.005	2.57	2.58	< 0.005	0.60	0.61	—	2,202	2,202	0.02	0.02	0.12	2,209
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.48	0.40	3.21	3.87	0.01	0.13	2.10	2.23	0.12	1.01	1.13	—	793	793	0.03	0.01	0.03	797
2033	0.47	0.40	2.90	4.02	0.01	0.11	1.47	1.58	0.11	0.58	0.68	—	957	957	0.04	0.01	0.02	961
2034	0.89	0.82	3.44	9.64	0.02	0.05	3.03	3.08	0.04	0.74	0.78	—	3,777	3,777	0.07	0.24	1.90	3,853
2035	0.89	0.82	3.37	9.46	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,758	3,758	0.07	0.23	1.64	3,831
2036	0.88	0.81	3.29	9.15	0.02	0.04	3.07	3.11	0.04	0.74	0.78	—	3,709	3,709	0.07	0.23	1.38	3,781
2037	0.84	0.78	3.22	8.87	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,646	3,646	0.07	0.23	1.15	3,718
2038	0.82	0.75	3.17	8.73	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,591	3,591	0.06	0.22	0.96	3,659
2039	0.79	0.65	3.11	8.50	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,550	3,550	0.06	0.22	0.79	3,617

2040	0.77	0.63	3.00	8.39	0.02	0.04	3.07	3.11	0.04	0.74	0.78	—	3,523	3,523	0.06	0.22	0.65	3,590
2041	0.74	0.60	2.95	8.25	0.02	0.04	3.06	3.10	0.03	0.74	0.78	—	3,480	3,480	0.06	0.22	0.53	3,548
2042	0.73	0.59	2.92	8.12	0.02	0.04	3.06	3.10	0.03	0.74	0.77	—	3,452	3,452	0.06	0.21	0.43	3,515
2043	0.72	0.58	2.89	8.08	0.02	0.04	3.06	3.10	0.03	0.74	0.77	—	3,426	3,426	0.06	0.21	0.35	3,490
2044	0.69	0.57	2.87	8.00	0.02	0.03	3.07	3.10	0.03	0.74	0.78	—	3,414	3,414	0.06	0.21	0.28	3,478
2045	0.68	0.55	2.83	7.96	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,386	3,386	0.05	0.21	0.23	3,449
2046	0.66	0.54	2.82	7.94	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,370	3,370	0.05	0.21	0.18	3,433
2047	0.33	0.31	0.78	1.60	< 0.005	0.01	0.06	0.07	0.01	0.01	0.02	—	258	258	0.01	< 0.005	< 0.005	259
2048	8.29	8.28	0.16	1.16	< 0.005	< 0.005	0.47	0.47	< 0.005	0.11	0.11	—	365	365	< 0.005	< 0.005	0.02	366

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	0.81	0.78	4.70	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,758	6,758	0.27	0.05	0.26	6,781
2034	5.49	5.18	17.0	75.8	0.12	0.17	19.6	19.8	0.17	4.76	4.93	—	28,048	28,048	0.42	1.73	31.5	28,606
2035	5.40	5.14	16.6	73.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	27,568	27,568	0.42	1.64	26.8	28,094
2036	5.27	4.96	16.3	70.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	27,137	27,137	0.42	1.64	22.5	27,658
2037	5.05	4.75	15.6	69.4	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,756	26,756	0.42	1.64	18.8	27,274
2038	4.93	4.62	15.3	68.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,359	26,359	0.42	1.54	15.6	26,845
2039	4.72	3.91	15.1	66.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,059	26,059	0.41	1.54	12.9	26,542
2040	4.51	3.75	14.9	65.5	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,793	25,793	0.37	1.54	10.5	26,273
2041	4.42	3.67	14.7	64.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,558	25,558	0.37	1.54	8.62	26,036
2042	4.30	3.50	14.5	64.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,350	25,350	0.37	1.45	7.01	25,798
2043	4.17	3.40	14.4	63.4	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,169	25,169	0.37	1.45	5.67	25,616
2044	4.02	3.32	14.3	62.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,014	25,014	0.37	1.41	4.58	25,447

2045	3.94	3.28	14.1	62.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,879	24,879	0.37	1.41	3.69	25,312
2046	3.90	3.23	14.1	62.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,764	24,764	0.37	1.41	2.96	25,195
2047	0.44	0.41	2.09	10.8	0.01	0.04	0.13	0.16	0.04	0.03	0.07	—	1,621	1,621	0.06	0.01	0.02	1,626
2048	56.5	56.4	1.07	9.74	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,937	2,937	0.03	0.02	0.34	2,944
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.81	0.78	5.75	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,744	6,744	0.27	0.11	0.03	6,767
2033	0.80	0.78	4.71	35.8	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,742	6,742	0.27	0.05	0.01	6,765
2034	5.24	4.94	18.5	63.1	0.12	0.17	19.6	19.8	0.17	4.76	4.93	—	26,615	26,615	0.51	1.73	0.82	27,145
2035	5.15	4.85	18.0	61.3	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,152	26,152	0.51	1.64	0.69	26,654
2036	5.07	4.77	17.2	59.6	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,736	25,736	0.46	1.64	0.58	26,237
2037	4.90	4.60	16.9	58.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,368	25,368	0.46	1.64	0.49	25,869
2038	4.69	3.89	16.6	56.5	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,986	24,986	0.45	1.54	0.40	25,458
2039	4.60	3.80	16.5	55.6	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,696	24,696	0.45	1.54	0.33	25,168
2040	4.39	3.59	16.2	54.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,439	24,439	0.45	1.54	0.27	24,911
2041	4.26	3.47	16.1	53.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,211	24,211	0.41	1.54	0.22	24,682
2042	4.22	3.42	15.4	53.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,010	24,010	0.41	1.45	0.18	24,452
2043	4.14	3.38	15.2	52.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,834	23,834	0.41	1.45	0.15	24,277
2044	3.92	3.26	15.1	52.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,684	23,684	0.41	1.45	0.12	24,126
2045	3.37	3.20	15.0	52.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,553	23,553	0.41	1.45	0.10	23,996
2046	3.33	3.13	14.9	52.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,441	23,441	0.41	1.45	0.08	23,883
2047	56.4	56.4	14.8	51.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,345	23,345	0.41	1.45	0.06	23,788
2048	56.4	56.4	1.10	7.68	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,671	2,671	0.04	0.03	0.01	2,680
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.56	0.54	3.25	25.0	0.04	0.10	11.5	11.6	0.10	5.56	5.65	—	4,792	4,792	0.19	0.05	0.15	4,812
2033	0.69	0.67	4.03	30.7	0.05	0.12	8.03	8.15	0.12	3.17	3.28	—	5,782	5,782	0.23	0.05	0.10	5,802
2034	4.37	4.11	14.8	54.8	0.10	0.15	16.6	16.8	0.15	4.04	4.19	—	22,814	22,814	0.40	1.46	11.5	23,271

2035	4.43	4.13	14.7	53.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	22,699	22,699	0.40	1.40	9.89	23,138
2036	4.37	4.11	14.5	52.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	22,401	22,401	0.40	1.41	8.36	22,839
2037	4.18	3.91	14.2	50.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	22,021	22,021	0.40	1.40	6.96	22,457
2038	4.03	3.77	14.0	49.9	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,691	21,691	0.36	1.32	5.79	22,100
2039	3.93	3.23	13.7	48.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,440	21,440	0.35	1.32	4.77	21,848
2040	3.79	3.14	13.2	48.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	21,276	21,276	0.35	1.33	3.92	21,685
2041	3.64	2.99	13.0	47.4	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,022	21,022	0.35	1.32	3.19	21,428
2042	3.56	2.92	12.9	46.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,848	20,848	0.35	1.24	2.59	21,229
2043	3.53	2.84	12.8	46.6	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,696	20,696	0.35	1.24	2.10	21,077
2044	3.38	2.81	12.7	46.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	20,623	20,623	0.35	1.25	1.70	21,004
2045	3.34	2.73	12.5	46.0	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,454	20,454	0.32	1.24	1.36	20,833
2046	3.22	2.66	12.5	45.9	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,357	20,357	0.32	1.24	1.10	20,736
2047	1.57	1.55	1.85	9.41	0.01	0.03	0.31	0.34	0.03	0.07	0.11	—	1,559	1,559	0.05	0.02	0.02	1,567
2048	45.4	45.4	0.87	6.36	< 0.005	< 0.005	2.57	2.58	< 0.005	0.60	0.61	—	2,202	2,202	0.02	0.02	0.12	2,209
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.10	0.10	0.59	4.57	0.01	0.02	2.10	2.12	0.02	1.01	1.03	—	793	793	0.03	0.01	0.03	797
2033	0.13	0.12	0.74	5.61	0.01	0.02	1.47	1.49	0.02	0.58	0.60	—	957	957	0.04	0.01	0.02	961
2034	0.80	0.75	2.71	9.99	0.02	0.03	3.03	3.06	0.03	0.74	0.76	—	3,777	3,777	0.07	0.24	1.90	3,853
2035	0.81	0.75	2.69	9.81	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,758	3,758	0.07	0.23	1.64	3,831
2036	0.80	0.75	2.64	9.51	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,709	3,709	0.07	0.23	1.38	3,781
2037	0.76	0.71	2.59	9.25	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,646	3,646	0.07	0.23	1.15	3,718
2038	0.74	0.69	2.55	9.11	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,591	3,591	0.06	0.22	0.96	3,659
2039	0.72	0.59	2.51	8.89	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,550	3,550	0.06	0.22	0.79	3,617
2040	0.69	0.57	2.41	8.79	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,523	3,523	0.06	0.22	0.65	3,590
2041	0.66	0.55	2.37	8.65	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,480	3,480	0.06	0.22	0.53	3,548
2042	0.65	0.53	2.35	8.52	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,452	3,452	0.06	0.21	0.43	3,515
2043	0.64	0.52	2.33	8.50	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,426	3,426	0.06	0.21	0.35	3,490
2044	0.62	0.51	2.31	8.42	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,414	3,414	0.06	0.21	0.28	3,478

2045	0.61	0.50	2.28	8.39	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,386	3,386	0.05	0.21	0.23	3,449
2046	0.59	0.48	2.28	8.37	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,370	3,370	0.05	0.21	0.18	3,433
2047	0.29	0.28	0.34	1.72	< 0.005	0.01	0.06	0.06	0.01	0.01	0.02	—	258	258	0.01	< 0.005	< 0.005	259
2048	8.29	8.28	0.16	1.16	< 0.005	< 0.005	0.47	0.47	< 0.005	0.11	0.11	—	365	365	< 0.005	< 0.005	0.02	366

3. Construction Emissions Details

3.1. Demolition (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	16.2	16.9	0.03	0.62	—	0.62	0.57	—	0.57	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.78	0.78	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.45	2.54	< 0.005	0.09	—	0.09	0.09	—	0.09	—	516	516	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.46	< 0.005	0.02	—	0.02	0.02	—	0.02	—	85.5	85.5	< 0.005	< 0.005	—	85.8
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.01	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.65	0.16	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	512	512	0.01	0.08	0.02	536
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.01	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	77.1	77.1	< 0.005	0.01	0.05	80.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.01	13.4

3.2. Demolition (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.61	5.07	18.3	0.03	0.10	—	0.10	0.10	—	0.10	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.78	0.78	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.76	2.75	< 0.005	0.02	—	0.02	0.01	—	0.01	—	516	516	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	85.5	85.5	< 0.005	< 0.005	—	85.8
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.01	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.65	0.16	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	512	512	0.01	0.08	0.02	536
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.01	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	77.1	77.1	< 0.005	0.01	0.05	80.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.01	13.4

3.3. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	10.1	11.6	0.02	0.42	—	0.42	0.38	—	0.38	—	2,394	2,394	0.10	0.02	—	2,402
Dust From Material Movement	—	—	—	—	—	—	8.89	8.89	—	4.57	4.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	1.84	2.12	< 0.005	0.08	—	0.08	0.07	—	0.07	—	396	396	0.02	< 0.005	—	398

Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.05	60.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.94	9.94	< 0.005	< 0.005	0.01	9.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.17	12.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,394	2,394	0.10	0.02	—	2,402
Dust From Material Movement	—	—	—	—	—	—	8.89	8.89	—	4.57	4.57	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.21	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	396	396	0.02	< 0.005	—	398
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.05	60.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.94	9.94	< 0.005	< 0.005	0.01	9.98

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.78	0.66	4.97	6.60	0.02	0.20	—	0.20	0.19	—	0.19	—	1,688	1,688	0.07	0.01	—	1,694
Dust From Material Movement	—	—	—	—	—	—	2.36	2.36	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	0.91	1.20	< 0.005	0.04	—	0.04	0.03	—	0.03	—	280	280	0.01	< 0.005	—	280
Dust From Material Movement	—	—	—	—	—	—	0.43	0.43	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.8	38.8	< 0.005	< 0.005	0.03	39.0

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.19	1.20	9.05	0.02	0.04	—	0.04	0.04	—	0.04	—	1,688	1,688	0.07	0.01	—	1,694
Dust From Material Movement	—	—	—	—	—	—	2.36	2.36	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.22	1.65	< 0.005	0.01	—	0.01	0.01	—	0.01	—	280	280	0.01	< 0.005	—	280
Dust From Material Movement	—	—	—	—	—	—	0.43	0.43	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.8	38.8	< 0.005	< 0.005	0.03	39.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.14	15.9	21.6	0.05	0.63	—	0.63	0.58	—	0.58	—	5,654	5,654	0.23	0.05	—	5,673
Dust From Material Movement	—	—	—	—	—	—	7.89	7.89	—	3.13	3.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	2.90	3.95	0.01	0.11	—	0.11	0.11	—	0.11	—	936	936	0.04	0.01	—	939
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.57	0.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	128	128	< 0.005	< 0.005	0.10	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.02	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.63	4.01	30.3	0.05	0.12	—	0.12	0.12	—	0.12	—	5,654	5,654	0.23	0.05	—	5,673
Dust From Material Movement	—	—	—	—	—	—	7.89	7.89	—	3.13	3.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.11	0.73	5.53	0.01	0.02	—	0.02	0.02	—	0.02	—	936	936	0.04	0.01	—	939

Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.57	0.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	128	128	< 0.005	< 0.005	0.10	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.02	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.90	2.44	17.8	25.1	0.06	0.68	—	0.68	0.62	—	0.62	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.25	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	92.9	92.9	< 0.005	< 0.005	—	93.3
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.4

Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Grading (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.73	4.66	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	92.9	92.9	< 0.005	< 0.005	—	93.3
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.4
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.34	10.8	0.02	0.16	—	0.16	0.15	—	0.15	—	2,021	2,021	0.08	0.02	—	2,028
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.16	1.96	< 0.005	0.03	—	0.03	0.03	—	0.03	—	335	335	0.01	< 0.005	—	336
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.54	4.46	2.34	56.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,219	15,219	0.17	0.13	21.7	15,283
Vendor	0.48	0.30	11.7	4.26	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,431	10,431	0.16	1.59	9.83	10,918

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	3.06	43.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,774	13,774	0.25	0.13	0.56	13,819
Vendor	0.44	0.27	12.5	4.40	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,444	10,444	0.16	1.59	0.25	10,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	38.0	0.00	0.00	13.5	13.5	0.00	3.16	3.16	—	11,900	11,900	0.18	0.11	7.91	11,944
Vendor	0.39	0.24	10.2	3.65	0.08	0.08	3.03	3.11	0.08	0.84	0.92	—	8,799	8,799	0.13	1.34	3.57	9,204
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.94	0.00	0.00	2.46	2.46	0.00	0.58	0.58	—	1,970	1,970	0.03	0.02	1.31	1,977
Vendor	0.07	0.04	1.87	0.67	0.01	0.01	0.55	0.57	0.01	0.15	0.17	—	1,457	1,457	0.02	0.22	0.59	1,524
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.35	2.49	12.6	0.02	0.07	—	0.07	0.06	—	0.06	—	2,021	2,021	0.08	0.02	—	2,028
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	335	335	0.01	< 0.005	—	336
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.54	4.46	2.34	56.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,219	15,219	0.17	0.13	21.7	15,283
Vendor	0.48	0.30	11.7	4.26	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,431	10,431	0.16	1.59	9.83	10,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	3.06	43.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,774	13,774	0.25	0.13	0.56	13,819

Vendor	0.44	0.27	12.5	4.40	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,444	10,444	0.16	1.59	0.25	10,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	38.0	0.00	0.00	13.5	13.5	0.00	3.16	3.16	—	11,900	11,900	0.18	0.11	7.91	11,944
Vendor	0.39	0.24	10.2	3.65	0.08	0.08	3.03	3.11	0.08	0.84	0.92	—	8,799	8,799	0.13	1.34	3.57	9,204
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.94	0.00	0.00	2.46	2.46	0.00	0.58	0.58	—	1,970	1,970	0.03	0.02	1.31	1,977
Vendor	0.07	0.04	1.87	0.67	0.01	0.01	0.55	0.57	0.01	0.15	0.17	—	1,457	1,457	0.02	0.22	0.59	1,524
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.42	2.34	54.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,048	15,048	0.17	0.13	18.6	15,108
Vendor	0.48	0.30	11.3	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,124	10,124	0.16	1.49	8.15	10,581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.25	4.16	3.01	42.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,619	13,619	0.25	0.13	0.48	13,664
Vendor	0.44	0.27	12.1	4.30	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,136	10,136	0.16	1.49	0.21	10,586
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.64	3.53	2.08	37.3	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,963	11,963	0.18	0.11	6.87	12,006
Vendor	0.39	0.24	10.1	3.62	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,682	8,682	0.13	1.28	3.02	9,070

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.64	0.38	6.81	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,981	1,981	0.03	0.02	1.14	1,988
Vendor	0.07	0.04	1.85	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,437	1,437	0.02	0.21	0.50	1,502
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.42	2.34	54.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,048	15,048	0.17	0.13	18.6	15,108
Vendor	0.48	0.30	11.3	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,124	10,124	0.16	1.49	8.15	10,581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.25	4.16	3.01	42.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,619	13,619	0.25	0.13	0.48	13,664
Vendor	0.44	0.27	12.1	4.30	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,136	10,136	0.16	1.49	0.21	10,586
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.64	3.53	2.08	37.3	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,963	11,963	0.18	0.11	6.87	12,006
Vendor	0.39	0.24	10.1	3.62	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,682	8,682	0.13	1.28	3.02	9,070
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.64	0.38	6.81	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,981	1,981	0.03	0.02	1.14	1,988
Vendor	0.07	0.04	1.85	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,437	1,437	0.02	0.21	0.50	1,502
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	2.30	51.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,894	14,894	0.17	0.13	15.8	14,951
Vendor	0.47	0.29	11.1	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,847	9,847	0.16	1.49	6.69	10,302
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.16	4.08	2.47	40.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,480	13,480	0.21	0.13	0.41	13,523
Vendor	0.44	0.27	11.8	4.29	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,859	9,859	0.16	1.49	0.17	10,308
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	35.7	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,873	11,873	0.18	0.11	5.88	11,916
Vendor	0.40	0.24	9.87	3.63	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	8,468	8,468	0.14	1.28	2.48	8,856
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.51	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,966	1,966	0.03	0.02	0.97	1,973
Vendor	0.07	0.04	1.80	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,402	1,402	0.02	0.21	0.41	1,466
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.33	4.25	2.30	51.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,894	14,894	0.17	0.13	15.8	14,951
Vendor	0.47	0.29	11.1	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,847	9,847	0.16	1.49	6.69	10,302
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.16	4.08	2.47	40.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,480	13,480	0.21	0.13	0.41	13,523
Vendor	0.44	0.27	11.8	4.29	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,859	9,859	0.16	1.49	0.17	10,308
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	35.7	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,873	11,873	0.18	0.11	5.88	11,916
Vendor	0.40	0.24	9.87	3.63	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	8,468	8,468	0.14	1.28	2.48	8,856
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.51	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,966	1,966	0.03	0.02	0.97	1,973
Vendor	0.07	0.04	1.80	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,402	1,402	0.02	0.21	0.41	1,466
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.12	4.04	1.80	50.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,759	14,759	0.17	0.13	13.4	14,814
Vendor	0.47	0.29	10.8	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,600	9,600	0.16	1.49	5.40	10,054
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.00	3.91	2.43	38.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,359	13,359	0.21	0.13	0.35	13,402
Vendor	0.44	0.27	11.5	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,613	9,613	0.16	1.49	0.14	10,062
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.39	3.32	2.01	34.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,734	11,734	0.18	0.11	4.96	11,775
Vendor	0.39	0.24	9.63	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,233	8,233	0.13	1.28	2.00	8,620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.61	0.37	6.27	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,943	1,943	0.03	0.02	0.82	1,950
Vendor	0.07	0.04	1.76	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,363	1,363	0.02	0.21	0.33	1,427
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.12	4.04	1.80	50.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,759	14,759	0.17	0.13	13.4	14,814
Vendor	0.47	0.29	10.8	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,600	9,600	0.16	1.49	5.40	10,054
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	2.43	38.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,359	13,359	0.21	0.13	0.35	13,402
Vendor	0.44	0.27	11.5	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,613	9,613	0.16	1.49	0.14	10,062
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.39	3.32	2.01	34.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,734	11,734	0.18	0.11	4.96	11,775
Vendor	0.39	0.24	9.63	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,233	8,233	0.13	1.28	2.00	8,620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.61	0.37	6.27	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,943	1,943	0.03	0.02	0.82	1,950
Vendor	0.07	0.04	1.76	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,363	1,363	0.02	0.21	0.33	1,427
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	1.76	49.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,584	14,584	0.17	0.13	11.3	14,637
Vendor	0.47	0.29	10.6	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,378	9,378	0.16	1.40	4.32	9,803
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	2.43	37.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,199	13,199	0.21	0.13	0.29	13,242
Vendor	0.44	0.27	11.3	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,391	9,391	0.15	1.40	0.11	9,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	3.17	2.01	33.6	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,594	11,594	0.14	0.11	4.18	11,634
Vendor	0.39	0.24	9.44	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,043	8,043	0.13	1.20	1.60	8,405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.59	0.58	0.37	6.13	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,919	1,919	0.02	0.02	0.69	1,926
Vendor	0.07	0.04	1.72	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,332	1,332	0.02	0.20	0.27	1,392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	1.76	49.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,584	14,584	0.17	0.13	11.3	14,637
Vendor	0.47	0.29	10.6	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,378	9,378	0.16	1.40	4.32	9,803
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	2.43	37.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,199	13,199	0.21	0.13	0.29	13,242
Vendor	0.44	0.27	11.3	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,391	9,391	0.15	1.40	0.11	9,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	3.17	2.01	33.6	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,594	11,594	0.14	0.11	4.18	11,634
Vendor	0.39	0.24	9.44	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,043	8,043	0.13	1.20	1.60	8,405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.58	0.37	6.13	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,919	1,919	0.02	0.02	0.69	1,926
Vendor	0.07	0.04	1.72	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,332	1,332	0.02	0.20	0.27	1,392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	5.81	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.06	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	1.76	47.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,482	14,482	0.17	0.13	9.45	14,533
Vendor	0.47	0.29	10.4	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,180	9,180	0.15	1.40	3.41	9,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.70	3.12	2.39	36.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,106	13,106	0.21	0.13	0.25	13,149
Vendor	0.44	0.27	11.1	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,193	9,193	0.15	1.40	0.09	9,613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.14	2.63	1.97	32.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,513	11,513	0.14	0.11	3.50	11,552
Vendor	0.39	0.24	9.24	3.46	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,873	7,873	0.13	1.20	1.26	8,235
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.48	0.36	5.92	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,906	1,906	0.02	0.02	0.58	1,913
Vendor	0.07	0.04	1.69	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,304	1,304	0.02	0.20	0.21	1,363
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	1.76	47.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,482	14,482	0.17	0.13	9.45	14,533
Vendor	0.47	0.29	10.4	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,180	9,180	0.15	1.40	3.41	9,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.70	3.12	2.39	36.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,106	13,106	0.21	0.13	0.25	13,149
Vendor	0.44	0.27	11.1	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,193	9,193	0.15	1.40	0.09	9,613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.14	2.63	1.97	32.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,513	11,513	0.14	0.11	3.50	11,552
Vendor	0.39	0.24	9.24	3.46	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,873	7,873	0.13	1.20	1.26	8,235
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.48	0.36	5.92	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,906	1,906	0.02	0.02	0.58	1,913
Vendor	0.07	0.04	1.69	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,304	1,304	0.02	0.20	0.21	1,363
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.57	3.03	1.72	46.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,393	14,393	0.13	0.13	7.87	14,442
Vendor	0.47	0.30	10.2	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,003	9,003	0.15	1.40	2.67	9,426
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.91	2.39	35.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,027	13,027	0.21	0.13	0.20	13,070
Vendor	0.44	0.27	10.9	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,015	9,015	0.15	1.40	0.07	9,436
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.00	2.53	1.55	31.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,474	11,474	0.14	0.11	2.93	11,513
Vendor	0.40	0.25	9.15	3.47	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,742	7,742	0.13	1.20	0.99	8,105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.46	0.28	5.82	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,900	1,900	0.02	0.02	0.48	1,906
Vendor	0.07	0.05	1.67	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,282	1,282	0.02	0.20	0.16	1,342
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.57	3.03	1.72	46.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,393	14,393	0.13	0.13	7.87	14,442
Vendor	0.47	0.30	10.2	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,003	9,003	0.15	1.40	2.67	9,426
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.91	2.39	35.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,027	13,027	0.21	0.13	0.20	13,070
Vendor	0.44	0.27	10.9	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,015	9,015	0.15	1.40	0.07	9,436
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.00	2.53	1.55	31.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,474	11,474	0.14	0.11	2.93	11,513
Vendor	0.40	0.25	9.15	3.47	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,742	7,742	0.13	1.20	0.99	8,105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.46	0.28	5.82	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,900	1,900	0.02	0.02	0.48	1,906
Vendor	0.07	0.05	1.67	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,282	1,282	0.02	0.20	0.16	1,342

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.95	1.72	45.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,317	14,317	0.13	0.13	6.56	14,365
Vendor	0.47	0.30	10.0	3.98	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,844	8,844	0.15	1.40	2.06	9,266
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	2.34	34.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,958	12,958	0.17	0.13	0.17	13,000
Vendor	0.44	0.27	10.8	4.12	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,857	8,857	0.15	1.40	0.05	9,277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.85	2.38	1.54	31.1	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,382	11,382	0.14	0.11	2.43	11,420
Vendor	0.39	0.25	8.94	3.47	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,585	7,585	0.13	1.20	0.76	7,946
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.28	5.68	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,884	1,884	0.02	0.02	0.40	1,891
Vendor	0.07	0.05	1.63	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,256	1,256	0.02	0.20	0.13	1,316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.95	1.72	45.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,317	14,317	0.13	0.13	6.56	14,365
Vendor	0.47	0.30	10.0	3.98	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,844	8,844	0.15	1.40	2.06	9,266
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	2.34	34.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,958	12,958	0.17	0.13	0.17	13,000
Vendor	0.44	0.27	10.8	4.12	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,857	8,857	0.15	1.40	0.05	9,277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.85	2.38	1.54	31.1	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,382	11,382	0.14	0.11	2.43	11,420
Vendor	0.39	0.25	8.94	3.47	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,585	7,585	0.13	1.20	0.76	7,946
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.28	5.68	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,884	1,884	0.02	0.02	0.40	1,891
Vendor	0.07	0.05	1.63	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,256	1,256	0.02	0.20	0.13	1,316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	1.72	45.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,251	14,251	0.13	0.13	5.43	14,297
Vendor	0.47	0.30	9.90	3.89	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,702	8,702	0.15	1.30	1.58	9,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.32	2.74	1.84	34.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,898	12,898	0.17	0.13	0.14	12,940
Vendor	0.44	0.27	10.6	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,715	8,715	0.15	1.30	0.04	9,108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.77	2.31	1.51	30.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,329	11,329	0.14	0.11	2.01	11,367
Vendor	0.39	0.25	8.83	3.39	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,464	7,464	0.13	1.12	0.59	7,801
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.42	0.28	5.57	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,876	1,876	0.02	0.02	0.33	1,882
Vendor	0.07	0.05	1.61	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,236	1,236	0.02	0.18	0.10	1,291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	1.72	45.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,251	14,251	0.13	0.13	5.43	14,297
Vendor	0.47	0.30	9.90	3.89	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,702	8,702	0.15	1.30	1.58	9,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.32	2.74	1.84	34.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,898	12,898	0.17	0.13	0.14	12,940
Vendor	0.44	0.27	10.6	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,715	8,715	0.15	1.30	0.04	9,108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.77	2.31	1.51	30.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,329	11,329	0.14	0.11	2.01	11,367
Vendor	0.39	0.25	8.83	3.39	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,464	7,464	0.13	1.12	0.59	7,801
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.42	0.28	5.57	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,876	1,876	0.02	0.02	0.33	1,882
Vendor	0.07	0.05	1.61	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,236	1,236	0.02	0.18	0.10	1,291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.67	44.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,193	14,193	0.13	0.13	4.46	14,238
Vendor	0.47	0.29	9.78	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,579	8,579	0.15	1.30	1.21	8,972
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.84	34.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,846	12,846	0.17	0.13	0.12	12,888
Vendor	0.44	0.27	10.5	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,592	8,592	0.15	1.30	0.03	8,984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.74	2.24	1.51	30.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,284	11,284	0.14	0.11	1.65	11,321
Vendor	0.39	0.25	8.73	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,358	7,358	0.13	1.12	0.45	7,695
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.41	0.28	5.54	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,868	1,868	0.02	0.02	0.27	1,874
Vendor	0.07	0.05	1.59	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,218	1,218	0.02	0.18	0.07	1,274

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.67	44.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,193	14,193	0.13	0.13	4.46	14,238
Vendor	0.47	0.29	9.78	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,579	8,579	0.15	1.30	1.21	8,972
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.84	34.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,846	12,846	0.17	0.13	0.12	12,888
Vendor	0.44	0.27	10.5	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,592	8,592	0.15	1.30	0.03	8,984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.74	2.24	1.51	30.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,284	11,284	0.14	0.11	1.65	11,321
Vendor	0.39	0.25	8.73	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,358	7,358	0.13	1.12	0.45	7,695
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.41	0.28	5.54	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,868	1,868	0.02	0.02	0.27	1,874
Vendor	0.07	0.05	1.59	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,218	1,218	0.02	0.18	0.07	1,274
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.61	1.67	44.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,146	14,146	0.13	0.08	3.67	14,178
Vendor	0.37	0.29	9.66	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,471	8,471	0.15	1.30	0.92	8,864
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.80	33.3	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,803	12,803	0.17	0.13	0.10	12,845
Vendor	0.34	0.27	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,484	8,484	0.15	1.30	0.02	8,876
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.21	1.51	29.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,277	11,277	0.14	0.11	1.36	11,314
Vendor	0.31	0.24	8.65	3.41	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,286	7,286	0.13	1.12	0.34	7,623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.40	0.28	5.46	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,867	1,867	0.02	0.02	0.23	1,873
Vendor	0.06	0.04	1.58	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,206	1,206	0.02	0.19	0.06	1,262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.61	1.67	44.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,146	14,146	0.13	0.08	3.67	14,178
Vendor	0.37	0.29	9.66	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,471	8,471	0.15	1.30	0.92	8,864
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.80	33.3	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,803	12,803	0.17	0.13	0.10	12,845
Vendor	0.34	0.27	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,484	8,484	0.15	1.30	0.02	8,876
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.21	1.51	29.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,277	11,277	0.14	0.11	1.36	11,314
Vendor	0.31	0.24	8.65	3.41	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,286	7,286	0.13	1.12	0.34	7,623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.40	0.28	5.46	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,867	1,867	0.02	0.02	0.23	1,873
Vendor	0.06	0.04	1.58	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,206	1,206	0.02	0.19	0.06	1,262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.79	0.66	5.50	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.67	43.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,104	14,104	0.13	0.08	3.01	14,136
Vendor	0.37	0.29	9.54	3.91	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,378	8,378	0.15	1.30	0.68	8,771
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.57	2.53	1.80	33.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,765	12,765	0.17	0.13	0.08	12,807
Vendor	0.34	0.26	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,391	8,391	0.15	1.30	0.02	8,783
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.63	2.13	1.47	29.8	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,213	11,213	0.11	0.11	1.11	11,249
Vendor	0.31	0.24	8.53	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,186	7,186	0.13	1.12	0.25	7,522
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.39	0.27	5.43	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,856	1,856	0.02	0.02	0.18	1,862
Vendor	0.06	0.04	1.56	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,190	1,190	0.02	0.18	0.04	1,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.34. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.67	43.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,104	14,104	0.13	0.08	3.01	14,136
Vendor	0.37	0.29	9.54	3.91	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,378	8,378	0.15	1.30	0.68	8,771
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.57	2.53	1.80	33.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,765	12,765	0.17	0.13	0.08	12,807
Vendor	0.34	0.26	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,391	8,391	0.15	1.30	0.02	8,783
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.63	2.13	1.47	29.8	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,213	11,213	0.11	0.11	1.11	11,249
Vendor	0.31	0.24	8.53	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,186	7,186	0.13	1.12	0.25	7,522
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.39	0.27	5.43	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,856	1,856	0.02	0.02	0.18	1,862
Vendor	0.06	0.04	1.56	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,190	1,190	0.02	0.18	0.04	1,245

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.66	5.47	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.07	2.53	1.67	43.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,069	14,069	0.13	0.08	2.46	14,100
Vendor	0.37	0.29	9.53	3.92	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,297	8,297	0.15	1.30	0.50	8,690
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.53	2.44	1.80	33.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,734	12,734	0.17	0.13	0.06	12,776
Vendor	0.34	0.27	10.2	4.03	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,310	8,310	0.15	1.30	0.01	8,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.52	2.06	1.47	29.7	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,186	11,186	0.11	0.11	0.91	11,222
Vendor	0.30	0.24	8.52	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,117	7,117	0.13	1.12	0.18	7,453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.38	0.27	5.42	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,852	1,852	0.02	0.02	0.15	1,858
Vendor	0.06	0.04	1.55	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,178	1,178	0.02	0.18	0.03	1,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Building Construction (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.07	2.53	1.67	43.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,069	14,069	0.13	0.08	2.46	14,100
Vendor	0.37	0.29	9.53	3.92	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,297	8,297	0.15	1.30	0.50	8,690
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.53	2.44	1.80	33.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,734	12,734	0.17	0.13	0.06	12,776
Vendor	0.34	0.27	10.2	4.03	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,310	8,310	0.15	1.30	0.01	8,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.52	2.06	1.47	29.7	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,186	11,186	0.11	0.11	0.91	11,222
Vendor	0.30	0.24	8.52	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,117	7,117	0.13	1.12	0.18	7,453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.38	0.27	5.42	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,852	1,852	0.02	0.02	0.15	1,858
Vendor	0.06	0.04	1.55	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,178	1,178	0.02	0.18	0.03	1,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.33	12.1	0.02	0.11	—	0.11	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	16.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.80	2.80	< 0.005	< 0.005	—	2.81
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.44	1.80	33.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,708	12,708	0.17	0.13	0.05	12,750
Vendor	0.33	0.27	10.1	3.95	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,241	8,241	0.15	1.30	0.01	8,633
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	91.8	91.8	< 0.005	< 0.005	0.01	92.0
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	58.0	58.0	< 0.005	0.01	< 0.005	60.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	< 0.005	15.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.60	9.60	< 0.005	< 0.005	< 0.005	10.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.38. Building Construction (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	16.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.80	2.80	< 0.005	< 0.005	—	2.81
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.44	1.80	33.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,708	12,708	0.17	0.13	0.05	12,750
Vendor	0.33	0.27	10.1	3.95	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,241	8,241	0.15	1.30	0.01	8,633
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	91.8	91.8	< 0.005	< 0.005	0.01	92.0
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	58.0	58.0	< 0.005	0.01	< 0.005	60.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	< 0.005	15.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.60	9.60	< 0.005	< 0.005	< 0.005	10.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Paving (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.44	0.37	4.14	8.03	0.01	0.06	—	0.06	0.05	—	0.05	—	1,250	1,250	0.05	0.01	—	1,254
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.07	0.76	1.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	207	207	0.01	< 0.005	—	208
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.6	84.6	< 0.005	< 0.005	0.01	84.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	< 0.005	14.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.40. Paving (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.20	1.72	8.65	0.01	0.03	—	0.03	0.03	—	0.03	—	1,250	1,250	0.05	0.01	—	1,254
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.31	1.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	207	207	0.01	< 0.005	—	208
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.6	84.6	< 0.005	< 0.005	0.01	84.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	< 0.005	14.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Architectural Coating (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.82	2.82	< 0.005	< 0.005	—	2.83
Architectural Coatings	1.18	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.47	0.47	< 0.005	< 0.005	—	0.47
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.60	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,542	2,542	0.03	0.03	0.01	2,550
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	55.1	55.1	< 0.005	< 0.005	< 0.005	55.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	< 0.005	9.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.42. Architectural Coating (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.82	2.82	< 0.005	< 0.005	—	2.83
Architectural Coatings	1.18	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.47	0.47	< 0.005	< 0.005	—	0.47
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.60	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,542	2,542	0.03	0.03	0.01	2,550
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	55.1	55.1	< 0.005	< 0.005	< 0.005	55.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	< 0.005	9.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Architectural Coating (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.60	0.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Architectural Coatings	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.8	17.8	< 0.005	< 0.005	—	17.9
Architectural Coatings	8.20	8.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.50	0.33	8.65	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,804	2,804	0.03	0.02	0.34	2,810
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.58	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,537	2,537	0.03	0.03	0.01	2,546
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.39	0.28	5.48	0.00	0.00	2.57	2.57	0.00	0.60	0.60	—	2,095	2,095	0.02	0.02	0.12	2,101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.00	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.44. Architectural Coating (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.60	0.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Architectural Coatings	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.8	17.8	< 0.005	< 0.005	—	17.9

Architect Coatings	8.20	8.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.50	0.33	8.65	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,804	2,804	0.03	0.02	0.34	2,810
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.58	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,537	2,537	0.03	0.03	0.01	2,546
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.39	0.28	5.48	0.00	0.00	2.57	2.57	0.00	0.60	0.60	—	2,095	2,095	0.02	0.02	0.12	2,101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.00	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2032	3/4/2032	6.00	55.0	—
Site Preparation	Site Preparation	3/5/2032	9/13/2032	6.00	165	—
Grading	Grading	9/14/2032	1/6/2034	6.00	412	—
Building Construction	Building Construction	1/7/2034	1/3/2047	6.00	4,067	—
Paving	Paving	1/4/2047	12/22/2047	6.00	302	—
Architectural Coating	Architectural Coating	12/23/2047	12/8/2048	6.00	302	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Back	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Back	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	8.73	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,910	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	472	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	382	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	8.73	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,910	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	472	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	382	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,110,400	1,036,800	2,232,286	743,398	71,613

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	41,713	—
Site Preparation	—	—	248	0.00	—
Grading	—	—	1,236	0.00	—
Paving	0.00	0.00	0.00	0.00	27.4

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Office Park	0.00	0%
Strip Mall	0.00	0%
Parking Lot	7.70	100%
University/College (4yr)	0.00	0%
Apartments Mid Rise	—	0%
Other Asphalt Surfaces	7.70	100%
Unenclosed Parking with Elevator	1.60	100%
Other Non-Asphalt Surfaces	10.4	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005
2047	0.00	204	0.03	< 0.005
2048	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—

CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—

Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5

Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—

2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

Pacific Gateway (Initial Phase Operation - Auto) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Operation - Auto)
Operational Year	2032
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	116	110	54.2	569	1.44	3.38	128	132	3.26	32.5	35.8	4,555	173,173	177,727	473	7.92	1,273	193,177
Mit.	80.8	77.5	52.7	390	1.43	3.06	128	131	3.02	32.5	35.5	4,555	172,443	176,998	473	7.91	1,273	192,446
% Reduced	30%	30%	3%	31%	1%	9%	—	< 0.5%	7%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	83.7	80.4	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Mit.	80.1	76.9	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
% Reduced	4%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	99.4	94.9	55.8	392	1.36	3.22	128	131	3.14	32.4	35.5	4,555	164,522	169,077	473	8.10	1,136	184,444
Mit.	80.1	76.8	55.0	304	1.35	3.06	128	131	3.02	32.4	35.4	4,555	164,163	168,717	473	8.09	1,136	184,083
% Reduced	19%	19%	1%	23%	< 0.5%	5%	—	< 0.5%	4%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.1	17.3	10.2	71.5	0.25	0.59	23.3	23.9	0.57	5.91	6.48	754	27,239	27,993	78.3	1.34	188	30,537
Mit.	14.6	14.0	10.0	55.4	0.25	0.56	23.3	23.8	0.55	5.91	6.46	754	27,179	27,933	78.3	1.34	188	30,477
% Reduced	19%	19%	1%	23%	< 0.5%	5%	—	< 0.5%	4%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Area	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	116	110	54.2	569	1.44	3.38	128	132	3.26	32.5	35.8	4,555	173,173	177,727	473	7.92	1,273	193,177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Area	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	83.7	80.4	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	23.1	277	1.16	0.64	128	128	0.60	32.4	33.0	—	117,497	117,497	1.31	2.64	104	118,422
Area	82.6	81.4	0.74	88.2	0.01	0.16	—	0.16	0.12	—	0.12	—	363	363	0.02	< 0.005	—	364
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	99.4	94.9	55.8	392	1.36	3.22	128	131	3.14	32.4	35.5	4,555	164,522	169,077	473	8.10	1,136	184,444
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606
Area	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,025	7,025	1.85	0.17	—	7,122

Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	18.1	17.3	10.2	71.5	0.25	0.59	23.3	23.9	0.57	5.91	6.48	754	27,239	27,993	78.3	1.34	188	30,537

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,439	42,439	11.2	1.02	—	43,024
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.8	77.5	52.7	390	1.43	3.06	128	131	3.02	32.5	35.5	4,555	172,443	176,998	473	7.91	1,273	192,446
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.1	76.9	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	23.1	277	1.16	0.64	128	128	0.60	32.4	33.0	—	117,497	117,497	1.31	2.64	104	118,422
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,436	42,436	11.2	1.02	—	43,021
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.1	76.8	55.0	304	1.35	3.06	128	131	3.02	32.4	35.4	4,555	164,163	168,717	473	8.09	1,136	184,083
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606
Area	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,026	7,026	1.86	0.17	—	7,123
Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	14.6	14.0	10.0	55.4	0.25	0.56	23.3	23.8	0.55	5.91	6.46	754	27,179	27,933	78.3	1.34	188	30,477

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.67	0.63	0.52	8.34	0.03	0.01	2.61	2.63	0.01	0.66	0.68	—	2,597	2,597	0.05	0.06	4.93	2,622
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.34	1.25	1.27	21.0	0.07	0.04	6.90	6.94	0.03	1.75	1.79	—	6,826	6,826	0.10	0.15	13.0	6,887
Industrial Park	11.9	10.6	18.9	334	1.15	0.59	119	119	0.55	30.1	30.7	—	116,351	116,351	1.13	2.24	224	117,272
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.64	0.60	0.63	6.62	0.02	0.01	2.61	2.63	0.01	0.66	0.68	—	2,377	2,377	0.06	0.07	0.13	2,400
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.29	1.19	1.53	16.0	0.06	0.04	6.90	6.94	0.03	1.75	1.79	—	6,243	6,243	0.12	0.17	0.34	6,298
Industrial Park	11.4	10.0	22.8	235	1.05	0.59	119	119	0.55	30.1	30.7	—	106,306	106,306	1.19	2.54	5.80	107,099
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.12	0.11	0.11	1.24	< 0.005	< 0.005	0.47	0.48	< 0.005	0.12	0.12	—	402	402	0.01	0.01	0.35	406
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	0.23	0.22	0.26	3.04	0.01	0.01	1.25	1.26	0.01	0.32	0.32	—	1,056	1,056	0.02	0.03	0.93	1,066
Industrial Park	2.07	1.83	3.86	46.2	0.20	0.11	21.6	21.7	0.10	5.47	5.57	—	17,994	17,994	0.19	0.40	16.0	18,134
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.67	0.63	0.52	8.34	0.03	0.01	2.61	2.63	0.01	0.66	0.68	—	2,597	2,597	0.05	0.06	4.93	2,622
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	1.34	1.25	1.27	21.0	0.07	0.04	6.90	6.94	0.03	1.75	1.79	—	6,826	6,826	0.10	0.15	13.0	6,887
Industrial Park	11.9	10.6	18.9	334	1.15	0.59	119	119	0.55	30.1	30.7	—	116,351	116,351	1.13	2.24	224	117,272
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.64	0.60	0.63	6.62	0.02	0.01	2.61	2.63	0.01	0.66	0.68	—	2,377	2,377	0.06	0.07	0.13	2,400
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.29	1.19	1.53	16.0	0.06	0.04	6.90	6.94	0.03	1.75	1.79	—	6,243	6,243	0.12	0.17	0.34	6,298
Industrial Park	11.4	10.0	22.8	235	1.05	0.59	119	119	0.55	30.1	30.7	—	106,306	106,306	1.19	2.54	5.80	107,099

Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.12	0.11	0.11	1.24	< 0.005	< 0.005	0.47	0.48	< 0.005	0.12	0.12	—	402	402	0.01	0.01	0.35	406
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.23	0.22	0.26	3.04	0.01	0.01	1.25	1.26	0.01	0.32	0.32	—	1,056	1,056	0.02	0.03	0.93	1,066
Industrial Park	2.07	1.83	3.86	46.2	0.20	0.11	21.6	21.7	0.10	5.47	5.57	—	17,994	17,994	0.19	0.40	16.0	18,134
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.21	1.21	< 0.005	< 0.005	—	1.35
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	688	688	1.24	0.15	—	764
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.6	19.6	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	798

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.37	7.37	0.01	< 0.005	—	8.18

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	4,163	4,163	7.51	0.91	—	4,622
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,348	4,348	7.84	0.95	—	4,828
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22	< 0.005	< 0.005	—	1.35
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	689	689	1.24	0.15	—	765
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.7	19.7	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	799

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086

Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758

Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	31.8	29.4	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Total	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.02	1.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	2.87	2.65	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Total	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699

Govern Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138

Industrial	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

University/College	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Croplan	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Croplan d	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadlef Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadlef Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Broadleaf	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	330	330	330	120,450	3,696	3,696	3,696	1,349,040
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	622	622	622	227,030	9,765	9,765	9,765	3,564,226
Industrial Park	4,240	4,240	4,240	1,547,605	167,773	167,773	167,773	61,237,072
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	330	330	330	120,450	3,696	3,696	3,696	1,349,040
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	622	622	622	227,030	9,765	9,765	9,765	3,564,226
Industrial Park	4,240	4,240	4,240	1,547,605	167,773	167,773	167,773	61,237,072
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,167,400	2,055,800	303,700

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419
Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419

Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3

Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—

Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8

Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2032 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.

Operations: Fleet Mix	Fleet mix is based on auto-specific vehicle types.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Initial Phase Operation - Truck) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Operation - Truck)
Operational Year	2032
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	109	101	270	251	2.27	7.05	69.9	77.0	6.78	18.8	25.6	4,555	268,626	273,180	475	40.4	1,432	298,525
Mit.	73.6	68.4	269	72.5	2.26	6.73	69.9	76.7	6.54	18.8	25.4	4,555	267,896	272,451	474	40.4	1,432	297,794
% Reduced	32%	33%	1%	71%	< 0.5%	5%	—	< 0.5%	4%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	76.9	71.8	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Mit.	73.4	68.2	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
% Reduced	5%	5%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	92.8	86.4	280	161	2.27	6.89	69.7	76.6	6.66	18.8	25.4	4,555	268,284	272,839	474	40.4	1,234	297,987
Mit.	73.5	68.3	280	72.7	2.26	6.73	69.7	76.4	6.55	18.8	25.3	4,555	267,925	272,479	474	40.4	1,234	297,626
% Reduced	21%	21%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.9	15.8	51.2	29.4	0.41	1.26	12.7	14.0	1.22	3.42	4.64	754	44,418	45,172	78.6	6.70	204	49,335
Mit.	13.4	12.5	51.0	13.3	0.41	1.23	12.7	14.0	1.19	3.42	4.62	754	44,358	45,112	78.6	6.69	204	49,275
% Reduced	21%	21%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Area	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	109	101	270	251	2.27	7.05	69.9	77.0	6.78	18.8	25.6	4,555	268,626	273,180	475	40.4	1,432	298,525
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Area	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	76.9	71.8	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.68	3.28	248	45.9	2.07	4.31	69.7	74.0	4.12	18.8	22.9	—	221,259	221,259	3.09	35.0	150	231,912
Area	82.6	81.4	0.74	88.2	0.01	0.16	—	0.16	0.12	—	0.12	—	363	363	0.02	< 0.005	—	364
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	92.8	86.4	280	161	2.27	6.89	69.7	76.6	6.66	18.8	25.4	4,555	268,284	272,839	474	40.4	1,234	297,987
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396
Area	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,025	7,025	1.85	0.17	—	7,122

Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	16.9	15.8	51.2	29.4	0.41	1.26	12.7	14.0	1.22	3.42	4.64	754	44,418	45,172	78.6	6.70	204	49,335

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,439	42,439	11.2	1.02	—	43,024
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.6	68.4	269	72.5	2.26	6.73	69.9	76.7	6.54	18.8	25.4	4,555	267,896	272,451	474	40.4	1,432	297,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.4	68.2	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.68	3.28	248	45.9	2.07	4.31	69.7	74.0	4.12	18.8	22.9	—	221,259	221,259	3.09	35.0	150	231,912
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,436	42,436	11.2	1.02	—	43,021
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.5	68.3	280	72.7	2.26	6.73	69.7	76.4	6.55	18.8	25.3	4,555	267,925	272,479	474	40.4	1,234	297,626
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396
Area	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,026	7,026	1.86	0.17	—	7,123
Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	13.4	12.5	51.0	13.3	0.41	1.23	12.7	14.0	1.19	3.42	4.62	754	44,358	45,112	78.6	6.69	204	49,275

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.27	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.39	260
Industrial Park	6.76	3.35	237	45.6	2.07	4.30	69.9	74.2	4.11	18.8	22.9	—	220,980	220,980	3.09	34.9	347	231,816
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.28	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.01	260
Industrial Park	6.56	3.17	252	46.2	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,055	221,055	3.08	35.0	8.99	231,557
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	41.1	41.1	< 0.005	0.01	0.03	43.0
Industrial Park	1.22	0.60	45.2	8.37	0.38	0.78	12.7	13.5	0.75	3.42	4.17	—	36,591	36,591	0.51	5.79	24.8	38,353
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	0.01	< 0.005	0.27	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.39	260
Industrial Park	6.76	3.35	237	45.6	2.07	4.30	69.9	74.2	4.11	18.8	22.9	—	220,980	220,980	3.09	34.9	347	231,816
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.28	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.01	260
Industrial Park	6.56	3.17	252	46.2	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,055	221,055	3.08	35.0	8.99	231,557

Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	41.1	41.1	< 0.005	0.01	0.03	43.0
Industrial Park	1.22	0.60	45.2	8.37	0.38	0.78	12.7	13.5	0.75	3.42	4.17	—	36,591	36,591	0.51	5.79	24.8	38,353
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.21	1.21	< 0.005	< 0.005	—	1.35
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	688	688	1.24	0.15	—	764
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.6	19.6	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	798

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.37	7.37	0.01	< 0.005	—	8.18

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	4,163	4,163	7.51	0.91	—	4,622
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,348	4,348	7.84	0.95	—	4,828
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22	< 0.005	< 0.005	—	1.35
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	689	689	1.24	0.15	—	765
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.7	19.7	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	799

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086

Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758

Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	31.8	29.4	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Total	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.02	1.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	2.87	2.65	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Total	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699

Govern Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138

Industrial	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	179	179
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

University/College	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	179	179
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Croplan	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Croplan d	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Broadleaf	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	2.00	2.00	2.00	730	85.8	85.8	85.8	31,317
Industrial Park	1,782	1,782	1,782	650,426	76,447	76,447	76,447	27,903,271
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	2.00	2.00	2.00	730	85.8	85.8	85.8	31,317
Industrial Park	1,782	1,782	1,782	650,426	76,447	76,447	76,447	27,903,271
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,167,400	2,055,800	303,700

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419
Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419

Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00

Urban	Inceptisols	0.00	226

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1

Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689

Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9

Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2032 RPS
Land Use	Land uses are based on Project-specific information.

Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Fleet mix is based on truck-specific vehicle types.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Project Operation - Auto) Detailed Report

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5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Project Operation - Auto)
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Industrial Park	24,675	1000sqft	705	24,675,000	5,994,592	—	—	—
Parking Lot	6,685	1000sqft	154	0.00	34,549	—	—	—
City Park	197	Acre	197	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	15,155	1000sqft	348	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	4,959	1000sqft	114	0.00	0.00	—	—	—
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
University/College (4yr)	5,000	Student	39.8	1,379,200	1,268,091	1,268,091	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Hotel	120	Room	0.60	60,000	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	43.9	1000sqft	2.20	43,900	52,991	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	905	831	302	3,604	8.92	72.6	740	813	70.0	188	258	37,900	943,070	980,971	3,017	38.5	8,628	1,076,520
Mit.	667	609	291	2,348	8.84	70.5	740	811	68.4	188	256	37,900	938,036	975,937	3,017	38.5	8,628	1,071,468
% Reduced	26%	27%	4%	35%	1%	3%	—	< 0.5%	2%	—	1%	—	1%	1%	< 0.5%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	688	630	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Mit.	666	608	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
% Reduced	3%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	731	696	289	2,262	7.47	30.7	737	768	29.9	187	217	31,158	883,599	914,758	2,986	39.4	8,595	1,009,74
Mit.	602	576	284	1,642	7.43	29.7	737	767	29.1	187	216	31,158	881,117	912,275	2,986	39.4	8,595	1,007,25 1
% Reduced	18%	17%	2%	27%	< 0.5%	3%	—	< 0.5%	3%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	133	127	52.8	413	1.36	5.60	134	140	5.46	34.1	39.5	5,159	146,290	151,449	494	6.52	1,423	167,174
Mit.	110	105	51.9	300	1.36	5.41	134	140	5.31	34.1	39.4	5,159	145,879	151,038	494	6.52	1,423	166,762
% Reduced	18%	17%	2%	27%	< 0.5%	3%	—	< 0.5%	3%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Area	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	905	831	302	3,604	8.92	72.6	740	813	70.0	188	258	37,900	943,070	980,971	3,017	38.5	8,628	1,076,52 0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688

Area	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	688	630	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.2	61.1	66.3	1,383	5.86	1.58	737	738	1.47	187	188	—	593,469	593,469	6.07	11.6	24.6	597,112
Area	641	623	9.55	702	0.32	12.9	—	12.9	12.2	—	12.2	1,953	6,267	8,220	9.31	0.03	—	8,461
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	731	696	289	2,262	7.47	30.7	737	768	29.9	187	217	31,158	883,599	914,758	2,986	39.4	8,595	1,009,743
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859
Area	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	133	127	52.8	413	1.36	5.60	134	140	5.46	34.1	39.5	5,159	146,290	151,449	494	6.52	1,423	167,174

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	667	609	291	2,348	8.84	70.5	740	811	68.4	188	256	37,900	938,036	975,937	3,017	38.5	8,628	1,071,468
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	666	608	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	66.2	61.1	66.3	1,383	5.86	1.58	737	738	1.47	187	188	—	593,469	593,469	6.07	11.6	24.6	597,112
Area	512	503	4.30	82.4	0.28	11.8	—	11.8	11.4	—	11.4	1,953	3,784	5,738	9.20	0.01	—	5,970
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	602	576	284	1,642	7.43	29.7	737	767	29.1	187	216	31,158	881,117	912,275	2,986	39.4	8,595	1,007,251
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859
Area	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	110	105	51.9	300	1.36	5.41	134	140	5.31	34.1	39.4	5,159	145,879	151,038	494	6.52	1,423	166,762

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.40	0.28	7.55	0.03	0.01	2.93	2.94	0.01	0.74	0.75	—	2,540	2,540	0.03	0.05	0.23	2,556
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	40.2	36.5	41.2	1,357	4.83	1.20	570	571	1.11	144	145	—	489,192	489,192	3.77	7.69	43.8	491,621
Parking Lot	0.09	0.08	0.03	0.25	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.2	19.2	< 0.005	< 0.005	< 0.005	20.5
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.52	1.39	1.51	49.3	0.18	0.04	20.6	20.7	0.04	5.23	5.27	—	17,738	17,738	0.14	0.28	1.59	17,828
University/College (4yr)	9.65	9.05	7.05	204	0.70	0.18	81.5	81.6	0.16	20.6	20.8	—	70,397	70,397	0.75	1.28	6.27	70,804
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.16	1.11	0.58	13.3	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	4,085	4,085	0.07	0.10	0.36	4,117

Gasolin Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Conveni ence Market (24 hour)	3.33	3.20	1.68	38.1	0.12	0.03	13.4	13.4	0.03	3.39	3.42	—	11,752	11,752	0.22	0.29	1.03	11,846
Fast Food Restaura nt with Drive Thru	7.66	7.36	3.86	87.6	0.27	0.07	30.7	30.8	0.07	7.78	7.85	—	27,001	27,001	0.50	0.67	2.36	27,216
High Turnover (Sit Down Restaura nt)	1.03	0.99	0.52	11.8	0.04	0.01	4.15	4.16	0.01	1.05	1.06	—	3,645	3,645	0.07	0.09	0.32	3,674
Fast Food Restaura nt w/o Drive Thru	0.47	0.45	0.24	5.38	0.02	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,657	1,657	0.03	0.04	0.15	1,671
Bank (with Drive-Through)	0.61	0.58	0.31	6.93	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	2,137	2,137	0.04	0.05	0.19	2,154
Strip Mall	1.86	1.78	0.97	22.8	0.07	0.02	8.17	8.19	0.02	2.07	2.09	—	7,164	7,164	0.12	0.17	0.63	7,218
Total	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.39	0.35	5.73	0.02	0.01	2.93	2.94	0.01	0.74	0.75	—	2,313	2,313	0.04	0.06	0.01	2,331
Govern ment Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	39.3	35.7	52.0	950	4.39	1.20	570	571	1.11	144	145	—	444,911	444,911	4.08	8.89	1.14	447,664
Parking Lot	0.09	0.08	0.03	0.35	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	0.01	< 0.005	< 0.005	20.1
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.49	1.36	1.91	34.7	0.16	0.04	20.6	20.7	0.04	5.23	5.27	—	16,134	16,134	0.15	0.33	0.04	16,235
University/College (4yr)	9.51	8.89	8.84	151	0.63	0.18	81.5	81.6	0.16	20.6	20.8	—	64,074	64,074	0.86	1.48	0.16	64,535
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.15	1.10	0.72	11.0	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	3,726	3,726	0.09	0.12	0.01	3,763
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.31	3.16	2.08	31.5	0.11	0.03	13.4	13.4	0.03	3.39	3.42	—	10,718	10,718	0.27	0.33	0.03	10,825

Fast Food Restaurant with Drive Thru	7.60	7.25	4.78	72.5	0.24	0.07	30.7	30.8	0.07	7.78	7.85	—	24,626	24,626	0.61	0.77	0.06	24,870
High Turnover (Sit Down Restaurant)	1.02	0.98	0.65	9.78	0.03	0.01	4.15	4.16	0.01	1.05	1.06	—	3,324	3,324	0.08	0.10	0.01	3,357
Fast Food Restaurant w/o Drive Thru	0.47	0.44	0.29	4.45	0.01	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,512	1,512	0.04	0.05	< 0.005	1,527
Bank (with Drive-Through)	0.60	0.57	0.38	5.74	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,949	1,949	0.05	0.06	< 0.005	1,968
Strip Mall	1.84	1.75	1.21	18.6	0.06	0.02	8.17	8.19	0.02	2.07	2.09	—	6,532	6,532	0.15	0.19	0.02	6,593
Total	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.08	0.07	0.06	1.09	< 0.005	< 0.005	0.53	0.53	< 0.005	0.13	0.14	—	392	392	0.01	0.01	0.02	395
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	7.12	6.47	8.58	187	0.82	0.22	104	104	0.20	26.2	26.4	—	75,400	75,400	0.65	1.38	3.13	75,831
Parking Lot	0.02	0.02	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.32
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.27	0.25	0.32	6.82	0.03	0.01	3.75	3.76	0.01	0.95	0.96	—	2,734	2,734	0.02	0.05	0.11	2,750
University/College (4yr)	1.72	1.61	1.46	29.1	0.12	0.03	14.8	14.8	0.03	3.75	3.78	—	10,856	10,856	0.13	0.23	0.45	10,928
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.21	0.20	0.12	2.02	0.01	< 0.005	0.84	0.85	< 0.005	0.21	0.22	—	631	631	0.01	0.02	0.03	637
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	0.59	0.57	0.34	5.80	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,815	1,815	0.04	0.05	0.07	1,831
Fast Food Restaurant with Drive Thru	1.37	1.31	0.79	13.3	0.05	0.01	5.58	5.59	0.01	1.41	1.43	—	4,170	4,170	0.09	0.12	0.17	4,208

High Turnover (Sit Down Restaurant)	0.18	0.18	0.11	1.80	0.01	< 0.005	0.75	0.76	< 0.005	0.19	0.19	—	563	563	0.01	0.02	0.02	568
Fast Food Restaurant w/o Drive Thru	0.08	0.08	0.05	0.82	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	256	256	0.01	0.01	0.01	258
Bank (with Drive-Through)	0.11	0.10	0.06	1.05	< 0.005	< 0.005	0.44	0.44	< 0.005	0.11	0.11	—	330	330	0.01	0.01	0.01	333
Strip Mall	0.33	0.32	0.20	3.44	0.01	< 0.005	1.49	1.49	< 0.005	0.38	0.38	—	1,106	1,106	0.02	0.03	0.04	1,116
Total	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.40	0.28	7.55	0.03	0.01	2.93	2.94	0.01	0.74	0.75	—	2,540	2,540	0.03	0.05	0.23	2,556
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	40.2	36.5	41.2	1,357	4.83	1.20	570	571	1.11	144	145	—	489,192	489,192	3.77	7.69	43.8	491,621
Parking Lot	0.09	0.08	0.03	0.25	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.2	19.2	< 0.005	< 0.005	< 0.005	20.5

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.52	1.39	1.51	49.3	0.18	0.04	20.6	20.7	0.04	5.23	5.27	—	17,738	17,738	0.14	0.28	1.59	17,828
University/College (4yr)	9.65	9.05	7.05	204	0.70	0.18	81.5	81.6	0.16	20.6	20.8	—	70,397	70,397	0.75	1.28	6.27	70,804
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.16	1.11	0.58	13.3	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	4,085	4,085	0.07	0.10	0.36	4,117
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.33	3.20	1.68	38.1	0.12	0.03	13.4	13.4	0.03	3.39	3.42	—	11,752	11,752	0.22	0.29	1.03	11,846
Fast Food Restaurant with Drive Thru	7.66	7.36	3.86	87.6	0.27	0.07	30.7	30.8	0.07	7.78	7.85	—	27,001	27,001	0.50	0.67	2.36	27,216

High Turnover (Sit Down Restaurant)	1.03	0.99	0.52	11.8	0.04	0.01	4.15	4.16	0.01	1.05	1.06	—	3,645	3,645	0.07	0.09	0.32	3,674
Fast Food Restaurant w/o Drive Thru	0.47	0.45	0.24	5.38	0.02	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,657	1,657	0.03	0.04	0.15	1,671
Bank (with Drive-Through)	0.61	0.58	0.31	6.93	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	2,137	2,137	0.04	0.05	0.19	2,154
Strip Mall	1.86	1.78	0.97	22.8	0.07	0.02	8.17	8.19	0.02	2.07	2.09	—	7,164	7,164	0.12	0.17	0.63	7,218
Total	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.39	0.35	5.73	0.02	0.01	2.93	2.94	0.01	0.74	0.75	—	2,313	2,313	0.04	0.06	0.01	2,331
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	39.3	35.7	52.0	950	4.39	1.20	570	571	1.11	144	145	—	444,911	444,911	4.08	8.89	1.14	447,664
Parking Lot	0.09	0.08	0.03	0.35	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	0.01	< 0.005	< 0.005	20.1
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.49	1.36	1.91	34.7	0.16	0.04	20.6	20.7	0.04	5.23	5.27	—	16,134	16,134	0.15	0.33	0.04	16,235
University/College (4yr)	9.51	8.89	8.84	151	0.63	0.18	81.5	81.6	0.16	20.6	20.8	—	64,074	64,074	0.86	1.48	0.16	64,535
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.15	1.10	0.72	11.0	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	3,726	3,726	0.09	0.12	0.01	3,763
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.31	3.16	2.08	31.5	0.11	0.03	13.4	13.4	0.03	3.39	3.42	—	10,718	10,718	0.27	0.33	0.03	10,825
Fast Food Restaurant with Drive Thru	7.60	7.25	4.78	72.5	0.24	0.07	30.7	30.8	0.07	7.78	7.85	—	24,626	24,626	0.61	0.77	0.06	24,870
High Turnover (Sit Down Restaurant)	1.02	0.98	0.65	9.78	0.03	0.01	4.15	4.16	0.01	1.05	1.06	—	3,324	3,324	0.08	0.10	0.01	3,357

Fast Food Restaurant w/o Drive Thru	0.47	0.44	0.29	4.45	0.01	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,512	1,512	0.04	0.05	< 0.005	1,527
Bank (with Drive-Through)	0.60	0.57	0.38	5.74	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,949	1,949	0.05	0.06	< 0.005	1,968
Strip Mall	1.84	1.75	1.21	18.6	0.06	0.02	8.17	8.19	0.02	2.07	2.09	—	6,532	6,532	0.15	0.19	0.02	6,593
Total	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.08	0.07	0.06	1.09	< 0.005	< 0.005	0.53	0.53	< 0.005	0.13	0.14	—	392	392	0.01	0.01	0.02	395
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	7.12	6.47	8.58	187	0.82	0.22	104	104	0.20	26.2	26.4	—	75,400	75,400	0.65	1.38	3.13	75,831
Parking Lot	0.02	0.02	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.32
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.27	0.25	0.32	6.82	0.03	0.01	3.75	3.76	0.01	0.95	0.96	—	2,734	2,734	0.02	0.05	0.11	2,750

University/College	1.72	1.61	1.46	29.1	0.12	0.03	14.8	14.8	0.03	3.75	3.78	—	10,856	10,856	0.13	0.23	0.45	10,928
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.21	0.20	0.12	2.02	0.01	< 0.005	0.84	0.85	< 0.005	0.21	0.22	—	631	631	0.01	0.02	0.03	637
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	0.59	0.57	0.34	5.80	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,815	1,815	0.04	0.05	0.07	1,831
Fast Food Restaurant with Drive Thru	1.37	1.31	0.79	13.3	0.05	0.01	5.58	5.59	0.01	1.41	1.43	—	4,170	4,170	0.09	0.12	0.17	4,208
High Turnover (Sit Down Restaurant)	0.18	0.18	0.11	1.80	0.01	< 0.005	0.75	0.76	< 0.005	0.19	0.19	—	563	563	0.01	0.02	0.02	568
Fast Food Restaurant w/o Drive Thru	0.08	0.08	0.05	0.82	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	256	256	0.01	0.01	0.01	258
Bank (with Drive-Through)	0.11	0.10	0.06	1.05	< 0.005	< 0.005	0.44	0.44	< 0.005	0.11	0.11	—	330	330	0.01	0.01	0.01	333

Strip Mall	0.33	0.32	0.20	3.44	0.01	< 0.005	1.49	1.49	< 0.005	0.38	0.38	—	1,106	1,106	0.02	0.03	0.04	1,116
Total	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533

High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548

Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143

University/College	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0

Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863

University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6

Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092

Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102

Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	216	199	10.6	1,256	0.07	2.11	—	2.11	1.60	—	1.60	—	5,034	5,034	0.21	0.04	—	5,052
Total	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	19.4	17.9	0.96	113	0.01	0.19	—	0.19	0.14	—	0.14	—	411	411	0.02	< 0.005	—	412
Total	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.94	2.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5

University/College	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198

Industria Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0

University/College	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassla	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	331	331	331	120,815	4,158	4,158	4,158	1,517,670
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	26,402	26,402	26,402	9,636,731	808,575	808,575	808,575	295,129,807
Parking Lot	77.0	77.0	77.0	28,110	15.7	15.7	15.7	5,732
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1,017	1,017	1,017	371,205	29,307	29,307	29,307	10,697,022
University/College (4yr)	7,272	7,272	7,272	2,654,280	115,625	115,625	115,625	42,203,052
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	960	960	960	350,400	6,596	6,596	6,596	2,407,539
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	2,762	2,762	2,762	1,008,130	18,976	18,976	18,976	6,926,317
Fast Food Restaurant with Drive Thru	6,348	6,348	6,348	2,317,020	43,597	43,597	43,597	15,913,015
High Turnover (Sit Down Restaurant)	856	856	856	312,440	5,886	5,886	5,886	2,148,244

Fast Food Restaurant w/o Drive Thru	389	389	389	141,985	2,676	2,676	2,676	976,887
Bank (with Drive-Through)	502	502	502	183,230	3,450	3,450	3,450	1,259,323
Strip Mall	1,526	1,526	1,526	556,889	11,601	11,601	11,601	4,234,325

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	331	331	331	120,815	4,158	4,158	4,158	1,517,670
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	26,402	26,402	26,402	9,636,731	808,575	808,575	808,575	295,129,807
Parking Lot	77.0	77.0	77.0	28,110	15.7	15.7	15.7	5,732
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1,017	1,017	1,017	371,205	29,307	29,307	29,307	10,697,022
University/College (4yr)	7,272	7,272	7,272	2,654,280	115,625	115,625	115,625	42,203,052
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	960	960	960	350,400	6,596	6,596	6,596	2,407,539
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	2,762	2,762	2,762	1,008,130	18,976	18,976	18,976	6,926,317

Fast Food Restaurant with Drive Thru	6,348	6,348	6,348	2,317,020	43,597	43,597	43,597	15,913,015
High Turnover (Sit Down Restaurant)	856	856	856	312,440	5,886	5,886	5,886	2,148,244
Fast Food Restaurant w/o Drive Thru	389	389	389	141,985	2,676	2,676	2,676	976,887
Bank (with Drive-Through)	502	502	502	183,230	3,450	3,450	3,450	1,259,323
Strip Mall	1,526	1,526	1,526	556,889	11,601	11,601	11,601	4,234,325

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3110400	1,036,800	39,663,586	13,220,498	1,614,159

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425
Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425

Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—

Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—
Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—

Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00

Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2057 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Auto-specific fleet mix
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Project Operation - Truck) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Project Operation - Truck)
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Industrial Park	24,675	1000sqft	705	24,675,000	5,994,592	—	—	—
Parking Lot	6,685	1000sqft	154	0.00	34,549	—	—	—
City Park	197	Acre	197	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	15,155	1000sqft	348	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	4,959	1000sqft	114	0.00	0.00	—	—	—
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
University/College (4yr)	5,000	Student	39.8	1,379,200	1,268,091	1,268,091	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Hotel	120	Room	0.60	60,000	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	43.9	1000sqft	2.20	43,900	52,991	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	869	789	1,549	2,053	14.0	96.4	460	556	92.9	124	216	37,900	1,520,189	1,558,089	3,021	220	8,740	1,707,815
Mit.	631	567	1,539	797	13.9	94.3	460	554	91.3	124	215	37,900	1,515,155	1,553,055	3,020	220	8,740	1,702,763
% Reduced	27%	28%	1%	61%	1%	2%	—	< 0.5%	2%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	652	588	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Mit.	630	566	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
% Reduced	3%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	696	656	1,589	1,134	13.0	54.6	458	513	52.8	123	176	31,158	1,504,82	1,535,97	2,989	220	8,644	1,684,80
Mit.	567	535	1,584	514	13.0	53.5	458	512	52.0	123	175	31,158	1,502,33 7	1,533,49 6	2,989	220	8,644	1,682,31 6
% Reduced	18%	18%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	127	120	290	207	2.37	9.96	83.6	93.6	9.63	22.5	32.1	5,159	249,140	254,299	495	36.4	1,431	278,939
Mit.	103	97.6	289	93.8	2.36	9.77	83.6	93.4	9.49	22.5	32.0	5,159	248,729	253,888	495	36.4	1,431	278,527
% Reduced	18%	18%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,44 7	1,214,44 7	8.98	192	170	1,272,02 0
Area	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	869	789	1,549	2,053	14.0	96.4	460	556	92.9	124	216	37,900	1,520,18 9	1,558,08 9	3,021	220	8,740	1,707,81 5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,02	1,215,02	8.91	192	4.40	1,272,45
Area	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	652	588	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.2	20.3	1,366	255	11.4	25.4	458	484	24.3	123	148	—	1,214,690	1,214,690	8.95	192	73.3	1,272,177
Area	641	623	9.55	702	0.32	12.9	—	12.9	12.2	—	12.2	1,953	6,267	8,220	9.31	0.03	—	8,461
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	696	656	1,589	1,134	13.0	54.6	458	513	52.8	123	176	31,158	1,504,820	1,535,978	2,989	220	8,644	1,684,808
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623
Area	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	127	120	290	207	2.37	9.96	83.6	93.6	9.63	22.5	32.1	5,159	249,140	254,299	495	36.4	1,431	278,939

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	631	567	1,539	797	13.9	94.3	460	554	91.3	124	215	37,900	1,515,155	1,553,055	3,020	220	8,740	1,702,763
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Vegetati	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	630	566	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.2	20.3	1,366	255	11.4	25.4	458	484	24.3	123	148	—	1,214,690	1,214,690	8.95	192	73.3	1,272,177
Area	512	503	4.30	82.4	0.28	11.8	—	11.8	11.4	—	11.4	1,953	3,784	5,738	9.20	0.01	—	5,970
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	567	535	1,584	514	13.0	53.5	458	512	52.0	123	175	31,158	1,502,337	1,533,496	2,989	220	8,644	1,682,316
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623
Area	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	103	97.6	289	93.8	2.36	9.77	83.6	93.4	9.49	22.5	32.0	5,159	248,729	253,888	495	36.4	1,431	278,527

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	29.4	19.1	1,246	229	11.0	24.6	445	470	23.6	120	143	—	1,173,780	1,173,780	8.50	185	164	1,229,421
Parking Lot	0.76	0.50	32.3	5.93	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,446	30,446	0.22	4.81	4.26	31,889
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.90	0.16	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	0.12	886
University/College (4yr)	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Unenclo Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Gasolin e/Servic e Station	1.49	1.17	19.6	16.7	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,820	2,820	0.21	0.45	0.10	2,959
Conveni ence Market (24 hour)	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Fast Food Restaura nt with Drive Thru	0.03	0.02	1.12	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,057	1,057	0.01	0.17	0.15	1,107
High Turnover (Sit Down Restaura nt)	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Fast Food Restaura nt w/o Drive Thru	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,214
Total	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	28.0	17.9	1,331	233	11.0	24.6	445	470	23.6	120	143	—	1,174,278	1,174,278	8.44	186	4.26	1,229,780
Parking Lot	0.73	0.46	34.5	6.03	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,459	30,459	0.22	4.81	0.11	31,899
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.96	0.17	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	< 0.005	886
University/College (4yr)	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443

Gasoline/Service Station	1.31	1.01	21.1	17.2	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,885	2,885	0.20	0.46	< 0.005	3,027
Convenience Market (24 hour)	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Fast Food Restaurant with Drive Thru	0.03	0.02	1.20	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,058	1,058	0.01	0.17	< 0.005	1,108
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Total	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	5.26	3.40	238	42.0	2.01	4.50	81.0	85.5	4.30	21.8	26.1	—	194,367	194,367	1.40	30.7	11.8	203,565
Parking Lot	0.14	0.09	6.17	1.09	0.05	0.12	2.10	2.22	0.11	0.56	0.68	—	5,042	5,042	0.04	0.80	0.30	5,280
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	140	140	< 0.005	0.02	0.01	147
University/College (4yr)	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Gasoline/Service Station	0.26	0.20	3.69	3.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	471	471	0.03	0.07	0.01	495
Convenience Market (24 hour)	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3

Fast Food Restaurant with Drive Thru	< 0.005	< 0.005	0.21	0.04	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	175	175	< 0.005	0.03	0.01	183
High Turnover (Sit Down Restaurant)	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Total	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	29.4	19.1	1,246	229	11.0	24.6	445	470	23.6	120	143	—	1,173,78	1,173,78	8.50	185	164	1,229,42
Parking Lot	0.76	0.50	32.3	5.93	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,446	30,446	0.22	4.81	4.26	31,889
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.90	0.16	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	0.12	886
University/College (4yr)	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Gasoline/Service Station	1.49	1.17	19.6	16.7	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,820	2,820	0.21	0.45	0.10	2,959
Convenience Market (24 hour)	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443

Fast Food Restaurant with Drive Thru	0.03	0.02	1.12	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,057	1,057	0.01	0.17	0.15	1,107
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,214
Total	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	28.0	17.9	1,331	233	11.0	24.6	445	470	23.6	120	143	—	1,174,278	1,174,278	8.44	186	4.26	1,229,780
Parking Lot	0.73	0.46	34.5	6.03	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,459	30,459	0.22	4.81	0.11	31,899

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.96	0.17	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	< 0.005	886
University/College (4yr)	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Gasoline/Service Station	1.31	1.01	21.1	17.2	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,885	2,885	0.20	0.46	< 0.005	3,027
Convenience Market (24 hour)	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Fast Food Restaurant with Drive Thru	0.03	0.02	1.20	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,058	1,058	0.01	0.17	< 0.005	1,108

High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Total	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	5.26	3.40	238	42.0	2.01	4.50	81.0	85.5	4.30	21.8	26.1	—	194,367	194,367	1.40	30.7	11.8	203,565
Parking Lot	0.14	0.09	6.17	1.09	0.05	0.12	2.10	2.22	0.11	0.56	0.68	—	5,042	5,042	0.04	0.80	0.30	5,280
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Office Park	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	140	140	< 0.005	0.02	0.01	147
University/College (4yr)	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Gasoline/Service Station	0.26	0.20	3.69	3.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	471	471	0.03	0.07	0.01	495
Convenience Market (24 hour)	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Fast Food Restaurant with Drive Thru	< 0.005	< 0.005	0.21	0.04	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	175	175	< 0.005	0.03	0.01	183
High Turnover (Sit Down Restaurant)	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7

Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Total	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049

Industria Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7

Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533

High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9

Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863

Universit (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6

Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092

Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102

Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	216	199	10.6	1,256	0.07	2.11	—	2.11	1.60	—	1.60	—	5,034	5,034	0.21	0.04	—	5,052
Total	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	19.4	17.9	0.96	113	0.01	0.19	—	0.19	0.14	—	0.14	—	411	411	0.02	< 0.005	—	412
Total	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.94	2.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5

University/College	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0

University/College	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassla	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	11,103	11,103	11,103	4,052,599	488,532	488,532	488,532	178,314,337
Parking Lot	288	288	288	105,118	12,672	12,672	12,672	4,625,185
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	8.00	8.00	8.00	2,920	352	352	352	128,478
University/College (4yr)	20.0	20.0	20.0	7,300	880	880	880	321,200
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	4.00	4.00	4.00	1,460	176	176	176	64,234
Gasoline/Service Station	1,440	1,440	1,440	525,600	288	288	288	105,120
Convenience Market (24 hour)	4.00	4.00	4.00	1,460	176	176	176	64,240
Fast Food Restaurant with Drive Thru	10.00	10.00	10.00	3,650	440	440	440	160,599
High Turnover (Sit Down Restaurant)	2.00	2.00	2.00	730	88.0	88.0	88.0	32,121

Fast Food Restaurant w/o Drive Thru	2.00	2.00	2.00	730	88.0	88.0	88.0	32,120
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	20.0	20.0	20.0	7,299	880	880	880	321,143

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	11,103	11,103	11,103	4,052,599	488,532	488,532	488,532	178,314,337
Parking Lot	288	288	288	105,118	12,672	12,672	12,672	4,625,185
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	8.00	8.00	8.00	2,920	352	352	352	128,478
University/College (4yr)	20.0	20.0	20.0	7,300	880	880	880	321,200
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	4.00	4.00	4.00	1,460	176	176	176	64,234
Gasoline/Service Station	1,440	1,440	1,440	525,600	288	288	288	105,120
Convenience Market (24 hour)	4.00	4.00	4.00	1,460	176	176	176	64,240

Fast Food Restaurant with Drive Thru	10.00	10.00	10.00	3,650	440	440	440	160,599
High Turnover (Sit Down Restaurant)	2.00	2.00	2.00	730	88.0	88.0	88.0	32,121
Fast Food Restaurant w/o Drive Thru	2.00	2.00	2.00	730	88.0	88.0	88.0	32,120
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	20.0	20.0	20.0	7,299	880	880	880	321,143

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3110400	1,036,800	39,663,586	13,220,498	1,614,159

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425
Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425

Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—

Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—
Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—

Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00

Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2057 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Truck-specific fleet mix.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

APPENDIX B
INITIAL PHASE MOBILE SOURCE CALEEMOD INPUTS

Table B-1. Fleet Mix (Initial Phase)
Pacific Gateway
San Joaquin County, California

CalEEMod® Default[1]	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	SBUS	MH
	49%	3%	22%	16%	3%	1%	1%	2%	0%	0%	2%	0%	0%

Autos[2]	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2
	52%	3%	24%	17%	3%	1%

Heavy-Duty Trucks[2]	HHDT
	100%

Notes:

[1] CalEEMod® default for San Joaquin County calendar year 2032.

[2] Vehicle categories are defined based on Fehr & Peer's assumed vehicle categories.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
HHDT - Heavy Heavy-Duty Truck
LDA - Light-Duty Automobile
LHD - Light Heavy-Duty Truck
LDT - Light-Duty Truck
MCY - Motorcycle
MDV - Medium-Duty Vehicle
MH - Motor Home
MHD - Medium Heavy-Duty Truck
OBUS - Other Buses
SBUS - School Bus
UBUS - Urban Buses

Year 2032

Table B-2. Trip Lengths and Vehicle Miles Traveled by Autos to General Industrial Land Use (Initial Phase)
Pacific Gateway
San Joaquin County, California

Land Use	Vehicle Type	Trip Type	Average One-Way Trip Length[1,2]	Daily Trips (one-way trips/day)[3]	Daily VMT[4,5]
General Industrial	Auto	Home-Work	70.0	2,026	141,899
	Auto	Work-Other	13.4	907	12,131
	Auto	Other-Other	10.5	1,306	13,742

Notes:

[1] Trip length for Home-Work trips are based on the division of daily VMT and daily trips.

[2] Trip lengths for Work-Other and Other-Other trips are based on CalEEMod® defaults.

[3] Total daily trips for each land use are based on Project-specific data provided by Fehr & Peers. The trips were split into trip types based on CalEEMod® default trip type distribution.

[4] Daily VMT for Home-Work trips are based on Project-specific data provided by Fehr & Peers.

[5] Daily VMT is estimated as a product of average trip length and number of trips presented in this table.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel

VMT - vehicle miles traveled

yr - year

APPENDIX C
FULL BUILDOUT MOBILE SOURCE CALEEMOD INPUTS

Table C-1. Fleet Mix (Full Buildout)
Pacific Gateway
San Joaquin County, California

CalEEMod® Default[1]	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	SBUS	MH
	49%	3%	24%	15%	2%	1%	2%	3%	0%	0%	2%	0%	0%

Autos[2]	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2
	52%	3%	26%	16%	2%	1%

Heavy-Duty Trucks[2]	HHDT
	100%

Notes:

[1] CalEEMod® default for San Joaquin County calendar year 2050. While the project buildout is expected to be completed in a later year, the latest calendar year in EMFAC was 2050. Thus, this year was used to model the emission factors for the full buildout scenario in the absence of an emission factor specific to operation in the year 2057. Since it is expected that emission factors would continue to improve over time this is a conservative assumption.

[2] Vehicle categories are defined based on Fehr & Peer's assumed vehicle categories.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
HHDT - Heavy Heavy-Duty Truck
LDA - Light-Duty Automobile
LHD - Light Heavy-Duty Truck
LDT - Light-Duty Truck
MCY - Motorcycle
MDV - Medium-Duty Vehicle
MH - Motor Home
MHD - Medium Heavy-Duty Truck
OBUS - Other Buses
SBUS - School Bus
UBUS - Urban Buses

Year 2050

Table C-2. Trip Lengths and Vehicle Miles Traveled by Autos to General Industrial and Office Land Uses (Full Buildout)
Pacific Gateway
San Joaquin County, California

Land Use	Vehicle Type	Trip Type	Average One-Way Trip Length[1,2]	Daily Trips (one-way trips/day)[3]	Daily VMT[4,5]
Business Park	Auto	Home-Work	47.5	486	23,101
	Auto	Work-Other	13.4	218	2,910
	Auto	Other-Other	10.5	313	3,296
General Industrial	Auto	Home-Work	51.3	12,618	647,465
	Auto	Work-Other	13.4	5,650	75,541
	Auto	Other-Other	10.5	8,134	85,569

Notes:

[1] Trip length for Home-Work trips are based on the division of daily VMT and daily trips.

[2] Trip lengths for Work-Other and Other-Other trips are based on CalEEMod® defaults.

[3] Total daily trips for each land use are based on Project-specific data provided by Fehr & Peers. The trips were split into trip types based on CalEEMod® default trip type distribution.

[4] Daily VMT for Home-Work trips are based on Project-specific data provided by Fehr & Peers.

[5] Daily VMT estimated as a product of average trip length and number of trips presented in this table.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel

VMT - vehicle miles traveled

yr - year

APPENDIX D
AERMOD INPUTS

Table D-1. Modeled Source Parameters - Construction Area Sources
Pacific Gateway
San Joaquin County, California

Source Parameters	Construction Equipment[1]
Source Type	Areapoly
Initial Vertical Dimension (m)	1.4
Release Height (m)	5.0

Notes:

[1] Offroad construction equipment should be modeled as area sources. Kyle Melching of SJVAPCD confirmed this approach on February 3, 2025. The initial vertical dimensions and release height of construction equipment sources are based on SCAQMD LST Methodology.

Abbreviations:

LST - Local Significance Threshold

m - meters

SCAQMD - South Coast Air Quality Management District

SJVAPCD - San Joaquin Valley Air Pollution Control District

References:

SCAQMD, 2008, Final Localized Significance Threshold Methodology. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2. Accessed: January 2025.

Table D-2. Modeled Source Parameters - Construction Line-Volume Sources
Pacific Gateway
San Joaquin County, California

Source Parameters	Construction Truck Travel
Source Type	Line-Volume
Plume Width[1] (m)	3.66
Plume Height[2] (m)	6.22
Release Height[3] (m)	1.83

Notes:

[1] Plume width is equal to SJVAPCD recommended value of 12 feet (3.66 meters) for truck width. Kyle Melching of SJVAPCD confirmed this value on January 27, 2025.

[2] The plume height for construction trucks is assumed to be equal to 1.7 times the vehicle height. Vehicle height assumed to be double the release height, based on the USEPA Transportation Conformity Guidance. Available at https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf. Accessed: January 2025.

[3] Release height for delivery trucks is equal to SJVAPCD recommended value of 6 feet for truck height. Kyle Melching of SJVAPCD confirmed this value on January 27, 2025.

Abbreviations:

m - meters

SJVAPCD - San Joaquin Valley Air Pollution Control District

USEPA - United States Environmental Protection Agency

References:

SJVAPCD. 2006. Guidance for Air Dispersion Modeling. Available at: https://www.valleyair.org/busind/pto/Tox_Resources/Modeling%20Guidance.pdf. Accessed: January 2025.

USEPA. 2015. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas Appendices. November. Available at: https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf. Accessed: January 2025.

Table D-3. Modeled Source Parameters - Operational Point Sources
Pacific Gateway
San Joaquin County, California

Source Group ID	Description	Stack Height (m)	Stack Temperature (K)	Exit Velocity (m/s)	Stack Diameter (m)	Emission Rate (g/s)
LOADING[1]	FF Loading Emissions	3.66	291	0.001	0.0508	1
BREATH[1]	FF Breathing Emissions	3.66	289	0.001	0.0508	1
TRUIDLE[2]	TRU Idling Emissions	3.96	501	49.0	0.044	1
T_IDLE[2]	Delivery Truck Idling Emissions	3.84	366	51.7	0.100	1
GEN	Diesel Generator	3.66	740	45.3	0.183	1

Notes:

[1] Stack parameters are based on CAPCOA Gasoline Service Station Industrywide Risk Assessment Guidelines. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-03/Draft%202022%20Gas%20Station%20IWG%20-%20Technical%20Guidance_ADA%20Compliant.pdf. Accessed: January 2025.

[2] Stack parameters are based on the draft SJVAPCD HRA guidance. Kyle Melching of SJVAPCD confirmed this value on October 26, 2023.

[3] Diesel generator source parameters based on prime or standby generator parameters from Table 10 of BAAQMD Air Quality Guidelines Appendix E: Recommended Methods For Screening and Modeling Local Risks and Hazards. Available at https://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/ceqa-guidelines-2022/appendix-e-recommended-methods-for-screening-and-modeling-local-risks-and-hazards_final-pdf.pdf?la=en. Accessed: January 2025.

Abbreviations:

BAAQMD - Bay Area Air Quality Management District

CAPCOA - California Air Pollution Control Officers Association

g - grams

FF - fueling facility

HRA - health risk assessment

K - Kelvin

m - meters

s - second

SJVAPCD - San Joaquin Valley Air Pollution Control District

TRU - Transport Refrigeration Unit

Table D-4. Modeled Source Parameters - Operational Volume Sources
Pacific Gateway
San Joaquin County, California

Source Group ID	Description	Release Height[2] (m)	Initial Lateral Dimension, Sigma Y[3,4] (m)	Initial Vertical Dimension, Sigma Z (m)	Emission Rate (g/s)
REFILL[1]	Refueling and Hose Permeation	1.50	3.02	1.86	1
SPILL[1]	Spillage	1.00	3.02	1.86	1
WH_GC, WH_IP, WH_PGC, WH_PGE	Warehouse Operational Equipment[2]	7.4	4.65	6.88	1

Notes:

[1] Release height, initial lateral dimension, and initial vertical dimension are based on CAPCOA Gasoline Service Station Industrywide Risk Assessment Guidelines. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-03/Draft%202022%20Gas%20Station%20IWG%20-%20Technical%20Guidance_ADA%20Compliant.pdf. Accessed: January 2025.

[2] Warehouse Operational Equipment release height is modeled as half of the building height on the corresponding building footprint. The lowest building heights from the Initial Phase site plan is used. The initial vertical dimension is modeled as the building height divided by 2.15 based on the AERMOD User's Guide. Available at: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_userguide.pdf. Accessed: January 2025.

[3] Since each of the modeled warehouse building is less than 5 acres, Warehouse Operational Equipment is modeled as adjacent 10 by 10 meter volume sources based on SCAQMD LST methodology. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2. Accessed: January 2025.

[4] The initial lateral dimension is modeled as the length of side divided by 2.15 for adjacent volume sources, and divided by 4.3 for single volume sources, based on the AERMOD User's Guide. Available at: https://gaftp.epa.gov/Air/aqmg/SCRAM/models/preferred/aermod/aermod_userguide.pdf. Accessed: January 2025.

Abbreviations:

CAPCOA - California Air Pollution Control Officers Association

g/s - grams per second

LST - Local Significance Threshold

m - meters

SCAQMD - South Coast Air Quality Management District

Table D-5. Modeled Source Parameters - Operational Line-Volume Sources
Pacific Gateway
San Joaquin County, California

Source Parameters	Delivery Truck Travel
Source Type	Line-Volume
Initial Lateral Dimensions[1] (m)	3.66
Initial Vertical Dimensions[2] (m)	6.22
Release Height[3] (m)	1.83

Notes:

[1] The initial lateral dimensions, or plume width, is equal to SJVAPCD recommended value of 12 feet for truck width. Kyle Melching of SJVAPCD confirmed this value on January 27, 2025.

[2] The initial vertical dimensions, or plume height, for construction trucks is assumed to be equal to 1.7 times the vehicle height. Vehicle height assumed to be double the release height, based on the USEPA Transportation Conformity Guidance. Available at https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf. Accessed January 2025.

[3] Release height for delivery trucks is equal to SJVAPCD recommended value of 6 feet for truck height. Kyle Melching of SJVAPCD confirmed this value on January 27, 2025.

Abbreviations:

m - meters

SJVAPCD - San Joaquin Valley Air Pollution Control District

USEPA - United States Environmental Protection Agency

References:

SJVAPCD. 2006. Guidance for Air Dispersion Modeling. Available at: https://www.valleyair.org/busind/pto/Tox_Resources/Modeling%20Guidance.pdf. Accessed: January 2025.

USEPA. 2015. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas Appendices. November. Available at: https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf. Accessed: January 2025.

Table D-6. Modeled Source Parameters - Operational Line-Area Sources
Pacific Gateway
San Joaquin County, California

Source Parameters	TRU Off-Site Travel[2]
Source Type	Line-Area
Width[1] (m)	3.3 per lane
Top of Plume Height (m)	6.80
Initial Vertical Dimension (m)	3.16
Release Height (m)	3.40

Notes:

[1] Road width is estimated as a product of the number of lanes and width of a lane. The width of the lane is defined as 3.3 meters based on the USEPA Transportation Conformity Guidance. Available at https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf. Accessed: January 2025.

[2] TRU travel source parameters are based on Appendix I to the Proposed Amendments to the ATCM Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate, Table II.G.4. AERMOD Source Inputs - Cold Storage Warehouse. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

Abbreviations:

CARB - California Air Resources Board

ATCM - Airborne Toxics Control Measure

m - meters

TRU - Transport Refrigeration Unit

USEPA - United States Environmental Protection Agency

References:

USEPA. 2015. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas Appendices. November. Available at: https://nepis.epa.gov/Exe/ZyPdf.cgi?Dockey=P100NN22.pdf. Accessed: January 2025.

CARB, 2021. Appendix I to the Proposed Amendments to the ATCM Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate, Table II.F.4. AERMOD Source Inputs - Grocery Store. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

APPENDIX E
INITIAL BUILDOUT - HEALTH RISK ASSESSMENT EMISSION CALCULATIONS

Table E-1. Initial Buildout - Traffic Volumes and Vehicle Miles Traveled on Modeled Roadways
Pacific Gateway
San Joaquin County, California

Source	Source Group ID	Road Segment ID	Total Daily Trip Rate	Total Annual Trip Rates[2] (one-way trips/year)	Segment Length[3] (meters)	Segment Length (miles)	Annual VMT[4] (miles/year)
Trucks	T_11	--	1,375	501,875	164.9	0.10	51,434
Trucks	T_12	--	1,375	501,875	174.0	0.11	54,250
Trucks	T_13	--	1,375	501,875	219.4	0.14	68,426
Trucks	T_14	--	1,375	501,875	123.7	0.08	38,590
Trucks	T_24	--	1,375	501,875	551.2	0.34	171,882
Trucks	T_25	--	1,375	501,875	405.4	0.25	126,412
Trucks	T_26	--	1,375	501,875	809.7	0.50	252,503
Trucks	T_27	--	2,520	919,800	658.0	0.41	376,048
TRUs	TRU_11	TRU_11_1	69	25,094	164.9	0.10	2,572
TRUs	TRU_12	TRU_12_1	69	25,094	174.0	0.11	2,713
TRUs	TRU_13	TRU_13_1	69	25,094	219.4	0.14	3,421
TRUs	TRU_14	TRU_14_1	69	25,094	123.7	0.08	1,930
TRUs	TRU_24	TRU_24_1	69	25,094	551.2	0.34	8,594
TRUs	TRU_25	TRU_25_1	69	25,094	405.4	0.25	6,321
TRUs	TRU_26	TRU_26_1	69	25,094	809.7	0.50	12,625
TRUs	TRU_27	TRU_27_1	126	45990	658.0	0.41	18,802

Notes:

[1] See Figure 2 for a graphic representation of the modeled sources.

[2] Trip rates based on Project-specific data provided by Fehr & Peers. TRUs are assumed to be present with 5% of truck trips.

[3] Segment length based on modeled source length in AERMOD.

[4] VMT is calculated as the product of the segment length and the total number of annual one-way trips.

Abbreviations:

AERMOD - American Meteorological Society/Environmental Protection Agency Regulatory Model

TRU - Transportation refrigeration unit

VMT - Vehicle miles traveled

Table E-2. Initial Buildout - Diesel Particulate Matter Emission Factors
Pacific Gateway
San Joaquin County, California

EMFAC Vehicle Class	Fuel	Speed	Year	EMFAC VMT Output[1] (miles/day)	DPM Emission Factor[2]		
					Running Exhaust[3] (g/mile)	Truck Idle Exhaust[4] (g/idle-minute)	TRU Idle Exhaust[5] (g/idle-minute)
HHDT	Diesel	5	2032	545	--	1.80E-04	0.0035
HHDT	Diesel	10	2032	8,950	--	--	--
HHDT	Diesel	15	2032	20,448	--	--	--
HHDT	Diesel	20	2032	43,512	--	--	--
HHDT	Diesel	25	2032	24,539	--	--	--
HHDT	Diesel	30	2032	26,965	0.006	--	--
HHDT	Diesel	35	2032	30,792	0.007	--	--
HHDT	Diesel	40	2032	37,519	0.009	--	--
HHDT	Diesel	45	2032	41,166	0.012	--	--
HHDT	Diesel	50	2032	48,709	0.016	--	--
HHDT	Diesel	55	2032	77,708	0.021	--	--
Diesel HHDT Emission Factor					**0.012**	**1.80E-04**	**0.004**

Notes:

[1] Data obtained from EMFAC2021 output for HHDT diesel vehicle default emissions activity.

[2] For purposes of this analysis, DPM emissions are assumed to be equal to PM_{10} exhaust emissions from diesel vehicles.

[3] Off-site running exhaust emission factor is based on EMFAC2021 emission rate output for 30 to 55 mph, per SJVAPCD draft guidance.

[4] Emission factor was obtained from the default EMFAC2021 project-level output for San Joaquin County in calendar year 2032.

[5] TRU Idle exhaust based on an emission rate of 0.21 g per hr, per SJVAPCD draft guidance.

Conversion Factors:

60 min/hr
907,185 g/ton

Abbreviations:

DPM - diesel particulate matter
EMFAC - EMission FACtor model
g - gram
HHDT - Heavy heavy-duty truck
hr - hour
mph - miles per hour
PM_{10} - particulate matter less than 10 microns in diameter
SJVAPCD - San Joaquin Valley Air Pollution Control District
TRU - Transportation Refrigeration Unit
VMT - vehicle miles travelled

Table E-2. Initial Buildout - Diesel Particulate Matter Emission Factors
Pacific Gateway
San Joaquin County, California

min - minute

Table E-3. Initial Buildout - Delivery Truck Emissions
Pacific Gateway
San Joaquin County, California

Source Group ID[1]	Modeled Roadway Link	Project VMT[2] (miles)	Idle Duration[3] (minutes/round trip)	DPM Exhaust Emissions[4,5]	
		Annual		Annual (lb/year)	Emissions Rate (g/s)
T_11	--	51,434	--	1.34E+00	1.93E-05
T_12	--	54,250	--	1.41E+00	2.03E-05
T_13	--	68,426	--	1.78E+00	2.57E-05
T_14	--	38,590	--	1.01E+00	1.45E-05
T_24	--	171,882	--	4.48E+00	6.45E-05
T_25	--	126,412	--	3.30E+00	4.74E-05
T_26	--	252,503	--	6.58E+00	9.47E-05
T_27	--	376,048	--	9.80E+00	1.41E-04
T_I_IP	On-Site Idling	--	15	1.94E+00	2.79E-05

Notes:

[1] See Figure 2 for a graphic representation of the modeled sources.

[2] Data was obtained from Table E-1.

[3] Idling duration is based on SJVAPCD's Draft HRA Guidance provided to Ramboll by Kyle Melching (SJVAPCD) on August 4, 2021.

[4] DPM running exhaust emissions were calculated using the emission factors from Table E-2 along with Project VMT and trips.

[5] DPM emissions for on-site vehicle idling were estimated using the number of round trips (i.e., half of the one-way trips) and DPM idling exhaust emission factor from Table E-2.

Conversion Factor:

453.59	g/lb
365	days/year
24	hours/day
60	minutes/hour
60	seconds/minute

Abbreviations:

DPM - diesel particulate matter
g - gram
HRA - health risk assessment
lb - pound
s - second
SJVAPCD - San Joaquin Valley Air Pollution Control District
TRU - Transportation Refrigeration Unit
VMT - vehicle miles traveled

Table E-4. Initial Buildout - TRU Emission Calculations
Pacific Gateway
San Joaquin County, California

Emission Factor[1,2] (g/bhp-hr)	PM_{10}
	0.02

Modeled Roadway Link	Modeled Roadway Link	Annual VMT (miles/year)	Idle Duration[3] (minutes/round trip)	Annual Average TRU Emissions (lb/year)	TRU Emissions Rate (g/s)
				PM_{10}	PM_{10}
TRU_11_1	TRU_11	2,572	--	0.05	7.85E-07
TRU_12_1	TRU_12	2,713	--	0.06	8.28E-07
TRU_13_1	TRU_13	3,421	--	0.07	1.04E-06
TRU_14_1	TRU_14	1,930	--	0.04	5.89E-07
TRU_24_1	TRU_24	8,594	--	0.18	2.62E-06
TRU_25_1	TRU_25	6,321	--	0.13	1.93E-06
TRU_26_1	TRU_26	12,625	--	0.27	3.85E-06
TRU_27_1	TRU_27	18,802	--	0.40	5.74E-06
TRUI_IP	TRUI_IP	--	30	75.37	1.08E-03

Constants:

Horsepower [4]	50	bhp
Load Factor [5]	0.38	
TRU Idling Duration [6]	15	min
Travel Speed[7]	30	miles/hr

Notes:

[1] Emission factors obtained from OFFROAD2021 emissions output for Calendar Year 2029, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin (SJV) County.

[2] SO_X emission factors based on sulfur content of ultra-low sulfur diesel fuel (15 ppm) and fuel consumption from

[3] Approximately 5% of warehouse delivery trucks are equipped with TRUs.

[4] Horsepower is based on SJVAPCD's Draft HRA Guidance provided to Ramboll by Kyle Melching (SJVAPCD) on August 4, 2021. Appendix section 2.3.1 Transportation Refrigeration unit (TRU), Modeling Parameters.

[5] Load factor obtained from CARB Draft 2019 Update to Emissions Inventory for Transport Refrigeration Units, for TRUs Over 25 hp, 2013 and newer. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/cold-storage/documents/hra_emissioninventory2019.pdf. Accessed: January 2024.

[6] On-site TRU operational duration is based on SJVAPCD's Draft HRA Guidance provided to Ramboll by Kyle Melching (SJVAPCD) on August 4, 2021.

[7] TRU On-Road Duration is based on the segment length and travel speed for each roadway. Travel speed is assumed to be 30 miles per hour. Assumptions are based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

Table E-4. Initial Buildout - TRU Emission Calculations
Pacific Gateway
San Joaquin County, California

Modeled Roadway Link	Modeled Roadway Link	Annual VMT (miles/year)	Idle Duration[3] (minutes/round trip)	Annual Average TRU Emissions (lb/year)	TRU Emissions Rate (g/s)
				PM_{10}	PM_{10}

Notes: *(Continued)*

Conversion Factors:

453.59	g/lb
1,000,000	g/MT
60	min/hr
365	day/year
2,000	lb/ton
60	s/min
24	hr/day

Abbreviations:

bph - brake horsepower
CARB - California Air Resources Board
CO - carbon monoxide
g - gram
hp - horsepower
hr - hour
HRA - health risk assessment
lb - pound
min - minute
MT - metric ton
PM_{10} - particulate matter less than 10 microns in diameter
ppm - parts per million
s - second
SJVAPCD - San Joaquin Valley Air Pollution Control District
TRU - Transportation Refrigeration Unit
VMT - vehicle miles travelled

Table E-5. Initial Buildout - Generator Emissions
Pacific Gateway
San Joaquin County, California

Operating Parameters[1]

Parameter	Value	Unit
Maximum Operation Schedule[1]	200	hours/engine/yr
Diesel Consumption Rate[2]	39.9	gal/hr
	7,973	gal/yr
Liquid Fuel Consumption Factor[3]	5.11E-05	Mgal/bhp-hr
Fuel Consumption Rate (calculated)	1.96	MMBtu/hr

Emissions[2]

Pollutant	Provided EF (lb/hp-hr)[4]	Brake Horsepower EF (lb/bhp-hr)	Fuel EF (lb/gal)	Emissions (lb/hr)	Emissions (lb/yr)	Emissions (g/s)
Diesel Particulate Matter	2.20E-03	2.17E-03	0.0425	1.69	338	4.87E-03

Notes:

[1] Emergency generator hours per year taken from SJVAPCD Rule 4701 Section 3.22, which states that "Any internal combustion engine used exclusively for non-utility electric power generation or any other emergency engine, approved by the APCO, and limited by permit condition to operate no more than 200 hours per calendar year for non-emergency purposes and not used in conjunction with any voluntary utility demand reduction program." Available at: https://ww2.valleyair.org/media/1danj2d0/rule-4701.pdf. Accessed: February 2025.

[2] Expected diesel consumption rate taken as an average of similar units.

[3] Liquid fuel consumption factor from Table 1 in AQMD Guidelines for Calculating Emissions form Internal Combustion Engines. https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidelines-for-calculating-emissions-from-internal-combustion-engines.pdf?sfvrsn=6. Accessed: February 2025.

[4] AP-42 emission factors obtained from Table 3-3-1 of AP-42 Section 3.3: Gasoline and Diesel Industrial Engines. Available at: https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed: February 2025.

Conversion Factors:

5.11E-05	Mgal/bhp-hr, liquid fuel consumption factor[4]
365	days/yr
0.001	Mgal/gal
0.986	hp/bhp
398.4658	bhp/MMBtu/hr
24	hr/day
60	min/hr
60	s/min

Abbreviations/Acronyms:

APCO -
bhp - brake-horsepower
EF -
g - gram
gal - gallon
hp - horsepower
hr - hour
lb - pound
Mgal - 1,000 gallons
min - minute
MMBtu - million British thermal units
s - second
SJVAPCD - San Joaquin Valley Air Pollution Control District
yr - year

APPENDIX F
FULL BUILDOUT - HEALTH RISK ASSESSMENT EMISSION CALCULATIONS

Table F-1. Full Buildout - Traffic Volumes and Vehicle Miles Traveled on Modeled Roadways
Pacific Gateway
San Joaquin County, California

Source	Source Group ID	Road Segment ID	Total Daily Trip Rate	Total Annual Trip Rates[2] (one-way trips/year)	Segment Length[3] (meters)	Segment Length (miles)	Annual VMT[4] (miles/year)
Trucks	T_5	--	360	131,400	301.3	0.19	24,601
Trucks	T_7	--	2,040	744,600	365.9	0.23	169,310
Trucks	T_7	--	2,040	744,600	192.2	0.12	88,929
Trucks	T_7	--	2,040	744,600	126.3	0.08	58,450
Trucks	T_7	--	2,040	744,600	455.3	0.28	210,651
Trucks	T_7	--	2,040	744,600	1031.0	0.64	477,008
Trucks	T_7	--	2,040	744,600	206.5	0.13	95,550
Trucks	T_8	--	360	131,400	527.9	0.33	43,102
Trucks	T_9	--	640	233,600	71.5	0.04	10,374
Trucks	T_9	--	640	233,600	367.7	0.23	53,375
Trucks	T_9	--	640	233,600	277.9	0.17	40,345
Trucks	T_9	--	640	233,600	972.5	0.60	141,154
Trucks	T_9	--	640	233,600	130.0	0.08	18,872
Trucks	T_10	--	3,608	1,316,920	158.0	0.10	129,280
Trucks	T_10	--	3,608	1,316,920	87.1	0.05	71,267
Trucks	T_10	--	3,608	1,316,920	502.5	0.31	411,208
Trucks	T_10	--	3,608	1,316,920	297.5	0.18	243,438
Trucks	T_10	--	3,608	1,316,920	688.2	0.43	563,119
Trucks	T_10	--	3,608	1,316,920	260.4	0.16	213,099
Trucks	T_11	--	8,456	3,086,440	164.9	0.10	316,311
Trucks	T_12	--	8,456	3,086,440	174.0	0.11	333,630
Trucks	T_13	--	8,456	3,086,440	219.4	0.14	420,809
Trucks	T_14	--	8,456	3,086,440	123.7	0.08	237,322
Trucks	T_15	--	840	306,600	740.6	0.46	141,094
Trucks	T_15	--	840	306,600	168.4	0.10	32,086
Trucks	T_15	--	840	306,600	276.1	0.17	52,605
Trucks	T_15	--	840	306,600	251.3	0.16	47,873
Trucks	T_15	--	840	306,600	270.7	0.17	51,581
Trucks	T_16	--	1,332	486,180	1352.2	0.84	408,495
Trucks	T_17	--	1,332	486,180	237.0	0.15	71,607
Trucks	T_17	--	1,332	486,180	73.3	0.05	22,145
Trucks	T_17	--	1,332	486,180	712.3	0.44	215,174
Trucks	T_18	--	2,160	788,400	705.2	0.44	345,456
Trucks	T_18	--	2,160	788,400	334.5	0.21	163,859
Trucks	T_19	--	2,160	788,400	1198.1	0.74	586,945
Trucks	T_19	--	2,160	788,400	268.0	0.17	131,280
Trucks	T_19	--	2,160	788,400	128.1	0.08	62,744
Trucks	T_19	--	2,160	788,400	71.6	0.04	35,062
Trucks	T_20	--	1,560	569,400	169.5	0.11	59,978
Trucks	T_21	--	1,560	569,400	273.5	0.17	96,759
Trucks	T_21	--	1,560	569,400	89.7	0.06	31,744
Trucks	T_21	--	1,560	569,400	172.2	0.11	60,942
Trucks	T_21	--	1,560	569,400	204.1	0.13	72,216
Trucks	T_21	--	1,560	569,400	283.7	0.18	100,391
Trucks	T_21	--	1,560	569,400	183.2	0.11	64,818
Trucks	T_21	--	1,560	569,400	110.2	0.07	38,998
Trucks	T_24	--	2,704	986,960	551.2	0.34	338,013
Trucks	T_25	--	2,704	986,960	405.4	0.25	248,595
Trucks	T_26	--	2,704	986,960	809.7	0.50	496,558
Trucks	T_27	--	2,704	986,960	658.0	0.41	403,505
Trucks	T_28	--	1,560	569,400	57.6	0.04	20,372
TRUs	TRU_5	TRU_5_1	18	6,570	301.3	0.19	1,230
TRUs	TRU_7	TRU_7_1	102	37,230	365.9	0.23	8,466

Table F-1. Full Buildout - Traffic Volumes and Vehicle Miles Traveled on Modeled Roadways
Pacific Gateway
San Joaquin County, California

Source	Source Group ID	Road Segment ID	Total Daily Trip Rate	Total Annual Trip Rates[2] (one-way trips/year)	Segment Length[3] (meters)	Segment Length (miles)	Annual VMT[4] (miles/year)
TRUs	TRU_7	TRU_7_2	102	37,230	192.2	0.12	4,446
TRUs	TRU_7	TRU_7_3	102	37,230	126.3	0.08	2,923
TRUs	TRU_7	TRU_7_4	102	37,230	455.3	0.28	10,533
TRUs	TRU_7	TRU_7_5	102	37,230	1031.0	0.64	23,850
TRUs	TRU_7	TRU_7_6	102	37,230	206.5	0.13	4,778
TRUs	TRU_8	TRU_8_1	18	6,570	527.9	0.33	2,155
TRUs	TRU_9	TRU_9_1	32	11,680	71.5	0.04	519
TRUs	TRU_9	TRU_9_2	32	11,680	367.7	0.23	2,669
TRUs	TRU_9	TRU_9_3	32	11,680	277.9	0.17	2,017
TRUs	TRU_9	TRU_9_4	32	11,680	972.5	0.60	7,058
TRUs	TRU_9	TRU_9_5	32	11,680	130.0	0.08	944
TRUs	TRU_10	TRU_10_1	180	65,846	158.0	0.10	6,464
TRUs	TRU_10	TRU_10_2	180	65,846	87.1	0.05	3,563
TRUs	TRU_10	TRU_10_3	180	65,846	502.5	0.31	20,560
TRUs	TRU_10	TRU_10_4	180	65,846	297.5	0.18	12,172
TRUs	TRU_10	TRU_10_5	180	65,846	688.2	0.43	28,156
TRUs	TRU_10	TRU_10_6	180	65,846	260.4	0.16	10,655
TRUs	TRU_11	TRU_11_1	423	154,322	164.9	0.10	15,816
TRUs	TRU_12	TRU_12_1	423	154,322	174.0	0.11	16,681
TRUs	TRU_13	TRU_13_1	423	154,322	219.4	0.14	21,040
TRUs	TRU_14	TRU_14_1	423	154,322	123.7	0.08	11,866
TRUs	TRU_15	TRU_15_1	42	15,330	740.6	0.46	7,055
TRUs	TRU_15	TRU_15_2	42	15,330	168.4	0.10	1,604
TRUs	TRU_15	TRU_15_3	42	15,330	276.1	0.17	2,630
TRUs	TRU_15	TRU_15_4	42	15,330	251.3	0.16	2,394
TRUs	TRU_15	TRU_15_5	42	15,330	270.7	0.17	2,579
TRUs	TRU_16	TRU_16_1	67	24,309	1352.2	0.84	20,425
TRUs	TRU_17	TRU_17_1	67	24,309	237.0	0.15	3,580
TRUs	TRU_17	TRU_17_2	67	24,309	73.3	0.05	1,107
TRUs	TRU_17	TRU_17_3	67	24,309	712.3	0.44	10,759
TRUs	TRU_18	TRU_18_1	108	39,420	705.2	0.44	17,273
TRUs	TRU_18	TRU_18_2	108	39,420	334.5	0.21	8,193
TRUs	TRU_19	TRU_19_1	108	39,420	1198.1	0.74	29,347
TRUs	TRU_19	TRU_19_2	108	39,420	268.0	0.17	6,564
TRUs	TRU_19	TRU_19_3	108	39,420	128.1	0.08	3,137
TRUs	TRU_19	TRU_19_4	108	39,420	71.6	0.04	1,753
TRUs	TRU_20	TRU_20_1	78	28,470	169.5	0.11	2,999
TRUs	TRU_21	TRU_21_1	78	28,470	273.5	0.17	4,838
TRUs	TRU_21	TRU_21_2	78	28,470	89.7	0.06	1,587
TRUs	TRU_21	TRU_21_3	78	28,470	172.2	0.11	3,047
TRUs	TRU_21	TRU_21_4	78	28,470	204.1	0.13	3,611
TRUs	TRU_21	TRU_21_5	78	28,470	283.7	0.18	5,020
TRUs	TRU_21	TRU_21_6	78	28,470	183.2	0.11	3,241
TRUs	TRU_21	TRU_21_7	78	28,470	110.2	0.07	1,950
TRUs	TRU_24	TRU_24_1	135	49,348	551.2	0.34	16,901
TRUs	TRU_25	TRU_25_1	135	49,348	405.4	0.25	12,430
TRUs	TRU_26	TRU_26_1	135	49,348	809.7	0.50	24,828
TRUs	TRU_27	TRU_27_1	135	49,348	658.0	0.41	20,175
TRUs	TRU_28	TRU_28_1	78	28,470	57.6	0.04	1,019

Notes:

[1] See Figure 2 for a graphic representation of the modeled sources.

[2] Trip rates based on Project-specific data provided by Fehr & Peers. TRUs are assumed to be present with 5% of truck trips.

Table F-1. Full Buildout - Traffic Volumes and Vehicle Miles Traveled on Modeled Roadways
Pacific Gateway
San Joaquin County, California

Source	Source Group ID	Road Segment ID	Total Daily Trip Rate	Total Annual Trip Rates[2] (one-way trips/year)	Segment Length[3] (meters)	Segment Length (miles)	Annual VMT[4] (miles/year)

[3] Segment length based on modeled source length in AERMOD.

[4] VMT is calculated as the product of the segment length and the total number of annual one-way trips.

Abbreviations:

AERMOD - American Meteorological Society/Environmental Protection Agency Regulatory Model

TRU - Transportation refrigeration unit

VMT - Vehicle miles traveled

Table F-2. Full Buildout - Diesel Particulate Matter Emission Factors
Pacific Gateway
San Joaquin County, California

EMFAC Vehicle Class	Fuel	Speed	Year[1]	EMFAC VMT Output[2] (miles/day)	DPM Emission Factor[3]		
					Running Exhaust[4] (g/mile)	Idle Exhaust[5] (g/idle-minute)	TRU Idle Exhaust[6] (g/idle-minute)
HHDT	Diesel	5	2050	379	--	1.68E-04	0.004
HHDT	Diesel	10	2050	11,290	--	--	--
HHDT	Diesel	15	2050	27,421	--	--	--
HHDT	Diesel	20	2050	48,684	--	--	--
HHDT	Diesel	25	2050	33,108	--	--	--
HHDT	Diesel	30	2050	35,554	0.005	--	--
HHDT	Diesel	35	2050	40,488	0.006	--	--
HHDT	Diesel	40	2050	50,053	0.008	--	--
HHDT	Diesel	45	2050	55,130	0.011	--	--
HHDT	Diesel	50	2050	66,423	0.015	--	--
HHDT	Diesel	55	2050	109,105	0.020	--	--
Diesel HHDT Emission Factor[4]					**0.011**	**1.68E-04**	**0.004**

Constants:

TRU idle exhaust rate[6] 0.21 g/hr

Notes:

[1] The furthest future year for which EMFAC outputs are available is 2050.

[2] Data obtained from EMFAC2021 output for HHDT diesel vehicle default emissions activity.

[3] For purposes of this analysis, DPM emissions are assumed to be equal to PM_{10} exhaust emissions from diesel vehicles.

[4] Off-site running exhaust emission factor is based on EMFAC2021 emission rate output for 30 to 55 mph, per SJVAPCD draft guidance.

[5] Truck idling emission factor was obtained from the default EMFAC2021 project-level output for San Joaquin County in calendar year 2050.

[6] TRU Idle exhaust based on an emission rate of 0.21 g per hr, per SJVAPCD draft guidance.

Conversion Factors:

60 min/hr
907,185 g/ton

Abbreviations:

DPM - diesel particulate matter
EMFAC - EMission FACtors model
g - grams
hr - hours
min - minutes
mph - miles per hour
SJVAPCD - San Joaquin Valley Air Pollution Control District
TRU - Transportation Refrigeration Unit
VMT - vehicle miles travelled

Table F-2. Full Buildout - Diesel Particulate Matter Emission Factors
Pacific Gateway
San Joaquin County, California

HHDT - Heavy heavy-duty truck

PM_{10} - particulate matter less than 10 microns in diameter

Table F-3. Full Buildout - Delivery Truck Emissions
Pacific Gateway
San Joaquin County, California

Source Group ID[1]	Modeled Roadway Link	Project VMT[2] (miles)	Idle Duration[3] (minutes/round trip)	DPM Exhaust Emissions[4,5]	
		Annual		Annual (lb/year)	Emission Rate (g/s)
T_5	--	24,601	--	5.73E-01	8.24E-06
T_7	--	169,310	--	3.94E+00	5.67E-05
T_7	--	88,929	--	2.07E+00	2.98E-05
T_7	--	58,450	--	1.36E+00	1.96E-05
T_7	--	210,651	--	4.91E+00	7.06E-05
T_7	--	477,008	--	1.11E+01	1.60E-04
T_7	--	95,550	--	2.23E+00	3.20E-05
T_8	--	43,102	--	1.00E+00	1.44E-05
T_9	--	10,374	--	2.42E-01	3.47E-06
T_9	--	53,375	--	1.24E+00	1.79E-05
T_9	--	40,345	--	9.40E-01	1.35E-05
T_9	--	141,154	--	3.29E+00	4.73E-05
T_9	--	18,872	--	4.39E-01	6.32E-06
T_10	--	129,280	--	3.01E+00	4.33E-05
T_10	--	71,267	--	1.66E+00	2.39E-05
T_10	--	411,208	--	9.58E+00	1.38E-04
T_10	--	243,438	--	5.67E+00	8.15E-05
T_10	--	563,119	--	1.31E+01	1.89E-04
T_10	--	213,099	--	4.96E+00	7.14E-05
T_11	--	316,311	--	7.37E+00	1.06E-04
T_12	--	333,630	--	7.77E+00	1.12E-04
T_13	--	420,809	--	9.80E+00	1.41E-04
T_14	--	237,322	--	5.53E+00	7.95E-05
T_15	--	141,094	--	3.29E+00	4.73E-05
T_15	--	32,086	--	7.47E-01	1.07E-05
T_15	--	52,605	--	1.23E+00	1.76E-05
T_15	--	47,873	--	1.11E+00	1.60E-05
T_15	--	51,581	--	1.20E+00	1.73E-05
T_16	--	408,495	--	9.51E+00	1.37E-04
T_17	--	71,607	--	1.67E+00	2.40E-05
T_17	--	22,145	--	5.16E-01	7.42E-06
T_17	--	215,174	--	5.01E+00	7.21E-05
T_18	--	345,456	--	8.04E+00	1.16E-04
T_18	--	163,859	--	3.82E+00	5.49E-05
T_19	--	586,945	--	1.37E+01	1.97E-04
T_19	--	131,280	--	3.06E+00	4.40E-05
T_19	--	62,744	--	1.46E+00	2.10E-05
T_19	--	35,062	--	8.17E-01	1.17E-05
T_20	--	59,978	--	1.40E+00	2.01E-05
T_21	--	96,759	--	2.25E+00	3.24E-05
T_21	--	31,744	--	7.39E-01	1.06E-05
T_21	--	60,942	--	1.42E+00	2.04E-05
T_21	--	72,216	--	1.68E+00	2.42E-05
T_21	--	100,391	--	2.34E+00	3.36E-05
T_21	--	64,818	--	1.51E+00	2.17E-05
T_21	--	38,998	--	9.08E-01	1.31E-05
T_24	--	338,013	--	7.87E+00	1.13E-04

Table F-3. Full Buildout - Delivery Truck Emissions
Pacific Gateway
San Joaquin County, California

Source Group ID[1]	Modeled Roadway Link	Project VMT[2] (miles)	Idle Duration[3] (minutes/round trip)	DPM Exhaust Emissions[4,5]	
		Annual		Annual (lb/year)	Emission Rate (g/s)
T_25	--	248,595	--	5.79E+00	8.33E-05
T_26	--	496,558	--	1.16E+01	1.66E-04
T_27	--	403,505	--	9.40E+00	1.35E-04
T_28	--	20,372	--	4.74E-01	6.82E-06
T_I_PGW	On-Site Idling	--	15	2.82E+00	4.05E-05
T_I_PGC	On-Site Idling	--	15	3.13E+00	4.50E-05
T_I_PGE	On-Site Idling	--	15	5.08E+00	7.31E-05
T_I_GC	On-Site Idling	--	15	1.28E+00	1.84E-05

Notes:

[1] See Figure 2 for a graphic representation of the modeled sources.

[2] Data was obtained from Table F-1.

[3] Idling duration is based on SJVAPCD's Draft HRA Guidance provided to Ramboll by Kyle Melching (SJVAPCD) on August 4, 2021.

[4] DPM running exhaust emissions were calculated using the emission factors from Table F-2 along with Project VMT and trips.

[5] DPM emissions for on-site vehicle idling were estimated using the number of round trips (i.e., half of the one-way trips) and DPM idling exhaust emission factor from Table F-2.

Conversion Factor:

453.59	g/lb
365	days/year
24	hours/day
60	minutes/hour
60	seconds/minute

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
DPM - diesel particulate matter
g - grams
lb - pounds
VMT - vehicle miles traveled
yr - year
SJVAPCD - San Joaquin Valley Air Pollution Control Distric

Table F-4. Full Buildout - TRU Emission Calculations
Pacific Gateway
San Joaquin County, California

Emission Factor[1,2] (g/bhp-hr)	PM_{10}
	0.01

Modeled Roadway Link	Source Group ID	Annual VMT[3] (miles/year)	Idle Duration[3] (minutes/round trip)	Annual Average TRU Emissions (lb/year)	TRU Emissions Rate (g/s)
				PM_{10}	PM_{10}
TRU_5_1	TRU_5	1,230	--	0.02	3.57E-07
TRU_7_1	TRU_7	8,466	--	0.17	2.46E-06
TRU_7_2	TRU_7	4,446	--	0.09	1.29E-06
TRU_7_3	TRU_7	2,923	--	0.06	8.48E-07
TRU_7_4	TRU_7	10,533	--	0.21	3.05E-06
TRU_7_5	TRU_7	23,850	--	0.48	6.92E-06
TRU_7_6	TRU_7	4,778	--	0.10	1.39E-06
TRU_8_1	TRU_8	2,155	--	0.04	6.25E-07
TRU_9_1	TRU_9	519	--	0.01	1.50E-07
TRU_9_2	TRU_9	2,669	--	0.05	7.74E-07
TRU_9_3	TRU_9	2,017	--	0.04	5.85E-07
TRU_9_4	TRU_9	7,058	--	0.14	2.05E-06
TRU_9_5	TRU_9	944	--	0.02	2.74E-07
TRU_10_1	TRU_10	6,464	--	0.13	1.87E-06
TRU_10_2	TRU_10	3,563	--	0.07	1.03E-06
TRU_10_3	TRU_10	20,560	--	0.41	5.96E-06
TRU_10_4	TRU_10	12,172	--	0.25	3.53E-06
TRU_10_5	TRU_10	28,156	--	0.57	8.17E-06
TRU_10_6	TRU_10	10,655	--	0.21	3.09E-06
TRU_11_1	TRU_11	15,816	--	0.32	4.59E-06
TRU_12_1	TRU_12	16,681	--	0.34	4.84E-06
TRU_13_1	TRU_13	21,040	--	0.42	6.10E-06
TRU_14_1	TRU_14	11,866	--	0.24	3.44E-06
TRU_15_1	TRU_15	7,055	--	0.14	2.05E-06
TRU_15_2	TRU_15	1,604	--	0.03	4.65E-07
TRU_15_3	TRU_15	2,630	--	0.05	7.63E-07
TRU_15_4	TRU_15	2,394	--	0.05	6.94E-07
TRU_15_5	TRU_15	2,579	--	0.05	7.48E-07
TRU_16_1	TRU_16	20,425	--	0.41	5.92E-06
TRU_17_1	TRU_17	3,580	--	0.07	1.04E-06
TRU_17_2	TRU_17	1,107	--	0.02	3.21E-07
TRU_17_3	TRU_17	10,759	--	0.22	3.12E-06
TRU_18_1	TRU_18	17,273	--	0.35	5.01E-06
TRU_18_2	TRU_18	8,193	--	0.17	2.38E-06
TRU_19_1	TRU_19	29,347	--	0.59	8.51E-06
TRU_19_2	TRU_19	6,564	--	0.13	1.90E-06
TRU_19_3	TRU_19	3,137	--	0.06	9.10E-07
TRU_19_4	TRU_19	1,753	--	0.04	5.08E-07
TRU_20_1	TRU_20	2,999	--	0.06	8.70E-07
TRU_21_1	TRU_21	4,838	--	0.10	1.40E-06
TRU_21_2	TRU_21	1,587	--	0.03	4.60E-07
TRU_21_3	TRU_21	3,047	--	0.06	8.84E-07
TRU_21_4	TRU_21	3,611	--	0.07	1.05E-06
TRU_21_5	TRU_21	5,020	--	0.10	1.46E-06

Table F-4. Full Buildout - TRU Emission Calculations
Pacific Gateway
San Joaquin County, California

Modeled Roadway Link	Source Group ID	Annual VMT[3] (miles/year)	Idle Duration[3] (minutes/round trip)	Annual Average TRU Emissions (lb/year)	TRU Emissions Rate (g/s)
				PM_{10}	PM_{10}
TRU_21_6	TRU_21	3,241	--	0.07	9.40E-07
TRU_21_7	TRU_21	1,950	--	0.04	5.65E-07
TRU_24_1	TRU_24	16,901	--	0.34	4.90E-06
TRU_25_1	TRU_25	12,430	--	0.25	3.60E-06
TRU_26_1	TRU_26	24,828	--	0.50	7.20E-06
TRU_27_1	TRU_27	20,175	--	0.41	5.85E-06
TRU_28_1	TRU_28	1,019	--	0.02	2.95E-07
TRUI_PGW	On-Site Idling	--	30	117.28	1.69E-03
TRUI_PGC	On-Site Idling	--	30	130.33	1.87E-03
TRUI_PGE	On-Site Idling	--	30	211.48	3.04E-03
TRUI_GC	On-Site Idling	--	30	53.40	7.68E-04

Notes:

[1] Emission factors obtained from OFFROAD2021 emissions output for Calendar Year 2029, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin (SJV) County.

[2] SO_X emission factors based on sulfur content of ultra-low sulfur diesel fuel (15 ppm) and fuel consumption from OFFROAD2021.

[3] Approximately 5% of warehouse delivery trucks are equipped with TRUs.

[4] Horsepower is based on SJVAPCD's Draft HRA Guidance provided to Ramboll by Kyle Melching (SJVAPCD) on August 4, 2021. Appendix section 2.3.1 Transportation Refrigeration unit (TRU), Modeling Parameters.

[5] Load factor obtained from CARB Draft 2019 Update to Emissions Inventory for Transport Refrigeration Units, for TRUs Over 25 hp, 2013 and newer. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/cold-storage/documents/hra_emissioninventory2019.pdf. Accessed: January 2025.

[6] Idling duration is based on SJVAPCD's Draft HRA Guidance provided to Ramboll by Kyle Melching (SJVAPCD) on August 4, 2021.

[7] TRU On-Road Duration is based on the segment length and travel speed for each roadway. Travel speed is assumed to be 30 miles per hour. Assumptions are based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

Constants:

Horsepower [4]	50	bhp
Load Factor [5]	0.38	
TRU Idling Duration[6]	30	min
Travel Speed [7]	30	miles/hr

Table F-4. Full Buildout - TRU Emission Calculations
Pacific Gateway
San Joaquin County, California

Modeled Roadway Link	Source Group ID	Annual VMT[3] (miles/year)	Idle Duration[3] (minutes/round trip)	Annual Average TRU Emissions (lb/year)	TRU Emissions Rate (g/s)
				PM_{10}	PM_{10}

Notes: *(Continued)*

Conversion Factors:

453.59	g/lb
1,000,000	g/MT
60	min/hr
365	day/year
2,000	lb/ton
60	s/min
24	hr/day

Abbreviations:

bph - brake horsepower
CARB - California Air Resources Board
g - grams
HRA - health risk assessment
hp - horsepower
hr - hour
lb - pound
min - minute
MT - metric ton
PM_{10} - particulate matter less than 10 microns in diameter
ppm - parts per million
s - second
SJVAPCD - San Joaquin Valley Air Pollution Control District
SO_x - oxides of sulfur
TRU - transport/transportation refrigeration unit
VMT - vehicle miles travelled

Table F-5. Full Buildout - Generator Emissions
Pacific Gateway
San Joaquin County, California

Operating Parameters

Parameter	Value	Unit
Schedule[1]	200	hours/engine/yr
Diesel Consumption Rate[2]	39.9	gal/hr
	7,973	gal/yr
Liquid Fuel Consumption Factor[3]	5.11E-05	Mgal/bhp-hr
Fuel Consumption Rate (calculated)	1.96	MMBtu/hr

Emissions[2]

Pollutant	Provided EF (lb/hp-hr)[4]	Brake Horsepower EF (lb/bhp-hr)	Fuel EF (lb/gal)	Emissions (lbs/hr)	Emissions (lbs/yr)	Emissions (g/s)
Diesel Particulate Matter	2.20E-03	2.17E-03	0.0425	1.69	338	4.87E-03

Notes:

[1] Emergency generator hours per year taken from SJVAPCD Rule 4701 Section 3.22, which states that "Any internal combustion engine used exclusively for non-utility electric power generation or any other emergency engine, approved by the APCO, and limited by permit condition to operate no more than 200 hours per calendar year for non-emergency purposes and not used in conjunction with any voluntary utility demand reduction program." Available at: https://ww2.valleyair.org/media/1danj2d0/rule-4701.pdf. Accessed: February 2025.

[2] Expected diesel consumption rate taken as an average of similar units.

[3] Liquid fuel consumption factor from Table 1 in AQMD Guidelines for Calculating Emissions form Internal Combustion Engines. https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidelines-for-calculating-emissions-from-internal-combustion-engines.pdf?sfvrsn=6. Accessed February 2025.

[4] AP-42 emission factors obtained from Table 3-3-1 of AP-42 Section 3.3: Gasoline and Diesel Industrial Engines. Available at: https://www3.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf. Accessed: February 2025.

Conversion Factors:

5.11E-05	Mgal/bhp-hr, liquid fuel consumption factor[4]
365	days/yr
0.001	Mgal/gal
0.986	hp/bhp
398.4658	bhp/MMBtu/hr
24	hr/day
60	min/hr
60	s/min

Abbreviations/Acronyms:

APCO -
bhp - brake-horsepower
EF -
g - gram
gal - gallon
hp - horsepower
hr - hour
kW - kilowatt
lb - pound
Mgal - 1,000 gallons
min - minute
MMBtu - million British thermal units
s - second
SJVAPCD - San Joaquin Valley Air Pollution Control District
yr - year

Table F-6. Fuel Facility Emissions
Pacific Gateway
San Joaquin County, California

		Source Group ID					
		LOADING	BREATH	REFILL			SPILL
		Loading	Breathing	Refueling	Hose Permeation	Total	Spillage
VOC Emission Factor (lb/1,000 gallons)[1]		0.15	0.024	0.356	0.009	--	0.24
Weight Percent[2]	Benzene	4.57E-03	4.57E-03	4.57E-03	4.57E-03	--	7.07E-03
	Ethyl Benzene	1.07E-03	1.07E-03	1.07E-03	1.07E-03	--	1.29E-02
	Hexane	1.82E-02	1.82E-02	1.82E-02	1.82E-02	--	1.86E-02
	Naphthalene	4.45E-06	4.45E-06	4.45E-06	4.45E-06	--	1.74E-03
	Propylene (propene)	3.59E-05	3.59E-05	3.59E-05	3.59E-05	--	1.22E-06
	Toluene	1.11E-02	1.11E-02	1.11E-02	1.11E-02	--	5.63E-02
	Xylenes	4.09E-03	4.09E-03	4.09E-03	4.09E-03	--	6.59E-02
Emissions (lb/hr)[3]	Benzene	6.03E-03	4.82E-04	7.15E-03	1.81E-04	7.33E-03	7.46E-03
	Ethyl Benzene	1.41E-03	1.13E-04	1.67E-03	4.23E-05	1.72E-03	1.36E-02
	Hexane	2.40E-02	1.92E-03	2.85E-02	7.20E-04	2.92E-02	1.96E-02
	Naphthalene	5.87E-06	4.69E-07	6.96E-06	1.76E-07	7.14E-06	1.84E-03
	Propylene (propene)	4.74E-05	3.79E-06	5.62E-05	1.42E-06	5.76E-05	1.29E-06
	Toluene	1.47E-02	1.17E-03	1.74E-02	4.39E-04	1.78E-02	5.94E-02
	Xylenes	5.40E-03	4.31E-04	6.40E-03	1.62E-04	6.56E-03	6.95E-02
Emissions (lb/year)	Benzene	1.75E+01	2.81E+00	4.16E+01	1.05E+00	4.27E+01	4.34E+01
	Ethyl Benzene	4.11E+00	6.57E-01	9.75E+00	2.47E-01	1.00E+01	7.93E+01
	Hexane	6.99E+01	1.12E+01	1.66E+02	4.19E+00	1.70E+02	1.14E+02
	Naphthalene	1.71E-02	2.73E-03	4.06E-02	1.03E-03	4.16E-02	1.07E+01
	Propylene (propene)	1.38E-01	2.21E-02	3.27E-01	8.27E-03	3.35E-01	7.50E-03
	Toluene	4.26E+01	6.82E+00	1.01E+02	2.56E+00	1.04E+02	3.46E+02
	Xylenes	1.57E+01	2.51E+00	3.73E+01	9.42E-01	3.82E+01	4.05E+02

Throughput:

Hourly Loading Throughput[3]	8,800	gallons/hr
Hourly Dispensing Throughput	4,396	gallons/hr
Annual Throughput	25.6	million gallons/year

Notes:

[1] Emission factors obtained from Kyle Melching from SJVAPCD in July 2024. It was assumed that the fueling facility would utilize underground storage tank and implement EVR Phase I and EVR Phase II equipment, and operate on a 16 hour/day schedule.

[2] Weight percents obtained from SJVAPCD Emission Factors for Gasoline Dispensing Operations. Available at https://ww2.valleyair.org/permitting/emission-factors/. Accessed: February 2025.

[3] Loading emissions are calculated based on an hourly throughput of 8,800 gallons, recommended by CARB/CAPCOA Gasoline Service Station Industrywide Risk Assessment Technical Guidance. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-03/Draft%202022%20Gas%20Station%20IWG%20-%20Technical%20Guidance_ADA%20Compliant.pdf. Accessed: February 2025.

Abbreviations:

hr - hour
lb - pound
VOC - volatile organic compounds
EVR - enhanced vapor recovery
SJVAPCD - San Joaquin Valley Air Pollution Control District
CARB - California Air Resources Board
CAPCOA - California Air Pollution Control Officers Association

APPENDIX G
HEALTH RISK ASSESSMENT RESULTS

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1	639723.5	4168261.2	Resident	Scenario 1	2.61E-01	4.76E-05	--
2	639698.5	4168286.2	Resident	Scenario 1	2.59E-01	4.72E-05	--
3	639723.5	4168286.2	Resident	Scenario 1	2.63E-01	4.80E-05	--
4	639648.5	4168311.2	Resident	Scenario 1	2.52E-01	4.60E-05	--
5	639673.5	4168311.2	Resident	Scenario 1	2.56E-01	4.68E-05	--
6	639698.5	4168311.2	Resident	Scenario 1	2.60E-01	4.75E-05	--
7	639648.5	4168336.2	Resident	Scenario 1	2.54E-01	4.65E-05	--
8	639673.5	4168336.2	Resident	Scenario 1	2.59E-01	4.72E-05	--
9	639698.5	4168336.2	Resident	Scenario 1	2.63E-01	4.80E-05	--
10	639648.5	4168361.2	Resident	Scenario 1	2.57E-01	4.69E-05	--
11	639673.5	4168361.2	Resident	Scenario 1	2.61E-01	4.77E-05	--
12	639698.5	4168361.2	Resident	Scenario 1	2.66E-01	4.85E-05	--
13	639648.5	4168386.2	Resident	Scenario 1	2.59E-01	4.73E-05	--
14	639673.5	4168386.2	Resident	Scenario 1	2.64E-01	4.81E-05	--
15	639698.5	4168386.2	Resident	Scenario 1	2.68E-01	4.89E-05	--
16	639648.5	4168411.2	Resident	Scenario 1	2.62E-01	4.78E-05	--
17	639673.5	4168411.2	Resident	Scenario 1	2.66E-01	4.86E-05	--
18	639698.5	4168411.2	Resident	Scenario 1	2.71E-01	4.94E-05	--
19	639648.5	4168436.2	Resident	Scenario 1	2.64E-01	4.82E-05	--
20	639673.5	4168436.2	Resident	Scenario 1	2.68E-01	4.90E-05	--
21	639698.5	4168436.2	Resident	Scenario 1	2.73E-01	4.99E-05	--
22	641298.5	4168511.2	Resident	Scenario 1	3.10E+00	5.67E-04	--
23	641323.5	4168511.2	Resident	Scenario 1	4.66E+00	8.51E-04	--
24	641298.5	4168536.2	Resident	Scenario 1	3.12E+00	5.69E-04	--
25	641323.5	4168536.2	Resident	Scenario 1	4.70E+00	8.58E-04	--
26	641298.5	4168561.2	Resident	Scenario 1	3.12E+00	5.70E-04	--
27	641323.5	4168561.2	Resident	Scenario 1	4.72E+00	8.62E-04	--
28	641298.5	4168586.2	Resident	Scenario 1	3.13E+00	5.71E-04	--
29	641323.5	4168586.2	Resident	Scenario 1	4.74E+00	8.66E-04	--
30	641298.5	4168611.2	Resident	Scenario 1	3.14E+00	5.73E-04	--
31	641323.5	4168611.2	Resident	Scenario 1	4.77E+00	8.71E-04	--
32	641298.5	4168636.2	Resident	Scenario 1	3.14E+00	5.72E-04	--
33	641323.5	4168636.2	Resident	Scenario 1	4.79E+00	8.74E-04	--
34	641298.5	4168661.2	Resident	Scenario 1	3.14E+00	5.73E-04	--
35	641323.5	4168661.2	Resident	Scenario 1	4.81E+00	8.78E-04	--
36	642036.2	4165948.9	Resident	Scenario 1	3.48E-01	6.35E-05	--
37	640636.2	4166448.9	Resident	Scenario 1	2.60E-01	4.75E-05	--
38	640836.2	4166448.9	Resident	Scenario 1	2.91E-01	5.31E-05	--
39	640936.2	4166448.9	Resident	Scenario 1	3.13E-01	5.71E-05	--
40	641036.2	4166448.9	Resident	Scenario 1	3.39E-01	6.19E-05	--
41	641136.2	4166448.9	Resident	Scenario 1	3.82E-01	6.98E-05	--
42	641236.2	4166448.9	Resident	Scenario 1	4.40E-01	8.04E-05	--
43	640636.2	4166548.9	Resident	Scenario 1	2.77E-01	5.05E-05	--
44	640736.2	4166548.9	Resident	Scenario 1	2.96E-01	5.41E-05	--
45	640836.2	4166548.9	Resident	Scenario 1	3.17E-01	5.79E-05	--
46	641036.2	4166548.9	Resident	Scenario 1	3.82E-01	6.98E-05	--
47	641136.2	4166548.9	Resident	Scenario 1	4.45E-01	8.12E-05	--
48	641236.2	4166548.9	Resident	Scenario 1	5.68E-01	1.04E-04	--
49	640636.2	4166648.9	Resident	Scenario 1	2.93E-01	5.36E-05	--
50	640736.2	4166648.9	Resident	Scenario 1	3.17E-01	5.79E-05	--
51	640836.2	4166648.9	Resident	Scenario 1	3.43E-01	6.26E-05	--
52	640936.2	4166648.9	Resident	Scenario 1	3.77E-01	6.88E-05	--
53	641036.2	4166648.9	Resident	Scenario 1	4.29E-01	7.83E-05	--
54	641136.2	4166648.9	Resident	Scenario 1	5.02E-01	9.17E-05	--
55	641236.2	4166648.9	Resident	Scenario 1	7.13E-01	1.30E-04	--
56	640636.2	4166748.9	Resident	Scenario 1	3.06E-01	5.60E-05	--
57	640736.2	4166748.9	Resident	Scenario 1	3.36E-01	6.14E-05	--
58	640836.2	4166748.9	Resident	Scenario 1	3.56E-01	6.50E-05	--
59	640936.2	4166748.9	Resident	Scenario 1	3.99E-01	7.28E-05	--
60	641036.2	4166748.9	Resident	Scenario 1	4.63E-01	8.46E-05	--
61	641136.2	4166748.9	Resident	Scenario 1	5.81E-01	1.06E-04	--
62	640636.2	4166848.9	Resident	Scenario 1	3.13E-01	5.71E-05	--
63	640736.2	4166848.9	Resident	Scenario 1	3.47E-01	6.34E-05	--
64	640836.2	4166848.9	Resident	Scenario 1	3.80E-01	6.93E-05	--
65	640936.2	4166848.9	Resident	Scenario 1	4.31E-01	7.87E-05	--
66	644636.2	4167548.9	Resident	Scenario 1	4.89E+00	8.92E-04	--
67	644636.2	4167648.9	Resident	Scenario 1	4.57E+00	8.34E-04	--
68	644736.2	4167648.9	Resident	Scenario 1	4.20E+00	7.66E-04	--
69	644836.2	4167648.9	Resident	Scenario 1	3.87E+00	7.06E-04	--
70	644936.2	4167648.9	Resident	Scenario 1	3.58E+00	6.54E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
71	645036.2	4167648.9	Resident	Scenario 1	3.33E+00	6.07E-04	--
72	645236.2	4167648.9	Resident	Scenario 1	2.91E+00	5.31E-04	--
73	644536.2	4167748.9	Resident	Scenario 1	4.45E+00	8.13E-04	--
74	644636.2	4168848.9	Resident	Scenario 1	1.05E+00	1.91E-04	--
75	644736.2	4168848.9	Resident	Scenario 1	1.02E+00	1.86E-04	--
76	644636.2	4168948.9	Resident	Scenario 1	9.85E-01	1.80E-04	--
77	644536.2	4169048.9	Resident	Scenario 1	9.49E-01	1.73E-04	--
78	644636.2	4169048.9	Resident	Scenario 1	9.27E-01	1.69E-04	--
79	644736.2	4169048.9	Resident	Scenario 1	9.06E-01	1.65E-04	--
80	644336.2	4169148.9	Resident	Scenario 1	9.45E-01	1.73E-04	--
81	644436.2	4169148.9	Resident	Scenario 1	9.20E-01	1.68E-04	--
82	644536.2	4169148.9	Resident	Scenario 1	8.98E-01	1.64E-04	--
83	644336.2	4169248.9	Resident	Scenario 1	8.98E-01	1.64E-04	--
84	644436.2	4169248.9	Resident	Scenario 1	8.76E-01	1.60E-04	--
85	644436.2	4169348.9	Resident	Scenario 1	8.36E-01	1.53E-04	--
86	642336.2	4169948.9	Resident	Scenario 1	8.99E-01	1.64E-04	--
87	642436.2	4169948.9	Resident	Scenario 1	8.88E-01	1.62E-04	--
88	642536.2	4169948.9	Resident	Scenario 1	8.77E-01	1.60E-04	--
89	642636.2	4169948.9	Resident	Scenario 1	8.62E-01	1.57E-04	--
90	642736.2	4169948.9	Resident	Scenario 1	8.44E-01	1.54E-04	--
91	642836.2	4169948.9	Resident	Scenario 1	8.26E-01	1.51E-04	--
92	642936.2	4169948.9	Resident	Scenario 1	8.09E-01	1.48E-04	--
93	643036.2	4169948.9	Resident	Scenario 1	7.96E-01	1.45E-04	--
94	643136.2	4169948.9	Resident	Scenario 1	7.84E-01	1.43E-04	--
95	644136.2	4169948.9	Resident	Scenario 1	6.31E-01	1.15E-04	--
96	642236.2	4170048.9	Resident	Scenario 1	8.49E-01	1.55E-04	--
97	642336.2	4170048.9	Resident	Scenario 1	8.40E-01	1.53E-04	--
98	642436.2	4170048.9	Resident	Scenario 1	8.34E-01	1.52E-04	--
99	642536.2	4170048.9	Resident	Scenario 1	8.25E-01	1.51E-04	--
100	642636.2	4170048.9	Resident	Scenario 1	8.09E-01	1.48E-04	--
101	642736.2	4170048.9	Resident	Scenario 1	7.93E-01	1.45E-04	--
102	642836.2	4170048.9	Resident	Scenario 1	7.76E-01	1.42E-04	--
103	642936.2	4170048.9	Resident	Scenario 1	7.63E-01	1.39E-04	--
104	643036.2	4170048.9	Resident	Scenario 1	7.51E-01	1.37E-04	--
105	643136.2	4170048.9	Resident	Scenario 1	7.40E-01	1.35E-04	--
106	643236.2	4170048.9	Resident	Scenario 1	7.31E-01	1.33E-04	--
107	643336.2	4170048.9	Resident	Scenario 1	7.19E-01	1.31E-04	--
108	643436.2	4170048.9	Resident	Scenario 1	7.08E-01	1.29E-04	--
109	643536.2	4170048.9	Resident	Scenario 1	6.97E-01	1.27E-04	--
110	643636.2	4170048.9	Resident	Scenario 1	6.85E-01	1.25E-04	--
111	643736.2	4170048.9	Resident	Scenario 1	6.68E-01	1.22E-04	--
112	643836.2	4170048.9	Resident	Scenario 1	6.50E-01	1.19E-04	--
113	643936.2	4170048.9	Resident	Scenario 1	6.32E-01	1.15E-04	--
114	644036.2	4170048.9	Resident	Scenario 1	6.15E-01	1.12E-04	--
115	642136.2	4170148.9	Resident	Scenario 1	7.92E-01	1.45E-04	--
116	642236.2	4170148.9	Resident	Scenario 1	7.86E-01	1.44E-04	--
117	642336.2	4170148.9	Resident	Scenario 1	7.85E-01	1.43E-04	--
118	643436.2	4170148.9	Resident	Scenario 1	6.71E-01	1.22E-04	--
119	643536.2	4170148.9	Resident	Scenario 1	6.61E-01	1.21E-04	--
120	643636.2	4170148.9	Resident	Scenario 1	6.49E-01	1.19E-04	--
121	643736.2	4170148.9	Resident	Scenario 1	6.36E-01	1.16E-04	--
122	643836.2	4170148.9	Resident	Scenario 1	6.21E-01	1.13E-04	--
123	643936.2	4170148.9	Resident	Scenario 1	6.04E-01	1.10E-04	--
124	643436.2	4170248.9	Resident	Scenario 1	6.37E-01	1.16E-04	--
125	643536.2	4170248.9	Resident	Scenario 1	6.28E-01	1.15E-04	--
126	643636.2	4170248.9	Resident	Scenario 1	6.18E-01	1.13E-04	--
127	643736.2	4170248.9	Resident	Scenario 1	6.07E-01	1.11E-04	--
128	643836.2	4170248.9	Resident	Scenario 1	5.93E-01	1.08E-04	--
129	635936.2	4170748.9	Resident	Scenario 1	8.95E-02	1.63E-05	--
130	636036.2	4170748.9	Resident	Scenario 1	9.18E-02	1.68E-05	--
131	636136.2	4170748.9	Resident	Scenario 1	9.48E-02	1.73E-05	--
132	635936.2	4170848.9	Resident	Scenario 1	9.04E-02	1.65E-05	--
133	636036.2	4170848.9	Resident	Scenario 1	9.32E-02	1.70E-05	--
134	636136.2	4170848.9	Resident	Scenario 1	9.64E-02	1.76E-05	--
135	636236.2	4170848.9	Resident	Scenario 1	9.96E-02	1.82E-05	--
136	636836.2	4170848.9	Resident	Scenario 1	1.23E-01	2.25E-05	--
137	636036.2	4170948.9	Resident	Scenario 1	9.48E-02	1.73E-05	--
138	636136.2	4170948.9	Resident	Scenario 1	9.80E-02	1.79E-05	--
139	636236.2	4170948.9	Resident	Scenario 1	1.01E-01	1.85E-05	--
140	636336.2	4170948.9	Resident	Scenario 1	1.05E-01	1.92E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
141	636636.2	4170948.9	Resident	Scenario 1	1.17E-01	2.13E-05	--
142	636736.2	4170948.9	Resident	Scenario 1	1.21E-01	2.21E-05	--
143	636836.2	4170948.9	Resident	Scenario 1	1.24E-01	2.27E-05	--
144	635936.2	4171048.9	Resident	Scenario 1	9.40E-02	1.72E-05	--
145	636036.2	4171048.9	Resident	Scenario 1	9.67E-02	1.77E-05	--
146	636136.2	4171048.9	Resident	Scenario 1	1.00E-01	1.83E-05	--
147	636236.2	4171048.9	Resident	Scenario 1	1.03E-01	1.88E-05	--
148	636336.2	4171048.9	Resident	Scenario 1	1.06E-01	1.94E-05	--
149	636536.2	4171048.9	Resident	Scenario 1	1.13E-01	2.07E-05	--
150	636636.2	4171048.9	Resident	Scenario 1	1.18E-01	2.15E-05	--
151	636736.2	4171048.9	Resident	Scenario 1	1.22E-01	2.23E-05	--
152	635936.2	4171148.9	Resident	Scenario 1	9.58E-02	1.75E-05	--
153	636036.2	4171148.9	Resident	Scenario 1	9.87E-02	1.80E-05	--
154	636136.2	4171148.9	Resident	Scenario 1	1.02E-01	1.86E-05	--
155	636236.2	4171148.9	Resident	Scenario 1	1.04E-01	1.91E-05	--
156	636336.2	4171148.9	Resident	Scenario 1	1.08E-01	1.97E-05	--
157	636536.2	4171148.9	Resident	Scenario 1	1.15E-01	2.10E-05	--
158	636636.2	4171148.9	Resident	Scenario 1	1.18E-01	2.16E-05	--
159	636136.2	4171248.9	Resident	Scenario 1	1.03E-01	1.88E-05	--
160	636236.2	4171248.9	Resident	Scenario 1	1.06E-01	1.94E-05	--
161	636336.2	4171248.9	Resident	Scenario 1	1.09E-01	2.00E-05	--
162	636536.2	4171248.9	Resident	Scenario 1	1.16E-01	2.12E-05	--
163	636036.2	4171348.9	Resident	Scenario 1	1.02E-01	1.86E-05	--
164	636136.2	4171348.9	Resident	Scenario 1	1.05E-01	1.91E-05	--
165	636236.2	4171348.9	Resident	Scenario 1	1.08E-01	1.97E-05	--
166	636336.2	4171348.9	Resident	Scenario 1	1.11E-01	2.02E-05	--
167	636136.2	4171448.9	Resident	Scenario 1	1.06E-01	1.94E-05	--
168	642573.5	4166836.2	Roadway/Waterway	Scenario 1	--	--	--
169	644323.5	4166836.2	Roadway/Waterway	Scenario 1	--	--	--
170	641523.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
171	641548.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
172	641573.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
173	642048.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
174	642073.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
175	642098.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
176	642198.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
177	642223.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
178	642248.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
179	642273.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
180	642548.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
181	642573.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
182	642598.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
183	642623.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
184	642648.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
185	642673.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
186	642698.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
187	642723.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
188	642748.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
189	642773.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
190	642798.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
191	642823.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
192	642848.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
193	642873.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
194	642898.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
195	642923.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
196	642948.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
197	642973.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
198	642998.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
199	643023.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
200	643048.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
201	643073.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
202	643098.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
203	643123.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
204	643148.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
205	643173.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
206	643198.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
207	643223.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
208	643248.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
209	643273.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
210	643298.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
211	643323.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
212	643348.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
213	643373.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
214	643398.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
215	643423.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
216	643448.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
217	643473.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
218	643498.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
219	643523.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
220	643548.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
221	643573.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
222	643598.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
223	643623.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
224	643648.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
225	643673.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
226	643698.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
227	643723.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
228	643748.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
229	643773.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
230	643798.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
231	643823.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
232	643848.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
233	643873.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
234	643898.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
235	643923.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
236	643948.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
237	643973.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
238	643998.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
239	644023.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
240	644048.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
241	644073.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
242	644098.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
243	644123.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
244	644148.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
245	644173.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
246	644198.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
247	644223.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
248	644248.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
249	644273.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
250	644298.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
251	644323.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
252	644348.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
253	644373.5	4166861.2	Roadway/Waterway	Scenario 1	--	--	--
254	641423.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
255	641448.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
256	641473.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
257	641498.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
258	641523.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
259	641548.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
260	641573.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
261	641598.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
262	641623.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
263	641648.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
264	641673.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
265	641698.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
266	641723.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
267	641748.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
268	641773.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
269	641798.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
270	641823.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
271	641848.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
272	641873.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
273	641898.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
274	641923.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
275	641948.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
276	641973.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
277	641998.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
278	642023.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
279	642048.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
280	642073.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
281	642098.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
282	642123.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
283	642148.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
284	642173.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
285	642198.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
286	642223.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
287	642248.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
288	642273.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
289	642298.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
290	642323.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
291	642348.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
292	642373.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
293	642398.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
294	642423.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
295	642448.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
296	642473.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
297	642498.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
298	642523.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
299	642548.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
300	642573.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
301	642598.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
302	642623.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
303	642648.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
304	642673.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
305	642698.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
306	642723.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
307	642748.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
308	642773.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
309	642798.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
310	642823.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
311	642848.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
312	642873.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
313	642898.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
314	642923.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
315	642948.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
316	642973.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
317	642998.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
318	643023.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
319	643048.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
320	643073.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
321	643098.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
322	643123.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
323	643148.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
324	643173.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
325	643198.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
326	643223.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
327	643248.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
328	643273.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
329	643298.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
330	643323.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
331	643348.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
332	643373.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
333	643398.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
334	643423.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
335	643448.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
336	643473.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
337	643498.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
338	643523.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
339	643548.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
340	643573.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
341	643598.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
342	643623.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
343	643648.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
344	643673.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
345	643698.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
346	643723.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
347	643748.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
348	643773.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
349	643798.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
350	643823.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
351	643848.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
352	643873.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
353	643898.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
354	643923.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
355	643948.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
356	643973.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
357	643998.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
358	644023.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
359	644048.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
360	644073.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
361	644098.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
362	644123.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
363	644148.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
364	644173.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
365	644198.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
366	644223.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
367	644248.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
368	644273.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
369	644298.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
370	644323.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
371	644348.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
372	644373.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
373	644398.5	4166886.2	Roadway/Waterway	Scenario 1	--	--	--
374	641348.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
375	641373.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
376	641398.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
377	641423.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
378	641448.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
379	641473.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
380	641498.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
381	641523.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
382	641548.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
383	641573.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
384	641598.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
385	641623.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
386	641648.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
387	641673.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
388	641698.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
389	641723.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
390	641748.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
391	641773.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
392	641798.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
393	641823.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
394	641848.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
395	641873.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
396	641898.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
397	641923.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
398	641948.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
399	641973.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
400	641998.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
401	642023.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
402	642048.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
403	642073.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
404	642098.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
405	642123.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
406	642148.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
407	642173.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
408	642198.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
409	642223.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
410	642248.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
411	642273.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
412	642298.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
413	642323.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
414	642348.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
415	642373.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
416	642398.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
417	642423.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
418	642448.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
419	642473.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
420	642498.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
421	642523.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
422	642548.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
423	642573.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
424	642598.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
425	642623.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
426	642648.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
427	642673.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
428	642698.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
429	642723.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
430	642748.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
431	642773.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
432	643548.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
433	643573.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
434	643598.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
435	643623.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
436	643648.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
437	643673.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
438	643698.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
439	643723.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
440	643748.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
441	643773.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
442	643798.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
443	643823.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
444	643848.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
445	643873.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
446	643898.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
447	643923.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
448	643948.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
449	643973.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
450	643998.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
451	644023.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
452	644048.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
453	644073.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
454	644098.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
455	644123.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
456	644148.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
457	644173.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
458	644198.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
459	644223.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
460	644248.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
461	644273.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
462	644298.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
463	644323.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
464	644348.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
465	644373.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
466	644398.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
467	644423.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
468	644448.5	4166911.2	Roadway/Waterway	Scenario 1	--	--	--
469	641323.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
470	641348.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
471	641373.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
472	641398.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
473	641423.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
474	641448.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
475	641473.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
476	641498.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
477	641523.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
478	641548.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
479	641573.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
480	641598.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
481	641623.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
482	641648.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
483	641673.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
484	641698.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
485	641723.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
486	641748.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
487	641773.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
488	641798.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
489	641823.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
490	641848.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
491	641873.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
492	641898.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
493	641923.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
494	641948.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
495	642223.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
496	642248.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
497	642273.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
498	642298.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
499	642323.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
500	642348.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
501	642373.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
502	642398.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
503	642423.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
504	642448.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
505	642473.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
506	642498.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
507	642523.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
508	642548.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
509	642573.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
510	644323.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
511	644348.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
512	644373.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
513	644398.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
514	644423.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
515	644448.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
516	644473.5	4166936.2	Roadway/Waterway	Scenario 1	--	--	--
517	641323.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
518	641348.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
519	641373.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
520	641398.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
521	641423.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
522	641448.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
523	641473.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
524	641498.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
525	641523.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
526	642198.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
527	642223.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
528	642248.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
529	642273.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
530	642298.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
531	642323.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
532	642348.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
533	642373.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
534	642398.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
535	642423.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
536	642448.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
537	642473.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
538	642498.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
539	642523.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
540	642548.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
541	644373.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
542	644398.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
543	644423.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
544	644448.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
545	644473.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
546	644498.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
547	644523.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
548	644548.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
549	644573.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
550	644598.5	4166961.2	Roadway/Waterway	Scenario 1	--	--	--
551	641298.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
552	641323.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
553	641348.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
554	641373.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
555	641398.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
556	641423.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
557	642173.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
558	642198.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
559	642223.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
560	642248.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
561	642273.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
562	642298.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
563	642323.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
564	642348.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
565	644398.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
566	644423.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
567	644448.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
568	644473.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
569	644498.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
570	644523.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
571	644548.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
572	644573.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
573	644598.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
574	644623.5	4166986.2	Roadway/Waterway	Scenario 1	--	--	--
575	641348.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
576	641373.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
577	642148.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
578	642173.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
579	642198.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
580	642223.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
581	642248.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
582	642273.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
583	642298.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
584	642323.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
585	644423.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
586	644448.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
587	644473.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
588	644498.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
589	644523.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
590	644548.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
591	644573.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
592	644598.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
593	644623.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
594	644648.5	4167011.2	Roadway/Waterway	Scenario 1	--	--	--
595	641348.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
596	641373.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
597	642123.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
598	642148.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
599	642173.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
600	642198.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
601	642223.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
602	642248.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
603	642273.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
604	642298.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
605	644473.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
606	644498.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
607	644523.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
608	644548.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
609	644573.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
610	644598.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
611	644623.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
612	644648.5	4167036.2	Roadway/Waterway	Scenario 1	--	--	--
613	641373.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
614	642098.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
615	642123.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
616	642148.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
617	642173.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
618	642198.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
619	642223.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
620	642248.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
621	642273.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
622	644573.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
623	644598.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
624	644623.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
625	644648.5	4167061.2	Roadway/Waterway	Scenario 1	--	--	--
626	641373.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
627	642073.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
628	642098.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
629	642123.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
630	642148.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
631	642173.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
632	642198.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
633	642223.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
634	642248.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
635	644598.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
636	644623.5	4167086.2	Roadway/Waterway	Scenario 1	--	--	--
637	641373.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
638	642048.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
639	642073.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
640	642098.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
641	642123.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
642	642148.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
643	642173.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
644	642198.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
645	642223.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
646	644598.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
647	644623.5	4167111.2	Roadway/Waterway	Scenario 1	--	--	--
648	641373.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
649	642023.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
650	642048.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
651	642073.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
652	642098.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
653	642123.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
654	642148.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
655	642173.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
656	642198.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
657	644598.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
658	644623.5	4167136.2	Roadway/Waterway	Scenario 1	--	--	--
659	641373.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
660	641998.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
661	642023.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
662	642048.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
663	642073.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
664	642098.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
665	642123.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
666	642148.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
667	644598.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
668	644623.5	4167161.2	Roadway/Waterway	Scenario 1	--	--	--
669	641373.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
670	641948.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
671	641973.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
672	641998.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
673	642023.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
674	642048.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
675	642073.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
676	642098.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
677	642123.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
678	644598.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
679	644623.5	4167186.2	Roadway/Waterway	Scenario 1	--	--	--
680	641373.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
681	641923.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
682	641948.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
683	641973.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
684	641998.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
685	642023.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
686	642048.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
687	642073.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
688	642098.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
689	644598.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
690	644623.5	4167211.2	Roadway/Waterway	Scenario 1	--	--	--
691	641373.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
692	641898.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
693	641923.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
694	641948.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
695	641973.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
696	641998.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
697	642023.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
698	642048.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
699	642073.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--
700	644598.5	4167236.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
701	641373.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
702	641873.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
703	641898.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
704	641923.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
705	641948.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
706	641973.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
707	641998.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
708	642023.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
709	642048.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
710	644548.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
711	644573.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
712	644598.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
713	644623.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
714	644648.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
715	644673.5	4167261.2	Roadway/Waterway	Scenario 1	--	--	--
716	641373.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
717	641823.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
718	641848.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
719	641873.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
720	641898.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
721	641923.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
722	641948.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
723	641973.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
724	641998.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
725	642023.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
726	644448.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
727	644473.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
728	644498.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
729	644523.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
730	644548.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
731	644573.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
732	644598.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
733	644623.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
734	644648.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
735	644673.5	4167286.2	Roadway/Waterway	Scenario 1	--	--	--
736	641373.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
737	641748.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
738	641773.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
739	641798.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
740	641823.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
741	641848.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
742	641873.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
743	641898.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
744	641923.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
745	641948.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
746	641973.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
747	641998.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
748	644373.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
749	644398.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
750	644423.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
751	644448.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
752	644473.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
753	644498.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
754	644523.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
755	644548.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
756	644573.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
757	644598.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
758	644623.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
759	644648.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
760	641373.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
761	641673.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
762	641698.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
763	641723.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
764	641748.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
765	641773.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
766	641798.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
767	641823.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
768	641848.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
769	641873.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
770	641898.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
771	641923.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
772	641948.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
773	641973.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
774	644298.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
775	644323.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
776	644348.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
777	644373.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
778	644398.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
779	644423.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
780	644448.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
781	644473.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
782	644498.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
783	644523.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
784	644548.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
785	644573.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
786	644598.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
787	644623.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
788	641373.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
789	641573.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
790	641598.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
791	641623.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
792	641648.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
793	641673.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
794	641698.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
795	641723.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
796	641748.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
797	641773.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
798	641798.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
799	641823.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
800	641848.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
801	641873.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
802	641898.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
803	641923.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
804	643348.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
805	643373.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
806	643398.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
807	643423.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
808	643448.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
809	643473.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
810	643498.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
811	643523.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
812	643548.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
813	643573.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
814	643598.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
815	643623.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
816	643648.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
817	643673.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
818	643698.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
819	643723.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
820	643748.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
821	643773.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
822	643798.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
823	643823.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
824	643848.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
825	643873.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
826	644248.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
827	644273.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
828	644298.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
829	644323.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
830	644348.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
831	644373.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
832	644398.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
833	644423.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
834	644448.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
835	644473.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
836	644498.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
837	641373.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
838	641498.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
839	641523.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
840	641548.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
841	641573.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
842	641598.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
843	641623.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
844	641648.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
845	641673.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
846	641698.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
847	641723.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
848	641748.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
849	641773.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
850	641798.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
851	641823.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
852	641848.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
853	641873.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
854	643323.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
855	643348.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
856	643373.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
857	643398.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
858	643423.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
859	643448.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
860	643473.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
861	643498.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
862	643523.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
863	643548.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
864	643573.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
865	643598.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
866	643623.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
867	643648.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
868	643673.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
869	643698.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
870	643723.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
871	643748.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
872	643773.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
873	643798.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
874	643823.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
875	643848.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
876	643873.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
877	643898.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
878	643923.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
879	643948.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
880	643973.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
881	643998.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
882	644023.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
883	644048.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
884	644073.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
885	644148.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
886	644173.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
887	644198.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
888	644223.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
889	644248.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
890	644273.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
891	644298.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
892	644323.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
893	644348.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
894	644373.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
895	644398.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
896	644423.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
897	641373.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
898	641398.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
899	641423.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
900	641448.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
901	641473.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
902	641498.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
903	641523.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
904	641548.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
905	641573.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
906	641598.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
907	641623.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
908	641648.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
909	641673.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
910	641698.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
911	641723.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
912	641748.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
913	641773.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
914	641798.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
915	641823.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
916	641848.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
917	643298.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
918	643323.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
919	643348.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
920	643373.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
921	643398.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
922	643423.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
923	643448.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
924	643473.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
925	643498.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
926	643523.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
927	643548.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
928	643573.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
929	643598.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
930	643623.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
931	643648.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
932	643673.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
933	643698.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
934	643723.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
935	643748.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
936	643773.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
937	643798.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
938	643823.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
939	643848.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
940	643873.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
941	643898.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
942	643923.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
943	643948.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
944	643973.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
945	643998.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
946	644023.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
947	644048.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
948	644073.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
949	644098.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
950	644123.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
951	644148.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
952	644173.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
953	644198.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
954	644223.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
955	644248.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
956	644273.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
957	644298.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
958	644323.5	4167411.2	Roadway/Waterway	Scenario 1	--	--	--
959	641298.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
960	641323.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
961	641348.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
962	641373.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
963	641398.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
964	641423.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
965	641448.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
966	641473.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
967	641498.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
968	641523.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
969	641548.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
970	641573.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
971	641598.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
972	641623.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
973	641648.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
974	641673.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
975	641698.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
976	641723.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
977	641748.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
978	641773.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
979	643273.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
980	643298.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
981	643323.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
982	643773.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
983	643798.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
984	643823.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
985	643848.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
986	643873.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
987	643898.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
988	643923.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
989	643948.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
990	643973.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
991	643998.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
992	644023.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
993	644048.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
994	644073.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
995	644098.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
996	644123.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
997	644148.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
998	644173.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
999	644198.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
1000	644223.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
1001	644248.5	4167436.2	Roadway/Waterway	Scenario 1	--	--	--
1002	641323.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1003	641348.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1004	641373.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1005	641398.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1006	641423.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1007	641448.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1008	641473.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1009	641498.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1010	641523.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1011	641548.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1012	641573.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1013	641598.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1014	641623.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1015	641648.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1016	641673.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1017	641698.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1018	643248.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1019	643273.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1020	643298.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1021	643923.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1022	643948.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1023	643973.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1024	643998.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1025	644023.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1026	644048.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1027	644073.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1028	644098.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1029	644123.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1030	644148.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1031	644173.5	4167461.2	Roadway/Waterway	Scenario 1	--	--	--
1032	641273.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1033	641298.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1034	641323.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1035	641348.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1036	641373.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1037	641398.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1038	641423.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1039	641448.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1040	641473.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1041	641498.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1042	641523.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1043	641548.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1044	641573.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1045	641598.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1046	643223.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1047	643248.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1048	643273.5	4167486.2	Roadway/Waterway	Scenario 1	--	--	--
1049	641198.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1050	641223.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1051	641248.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1052	641273.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1053	641298.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1054	641323.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1055	641348.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1056	641373.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1057	641398.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1058	641423.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1059	641448.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1060	641473.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1061	641498.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1062	641523.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1063	643223.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1064	643248.5	4167511.2	Roadway/Waterway	Scenario 1	--	--	--
1065	641098.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1066	641123.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1067	641148.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1068	641173.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1069	641198.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1070	641223.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1071	641248.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1072	641273.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1073	641298.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1074	641323.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1075	641348.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1076	641373.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1077	641398.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1078	641423.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1079	643198.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1080	643223.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1081	643248.5	4167536.2	Roadway/Waterway	Scenario 1	--	--	--
1082	641023.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1083	641048.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1084	641073.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1085	641098.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1086	641123.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1087	641148.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1088	641173.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1089	641198.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1090	641223.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1091	641248.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1092	641273.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1093	641298.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1094	641323.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1095	641348.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1096	643173.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1097	643198.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1098	643223.5	4167561.2	Roadway/Waterway	Scenario 1	--	--	--
1099	640923.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1100	640948.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1101	640973.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1102	640998.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1103	641023.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1104	641048.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1105	641073.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1106	641098.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1107	641123.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1108	641148.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1109	641173.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1110	641198.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1111	641223.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1112	641248.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1113	641273.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1114	643148.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1115	643173.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1116	643198.5	4167586.2	Roadway/Waterway	Scenario 1	--	--	--
1117	640823.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1118	640848.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1119	640873.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1120	640898.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1121	640923.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1122	640948.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1123	640973.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1124	640998.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1125	641023.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1126	641048.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1127	641073.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1128	641098.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1129	641123.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1130	641148.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1131	641173.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1132	643123.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1133	643148.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1134	643173.5	4167611.2	Roadway/Waterway	Scenario 1	--	--	--
1135	640723.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1136	640748.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1137	640773.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1138	640798.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1139	640823.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1140	640848.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1141	640873.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1142	640898.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1143	640923.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1144	640948.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1145	640973.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1146	640998.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1147	641023.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1148	641048.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1149	641073.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1150	641098.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1151	643123.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1152	643148.5	4167636.2	Roadway/Waterway	Scenario 1	--	--	--
1153	640623.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1154	640648.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1155	640673.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1156	640698.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1157	640723.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1158	640748.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1159	640773.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1160	640798.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1161	640823.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1162	640848.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1163	640873.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1164	640898.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1165	640923.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1166	640948.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1167	640973.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1168	640998.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1169	643098.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1170	643123.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1171	643148.5	4167661.2	Roadway/Waterway	Scenario 1	--	--	--
1172	640523.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1173	640548.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1174	640573.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1175	640598.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1176	640623.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1177	640648.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1178	640673.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1179	640698.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1180	640723.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1181	640748.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1182	640773.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1183	640798.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1184	640823.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1185	640848.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1186	640873.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1187	640898.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1188	643073.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1189	643098.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--
1190	643123.5	4167686.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1191	640423.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1192	640448.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1193	640473.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1194	640498.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1195	640523.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1196	640548.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1197	640573.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1198	640598.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1199	640623.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1200	640648.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1201	640673.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1202	640698.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1203	640723.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1204	640748.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1205	640773.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1206	640798.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1207	643048.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1208	643073.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1209	643098.5	4167711.2	Roadway/Waterway	Scenario 1	--	--	--
1210	640373.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1211	640398.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1212	640423.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1213	640448.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1214	640473.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1215	640498.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1216	640523.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1217	640548.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1218	640573.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1219	640598.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1220	640623.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1221	640648.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1222	640673.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1223	640698.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1224	640723.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1225	643023.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1226	643048.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1227	643073.5	4167736.2	Roadway/Waterway	Scenario 1	--	--	--
1228	640323.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1229	640348.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1230	640373.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1231	640398.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1232	640423.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1233	640448.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1234	640473.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1235	640498.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1236	640523.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1237	640548.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1238	640573.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1239	640598.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1240	640623.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1241	643023.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1242	643048.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1243	643073.5	4167761.2	Roadway/Waterway	Scenario 1	--	--	--
1244	640273.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1245	640298.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1246	640323.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1247	640348.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1248	640373.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1249	640398.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1250	640423.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1251	640448.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1252	640473.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1253	640498.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1254	640523.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1255	642998.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1256	643023.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1257	643048.5	4167786.2	Roadway/Waterway	Scenario 1	--	--	--
1258	640223.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1259	640248.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1260	640273.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1261	640298.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1262	640323.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1263	640348.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1264	640373.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1265	640398.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1266	640423.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1267	642973.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1268	642998.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1269	643023.5	4167811.2	Roadway/Waterway	Scenario 1	--	--	--
1270	640198.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1271	640223.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1272	640248.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1273	640273.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1274	640298.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1275	640323.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1276	640348.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1277	640373.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1278	642923.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1279	642948.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1280	642973.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1281	642998.5	4167836.2	Roadway/Waterway	Scenario 1	--	--	--
1282	640148.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1283	640173.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1284	640198.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1285	640223.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1286	640248.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1287	640273.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1288	640298.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1289	640323.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1290	642898.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1291	642923.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1292	642948.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1293	642973.5	4167861.2	Roadway/Waterway	Scenario 1	--	--	--
1294	640123.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1295	640148.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1296	640173.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1297	640198.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1298	640223.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1299	640248.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1300	640273.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1301	642848.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1302	642873.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1303	642898.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1304	642923.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1305	642948.5	4167886.2	Roadway/Waterway	Scenario 1	--	--	--
1306	640073.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1307	640098.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1308	640123.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1309	640148.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1310	640173.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1311	640198.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1312	640223.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1313	640248.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1314	642823.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1315	642848.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1316	642873.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1317	642898.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1318	642923.5	4167911.2	Roadway/Waterway	Scenario 1	--	--	--
1319	640048.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1320	640073.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1321	640098.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1322	640123.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1323	640148.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1324	640173.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1325	640198.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1326	642773.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1327	642798.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1328	642823.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1329	642848.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--
1330	642873.5	4167936.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1331	639998.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1332	640023.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1333	640048.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1334	640073.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1335	640098.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1336	640123.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1337	640148.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1338	640173.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1339	642748.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1340	642773.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1341	642798.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1342	642823.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1343	642848.5	4167961.2	Roadway/Waterway	Scenario 1	--	--	--
1344	639973.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1345	639998.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1346	640023.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1347	640048.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1348	640073.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1349	640098.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1350	640123.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1351	642698.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1352	642723.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1353	642748.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1354	642773.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1355	642798.5	4167986.2	Roadway/Waterway	Scenario 1	--	--	--
1356	639923.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1357	639948.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1358	639973.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1359	639998.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1360	640023.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1361	640048.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1362	640073.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1363	640098.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1364	642648.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1365	642673.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1366	642698.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1367	642723.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1368	642748.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1369	642773.5	4168011.2	Roadway/Waterway	Scenario 1	--	--	--
1370	639898.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1371	639923.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1372	639948.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1373	639973.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1374	639998.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1375	640023.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1376	640048.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1377	642623.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1378	642648.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1379	642673.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1380	642698.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1381	642723.5	4168036.2	Roadway/Waterway	Scenario 1	--	--	--
1382	639848.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1383	639873.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1384	639898.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1385	639923.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1386	639948.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1387	639973.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1388	639998.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1389	642573.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1390	642598.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1391	642623.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1392	642648.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1393	642673.5	4168061.2	Roadway/Waterway	Scenario 1	--	--	--
1394	639823.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1395	639848.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1396	639873.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1397	639898.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1398	639923.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1399	639948.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1400	639973.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1401	642548.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1402	642573.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1403	642598.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1404	642623.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1405	642648.5	4168086.2	Roadway/Waterway	Scenario 1	--	--	--
1406	639773.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1407	639798.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1408	639823.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1409	639848.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1410	639873.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1411	639898.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1412	639923.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1413	642498.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1414	642523.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1415	642548.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1416	642573.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1417	642598.5	4168111.2	Roadway/Waterway	Scenario 1	--	--	--
1418	639748.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1419	639773.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1420	639798.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1421	639823.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1422	639848.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1423	639873.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1424	639898.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1425	642473.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1426	642498.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1427	642523.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1428	642548.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1429	642573.5	4168136.2	Roadway/Waterway	Scenario 1	--	--	--
1430	639698.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1431	639723.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1432	639748.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1433	639773.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1434	639798.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1435	639823.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1436	639848.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1437	642448.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1438	642473.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1439	642498.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1440	642523.5	4168161.2	Roadway/Waterway	Scenario 1	--	--	--
1441	639673.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1442	639698.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1443	639723.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1444	639748.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1445	639773.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1446	639798.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1447	639823.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1448	642423.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1449	642448.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1450	642473.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1451	642498.5	4168186.2	Roadway/Waterway	Scenario 1	--	--	--
1452	639648.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1453	639673.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1454	639698.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1455	639723.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1456	639748.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1457	639773.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1458	642398.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1459	642423.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1460	642448.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1461	642473.5	4168211.2	Roadway/Waterway	Scenario 1	--	--	--
1462	639648.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--
1463	639673.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--
1464	639698.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--
1465	639723.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--
1466	639748.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--
1467	642373.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--
1468	642398.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--
1469	642423.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--
1470	642448.5	4168236.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1471	639648.5	4168261.2	Roadway/Waterway	Scenario 1	--	--	--
1472	639673.5	4168261.2	Roadway/Waterway	Scenario 1	--	--	--
1473	639698.5	4168261.2	Roadway/Waterway	Scenario 1	--	--	--
1474	642348.5	4168261.2	Roadway/Waterway	Scenario 1	--	--	--
1475	642373.5	4168261.2	Roadway/Waterway	Scenario 1	--	--	--
1476	642398.5	4168261.2	Roadway/Waterway	Scenario 1	--	--	--
1477	642423.5	4168261.2	Roadway/Waterway	Scenario 1	--	--	--
1478	639648.5	4168286.2	Roadway/Waterway	Scenario 1	--	--	--
1479	639673.5	4168286.2	Roadway/Waterway	Scenario 1	--	--	--
1480	642298.5	4168286.2	Roadway/Waterway	Scenario 1	--	--	--
1481	642323.5	4168286.2	Roadway/Waterway	Scenario 1	--	--	--
1482	642348.5	4168286.2	Roadway/Waterway	Scenario 1	--	--	--
1483	642373.5	4168286.2	Roadway/Waterway	Scenario 1	--	--	--
1484	642398.5	4168286.2	Roadway/Waterway	Scenario 1	--	--	--
1485	639723.5	4168311.2	Roadway/Waterway	Scenario 1	--	--	--
1486	642248.5	4168311.2	Roadway/Waterway	Scenario 1	--	--	--
1487	642273.5	4168311.2	Roadway/Waterway	Scenario 1	--	--	--
1488	642298.5	4168311.2	Roadway/Waterway	Scenario 1	--	--	--
1489	642323.5	4168311.2	Roadway/Waterway	Scenario 1	--	--	--
1490	642348.5	4168311.2	Roadway/Waterway	Scenario 1	--	--	--
1491	642373.5	4168311.2	Roadway/Waterway	Scenario 1	--	--	--
1492	639723.5	4168336.2	Roadway/Waterway	Scenario 1	--	--	--
1493	642198.5	4168336.2	Roadway/Waterway	Scenario 1	--	--	--
1494	642223.5	4168336.2	Roadway/Waterway	Scenario 1	--	--	--
1495	642248.5	4168336.2	Roadway/Waterway	Scenario 1	--	--	--
1496	642273.5	4168336.2	Roadway/Waterway	Scenario 1	--	--	--
1497	642298.5	4168336.2	Roadway/Waterway	Scenario 1	--	--	--
1498	642323.5	4168336.2	Roadway/Waterway	Scenario 1	--	--	--
1499	639373.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1500	639398.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1501	639423.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1502	639448.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1503	639473.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1504	639498.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1505	639523.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1506	639548.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1507	639723.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1508	642148.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1509	642173.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1510	642198.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1511	642223.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1512	642248.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1513	642273.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1514	642298.5	4168361.2	Roadway/Waterway	Scenario 1	--	--	--
1515	639323.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1516	639348.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1517	639373.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1518	639398.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1519	639423.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1520	639448.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1521	639473.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1522	639498.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1523	639723.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1524	642098.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1525	642123.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1526	642148.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1527	642173.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1528	642198.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1529	642223.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1530	642248.5	4168386.2	Roadway/Waterway	Scenario 1	--	--	--
1531	639298.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1532	639323.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1533	639348.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1534	639373.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1535	639398.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1536	639423.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1537	639448.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1538	639473.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1539	639723.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1540	642023.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1541	642048.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1542	642073.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1543	642098.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1544	642123.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1545	642148.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1546	642173.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1547	642198.5	4168411.2	Roadway/Waterway	Scenario 1	--	--	--
1548	639248.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1549	639273.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1550	639298.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1551	639323.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1552	639348.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1553	639373.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1554	639398.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1555	639423.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1556	639723.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1557	641973.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1558	641998.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1559	642023.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1560	642048.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1561	642073.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1562	642098.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1563	642123.5	4168436.2	Roadway/Waterway	Scenario 1	--	--	--
1564	639198.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1565	639223.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1566	639248.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1567	639273.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1568	639298.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1569	639323.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1570	639348.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1571	639373.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1572	641923.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1573	641948.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1574	641973.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1575	641998.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1576	642023.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1577	642048.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1578	642073.5	4168461.2	Roadway/Waterway	Scenario 1	--	--	--
1579	639173.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1580	639198.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1581	639223.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1582	639248.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1583	639273.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1584	639298.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1585	639323.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1586	641848.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1587	641873.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1588	641898.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1589	641923.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1590	641948.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1591	641973.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1592	641998.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1593	642023.5	4168486.2	Roadway/Waterway	Scenario 1	--	--	--
1594	639123.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1595	639148.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1596	639173.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1597	639198.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1598	639223.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1599	639248.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1600	639273.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1601	639298.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1602	641348.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1603	641798.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1604	641823.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1605	641848.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1606	641873.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1607	641898.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1608	641923.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1609	641948.5	4168511.2	Roadway/Waterway	Scenario 1	--	--	--
1610	639073.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1611	639098.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1612	639123.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1613	639148.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1614	639173.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1615	639198.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1616	639223.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1617	639248.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1618	641348.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1619	641723.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1620	641748.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1621	641773.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1622	641798.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1623	641823.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1624	641848.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1625	641873.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1626	641898.5	4168536.2	Roadway/Waterway	Scenario 1	--	--	--
1627	639048.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1628	639073.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1629	639098.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1630	639123.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1631	639148.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1632	639173.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1633	639198.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1634	641348.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1635	641648.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1636	641673.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1637	641698.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1638	641723.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1639	641748.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1640	641773.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1641	641798.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1642	641823.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1643	641848.5	4168561.2	Roadway/Waterway	Scenario 1	--	--	--
1644	638998.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1645	639023.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1646	639048.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1647	639073.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1648	639098.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1649	639123.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1650	639148.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1651	639173.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1652	641348.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1653	641573.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1654	641598.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1655	641623.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1656	641648.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1657	641673.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1658	641698.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1659	641723.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1660	641748.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1661	641773.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1662	641798.5	4168586.2	Roadway/Waterway	Scenario 1	--	--	--
1663	638948.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1664	638973.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1665	638998.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1666	639023.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1667	639048.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1668	639073.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1669	639098.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1670	639123.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1671	641348.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1672	641498.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1673	641523.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1674	641548.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1675	641573.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1676	641598.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1677	641623.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1678	641648.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1679	641673.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1680	641698.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1681	641723.5	4168611.2	Roadway/Waterway	Scenario 1	--	--	--
1682	638923.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1683	638948.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1684	638973.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1685	638998.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1686	639023.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1687	639048.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1688	639073.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1689	641348.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1690	641423.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1691	641448.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1692	641473.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1693	641498.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1694	641523.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1695	641548.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1696	641573.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1697	641598.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1698	641623.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1699	641648.5	4168636.2	Roadway/Waterway	Scenario 1	--	--	--
1700	638873.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1701	638898.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1702	638923.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1703	638948.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1704	638973.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1705	638998.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1706	639023.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1707	639048.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1708	641348.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1709	641373.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1710	641398.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1711	641423.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1712	641448.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1713	641473.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1714	641498.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1715	641523.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1716	641548.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1717	641573.5	4168661.2	Roadway/Waterway	Scenario 1	--	--	--
1718	638823.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1719	638848.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1720	638873.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1721	638898.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1722	638923.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1723	638948.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1724	638973.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1725	638998.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1726	641273.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1727	641298.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1728	641323.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1729	641348.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1730	641373.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1731	641398.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1732	641423.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1733	641448.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1734	641473.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1735	641498.5	4168686.2	Roadway/Waterway	Scenario 1	--	--	--
1736	638773.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1737	638798.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1738	638823.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1739	638848.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1740	638873.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1741	638898.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1742	638923.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1743	638948.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1744	641198.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1745	641223.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1746	641248.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1747	641273.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1748	641298.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1749	641323.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1750	641348.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1751	641373.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1752	641398.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1753	641423.5	4168711.2	Roadway/Waterway	Scenario 1	--	--	--
1754	638748.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1755	638773.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1756	638798.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1757	638823.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1758	638848.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1759	638873.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1760	638898.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1761	638923.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1762	640123.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1763	640148.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1764	640173.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1765	640198.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1766	640223.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1767	640248.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1768	640273.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1769	640298.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1770	641123.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1771	641148.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1772	641173.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1773	641198.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1774	641223.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1775	641248.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1776	641273.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1777	641298.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1778	641323.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1779	641348.5	4168736.2	Roadway/Waterway	Scenario 1	--	--	--
1780	638698.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1781	638723.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1782	638748.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1783	638773.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1784	638798.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1785	638823.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1786	638848.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1787	638873.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1788	640098.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1789	640123.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1790	640148.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1791	640173.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1792	640198.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1793	640223.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1794	640248.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1795	640273.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1796	640298.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1797	640323.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1798	640348.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1799	641048.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1800	641073.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1801	641098.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1802	641123.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1803	641148.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1804	641173.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1805	641198.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1806	641223.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1807	641248.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1808	641273.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
1809	638673.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1810	638698.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1811	638723.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1812	638748.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1813	638773.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1814	638798.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1815	638823.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1816	640048.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1817	640073.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1818	640098.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1819	640123.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1820	640148.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1821	640173.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1822	640198.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1823	640223.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1824	640248.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1825	640273.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1826	640298.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1827	640323.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1828	640348.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1829	640373.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1830	640398.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1831	640973.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1832	640998.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1833	641023.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1834	641048.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1835	641073.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1836	641098.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1837	641123.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1838	641148.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1839	641173.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1840	641198.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1841	641223.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
1842	638648.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1843	638673.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1844	638698.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1845	638723.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1846	638748.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1847	638773.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1848	638798.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1849	640048.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1850	640073.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1851	640098.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1852	640123.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1853	640148.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1854	640173.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1855	640198.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1856	640223.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1857	640248.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1858	640273.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1859	640298.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1860	640323.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1861	640348.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1862	640373.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1863	640398.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1864	640423.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1865	640448.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1866	640898.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1867	640923.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1868	640948.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1869	640973.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1870	640998.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1871	641023.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1872	641048.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1873	641073.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1874	641098.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1875	641123.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1876	641148.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
1877	638598.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1878	638623.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1879	638648.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1880	638673.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1881	638698.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1882	638723.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1883	638748.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1884	640023.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1885	640048.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1886	640073.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1887	640098.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1888	640123.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1889	640148.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1890	640298.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1891	640323.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1892	640348.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1893	640373.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1894	640398.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1895	640423.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1896	640448.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1897	640473.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1898	640498.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1899	640823.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1900	640848.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1901	640873.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1902	640898.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1903	640923.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1904	640948.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1905	640973.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1906	640998.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1907	641023.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1908	641048.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1909	641073.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
1910	638573.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1911	638598.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1912	638623.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1913	638648.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1914	638673.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1915	638698.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1916	638723.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1917	639998.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1918	640023.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1919	640048.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1920	640073.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1921	640098.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1922	640348.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1923	640373.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1924	640398.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1925	640423.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1926	640448.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1927	640473.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1928	640498.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1929	640523.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1930	640548.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1931	640748.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1932	640773.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1933	640798.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1934	640823.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1935	640848.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1936	640873.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1937	640898.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1938	640923.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1939	640948.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1940	640973.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1941	640998.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
1942	638548.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1943	638573.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1944	638598.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1945	638623.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1946	638648.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1947	638673.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1948	639973.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1949	639998.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1950	640023.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1951	640048.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1952	640073.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1953	640398.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1954	640423.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1955	640448.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1956	640473.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1957	640498.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1958	640523.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1959	640548.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1960	640573.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1961	640598.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1962	640623.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1963	640648.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1964	640673.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1965	640698.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1966	640723.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1967	640748.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1968	640773.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1969	640798.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1970	640823.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1971	640848.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1972	640873.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1973	640898.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1974	640923.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
1975	638523.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1976	638548.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1977	638573.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1978	638598.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1979	638623.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1980	638648.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1981	639948.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1982	639973.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1983	639998.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1984	640023.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1985	640048.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1986	640448.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1987	640473.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1988	640498.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1989	640523.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1990	640548.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1991	640573.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1992	640598.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1993	640623.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1994	640648.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1995	640673.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1996	640698.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1997	640723.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1998	640748.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
1999	640773.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
2000	640798.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
2001	640823.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
2002	640848.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
2003	638473.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2004	638498.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2005	638523.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2006	638548.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2007	638573.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2008	638598.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2009	638623.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2010	639923.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2011	639948.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2012	639973.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2013	639998.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2014	640023.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2015	640448.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2016	640473.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2017	640498.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2018	640523.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2019	640548.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2020	640573.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2021	640598.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2022	640623.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2023	640648.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2024	640673.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2025	640698.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2026	640723.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2027	640748.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
2028	638448.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2029	638473.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2030	638498.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2031	638523.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2032	638548.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2033	638573.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2034	639898.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2035	639923.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2036	639948.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2037	639973.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2038	639998.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2039	640023.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2040	640448.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2041	640473.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2042	640498.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2043	640523.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2044	640598.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2045	640623.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2046	640648.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2047	640673.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
2048	638423.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2049	638448.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2050	638473.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2051	638498.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2052	638523.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2053	638548.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2054	639873.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2055	639898.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2056	639923.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2057	639948.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2058	639973.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2059	639998.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2060	640448.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2061	640473.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2062	640498.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2063	640523.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
2064	638398.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2065	638423.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2066	638448.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2067	638473.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2068	638498.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2069	638523.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2070	639848.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2071	639873.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2072	639898.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2073	639923.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2074	639948.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2075	639973.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2076	640473.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2077	640498.5	4169011.2	Roadway/Waterway	Scenario 1	--	--	--
2078	638373.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2079	638398.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2080	638423.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2081	638448.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2082	638473.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2083	638498.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2084	639823.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2085	639848.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2086	639873.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2087	639898.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2088	639923.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2089	639948.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2090	640498.5	4169036.2	Roadway/Waterway	Scenario 1	--	--	--
2091	638348.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2092	638373.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2093	638398.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2094	638423.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2095	638448.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2096	639823.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2097	639848.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2098	639873.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2099	639898.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2100	639923.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2101	640498.5	4169061.2	Roadway/Waterway	Scenario 1	--	--	--
2102	638323.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2103	638348.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2104	638373.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2105	638398.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2106	638423.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2107	638448.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2108	639648.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2109	639673.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2110	639698.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2111	639723.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2112	639748.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2113	639773.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2114	639798.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2115	639823.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2116	639848.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2117	639873.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2118	639898.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2119	640498.5	4169086.2	Roadway/Waterway	Scenario 1	--	--	--
2120	638298.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2121	638323.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2122	638348.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2123	638373.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2124	638398.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2125	638423.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2126	639598.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2127	639623.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2128	639648.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2129	639673.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2130	639698.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2131	639723.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2132	639748.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2133	639773.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2134	639798.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2135	639823.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2136	639848.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2137	639873.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2138	640498.5	4169111.2	Roadway/Waterway	Scenario 1	--	--	--
2139	638273.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2140	638298.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2141	638323.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2142	638348.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2143	638373.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2144	638398.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2145	639573.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2146	639598.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2147	639623.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2148	639648.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2149	639673.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2150	639698.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2151	639723.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2152	639748.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2153	639773.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2154	639798.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2155	639823.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2156	639848.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2157	640498.5	4169136.2	Roadway/Waterway	Scenario 1	--	--	--
2158	638248.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2159	638273.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2160	638298.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2161	638323.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2162	638348.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2163	638373.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2164	639548.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2165	639573.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2166	639598.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2167	639623.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2168	639648.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2169	639673.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2170	639698.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2171	639723.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2172	639748.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2173	639773.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2174	639798.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2175	639823.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2176	640498.5	4169161.2	Roadway/Waterway	Scenario 1	--	--	--
2177	638223.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2178	638248.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2179	638273.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2180	638298.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2181	638323.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2182	638348.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2183	639548.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2184	639573.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2185	639598.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2186	639623.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2187	639648.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2188	640498.5	4169186.2	Roadway/Waterway	Scenario 1	--	--	--
2189	638198.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2190	638223.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2191	638248.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2192	638273.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2193	638298.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2194	638323.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2195	639523.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2196	639548.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2197	639573.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2198	639598.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2199	639623.5	4169211.2	Roadway/Waterway	Scenario 1	--	--	--
2200	638173.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2201	638198.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2202	638223.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2203	638248.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2204	638273.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2205	638298.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2206	639523.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2207	639548.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2208	639573.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2209	639598.5	4169236.2	Roadway/Waterway	Scenario 1	--	--	--
2210	638148.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2211	638173.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2212	638198.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2213	638223.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2214	638248.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2215	638273.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2216	639498.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2217	639523.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2218	639548.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2219	639573.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2220	639598.5	4169261.2	Roadway/Waterway	Scenario 1	--	--	--
2221	638123.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2222	638148.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2223	638173.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2224	638198.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2225	638223.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2226	638248.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2227	639473.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2228	639498.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2229	639523.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2230	639548.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2231	639573.5	4169286.2	Roadway/Waterway	Scenario 1	--	--	--
2232	638098.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2233	638123.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2234	638148.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2235	638173.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2236	638198.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2237	638223.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2238	639473.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2239	639498.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2240	639523.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2241	639548.5	4169311.2	Roadway/Waterway	Scenario 1	--	--	--
2242	638073.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2243	638098.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2244	638123.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2245	638148.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2246	638173.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2247	638198.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2248	639448.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2249	639473.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2250	639498.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2251	639523.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2252	639548.5	4169336.2	Roadway/Waterway	Scenario 1	--	--	--
2253	638048.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2254	638073.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2255	638098.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2256	638123.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2257	638148.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2258	638173.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2259	639398.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2260	639423.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2261	639448.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2262	639473.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2263	639498.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2264	639523.5	4169361.2	Roadway/Waterway	Scenario 1	--	--	--
2265	638023.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2266	638048.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2267	638073.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2268	638098.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2269	638123.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2270	638148.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2271	639373.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2272	639398.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2273	639423.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2274	639448.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2275	639473.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2276	639498.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2277	641323.5	4169386.2	Roadway/Waterway	Scenario 1	--	--	--
2278	638023.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2279	638048.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2280	638073.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2281	638098.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2282	638123.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2283	639348.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2284	639373.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2285	639398.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2286	639423.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2287	639448.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2288	639473.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2289	641323.5	4169411.2	Roadway/Waterway	Scenario 1	--	--	--
2290	637998.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2291	638023.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2292	638048.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2293	638073.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2294	638098.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2295	639323.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2296	639348.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2297	639373.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2298	639398.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2299	639423.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2300	639448.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2301	641323.5	4169436.2	Roadway/Waterway	Scenario 1	--	--	--
2302	637998.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2303	638023.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2304	638048.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2305	638073.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2306	639298.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2307	639323.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2308	639348.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2309	639373.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2310	639398.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2311	639423.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2312	641323.5	4169461.2	Roadway/Waterway	Scenario 1	--	--	--
2313	637998.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2314	638023.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2315	638048.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2316	639248.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2317	639273.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2318	639298.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2319	639323.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2320	639348.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2321	639373.5	4169486.2	Roadway/Waterway	Scenario 1	--	--	--
2322	637998.5	4169511.2	Roadway/Waterway	Scenario 1	--	--	--
2323	638023.5	4169511.2	Roadway/Waterway	Scenario 1	--	--	--
2324	639223.5	4169511.2	Roadway/Waterway	Scenario 1	--	--	--
2325	639248.5	4169511.2	Roadway/Waterway	Scenario 1	--	--	--
2326	639273.5	4169511.2	Roadway/Waterway	Scenario 1	--	--	--
2327	639298.5	4169511.2	Roadway/Waterway	Scenario 1	--	--	--
2328	639323.5	4169511.2	Roadway/Waterway	Scenario 1	--	--	--
2329	639348.5	4169511.2	Roadway/Waterway	Scenario 1	--	--	--
2330	637998.5	4169536.2	Roadway/Waterway	Scenario 1	--	--	--
2331	639198.5	4169536.2	Roadway/Waterway	Scenario 1	--	--	--
2332	639223.5	4169536.2	Roadway/Waterway	Scenario 1	--	--	--
2333	639248.5	4169536.2	Roadway/Waterway	Scenario 1	--	--	--
2334	639273.5	4169536.2	Roadway/Waterway	Scenario 1	--	--	--
2335	639298.5	4169536.2	Roadway/Waterway	Scenario 1	--	--	--
2336	639323.5	4169536.2	Roadway/Waterway	Scenario 1	--	--	--
2337	639173.5	4169561.2	Roadway/Waterway	Scenario 1	--	--	--
2338	639198.5	4169561.2	Roadway/Waterway	Scenario 1	--	--	--
2339	639223.5	4169561.2	Roadway/Waterway	Scenario 1	--	--	--
2340	639248.5	4169561.2	Roadway/Waterway	Scenario 1	--	--	--
2341	639273.5	4169561.2	Roadway/Waterway	Scenario 1	--	--	--
2342	639298.5	4169561.2	Roadway/Waterway	Scenario 1	--	--	--
2343	639123.5	4169586.2	Roadway/Waterway	Scenario 1	--	--	--
2344	639148.5	4169586.2	Roadway/Waterway	Scenario 1	--	--	--
2345	639173.5	4169586.2	Roadway/Waterway	Scenario 1	--	--	--
2346	639198.5	4169586.2	Roadway/Waterway	Scenario 1	--	--	--
2347	639223.5	4169586.2	Roadway/Waterway	Scenario 1	--	--	--
2348	639248.5	4169586.2	Roadway/Waterway	Scenario 1	--	--	--
2349	639273.5	4169586.2	Roadway/Waterway	Scenario 1	--	--	--
2350	639098.5	4169611.2	Roadway/Waterway	Scenario 1	--	--	--
2351	639123.5	4169611.2	Roadway/Waterway	Scenario 1	--	--	--
2352	639148.5	4169611.2	Roadway/Waterway	Scenario 1	--	--	--
2353	639173.5	4169611.2	Roadway/Waterway	Scenario 1	--	--	--
2354	639198.5	4169611.2	Roadway/Waterway	Scenario 1	--	--	--
2355	639223.5	4169611.2	Roadway/Waterway	Scenario 1	--	--	--
2356	639073.5	4169636.2	Roadway/Waterway	Scenario 1	--	--	--
2357	639098.5	4169636.2	Roadway/Waterway	Scenario 1	--	--	--
2358	639123.5	4169636.2	Roadway/Waterway	Scenario 1	--	--	--
2359	639148.5	4169636.2	Roadway/Waterway	Scenario 1	--	--	--
2360	639173.5	4169636.2	Roadway/Waterway	Scenario 1	--	--	--
2361	639198.5	4169636.2	Roadway/Waterway	Scenario 1	--	--	--
2362	639048.5	4169661.2	Roadway/Waterway	Scenario 1	--	--	--
2363	639073.5	4169661.2	Roadway/Waterway	Scenario 1	--	--	--
2364	639098.5	4169661.2	Roadway/Waterway	Scenario 1	--	--	--
2365	639123.5	4169661.2	Roadway/Waterway	Scenario 1	--	--	--
2366	639148.5	4169661.2	Roadway/Waterway	Scenario 1	--	--	--
2367	639173.5	4169661.2	Roadway/Waterway	Scenario 1	--	--	--
2368	639023.5	4169686.2	Roadway/Waterway	Scenario 1	--	--	--
2369	639048.5	4169686.2	Roadway/Waterway	Scenario 1	--	--	--
2370	639073.5	4169686.2	Roadway/Waterway	Scenario 1	--	--	--
2371	639098.5	4169686.2	Roadway/Waterway	Scenario 1	--	--	--
2372	639123.5	4169686.2	Roadway/Waterway	Scenario 1	--	--	--
2373	639148.5	4169686.2	Roadway/Waterway	Scenario 1	--	--	--
2374	638998.5	4169711.2	Roadway/Waterway	Scenario 1	--	--	--
2375	639023.5	4169711.2	Roadway/Waterway	Scenario 1	--	--	--
2376	639048.5	4169711.2	Roadway/Waterway	Scenario 1	--	--	--
2377	639073.5	4169711.2	Roadway/Waterway	Scenario 1	--	--	--
2378	639098.5	4169711.2	Roadway/Waterway	Scenario 1	--	--	--
2379	639123.5	4169711.2	Roadway/Waterway	Scenario 1	--	--	--
2380	638973.5	4169736.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2381	638998.5	4169736.2	Roadway/Waterway	Scenario 1	--	--	--
2382	639023.5	4169736.2	Roadway/Waterway	Scenario 1	--	--	--
2383	639048.5	4169736.2	Roadway/Waterway	Scenario 1	--	--	--
2384	639073.5	4169736.2	Roadway/Waterway	Scenario 1	--	--	--
2385	638948.5	4169761.2	Roadway/Waterway	Scenario 1	--	--	--
2386	638973.5	4169761.2	Roadway/Waterway	Scenario 1	--	--	--
2387	638998.5	4169761.2	Roadway/Waterway	Scenario 1	--	--	--
2388	639023.5	4169761.2	Roadway/Waterway	Scenario 1	--	--	--
2389	639048.5	4169761.2	Roadway/Waterway	Scenario 1	--	--	--
2390	638948.5	4169786.2	Roadway/Waterway	Scenario 1	--	--	--
2391	638973.5	4169786.2	Roadway/Waterway	Scenario 1	--	--	--
2392	638998.5	4169786.2	Roadway/Waterway	Scenario 1	--	--	--
2393	639023.5	4169786.2	Roadway/Waterway	Scenario 1	--	--	--
2394	638923.5	4169811.2	Roadway/Waterway	Scenario 1	--	--	--
2395	638948.5	4169811.2	Roadway/Waterway	Scenario 1	--	--	--
2396	638973.5	4169811.2	Roadway/Waterway	Scenario 1	--	--	--
2397	638998.5	4169811.2	Roadway/Waterway	Scenario 1	--	--	--
2398	639023.5	4169811.2	Roadway/Waterway	Scenario 1	--	--	--
2399	638898.5	4169836.2	Roadway/Waterway	Scenario 1	--	--	--
2400	638923.5	4169836.2	Roadway/Waterway	Scenario 1	--	--	--
2401	638948.5	4169836.2	Roadway/Waterway	Scenario 1	--	--	--
2402	638973.5	4169836.2	Roadway/Waterway	Scenario 1	--	--	--
2403	638998.5	4169836.2	Roadway/Waterway	Scenario 1	--	--	--
2404	638873.5	4169861.2	Roadway/Waterway	Scenario 1	--	--	--
2405	638898.5	4169861.2	Roadway/Waterway	Scenario 1	--	--	--
2406	638923.5	4169861.2	Roadway/Waterway	Scenario 1	--	--	--
2407	638948.5	4169861.2	Roadway/Waterway	Scenario 1	--	--	--
2408	638973.5	4169861.2	Roadway/Waterway	Scenario 1	--	--	--
2409	638848.5	4169886.2	Roadway/Waterway	Scenario 1	--	--	--
2410	638873.5	4169886.2	Roadway/Waterway	Scenario 1	--	--	--
2411	638898.5	4169886.2	Roadway/Waterway	Scenario 1	--	--	--
2412	638923.5	4169886.2	Roadway/Waterway	Scenario 1	--	--	--
2413	638948.5	4169886.2	Roadway/Waterway	Scenario 1	--	--	--
2414	638823.5	4169911.2	Roadway/Waterway	Scenario 1	--	--	--
2415	638848.5	4169911.2	Roadway/Waterway	Scenario 1	--	--	--
2416	638873.5	4169911.2	Roadway/Waterway	Scenario 1	--	--	--
2417	638898.5	4169911.2	Roadway/Waterway	Scenario 1	--	--	--
2418	638923.5	4169911.2	Roadway/Waterway	Scenario 1	--	--	--
2419	638798.5	4169936.2	Roadway/Waterway	Scenario 1	--	--	--
2420	638823.5	4169936.2	Roadway/Waterway	Scenario 1	--	--	--
2421	638848.5	4169936.2	Roadway/Waterway	Scenario 1	--	--	--
2422	638873.5	4169936.2	Roadway/Waterway	Scenario 1	--	--	--
2423	638898.5	4169936.2	Roadway/Waterway	Scenario 1	--	--	--
2424	638798.5	4169961.2	Roadway/Waterway	Scenario 1	--	--	--
2425	638823.5	4169961.2	Roadway/Waterway	Scenario 1	--	--	--
2426	638848.5	4169961.2	Roadway/Waterway	Scenario 1	--	--	--
2427	638873.5	4169961.2	Roadway/Waterway	Scenario 1	--	--	--
2428	638798.5	4169986.2	Roadway/Waterway	Scenario 1	--	--	--
2429	638823.5	4169986.2	Roadway/Waterway	Scenario 1	--	--	--
2430	638848.5	4169986.2	Roadway/Waterway	Scenario 1	--	--	--
2431	638873.5	4169986.2	Roadway/Waterway	Scenario 1	--	--	--
2432	638098.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2433	638123.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2434	638148.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2435	638173.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2436	638198.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2437	638223.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2438	638248.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2439	638273.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2440	638298.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2441	638773.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2442	638798.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2443	638823.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2444	638848.5	4170011.2	Roadway/Waterway	Scenario 1	--	--	--
2445	638773.5	4170036.2	Roadway/Waterway	Scenario 1	--	--	--
2446	638798.5	4170036.2	Roadway/Waterway	Scenario 1	--	--	--
2447	638823.5	4170036.2	Roadway/Waterway	Scenario 1	--	--	--
2448	638848.5	4170036.2	Roadway/Waterway	Scenario 1	--	--	--
2449	638773.5	4170061.2	Roadway/Waterway	Scenario 1	--	--	--
2450	638798.5	4170061.2	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2451	638823.5	4170061.2	Roadway/Waterway	Scenario 1	--	--	--
2452	638848.5	4170061.2	Roadway/Waterway	Scenario 1	--	--	--
2453	638748.5	4170086.2	Roadway/Waterway	Scenario 1	--	--	--
2454	638773.5	4170086.2	Roadway/Waterway	Scenario 1	--	--	--
2455	638798.5	4170086.2	Roadway/Waterway	Scenario 1	--	--	--
2456	638823.5	4170086.2	Roadway/Waterway	Scenario 1	--	--	--
2457	638723.5	4170111.2	Roadway/Waterway	Scenario 1	--	--	--
2458	638748.5	4170111.2	Roadway/Waterway	Scenario 1	--	--	--
2459	638773.5	4170111.2	Roadway/Waterway	Scenario 1	--	--	--
2460	638798.5	4170111.2	Roadway/Waterway	Scenario 1	--	--	--
2461	642611.0	4166673.7	Roadway/Waterway	Scenario 1	--	--	--
2462	642661.0	4166673.7	Roadway/Waterway	Scenario 1	--	--	--
2463	642461.0	4166723.7	Roadway/Waterway	Scenario 1	--	--	--
2464	642511.0	4166723.7	Roadway/Waterway	Scenario 1	--	--	--
2465	642561.0	4166723.7	Roadway/Waterway	Scenario 1	--	--	--
2466	642611.0	4166723.7	Roadway/Waterway	Scenario 1	--	--	--
2467	641311.0	4166773.7	Roadway/Waterway	Scenario 1	--	--	--
2468	641361.0	4166773.7	Roadway/Waterway	Scenario 1	--	--	--
2469	641411.0	4166773.7	Roadway/Waterway	Scenario 1	--	--	--
2470	642411.0	4166773.7	Roadway/Waterway	Scenario 1	--	--	--
2471	642461.0	4166773.7	Roadway/Waterway	Scenario 1	--	--	--
2472	642511.0	4166773.7	Roadway/Waterway	Scenario 1	--	--	--
2473	642561.0	4166773.7	Roadway/Waterway	Scenario 1	--	--	--
2474	641261.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2475	641311.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2476	641361.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2477	641411.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2478	641461.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2479	642361.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2480	642411.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2481	642461.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2482	642511.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2483	642561.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2484	644361.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2485	644561.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2486	644611.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2487	644661.0	4166823.7	Roadway/Waterway	Scenario 1	--	--	--
2488	641211.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2489	641261.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2490	641311.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2491	641361.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2492	641411.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2493	641461.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2494	642311.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2495	644411.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2496	644461.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2497	644511.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2498	644561.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2499	644611.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2500	644661.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2501	644711.0	4166873.7	Roadway/Waterway	Scenario 1	--	--	--
2502	641161.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2503	641211.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2504	641261.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2505	641311.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2506	644511.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2507	644561.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2508	644611.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2509	644661.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2510	644711.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2511	644761.0	4166923.7	Roadway/Waterway	Scenario 1	--	--	--
2512	641161.0	4166973.7	Roadway/Waterway	Scenario 1	--	--	--
2513	641211.0	4166973.7	Roadway/Waterway	Scenario 1	--	--	--
2514	641261.0	4166973.7	Roadway/Waterway	Scenario 1	--	--	--
2515	644661.0	4166973.7	Roadway/Waterway	Scenario 1	--	--	--
2516	644711.0	4167273.7	Roadway/Waterway	Scenario 1	--	--	--
2517	644761.0	4167273.7	Roadway/Waterway	Scenario 1	--	--	--
2518	644811.0	4167273.7	Roadway/Waterway	Scenario 1	--	--	--
2519	644711.0	4167323.7	Roadway/Waterway	Scenario 1	--	--	--
2520	644761.0	4167323.7	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2521	644811.0	4167323.7	Roadway/Waterway	Scenario 1	--	--	--
2522	641161.0	4167473.7	Roadway/Waterway	Scenario 1	--	--	--
2523	641211.0	4167473.7	Roadway/Waterway	Scenario 1	--	--	--
2524	641261.0	4167473.7	Roadway/Waterway	Scenario 1	--	--	--
2525	641011.0	4167523.7	Roadway/Waterway	Scenario 1	--	--	--
2526	641061.0	4167523.7	Roadway/Waterway	Scenario 1	--	--	--
2527	641111.0	4167523.7	Roadway/Waterway	Scenario 1	--	--	--
2528	640861.0	4167573.7	Roadway/Waterway	Scenario 1	--	--	--
2529	640911.0	4167573.7	Roadway/Waterway	Scenario 1	--	--	--
2530	640711.0	4167623.7	Roadway/Waterway	Scenario 1	--	--	--
2531	640561.0	4167673.7	Roadway/Waterway	Scenario 1	--	--	--
2532	640111.0	4167873.7	Roadway/Waterway	Scenario 1	--	--	--
2533	639961.0	4167973.7	Roadway/Waterway	Scenario 1	--	--	--
2534	639861.0	4168023.7	Roadway/Waterway	Scenario 1	--	--	--
2535	639811.0	4168073.7	Roadway/Waterway	Scenario 1	--	--	--
2536	639711.0	4168123.7	Roadway/Waterway	Scenario 1	--	--	--
2537	639611.0	4168173.7	Roadway/Waterway	Scenario 1	--	--	--
2538	639661.0	4168173.7	Roadway/Waterway	Scenario 1	--	--	--
2539	639561.0	4168223.7	Roadway/Waterway	Scenario 1	--	--	--
2540	639611.0	4168223.7	Roadway/Waterway	Scenario 1	--	--	--
2541	639461.0	4168273.7	Roadway/Waterway	Scenario 1	--	--	--
2542	639511.0	4168273.7	Roadway/Waterway	Scenario 1	--	--	--
2543	639561.0	4168273.7	Roadway/Waterway	Scenario 1	--	--	--
2544	639611.0	4168273.7	Roadway/Waterway	Scenario 1	--	--	--
2545	639161.0	4168323.7	Roadway/Waterway	Scenario 1	--	--	--
2546	639411.0	4168323.7	Roadway/Waterway	Scenario 1	--	--	--
2547	639461.0	4168323.7	Roadway/Waterway	Scenario 1	--	--	--
2548	639511.0	4168323.7	Roadway/Waterway	Scenario 1	--	--	--
2549	639561.0	4168323.7	Roadway/Waterway	Scenario 1	--	--	--
2550	639611.0	4168323.7	Roadway/Waterway	Scenario 1	--	--	--
2551	639061.0	4168373.7	Roadway/Waterway	Scenario 1	--	--	--
2552	639311.0	4168373.7	Roadway/Waterway	Scenario 1	--	--	--
2553	639011.0	4168423.7	Roadway/Waterway	Scenario 1	--	--	--
2554	639211.0	4168423.7	Roadway/Waterway	Scenario 1	--	--	--
2555	638911.0	4168473.7	Roadway/Waterway	Scenario 1	--	--	--
2556	638961.0	4168473.7	Roadway/Waterway	Scenario 1	--	--	--
2557	639161.0	4168473.7	Roadway/Waterway	Scenario 1	--	--	--
2558	638811.0	4168523.7	Roadway/Waterway	Scenario 1	--	--	--
2559	638861.0	4168523.7	Roadway/Waterway	Scenario 1	--	--	--
2560	639061.0	4168523.7	Roadway/Waterway	Scenario 1	--	--	--
2561	638711.0	4168573.7	Roadway/Waterway	Scenario 1	--	--	--
2562	638761.0	4168573.7	Roadway/Waterway	Scenario 1	--	--	--
2563	638811.0	4168573.7	Roadway/Waterway	Scenario 1	--	--	--
2564	638661.0	4168623.7	Roadway/Waterway	Scenario 1	--	--	--
2565	638711.0	4168623.7	Roadway/Waterway	Scenario 1	--	--	--
2566	638761.0	4168623.7	Roadway/Waterway	Scenario 1	--	--	--
2567	638911.0	4168623.7	Roadway/Waterway	Scenario 1	--	--	--
2568	638561.0	4168673.7	Roadway/Waterway	Scenario 1	--	--	--
2569	638611.0	4168673.7	Roadway/Waterway	Scenario 1	--	--	--
2570	638661.0	4168673.7	Roadway/Waterway	Scenario 1	--	--	--
2571	638511.0	4168723.7	Roadway/Waterway	Scenario 1	--	--	--
2572	638561.0	4168723.7	Roadway/Waterway	Scenario 1	--	--	--
2573	638611.0	4168723.7	Roadway/Waterway	Scenario 1	--	--	--
2574	638461.0	4168773.7	Roadway/Waterway	Scenario 1	--	--	--
2575	638511.0	4168773.7	Roadway/Waterway	Scenario 1	--	--	--
2576	638411.0	4168823.7	Roadway/Waterway	Scenario 1	--	--	--
2577	638461.0	4168823.7	Roadway/Waterway	Scenario 1	--	--	--
2578	640211.0	4168823.7	Roadway/Waterway	Scenario 1	--	--	--
2579	638311.0	4168873.7	Roadway/Waterway	Scenario 1	--	--	--
2580	638361.0	4168873.7	Roadway/Waterway	Scenario 1	--	--	--
2581	638411.0	4168873.7	Roadway/Waterway	Scenario 1	--	--	--
2582	640111.0	4168873.7	Roadway/Waterway	Scenario 1	--	--	--
2583	640161.0	4168873.7	Roadway/Waterway	Scenario 1	--	--	--
2584	640261.0	4168873.7	Roadway/Waterway	Scenario 1	--	--	--
2585	640311.0	4168873.7	Roadway/Waterway	Scenario 1	--	--	--
2586	640361.0	4168873.7	Roadway/Waterway	Scenario 1	--	--	--
2587	638261.0	4168923.7	Roadway/Waterway	Scenario 1	--	--	--
2588	638311.0	4168923.7	Roadway/Waterway	Scenario 1	--	--	--
2589	640061.0	4168923.7	Roadway/Waterway	Scenario 1	--	--	--
2590	640411.0	4168923.7	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2591	638211.0	4168973.7	Roadway/Waterway	Scenario 1	--	--	--
2592	638261.0	4168973.7	Roadway/Waterway	Scenario 1	--	--	--
2593	638211.0	4169023.7	Roadway/Waterway	Scenario 1	--	--	--
2594	638311.0	4169073.7	Roadway/Waterway	Scenario 1	--	--	--
2595	638111.0	4169123.7	Roadway/Waterway	Scenario 1	--	--	--
2596	638261.0	4169123.7	Roadway/Waterway	Scenario 1	--	--	--
2597	638111.0	4169173.7	Roadway/Waterway	Scenario 1	--	--	--
2598	638211.0	4169173.7	Roadway/Waterway	Scenario 1	--	--	--
2599	638111.0	4169223.7	Roadway/Waterway	Scenario 1	--	--	--
2600	638161.0	4169223.7	Roadway/Waterway	Scenario 1	--	--	--
2601	639711.0	4169223.7	Roadway/Waterway	Scenario 1	--	--	--
2602	638111.0	4169273.7	Roadway/Waterway	Scenario 1	--	--	--
2603	639711.0	4169273.7	Roadway/Waterway	Scenario 1	--	--	--
2604	638061.0	4169323.7	Roadway/Waterway	Scenario 1	--	--	--
2605	639711.0	4169323.7	Roadway/Waterway	Scenario 1	--	--	--
2606	638011.0	4169373.7	Roadway/Waterway	Scenario 1	--	--	--
2607	637961.0	4169423.7	Roadway/Waterway	Scenario 1	--	--	--
2608	637911.0	4169473.7	Roadway/Waterway	Scenario 1	--	--	--
2609	637961.0	4169473.7	Roadway/Waterway	Scenario 1	--	--	--
2610	637861.0	4169523.7	Roadway/Waterway	Scenario 1	--	--	--
2611	637911.0	4169523.7	Roadway/Waterway	Scenario 1	--	--	--
2612	637961.0	4169523.7	Roadway/Waterway	Scenario 1	--	--	--
2613	641311.0	4169523.7	Roadway/Waterway	Scenario 1	--	--	--
2614	637861.0	4169573.7	Roadway/Waterway	Scenario 1	--	--	--
2615	637911.0	4169573.7	Roadway/Waterway	Scenario 1	--	--	--
2616	637961.0	4169573.7	Roadway/Waterway	Scenario 1	--	--	--
2617	641311.0	4169573.7	Roadway/Waterway	Scenario 1	--	--	--
2618	637861.0	4169623.7	Roadway/Waterway	Scenario 1	--	--	--
2619	637911.0	4169623.7	Roadway/Waterway	Scenario 1	--	--	--
2620	641311.0	4169623.7	Roadway/Waterway	Scenario 1	--	--	--
2621	637861.0	4169673.7	Roadway/Waterway	Scenario 1	--	--	--
2622	638861.0	4170073.7	Roadway/Waterway	Scenario 1	--	--	--
2623	638811.0	4170123.7	Roadway/Waterway	Scenario 1	--	--	--
2624	638861.0	4170123.7	Roadway/Waterway	Scenario 1	--	--	--
2625	638661.0	4170173.7	Roadway/Waterway	Scenario 1	--	--	--
2626	638711.0	4170173.7	Roadway/Waterway	Scenario 1	--	--	--
2627	638761.0	4170173.7	Roadway/Waterway	Scenario 1	--	--	--
2628	638811.0	4170173.7	Roadway/Waterway	Scenario 1	--	--	--
2629	638611.0	4170223.7	Roadway/Waterway	Scenario 1	--	--	--
2630	638661.0	4170223.7	Roadway/Waterway	Scenario 1	--	--	--
2631	638711.0	4170223.7	Roadway/Waterway	Scenario 1	--	--	--
2632	638761.0	4170223.7	Roadway/Waterway	Scenario 1	--	--	--
2633	638711.0	4170273.7	Roadway/Waterway	Scenario 1	--	--	--
2634	644236.2	4164448.9	Roadway/Waterway	Scenario 1	--	--	--
2635	644136.2	4164548.9	Roadway/Waterway	Scenario 1	--	--	--
2636	643936.2	4164648.9	Roadway/Waterway	Scenario 1	--	--	--
2637	644036.2	4164648.9	Roadway/Waterway	Scenario 1	--	--	--
2638	644636.2	4164648.9	Roadway/Waterway	Scenario 1	--	--	--
2639	643836.2	4164748.9	Roadway/Waterway	Scenario 1	--	--	--
2640	643936.2	4164748.9	Roadway/Waterway	Scenario 1	--	--	--
2641	644636.2	4164748.9	Roadway/Waterway	Scenario 1	--	--	--
2642	643736.2	4164848.9	Roadway/Waterway	Scenario 1	--	--	--
2643	643836.2	4164848.9	Roadway/Waterway	Scenario 1	--	--	--
2644	644636.2	4164848.9	Roadway/Waterway	Scenario 1	--	--	--
2645	643636.2	4164948.9	Roadway/Waterway	Scenario 1	--	--	--
2646	644636.2	4164948.9	Roadway/Waterway	Scenario 1	--	--	--
2647	643536.2	4165048.9	Roadway/Waterway	Scenario 1	--	--	--
2648	644636.2	4165048.9	Roadway/Waterway	Scenario 1	--	--	--
2649	645836.2	4165048.9	Roadway/Waterway	Scenario 1	--	--	--
2650	645936.2	4165048.9	Roadway/Waterway	Scenario 1	--	--	--
2651	643436.2	4165148.9	Roadway/Waterway	Scenario 1	--	--	--
2652	644636.2	4165148.9	Roadway/Waterway	Scenario 1	--	--	--
2653	645836.2	4165148.9	Roadway/Waterway	Scenario 1	--	--	--
2654	643236.2	4165248.9	Roadway/Waterway	Scenario 1	--	--	--
2655	643336.2	4165248.9	Roadway/Waterway	Scenario 1	--	--	--
2656	644636.2	4165248.9	Roadway/Waterway	Scenario 1	--	--	--
2657	645736.2	4165248.9	Roadway/Waterway	Scenario 1	--	--	--
2658	645836.2	4165248.9	Roadway/Waterway	Scenario 1	--	--	--
2659	646236.2	4165248.9	Roadway/Waterway	Scenario 1	--	--	--
2660	643136.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2661	644636.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--
2662	645736.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--
2663	645836.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--
2664	645936.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--
2665	646036.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--
2666	646136.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--
2667	646236.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--
2668	646336.2	4165348.9	Roadway/Waterway	Scenario 1	--	--	--
2669	643036.2	4165448.9	Roadway/Waterway	Scenario 1	--	--	--
2670	645736.2	4165448.9	Roadway/Waterway	Scenario 1	--	--	--
2671	645836.2	4165448.9	Roadway/Waterway	Scenario 1	--	--	--
2672	646236.2	4165448.9	Roadway/Waterway	Scenario 1	--	--	--
2673	642836.2	4165548.9	Roadway/Waterway	Scenario 1	--	--	--
2674	642936.2	4165548.9	Roadway/Waterway	Scenario 1	--	--	--
2675	645736.2	4165548.9	Roadway/Waterway	Scenario 1	--	--	--
2676	645836.2	4165548.9	Roadway/Waterway	Scenario 1	--	--	--
2677	646236.2	4165548.9	Roadway/Waterway	Scenario 1	--	--	--
2678	642736.2	4165648.9	Roadway/Waterway	Scenario 1	--	--	--
2679	645636.2	4165648.9	Roadway/Waterway	Scenario 1	--	--	--
2680	645736.2	4165648.9	Roadway/Waterway	Scenario 1	--	--	--
2681	646236.2	4165648.9	Roadway/Waterway	Scenario 1	--	--	--
2682	642636.2	4165748.9	Roadway/Waterway	Scenario 1	--	--	--
2683	645436.2	4165748.9	Roadway/Waterway	Scenario 1	--	--	--
2684	645536.2	4165748.9	Roadway/Waterway	Scenario 1	--	--	--
2685	645636.2	4165748.9	Roadway/Waterway	Scenario 1	--	--	--
2686	646236.2	4165748.9	Roadway/Waterway	Scenario 1	--	--	--
2687	642436.2	4165848.9	Roadway/Waterway	Scenario 1	--	--	--
2688	642536.2	4165848.9	Roadway/Waterway	Scenario 1	--	--	--
2689	645136.2	4165848.9	Roadway/Waterway	Scenario 1	--	--	--
2690	645236.2	4165848.9	Roadway/Waterway	Scenario 1	--	--	--
2691	645336.2	4165848.9	Roadway/Waterway	Scenario 1	--	--	--
2692	646236.2	4165848.9	Roadway/Waterway	Scenario 1	--	--	--
2693	641936.2	4165948.9	Roadway/Waterway	Scenario 1	--	--	--
2694	642336.2	4165948.9	Roadway/Waterway	Scenario 1	--	--	--
2695	644836.2	4165948.9	Roadway/Waterway	Scenario 1	--	--	--
2696	644936.2	4165948.9	Roadway/Waterway	Scenario 1	--	--	--
2697	645036.2	4165948.9	Roadway/Waterway	Scenario 1	--	--	--
2698	645136.2	4165948.9	Roadway/Waterway	Scenario 1	--	--	--
2699	646236.2	4165948.9	Roadway/Waterway	Scenario 1	--	--	--
2700	641536.2	4166048.9	Roadway/Waterway	Scenario 1	--	--	--
2701	642236.2	4166048.9	Roadway/Waterway	Scenario 1	--	--	--
2702	644436.2	4166048.9	Roadway/Waterway	Scenario 1	--	--	--
2703	644536.2	4166048.9	Roadway/Waterway	Scenario 1	--	--	--
2704	644636.2	4166048.9	Roadway/Waterway	Scenario 1	--	--	--
2705	644736.2	4166048.9	Roadway/Waterway	Scenario 1	--	--	--
2706	644836.2	4166048.9	Roadway/Waterway	Scenario 1	--	--	--
2707	646236.2	4166048.9	Roadway/Waterway	Scenario 1	--	--	--
2708	642036.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2709	642136.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2710	643136.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2711	643236.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2712	643336.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2713	643436.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2714	643536.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2715	643636.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2716	643736.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2717	643836.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2718	643936.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2719	644036.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2720	644136.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2721	644236.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2722	644336.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2723	644436.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2724	646236.2	4166148.9	Roadway/Waterway	Scenario 1	--	--	--
2725	643036.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2726	643136.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2727	643236.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2728	643336.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2729	643436.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2730	643536.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2731	643636.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2732	643736.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2733	643836.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2734	643936.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2735	644036.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2736	644136.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2737	646236.2	4166248.9	Roadway/Waterway	Scenario 1	--	--	--
2738	641736.2	4166348.9	Roadway/Waterway	Scenario 1	--	--	--
2739	641836.2	4166348.9	Roadway/Waterway	Scenario 1	--	--	--
2740	642936.2	4166348.9	Roadway/Waterway	Scenario 1	--	--	--
2741	646236.2	4166348.9	Roadway/Waterway	Scenario 1	--	--	--
2742	646936.2	4166348.9	Roadway/Waterway	Scenario 1	--	--	--
2743	640736.2	4166448.9	Roadway/Waterway	Scenario 1	--	--	--
2744	641336.2	4166448.9	Roadway/Waterway	Scenario 1	--	--	--
2745	641636.2	4166448.9	Roadway/Waterway	Scenario 1	--	--	--
2746	642736.2	4166448.9	Roadway/Waterway	Scenario 1	--	--	--
2747	642836.2	4166448.9	Roadway/Waterway	Scenario 1	--	--	--
2748	646236.2	4166448.9	Roadway/Waterway	Scenario 1	--	--	--
2749	646936.2	4166448.9	Roadway/Waterway	Scenario 1	--	--	--
2750	640936.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2751	641336.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2752	641436.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2753	641536.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2754	642636.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2755	642736.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2756	646236.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2757	646736.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2758	646836.2	4166548.9	Roadway/Waterway	Scenario 1	--	--	--
2759	641336.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2760	641436.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2761	642536.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2762	642636.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2763	645936.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2764	646036.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2765	646136.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2766	646236.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2767	646336.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2768	646436.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2769	646536.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2770	646636.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2771	646736.2	4166648.9	Roadway/Waterway	Scenario 1	--	--	--
2772	641236.2	4166748.9	Roadway/Waterway	Scenario 1	--	--	--
2773	641336.2	4166748.9	Roadway/Waterway	Scenario 1	--	--	--
2774	644736.2	4166748.9	Roadway/Waterway	Scenario 1	--	--	--
2775	645836.2	4166748.9	Roadway/Waterway	Scenario 1	--	--	--
2776	646136.2	4166748.9	Roadway/Waterway	Scenario 1	--	--	--
2777	646236.2	4166748.9	Roadway/Waterway	Scenario 1	--	--	--
2778	646336.2	4166748.9	Roadway/Waterway	Scenario 1	--	--	--
2779	639836.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2780	639936.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2781	640036.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2782	640136.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2783	640236.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2784	640336.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2785	640436.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2786	640536.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2787	641036.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2788	641136.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2789	644736.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2790	645736.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2791	646036.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2792	646136.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2793	646236.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2794	646336.2	4166848.9	Roadway/Waterway	Scenario 1	--	--	--
2795	640836.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2796	640936.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2797	641036.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2798	641136.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2799	644836.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2800	644936.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2801	645036.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2802	645136.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2803	645236.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2804	645336.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2805	645436.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2806	645536.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2807	645736.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2808	645836.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2809	645936.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2810	646036.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2811	646136.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2812	646236.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2813	646336.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2814	646436.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2815	646536.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2816	646636.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2817	646736.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2818	646836.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2819	646936.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2820	647036.2	4166948.9	Roadway/Waterway	Scenario 1	--	--	--
2821	640636.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2822	640736.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2823	640836.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2824	640936.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2825	645236.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2826	645336.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2827	645736.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2828	646036.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2829	646136.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2830	646236.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2831	646336.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2832	646836.2	4167048.9	Roadway/Waterway	Scenario 1	--	--	--
2833	640536.2	4167148.9	Roadway/Waterway	Scenario 1	--	--	--
2834	640636.2	4167148.9	Roadway/Waterway	Scenario 1	--	--	--
2835	640736.2	4167148.9	Roadway/Waterway	Scenario 1	--	--	--
2836	645236.2	4167148.9	Roadway/Waterway	Scenario 1	--	--	--
2837	645336.2	4167148.9	Roadway/Waterway	Scenario 1	--	--	--
2838	645736.2	4167148.9	Roadway/Waterway	Scenario 1	--	--	--
2839	646136.2	4167148.9	Roadway/Waterway	Scenario 1	--	--	--
2840	646236.2	4167148.9	Roadway/Waterway	Scenario 1	--	--	--
2841	640436.2	4167248.9	Roadway/Waterway	Scenario 1	--	--	--
2842	640536.2	4167248.9	Roadway/Waterway	Scenario 1	--	--	--
2843	644936.2	4167248.9	Roadway/Waterway	Scenario 1	--	--	--
2844	645236.2	4167248.9	Roadway/Waterway	Scenario 1	--	--	--
2845	646236.2	4167248.9	Roadway/Waterway	Scenario 1	--	--	--
2846	640336.2	4167348.9	Roadway/Waterway	Scenario 1	--	--	--
2847	640436.2	4167348.9	Roadway/Waterway	Scenario 1	--	--	--
2848	646136.2	4167348.9	Roadway/Waterway	Scenario 1	--	--	--
2849	646236.2	4167348.9	Roadway/Waterway	Scenario 1	--	--	--
2850	640236.2	4167448.9	Roadway/Waterway	Scenario 1	--	--	--
2851	640336.2	4167448.9	Roadway/Waterway	Scenario 1	--	--	--
2852	646036.2	4167448.9	Roadway/Waterway	Scenario 1	--	--	--
2853	646136.2	4167448.9	Roadway/Waterway	Scenario 1	--	--	--
2854	646236.2	4167448.9	Roadway/Waterway	Scenario 1	--	--	--
2855	640136.2	4167548.9	Roadway/Waterway	Scenario 1	--	--	--
2856	646136.2	4167548.9	Roadway/Waterway	Scenario 1	--	--	--
2857	640036.2	4167648.9	Roadway/Waterway	Scenario 1	--	--	--
2858	646136.2	4167648.9	Roadway/Waterway	Scenario 1	--	--	--
2859	639836.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2860	639936.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2861	644136.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2862	644236.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2863	645036.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2864	645136.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2865	645236.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2866	645336.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2867	645436.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2868	645536.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2869	645636.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2870	645736.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2871	645836.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2872	645936.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2873	646136.2	4167748.9	Roadway/Waterway	Scenario 1	--	--	--
2874	639736.2	4167848.9	Roadway/Waterway	Scenario 1	--	--	--
2875	646136.2	4167848.9	Roadway/Waterway	Scenario 1	--	--	--
2876	639636.2	4167948.9	Roadway/Waterway	Scenario 1	--	--	--
2877	646136.2	4167948.9	Roadway/Waterway	Scenario 1	--	--	--
2878	639436.2	4168048.9	Roadway/Waterway	Scenario 1	--	--	--
2879	639536.2	4168048.9	Roadway/Waterway	Scenario 1	--	--	--
2880	646136.2	4168048.9	Roadway/Waterway	Scenario 1	--	--	--
2881	639336.2	4168148.9	Roadway/Waterway	Scenario 1	--	--	--
2882	639436.2	4168148.9	Roadway/Waterway	Scenario 1	--	--	--
2883	646136.2	4168148.9	Roadway/Waterway	Scenario 1	--	--	--
2884	639236.2	4168248.9	Roadway/Waterway	Scenario 1	--	--	--
2885	646136.2	4168248.9	Roadway/Waterway	Scenario 1	--	--	--
2886	639036.2	4168348.9	Roadway/Waterway	Scenario 1	--	--	--
2887	646136.2	4168348.9	Roadway/Waterway	Scenario 1	--	--	--
2888	646136.2	4168448.9	Roadway/Waterway	Scenario 1	--	--	--
2889	644836.2	4168548.9	Roadway/Waterway	Scenario 1	--	--	--
2890	644936.2	4168548.9	Roadway/Waterway	Scenario 1	--	--	--
2891	645036.2	4168548.9	Roadway/Waterway	Scenario 1	--	--	--
2892	645136.2	4168548.9	Roadway/Waterway	Scenario 1	--	--	--
2893	645236.2	4168548.9	Roadway/Waterway	Scenario 1	--	--	--
2894	645336.2	4168548.9	Roadway/Waterway	Scenario 1	--	--	--
2895	646136.2	4168548.9	Roadway/Waterway	Scenario 1	--	--	--
2896	646136.2	4168648.9	Roadway/Waterway	Scenario 1	--	--	--
2897	646636.2	4168648.9	Roadway/Waterway	Scenario 1	--	--	--
2898	646136.2	4168748.9	Roadway/Waterway	Scenario 1	--	--	--
2899	646136.2	4168848.9	Roadway/Waterway	Scenario 1	--	--	--
2900	644736.2	4168948.9	Roadway/Waterway	Scenario 1	--	--	--
2901	645936.2	4168948.9	Roadway/Waterway	Scenario 1	--	--	--
2902	646136.2	4168948.9	Roadway/Waterway	Scenario 1	--	--	--
2903	638136.2	4169048.9	Roadway/Waterway	Scenario 1	--	--	--
2904	644136.2	4169048.9	Roadway/Waterway	Scenario 1	--	--	--
2905	646136.2	4169048.9	Roadway/Waterway	Scenario 1	--	--	--
2906	637936.2	4169148.9	Roadway/Waterway	Scenario 1	--	--	--
2907	638036.2	4169148.9	Roadway/Waterway	Scenario 1	--	--	--
2908	644236.2	4169148.9	Roadway/Waterway	Scenario 1	--	--	--
2909	646136.2	4169148.9	Roadway/Waterway	Scenario 1	--	--	--
2910	637836.2	4169248.9	Roadway/Waterway	Scenario 1	--	--	--
2911	644536.2	4169248.9	Roadway/Waterway	Scenario 1	--	--	--
2912	637736.2	4169348.9	Roadway/Waterway	Scenario 1	--	--	--
2913	644536.2	4169348.9	Roadway/Waterway	Scenario 1	--	--	--
2914	637536.2	4169448.9	Roadway/Waterway	Scenario 1	--	--	--
2915	637636.2	4169448.9	Roadway/Waterway	Scenario 1	--	--	--
2916	644436.2	4169448.9	Roadway/Waterway	Scenario 1	--	--	--
2917	644536.2	4169448.9	Roadway/Waterway	Scenario 1	--	--	--
2918	637436.2	4169548.9	Roadway/Waterway	Scenario 1	--	--	--
2919	637836.2	4169548.9	Roadway/Waterway	Scenario 1	--	--	--
2920	644536.2	4169548.9	Roadway/Waterway	Scenario 1	--	--	--
2921	637236.2	4169648.9	Roadway/Waterway	Scenario 1	--	--	--
2922	637336.2	4169648.9	Roadway/Waterway	Scenario 1	--	--	--
2923	637836.2	4169648.9	Roadway/Waterway	Scenario 1	--	--	--
2924	644536.2	4169648.9	Roadway/Waterway	Scenario 1	--	--	--
2925	637136.2	4169748.9	Roadway/Waterway	Scenario 1	--	--	--
2926	637736.2	4169748.9	Roadway/Waterway	Scenario 1	--	--	--
2927	644536.2	4169748.9	Roadway/Waterway	Scenario 1	--	--	--
2928	637036.2	4169848.9	Roadway/Waterway	Scenario 1	--	--	--
2929	637636.2	4169848.9	Roadway/Waterway	Scenario 1	--	--	--
2930	637736.2	4169848.9	Roadway/Waterway	Scenario 1	--	--	--
2931	644536.2	4169848.9	Roadway/Waterway	Scenario 1	--	--	--
2932	636836.2	4169948.9	Roadway/Waterway	Scenario 1	--	--	--
2933	636936.2	4169948.9	Roadway/Waterway	Scenario 1	--	--	--
2934	637636.2	4169948.9	Roadway/Waterway	Scenario 1	--	--	--
2935	639636.2	4169948.9	Roadway/Waterway	Scenario 1	--	--	--
2936	636736.2	4170048.9	Roadway/Waterway	Scenario 1	--	--	--
2937	636836.2	4170048.9	Roadway/Waterway	Scenario 1	--	--	--
2938	637536.2	4170048.9	Roadway/Waterway	Scenario 1	--	--	--
2939	635636.2	4170148.9	Roadway/Waterway	Scenario 1	--	--	--
2940	636636.2	4170148.9	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2941	637436.2	4170148.9	Roadway/Waterway	Scenario 1	--	--	--
2942	637536.2	4170148.9	Roadway/Waterway	Scenario 1	--	--	--
2943	635636.2	4170248.9	Roadway/Waterway	Scenario 1	--	--	--
2944	635736.2	4170248.9	Roadway/Waterway	Scenario 1	--	--	--
2945	636436.2	4170248.9	Roadway/Waterway	Scenario 1	--	--	--
2946	636536.2	4170248.9	Roadway/Waterway	Scenario 1	--	--	--
2947	637336.2	4170248.9	Roadway/Waterway	Scenario 1	--	--	--
2948	637436.2	4170248.9	Roadway/Waterway	Scenario 1	--	--	--
2949	635736.2	4170348.9	Roadway/Waterway	Scenario 1	--	--	--
2950	635836.2	4170348.9	Roadway/Waterway	Scenario 1	--	--	--
2951	636336.2	4170348.9	Roadway/Waterway	Scenario 1	--	--	--
2952	636436.2	4170348.9	Roadway/Waterway	Scenario 1	--	--	--
2953	637336.2	4170348.9	Roadway/Waterway	Scenario 1	--	--	--
2954	638536.2	4170348.9	Roadway/Waterway	Scenario 1	--	--	--
2955	638636.2	4170348.9	Roadway/Waterway	Scenario 1	--	--	--
2956	635736.2	4170448.9	Roadway/Waterway	Scenario 1	--	--	--
2957	635936.2	4170448.9	Roadway/Waterway	Scenario 1	--	--	--
2958	636136.2	4170448.9	Roadway/Waterway	Scenario 1	--	--	--
2959	636236.2	4170448.9	Roadway/Waterway	Scenario 1	--	--	--
2960	637236.2	4170448.9	Roadway/Waterway	Scenario 1	--	--	--
2961	637336.2	4170448.9	Roadway/Waterway	Scenario 1	--	--	--
2962	638436.2	4170448.9	Roadway/Waterway	Scenario 1	--	--	--
2963	638536.2	4170448.9	Roadway/Waterway	Scenario 1	--	--	--
2964	635736.2	4170548.9	Roadway/Waterway	Scenario 1	--	--	--
2965	636036.2	4170548.9	Roadway/Waterway	Scenario 1	--	--	--
2966	636136.2	4170548.9	Roadway/Waterway	Scenario 1	--	--	--
2967	637236.2	4170548.9	Roadway/Waterway	Scenario 1	--	--	--
2968	638436.2	4170548.9	Roadway/Waterway	Scenario 1	--	--	--
2969	635936.2	4170648.9	Roadway/Waterway	Scenario 1	--	--	--
2970	636036.2	4170648.9	Roadway/Waterway	Scenario 1	--	--	--
2971	636136.2	4170648.9	Roadway/Waterway	Scenario 1	--	--	--
2972	637136.2	4170648.9	Roadway/Waterway	Scenario 1	--	--	--
2973	637236.2	4170648.9	Roadway/Waterway	Scenario 1	--	--	--
2974	638436.2	4170648.9	Roadway/Waterway	Scenario 1	--	--	--
2975	635836.2	4170748.9	Roadway/Waterway	Scenario 1	--	--	--
2976	636236.2	4170748.9	Roadway/Waterway	Scenario 1	--	--	--
2977	637036.2	4170748.9	Roadway/Waterway	Scenario 1	--	--	--
2978	637136.2	4170748.9	Roadway/Waterway	Scenario 1	--	--	--
2979	638436.2	4170748.9	Roadway/Waterway	Scenario 1	--	--	--
2980	638536.2	4170748.9	Roadway/Waterway	Scenario 1	--	--	--
2981	635736.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2982	635836.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2983	636336.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2984	636636.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2985	636736.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2986	637036.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2987	637136.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2988	637236.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2989	638436.2	4170848.9	Roadway/Waterway	Scenario 1	--	--	--
2990	635836.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2991	635936.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2992	636436.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2993	636536.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2994	636936.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2995	637036.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2996	637136.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2997	637236.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2998	638336.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
2999	638436.2	4170948.9	Roadway/Waterway	Scenario 1	--	--	--
3000	635836.2	4171048.9	Roadway/Waterway	Scenario 1	--	--	--
3001	636436.2	4171048.9	Roadway/Waterway	Scenario 1	--	--	--
3002	636936.2	4171048.9	Roadway/Waterway	Scenario 1	--	--	--
3003	638336.2	4171048.9	Roadway/Waterway	Scenario 1	--	--	--
3004	636436.2	4171148.9	Roadway/Waterway	Scenario 1	--	--	--
3005	636736.2	4171148.9	Roadway/Waterway	Scenario 1	--	--	--
3006	636836.2	4171148.9	Roadway/Waterway	Scenario 1	--	--	--
3007	638236.2	4171148.9	Roadway/Waterway	Scenario 1	--	--	--
3008	638336.2	4171148.9	Roadway/Waterway	Scenario 1	--	--	--
3009	635936.2	4171248.9	Roadway/Waterway	Scenario 1	--	--	--
3010	636036.2	4171248.9	Roadway/Waterway	Scenario 1	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3011	636436.2	4171248.9	Roadway/Waterway	Scenario 1	--	--	--
3012	636636.2	4171248.9	Roadway/Waterway	Scenario 1	--	--	--
3013	636736.2	4171248.9	Roadway/Waterway	Scenario 1	--	--	--
3014	638036.2	4171248.9	Roadway/Waterway	Scenario 1	--	--	--
3015	638136.2	4171248.9	Roadway/Waterway	Scenario 1	--	--	--
3016	638236.2	4171248.9	Roadway/Waterway	Scenario 1	--	--	--
3017	636436.2	4171348.9	Roadway/Waterway	Scenario 1	--	--	--
3018	636536.2	4171348.9	Roadway/Waterway	Scenario 1	--	--	--
3019	636636.2	4171348.9	Roadway/Waterway	Scenario 1	--	--	--
3020	637936.2	4171348.9	Roadway/Waterway	Scenario 1	--	--	--
3021	638036.2	4171348.9	Roadway/Waterway	Scenario 1	--	--	--
3022	636336.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3023	636436.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3024	636536.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3025	637436.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3026	637536.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3027	637636.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3028	637736.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3029	637836.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3030	637936.2	4171448.9	Roadway/Waterway	Scenario 1	--	--	--
3031	636136.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3032	636236.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3033	636336.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3034	636436.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3035	637336.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3036	637436.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3037	637536.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3038	637636.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3039	637736.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3040	637836.2	4171548.9	Roadway/Waterway	Scenario 1	--	--	--
3041	636236.2	4171648.9	Roadway/Waterway	Scenario 1	--	--	--
3042	636436.2	4171648.9	Roadway/Waterway	Scenario 1	--	--	--
3043	637336.2	4171648.9	Roadway/Waterway	Scenario 1	--	--	--
3044	637436.2	4171648.9	Roadway/Waterway	Scenario 1	--	--	--
3045	636436.2	4171748.9	Roadway/Waterway	Scenario 1	--	--	--
3046	637236.2	4171748.9	Roadway/Waterway	Scenario 1	--	--	--
3047	636436.2	4171848.9	Roadway/Waterway	Scenario 1	--	--	--
3048	637136.2	4171848.9	Roadway/Waterway	Scenario 1	--	--	--
3049	637036.2	4171948.9	Roadway/Waterway	Scenario 1	--	--	--
3050	637136.2	4171948.9	Roadway/Waterway	Scenario 1	--	--	--
3051	638036.2	4171948.9	Roadway/Waterway	Scenario 1	--	--	--
3052	636936.2	4172048.9	Roadway/Waterway	Scenario 1	--	--	--
3053	637036.2	4172048.9	Roadway/Waterway	Scenario 1	--	--	--
3054	637136.2	4172048.9	Roadway/Waterway	Scenario 1	--	--	--
3055	638036.2	4172048.9	Roadway/Waterway	Scenario 1	--	--	--
3056	636836.2	4172148.9	Roadway/Waterway	Scenario 1	--	--	--
3057	636936.2	4172148.9	Roadway/Waterway	Scenario 1	--	--	--
3058	637036.2	4172148.9	Roadway/Waterway	Scenario 1	--	--	--
3059	638036.2	4172148.9	Roadway/Waterway	Scenario 1	--	--	--
3060	638036.2	4172248.9	Roadway/Waterway	Scenario 1	--	--	--
3061	639636.2	4172248.9	Roadway/Waterway	Scenario 1	--	--	--
3062	638036.2	4172348.9	Roadway/Waterway	Scenario 1	--	--	--
3063	639636.2	4172348.9	Roadway/Waterway	Scenario 1	--	--	--
3064	638036.2	4172448.9	Roadway/Waterway	Scenario 1	--	--	--
3065	642798.5	4166811.2	Worker	Scenario 1	1.59E-01	3.21E-04	--
3066	642823.5	4166811.2	Worker	Scenario 1	1.62E-01	3.27E-04	--
3067	642848.5	4166811.2	Worker	Scenario 1	1.65E-01	3.33E-04	--
3068	642873.5	4166811.2	Worker	Scenario 1	1.68E-01	3.39E-04	--
3069	642898.5	4166811.2	Worker	Scenario 1	1.71E-01	3.45E-04	--
3070	642923.5	4166811.2	Worker	Scenario 1	1.73E-01	3.50E-04	--
3071	642948.5	4166811.2	Worker	Scenario 1	1.76E-01	3.55E-04	--
3072	642973.5	4166811.2	Worker	Scenario 1	1.85E-01	3.74E-04	--
3073	642998.5	4166811.2	Worker	Scenario 1	1.86E-01	3.77E-04	--
3074	643023.5	4166811.2	Worker	Scenario 1	1.91E-01	3.85E-04	--
3075	643048.5	4166811.2	Worker	Scenario 1	1.96E-01	3.95E-04	--
3076	643073.5	4166811.2	Worker	Scenario 1	2.01E-01	4.06E-04	--
3077	643098.5	4166811.2	Worker	Scenario 1	2.08E-01	4.20E-04	--
3078	643123.5	4166811.2	Worker	Scenario 1	2.15E-01	4.34E-04	--
3079	643148.5	4166811.2	Worker	Scenario 1	2.23E-01	4.51E-04	--
3080	643173.5	4166811.2	Worker	Scenario 1	2.32E-01	4.68E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3081	643198.5	4166811.2	Worker	Scenario 1	2.40E-01	4.85E-04	--
3082	643223.5	4166811.2	Worker	Scenario 1	2.49E-01	5.03E-04	--
3083	643248.5	4166811.2	Worker	Scenario 1	2.58E-01	5.21E-04	--
3084	643273.5	4166811.2	Worker	Scenario 1	2.67E-01	5.39E-04	--
3085	643298.5	4166811.2	Worker	Scenario 1	2.76E-01	5.58E-04	--
3086	643323.5	4166811.2	Worker	Scenario 1	2.85E-01	5.76E-04	--
3087	643348.5	4166811.2	Worker	Scenario 1	2.94E-01	5.94E-04	--
3088	643373.5	4166811.2	Worker	Scenario 1	3.03E-01	6.12E-04	--
3089	643398.5	4166811.2	Worker	Scenario 1	3.11E-01	6.28E-04	--
3090	643423.5	4166811.2	Worker	Scenario 1	3.19E-01	6.44E-04	--
3091	643448.5	4166811.2	Worker	Scenario 1	3.26E-01	6.57E-04	--
3092	643473.5	4166811.2	Worker	Scenario 1	3.31E-01	6.69E-04	--
3093	643498.5	4166811.2	Worker	Scenario 1	3.36E-01	6.79E-04	--
3094	643523.5	4166811.2	Worker	Scenario 1	3.40E-01	6.86E-04	--
3095	641973.5	4166836.2	Worker	Scenario 1	9.25E-02	1.87E-04	--
3096	641998.5	4166836.2	Worker	Scenario 1	9.23E-02	1.86E-04	--
3097	642023.5	4166836.2	Worker	Scenario 1	9.24E-02	1.87E-04	--
3098	642048.5	4166836.2	Worker	Scenario 1	9.27E-02	1.87E-04	--
3099	642073.5	4166836.2	Worker	Scenario 1	9.29E-02	1.88E-04	--
3100	642098.5	4166836.2	Worker	Scenario 1	9.32E-02	1.88E-04	--
3101	642123.5	4166836.2	Worker	Scenario 1	9.39E-02	1.90E-04	--
3102	642148.5	4166836.2	Worker	Scenario 1	9.48E-02	1.92E-04	--
3103	642173.5	4166836.2	Worker	Scenario 1	9.60E-02	1.94E-04	--
3104	642198.5	4166836.2	Worker	Scenario 1	9.73E-02	1.96E-04	--
3105	642223.5	4166836.2	Worker	Scenario 1	9.89E-02	2.00E-04	--
3106	642248.5	4166836.2	Worker	Scenario 1	1.01E-01	2.03E-04	--
3107	642598.5	4166836.2	Worker	Scenario 1	1.45E-01	2.92E-04	--
3108	642623.5	4166836.2	Worker	Scenario 1	1.48E-01	2.98E-04	--
3109	642648.5	4166836.2	Worker	Scenario 1	1.50E-01	3.04E-04	--
3110	642673.5	4166836.2	Worker	Scenario 1	1.53E-01	3.10E-04	--
3111	642698.5	4166836.2	Worker	Scenario 1	1.56E-01	3.15E-04	--
3112	642723.5	4166836.2	Worker	Scenario 1	1.59E-01	3.21E-04	--
3113	642748.5	4166836.2	Worker	Scenario 1	1.62E-01	3.28E-04	--
3114	642773.5	4166836.2	Worker	Scenario 1	1.66E-01	3.34E-04	--
3115	642798.5	4166836.2	Worker	Scenario 1	1.69E-01	3.41E-04	--
3116	642823.5	4166836.2	Worker	Scenario 1	1.73E-01	3.48E-04	--
3117	642848.5	4166836.2	Worker	Scenario 1	1.76E-01	3.55E-04	--
3118	642873.5	4166836.2	Worker	Scenario 1	1.79E-01	3.62E-04	--
3119	642898.5	4166836.2	Worker	Scenario 1	1.82E-01	3.68E-04	--
3120	642923.5	4166836.2	Worker	Scenario 1	1.86E-01	3.75E-04	--
3121	642948.5	4166836.2	Worker	Scenario 1	1.89E-01	3.83E-04	--
3122	642973.5	4166836.2	Worker	Scenario 1	1.94E-01	3.92E-04	--
3123	642998.5	4166836.2	Worker	Scenario 1	2.03E-01	4.10E-04	--
3124	643023.5	4166836.2	Worker	Scenario 1	2.04E-01	4.12E-04	--
3125	643048.5	4166836.2	Worker	Scenario 1	2.09E-01	4.23E-04	--
3126	643073.5	4166836.2	Worker	Scenario 1	2.16E-01	4.35E-04	--
3127	643098.5	4166836.2	Worker	Scenario 1	2.23E-01	4.50E-04	--
3128	643123.5	4166836.2	Worker	Scenario 1	2.31E-01	4.68E-04	--
3129	643148.5	4166836.2	Worker	Scenario 1	2.41E-01	4.86E-04	--
3130	643173.5	4166836.2	Worker	Scenario 1	2.50E-01	5.06E-04	--
3131	643198.5	4166836.2	Worker	Scenario 1	2.60E-01	5.25E-04	--
3132	643223.5	4166836.2	Worker	Scenario 1	2.70E-01	5.45E-04	--
3133	643248.5	4166836.2	Worker	Scenario 1	2.80E-01	5.65E-04	--
3134	643273.5	4166836.2	Worker	Scenario 1	2.90E-01	5.86E-04	--
3135	643298.5	4166836.2	Worker	Scenario 1	3.01E-01	6.07E-04	--
3136	643323.5	4166836.2	Worker	Scenario 1	3.11E-01	6.27E-04	--
3137	643348.5	4166836.2	Worker	Scenario 1	3.20E-01	6.47E-04	--
3138	643373.5	4166836.2	Worker	Scenario 1	3.29E-01	6.65E-04	--
3139	643398.5	4166836.2	Worker	Scenario 1	3.38E-01	6.82E-04	--
3140	643423.5	4166836.2	Worker	Scenario 1	3.46E-01	6.98E-04	--
3141	643448.5	4166836.2	Worker	Scenario 1	3.52E-01	7.12E-04	--
3142	643473.5	4166836.2	Worker	Scenario 1	3.58E-01	7.23E-04	--
3143	643498.5	4166836.2	Worker	Scenario 1	3.62E-01	7.32E-04	--
3144	643523.5	4166836.2	Worker	Scenario 1	3.66E-01	7.38E-04	--
3145	643548.5	4166836.2	Worker	Scenario 1	3.67E-01	7.42E-04	--
3146	643573.5	4166836.2	Worker	Scenario 1	3.68E-01	7.43E-04	--
3147	643598.5	4166836.2	Worker	Scenario 1	3.67E-01	7.42E-04	--
3148	643623.5	4166836.2	Worker	Scenario 1	3.66E-01	7.39E-04	--
3149	643648.5	4166836.2	Worker	Scenario 1	3.63E-01	7.34E-04	--
3150	643673.5	4166836.2	Worker	Scenario 1	3.60E-01	7.28E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3151	643698.5	4166836.2	Worker	Scenario 1	3.57E-01	7.20E-04	--
3152	643723.5	4166836.2	Worker	Scenario 1	3.53E-01	7.12E-04	--
3153	643748.5	4166836.2	Worker	Scenario 1	3.48E-01	7.03E-04	--
3154	643773.5	4166836.2	Worker	Scenario 1	3.43E-01	6.93E-04	--
3155	643798.5	4166836.2	Worker	Scenario 1	3.39E-01	6.84E-04	--
3156	643823.5	4166836.2	Worker	Scenario 1	3.34E-01	6.75E-04	--
3157	643848.5	4166836.2	Worker	Scenario 1	3.30E-01	6.66E-04	--
3158	643873.5	4166836.2	Worker	Scenario 1	3.26E-01	6.58E-04	--
3159	643898.5	4166836.2	Worker	Scenario 1	3.22E-01	6.51E-04	--
3160	643923.5	4166836.2	Worker	Scenario 1	3.19E-01	6.44E-04	--
3161	643948.5	4166836.2	Worker	Scenario 1	3.16E-01	6.39E-04	--
3162	643973.5	4166836.2	Worker	Scenario 1	3.14E-01	6.34E-04	--
3163	643998.5	4166836.2	Worker	Scenario 1	3.12E-01	6.30E-04	--
3164	644023.5	4166836.2	Worker	Scenario 1	3.10E-01	6.26E-04	--
3165	644048.5	4166836.2	Worker	Scenario 1	3.09E-01	6.23E-04	--
3166	644073.5	4166836.2	Worker	Scenario 1	3.07E-01	6.20E-04	--
3167	644098.5	4166836.2	Worker	Scenario 1	3.06E-01	6.17E-04	--
3168	644123.5	4166836.2	Worker	Scenario 1	3.04E-01	6.14E-04	--
3169	644148.5	4166836.2	Worker	Scenario 1	3.02E-01	6.11E-04	--
3170	644173.5	4166836.2	Worker	Scenario 1	3.01E-01	6.08E-04	--
3171	644198.5	4166836.2	Worker	Scenario 1	2.99E-01	6.04E-04	--
3172	644223.5	4166836.2	Worker	Scenario 1	2.98E-01	6.01E-04	--
3173	644248.5	4166836.2	Worker	Scenario 1	2.96E-01	5.98E-04	--
3174	644273.5	4166836.2	Worker	Scenario 1	2.94E-01	5.94E-04	--
3175	644298.5	4166836.2	Worker	Scenario 1	2.93E-01	5.91E-04	--
3176	641598.5	4166861.2	Worker	Scenario 1	1.42E-01	2.87E-04	--
3177	641623.5	4166861.2	Worker	Scenario 1	1.33E-01	2.69E-04	--
3178	641648.5	4166861.2	Worker	Scenario 1	1.26E-01	2.54E-04	--
3179	641673.5	4166861.2	Worker	Scenario 1	1.20E-01	2.42E-04	--
3180	641698.5	4166861.2	Worker	Scenario 1	1.15E-01	2.32E-04	--
3181	641723.5	4166861.2	Worker	Scenario 1	1.11E-01	2.23E-04	--
3182	641748.5	4166861.2	Worker	Scenario 1	1.07E-01	2.16E-04	--
3183	641773.5	4166861.2	Worker	Scenario 1	1.04E-01	2.11E-04	--
3184	641798.5	4166861.2	Worker	Scenario 1	1.02E-01	2.06E-04	--
3185	641823.5	4166861.2	Worker	Scenario 1	1.00E-01	2.02E-04	--
3186	641848.5	4166861.2	Worker	Scenario 1	9.86E-02	1.99E-04	--
3187	641873.5	4166861.2	Worker	Scenario 1	9.74E-02	1.97E-04	--
3188	641898.5	4166861.2	Worker	Scenario 1	9.64E-02	1.95E-04	--
3189	641923.5	4166861.2	Worker	Scenario 1	9.57E-02	1.93E-04	--
3190	641948.5	4166861.2	Worker	Scenario 1	9.51E-02	1.92E-04	--
3191	641973.5	4166861.2	Worker	Scenario 1	9.49E-02	1.92E-04	--
3192	641998.5	4166861.2	Worker	Scenario 1	9.49E-02	1.92E-04	--
3193	642023.5	4166861.2	Worker	Scenario 1	9.50E-02	1.92E-04	--
3194	642123.5	4166861.2	Worker	Scenario 1	9.71E-02	1.96E-04	--
3195	642148.5	4166861.2	Worker	Scenario 1	9.82E-02	1.98E-04	--
3196	642173.5	4166861.2	Worker	Scenario 1	9.96E-02	2.01E-04	--
3197	641298.5	4167011.2	Worker	Scenario 1	1.55E-01	3.12E-04	--
3198	641323.5	4167011.2	Worker	Scenario 1	2.01E-01	4.06E-04	--
3199	641298.5	4167036.2	Worker	Scenario 1	1.57E-01	3.17E-04	--
3200	641323.5	4167036.2	Worker	Scenario 1	2.04E-01	4.12E-04	--
3201	641298.5	4167061.2	Worker	Scenario 1	1.59E-01	3.22E-04	--
3202	641323.5	4167061.2	Worker	Scenario 1	2.08E-01	4.19E-04	--
3203	641348.5	4167061.2	Worker	Scenario 1	3.06E-01	6.17E-04	--
3204	644673.5	4167061.2	Worker	Scenario 1	3.66E-01	7.40E-04	--
3205	641298.5	4167086.2	Worker	Scenario 1	1.62E-01	3.27E-04	--
3206	641323.5	4167086.2	Worker	Scenario 1	2.12E-01	4.28E-04	--
3207	641348.5	4167086.2	Worker	Scenario 1	3.15E-01	6.36E-04	--
3208	644648.5	4167086.2	Worker	Scenario 1	3.87E-01	7.82E-04	--
3209	644673.5	4167086.2	Worker	Scenario 1	3.77E-01	7.62E-04	--
3210	641298.5	4167111.2	Worker	Scenario 1	1.65E-01	3.33E-04	--
3211	641323.5	4167111.2	Worker	Scenario 1	2.16E-01	4.37E-04	--
3212	641348.5	4167111.2	Worker	Scenario 1	3.25E-01	6.57E-04	--
3213	644648.5	4167111.2	Worker	Scenario 1	3.96E-01	8.01E-04	--
3214	644673.5	4167111.2	Worker	Scenario 1	3.87E-01	7.81E-04	--
3215	641298.5	4167136.2	Worker	Scenario 1	1.68E-01	3.38E-04	--
3216	641323.5	4167136.2	Worker	Scenario 1	2.21E-01	4.47E-04	--
3217	641348.5	4167136.2	Worker	Scenario 1	3.36E-01	6.79E-04	--
3218	644648.5	4167136.2	Worker	Scenario 1	4.05E-01	8.17E-04	--
3219	644673.5	4167136.2	Worker	Scenario 1	3.95E-01	7.97E-04	--
3220	641298.5	4167161.2	Worker	Scenario 1	1.70E-01	3.44E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3221	641323.5	4167161.2	Worker	Scenario 1	2.26E-01	4.56E-04	--
3222	641348.5	4167161.2	Worker	Scenario 1	3.47E-01	7.00E-04	--
3223	644648.5	4167161.2	Worker	Scenario 1	4.10E-01	8.29E-04	--
3224	644673.5	4167161.2	Worker	Scenario 1	4.00E-01	8.08E-04	--
3225	641298.5	4167186.2	Worker	Scenario 1	1.73E-01	3.50E-04	--
3226	641323.5	4167186.2	Worker	Scenario 1	2.30E-01	4.65E-04	--
3227	641348.5	4167186.2	Worker	Scenario 1	3.56E-01	7.19E-04	--
3228	644648.5	4167186.2	Worker	Scenario 1	4.16E-01	8.41E-04	--
3229	644673.5	4167186.2	Worker	Scenario 1	4.06E-01	8.21E-04	--
3230	641298.5	4167211.2	Worker	Scenario 1	1.76E-01	3.55E-04	--
3231	641323.5	4167211.2	Worker	Scenario 1	2.34E-01	4.73E-04	--
3232	641348.5	4167211.2	Worker	Scenario 1	3.64E-01	7.36E-04	--
3233	644648.5	4167211.2	Worker	Scenario 1	4.24E-01	8.56E-04	--
3234	644673.5	4167211.2	Worker	Scenario 1	4.14E-01	8.35E-04	--
3235	641298.5	4167236.2	Worker	Scenario 1	1.78E-01	3.61E-04	--
3236	641323.5	4167236.2	Worker	Scenario 1	2.38E-01	4.81E-04	--
3237	641348.5	4167236.2	Worker	Scenario 1	3.72E-01	7.52E-04	--
3238	644623.5	4167236.2	Worker	Scenario 1	4.41E-01	8.91E-04	--
3239	644648.5	4167236.2	Worker	Scenario 1	4.30E-01	8.68E-04	--
3240	644673.5	4167236.2	Worker	Scenario 1	4.20E-01	8.48E-04	--
3241	641298.5	4167261.2	Worker	Scenario 1	1.81E-01	3.66E-04	--
3242	641323.5	4167261.2	Worker	Scenario 1	2.42E-01	4.88E-04	--
3243	641348.5	4167261.2	Worker	Scenario 1	3.80E-01	7.67E-04	--
3244	641298.5	4167286.2	Worker	Scenario 1	1.84E-01	3.71E-04	--
3245	641323.5	4167286.2	Worker	Scenario 1	2.46E-01	4.96E-04	--
3246	641348.5	4167286.2	Worker	Scenario 1	3.87E-01	7.81E-04	--
3247	641298.5	4167311.2	Worker	Scenario 1	1.86E-01	3.76E-04	--
3248	641323.5	4167311.2	Worker	Scenario 1	2.49E-01	5.03E-04	--
3249	641348.5	4167311.2	Worker	Scenario 1	3.94E-01	7.96E-04	--
3250	641723.5	4167311.2	Roadway/Waterway	Scenario 1	--	--	--
3251	641298.5	4167336.2	Worker	Scenario 1	1.88E-01	3.80E-04	--
3252	641323.5	4167336.2	Worker	Scenario 1	2.53E-01	5.10E-04	--
3253	641348.5	4167336.2	Worker	Scenario 1	4.01E-01	8.10E-04	--
3254	641623.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
3255	641648.5	4167336.2	Roadway/Waterway	Scenario 1	--	--	--
3256	641298.5	4167361.2	Worker	Scenario 1	1.91E-01	3.85E-04	--
3257	641323.5	4167361.2	Worker	Scenario 1	2.56E-01	5.18E-04	--
3258	641348.5	4167361.2	Worker	Scenario 1	4.10E-01	8.28E-04	--
3259	641548.5	4167361.2	Roadway/Waterway	Scenario 1	--	--	--
3260	644523.5	4167361.2	Worker	Scenario 1	5.09E-01	1.03E-03	--
3261	641298.5	4167386.2	Worker	Scenario 1	1.93E-01	3.89E-04	--
3262	641323.5	4167386.2	Worker	Scenario 1	2.59E-01	5.24E-04	--
3263	641348.5	4167386.2	Worker	Scenario 1	4.17E-01	8.42E-04	--
3264	641448.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
3265	641473.5	4167386.2	Roadway/Waterway	Scenario 1	--	--	--
3266	644448.5	4167386.2	Worker	Scenario 1	5.53E-01	1.12E-03	--
3267	641298.5	4167411.2	Worker	Scenario 1	1.94E-01	3.93E-04	--
3268	641323.5	4167411.2	Worker	Scenario 1	2.62E-01	5.30E-04	--
3269	641348.5	4167411.2	Worker	Scenario 1	4.24E-01	8.55E-04	--
3270	644348.5	4167411.2	Worker	Scenario 1	6.20E-01	1.25E-03	--
3271	644373.5	4167411.2	Worker	Scenario 1	6.02E-01	1.22E-03	--
3272	643348.5	4167436.2	Worker	Scenario 1	5.15E+00	1.04E-02	--
3273	643373.5	4167436.2	Worker	Scenario 1	4.57E+00	9.24E-03	--
3274	643398.5	4167436.2	Worker	Scenario 1	4.13E+00	8.35E-03	--
3275	643423.5	4167436.2	Worker	Scenario 1	3.75E+00	7.58E-03	--
3276	643448.5	4167436.2	Worker	Scenario 1	3.42E+00	6.91E-03	--
3277	643473.5	4167436.2	Worker	Scenario 1	3.13E+00	6.33E-03	--
3278	643498.5	4167436.2	Worker	Scenario 1	2.88E+00	5.82E-03	--
3279	643523.5	4167436.2	Worker	Scenario 1	2.66E+00	5.38E-03	--
3280	643548.5	4167436.2	Worker	Scenario 1	2.47E+00	4.99E-03	--
3281	643573.5	4167436.2	Worker	Scenario 1	2.30E+00	4.65E-03	--
3282	643598.5	4167436.2	Worker	Scenario 1	2.15E+00	4.34E-03	--
3283	643623.5	4167436.2	Worker	Scenario 1	2.02E+00	4.07E-03	--
3284	643648.5	4167436.2	Worker	Scenario 1	1.89E+00	3.83E-03	--
3285	643673.5	4167436.2	Worker	Scenario 1	1.78E+00	3.60E-03	--
3286	643698.5	4167436.2	Worker	Scenario 1	1.69E+00	3.41E-03	--
3287	643723.5	4167436.2	Worker	Scenario 1	1.60E+00	3.23E-03	--
3288	643748.5	4167436.2	Worker	Scenario 1	1.52E+00	3.06E-03	--
3289	644273.5	4167436.2	Worker	Scenario 1	6.77E-01	1.37E-03	--
3290	644298.5	4167436.2	Worker	Scenario 1	6.57E-01	1.33E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3291	643323.5	4167461.2	Worker	Scenario 1	6.49E+00	1.31E-02	--
3292	643348.5	4167461.2	Worker	Scenario 1	5.62E+00	1.13E-02	--
3293	643873.5	4167461.2	Worker	Scenario 1	1.21E+00	2.44E-03	--
3294	643898.5	4167461.2	Worker	Scenario 1	1.16E+00	2.34E-03	--
3295	644198.5	4167461.2	Worker	Scenario 1	7.42E-01	1.50E-03	--
3296	644223.5	4167461.2	Worker	Scenario 1	7.18E-01	1.45E-03	--
3297	643298.5	4167486.2	Worker	Scenario 1	8.25E+00	1.67E-02	--
3298	643323.5	4167486.2	Worker	Scenario 1	6.81E+00	1.38E-02	--
3299	643348.5	4167486.2	Worker	Scenario 1	5.87E+00	1.19E-02	--
3300	644098.5	4167486.2	Worker	Scenario 1	8.44E-01	1.70E-03	--
3301	644123.5	4167486.2	Worker	Scenario 1	8.15E-01	1.65E-03	--
3302	644148.5	4167486.2	Worker	Scenario 1	7.87E-01	1.59E-03	--
3303	643273.5	4167511.2	Worker	Scenario 1	9.67E+00	1.95E-02	--
3304	643298.5	4167511.2	Worker	Scenario 1	7.78E+00	1.57E-02	--
3305	643323.5	4167511.2	Worker	Scenario 1	6.62E+00	1.34E-02	--
3306	643273.5	4167536.2	Worker	Scenario 1	7.89E+00	1.59E-02	--
3307	643298.5	4167536.2	Worker	Scenario 1	6.76E+00	1.37E-02	--
3308	643248.5	4167561.2	Worker	Scenario 1	6.52E+00	1.32E-02	--
3309	643273.5	4167561.2	Worker	Scenario 1	5.86E+00	1.18E-02	--
3310	643223.5	4167586.2	Worker	Scenario 1	4.03E+00	8.14E-03	--
3311	643248.5	4167586.2	Worker	Scenario 1	4.03E+00	8.15E-03	--
3312	643198.5	4167611.2	Worker	Scenario 1	2.02E+00	4.08E-03	--
3313	643223.5	4167611.2	Worker	Scenario 1	2.22E+00	4.49E-03	--
3314	643248.5	4167611.2	Worker	Scenario 1	2.45E+00	4.95E-03	--
3315	643173.5	4167636.2	Worker	Scenario 1	1.24E+00	2.50E-03	--
3316	643198.5	4167636.2	Worker	Scenario 1	1.25E+00	2.52E-03	--
3317	643223.5	4167636.2	Worker	Scenario 1	1.39E+00	2.80E-03	--
3318	643173.5	4167661.2	Worker	Scenario 1	9.77E-01	1.97E-03	--
3319	643198.5	4167661.2	Worker	Scenario 1	9.55E-01	1.93E-03	--
3320	643148.5	4167686.2	Worker	Scenario 1	9.50E-01	1.92E-03	--
3321	643173.5	4167686.2	Worker	Scenario 1	8.51E-01	1.72E-03	--
3322	643123.5	4167711.2	Worker	Scenario 1	9.87E-01	1.99E-03	--
3323	643148.5	4167711.2	Worker	Scenario 1	8.44E-01	1.70E-03	--
3324	643098.5	4167736.2	Worker	Scenario 1	1.02E+00	2.07E-03	--
3325	643123.5	4167736.2	Worker	Scenario 1	8.67E-01	1.75E-03	--
3326	643098.5	4167761.2	Worker	Scenario 1	8.96E-01	1.81E-03	--
3327	643123.5	4167761.2	Worker	Scenario 1	7.97E-01	1.61E-03	--
3328	643073.5	4167786.2	Worker	Scenario 1	8.92E-01	1.80E-03	--
3329	643098.5	4167786.2	Worker	Scenario 1	8.07E-01	1.63E-03	--
3330	643048.5	4167811.2	Worker	Scenario 1	8.82E-01	1.78E-03	--
3331	643073.5	4167811.2	Worker	Scenario 1	7.99E-01	1.61E-03	--
3332	643023.5	4167836.2	Worker	Scenario 1	8.59E-01	1.74E-03	--
3333	643048.5	4167836.2	Worker	Scenario 1	7.77E-01	1.57E-03	--
3334	642998.5	4167861.2	Worker	Scenario 1	8.21E-01	1.66E-03	--
3335	643023.5	4167861.2	Worker	Scenario 1	7.51E-01	1.52E-03	--
3336	642973.5	4167886.2	Worker	Scenario 1	7.81E-01	1.58E-03	--
3337	642998.5	4167886.2	Worker	Scenario 1	7.20E-01	1.45E-03	--
3338	642948.5	4167911.2	Worker	Scenario 1	7.27E-01	1.47E-03	--
3339	642973.5	4167911.2	Worker	Scenario 1	6.90E-01	1.39E-03	--
3340	642898.5	4167936.2	Worker	Scenario 1	7.14E-01	1.44E-03	--
3341	642923.5	4167936.2	Worker	Scenario 1	6.77E-01	1.37E-03	--
3342	642873.5	4167961.2	Worker	Scenario 1	6.59E-01	1.33E-03	--
3343	642898.5	4167961.2	Worker	Scenario 1	6.40E-01	1.29E-03	--
3344	642823.5	4167986.2	Worker	Scenario 1	6.29E-01	1.27E-03	--
3345	642848.5	4167986.2	Worker	Scenario 1	6.12E-01	1.24E-03	--
3346	642798.5	4168011.2	Worker	Scenario 1	5.82E-01	1.18E-03	--
3347	642823.5	4168011.2	Worker	Scenario 1	5.77E-01	1.16E-03	--
3348	642748.5	4168036.2	Worker	Scenario 1	5.50E-01	1.11E-03	--
3349	642773.5	4168036.2	Worker	Scenario 1	5.43E-01	1.10E-03	--
3350	642698.5	4168061.2	Worker	Scenario 1	5.14E-01	1.04E-03	--
3351	642723.5	4168061.2	Worker	Scenario 1	5.10E-01	1.03E-03	--
3352	642748.5	4168061.2	Worker	Scenario 1	5.10E-01	1.03E-03	--
3353	642673.5	4168086.2	Worker	Scenario 1	4.79E-01	9.68E-04	--
3354	642698.5	4168086.2	Worker	Scenario 1	4.75E-01	9.60E-04	--
3355	642623.5	4168111.2	Worker	Scenario 1	4.46E-01	9.00E-04	--
3356	642648.5	4168111.2	Worker	Scenario 1	4.44E-01	8.97E-04	--
3357	642673.5	4168111.2	Worker	Scenario 1	4.46E-01	9.01E-04	--
3358	642598.5	4168136.2	Worker	Scenario 1	4.18E-01	8.43E-04	--
3359	642623.5	4168136.2	Worker	Scenario 1	4.15E-01	8.39E-04	--
3360	642548.5	4168161.2	Worker	Scenario 1	3.90E-01	7.88E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3361	642573.5	4168161.2	Worker	Scenario 1	3.89E-01	7.86E-04	--
3362	642523.5	4168186.2	Worker	Scenario 1	3.66E-01	7.39E-04	--
3363	642548.5	4168186.2	Worker	Scenario 1	3.66E-01	7.40E-04	--
3364	642498.5	4168211.2	Worker	Scenario 1	3.45E-01	6.96E-04	--
3365	642473.5	4168236.2	Worker	Scenario 1	3.27E-01	6.61E-04	--
3366	642448.5	4168261.2	Worker	Scenario 1	3.12E-01	6.31E-04	--
3367	642423.5	4168286.2	Worker	Scenario 1	2.98E-01	6.01E-04	--
3368	642398.5	4168311.2	Worker	Scenario 1	2.85E-01	5.75E-04	--
3369	642423.5	4168311.2	Worker	Scenario 1	2.88E-01	5.82E-04	--
3370	642348.5	4168336.2	Worker	Scenario 1	2.75E-01	5.55E-04	--
3371	642373.5	4168336.2	Worker	Scenario 1	2.73E-01	5.52E-04	--
3372	639573.5	4168361.2	Worker	Scenario 1	2.21E-02	4.46E-05	--
3373	639598.5	4168361.2	Worker	Scenario 1	2.25E-02	4.54E-05	--
3374	639623.5	4168361.2	Worker	Scenario 1	2.28E-02	4.61E-05	--
3375	642323.5	4168361.2	Worker	Scenario 1	2.63E-01	5.31E-04	--
3376	642348.5	4168361.2	Worker	Scenario 1	2.62E-01	5.30E-04	--
3377	639523.5	4168386.2	Worker	Scenario 1	2.15E-02	4.35E-05	--
3378	639548.5	4168386.2	Worker	Scenario 1	2.19E-02	4.43E-05	--
3379	639573.5	4168386.2	Worker	Scenario 1	2.23E-02	4.50E-05	--
3380	639598.5	4168386.2	Worker	Scenario 1	2.26E-02	4.57E-05	--
3381	639623.5	4168386.2	Worker	Scenario 1	2.30E-02	4.65E-05	--
3382	642273.5	4168386.2	Worker	Scenario 1	2.51E-01	5.06E-04	--
3383	642298.5	4168386.2	Worker	Scenario 1	2.50E-01	5.05E-04	--
3384	639498.5	4168411.2	Worker	Scenario 1	2.14E-02	4.33E-05	--
3385	639523.5	4168411.2	Worker	Scenario 1	2.18E-02	4.39E-05	--
3386	639548.5	4168411.2	Worker	Scenario 1	2.21E-02	4.46E-05	--
3387	639573.5	4168411.2	Worker	Scenario 1	2.25E-02	4.54E-05	--
3388	639598.5	4168411.2	Worker	Scenario 1	2.28E-02	4.61E-05	--
3389	639623.5	4168411.2	Worker	Scenario 1	2.32E-02	4.69E-05	--
3390	642223.5	4168411.2	Worker	Scenario 1	2.37E-01	4.80E-04	--
3391	642248.5	4168411.2	Worker	Scenario 1	2.38E-01	4.80E-04	--
3392	639448.5	4168436.2	Worker	Scenario 1	2.10E-02	4.24E-05	--
3393	639473.5	4168436.2	Worker	Scenario 1	2.13E-02	4.30E-05	--
3394	639498.5	4168436.2	Worker	Scenario 1	2.16E-02	4.37E-05	--
3395	639523.5	4168436.2	Worker	Scenario 1	2.20E-02	4.43E-05	--
3396	639548.5	4168436.2	Worker	Scenario 1	2.23E-02	4.50E-05	--
3397	639573.5	4168436.2	Worker	Scenario 1	2.27E-02	4.58E-05	--
3398	639598.5	4168436.2	Worker	Scenario 1	2.31E-02	4.66E-05	--
3399	639623.5	4168436.2	Worker	Scenario 1	2.35E-02	4.74E-05	--
3400	642148.5	4168436.2	Worker	Scenario 1	2.23E-01	4.51E-04	--
3401	642173.5	4168436.2	Worker	Scenario 1	2.25E-01	4.54E-04	--
3402	642198.5	4168436.2	Worker	Scenario 1	2.26E-01	4.56E-04	--
3403	642098.5	4168461.2	Worker	Scenario 1	2.14E-01	4.33E-04	--
3404	642123.5	4168461.2	Worker	Scenario 1	2.15E-01	4.34E-04	--
3405	642148.5	4168461.2	Worker	Scenario 1	2.16E-01	4.36E-04	--
3406	642048.5	4168486.2	Worker	Scenario 1	2.06E-01	4.15E-04	--
3407	642073.5	4168486.2	Worker	Scenario 1	2.05E-01	4.15E-04	--
3408	642098.5	4168486.2	Worker	Scenario 1	2.07E-01	4.18E-04	--
3409	641973.5	4168511.2	Worker	Scenario 1	1.97E-01	3.98E-04	--
3410	641998.5	4168511.2	Worker	Scenario 1	1.97E-01	3.98E-04	--
3411	642023.5	4168511.2	Worker	Scenario 1	1.98E-01	3.99E-04	--
3412	641923.5	4168536.2	Worker	Scenario 1	1.91E-01	3.87E-04	--
3413	641948.5	4168536.2	Worker	Scenario 1	1.91E-01	3.86E-04	--
3414	641973.5	4168536.2	Worker	Scenario 1	1.91E-01	3.86E-04	--
3415	641873.5	4168561.2	Worker	Scenario 1	1.87E-01	3.77E-04	--
3416	641898.5	4168561.2	Worker	Scenario 1	1.86E-01	3.76E-04	--
3417	641823.5	4168586.2	Worker	Scenario 1	1.84E-01	3.72E-04	--
3418	641848.5	4168586.2	Worker	Scenario 1	1.83E-01	3.69E-04	--
3419	641748.5	4168611.2	Worker	Scenario 1	1.85E-01	3.73E-04	--
3420	641773.5	4168611.2	Worker	Scenario 1	1.83E-01	3.69E-04	--
3421	641798.5	4168611.2	Worker	Scenario 1	1.81E-01	3.66E-04	--
3422	641673.5	4168636.2	Worker	Scenario 1	1.90E-01	3.83E-04	--
3423	641698.5	4168636.2	Worker	Scenario 1	1.86E-01	3.76E-04	--
3424	641723.5	4168636.2	Worker	Scenario 1	1.83E-01	3.69E-04	--
3425	641598.5	4168661.2	Worker	Scenario 1	2.02E-01	4.08E-04	--
3426	641623.5	4168661.2	Worker	Scenario 1	1.95E-01	3.94E-04	--
3427	641648.5	4168661.2	Worker	Scenario 1	1.90E-01	3.83E-04	--
3428	641523.5	4168686.2	Worker	Scenario 1	2.29E-01	4.63E-04	--
3429	641548.5	4168686.2	Worker	Scenario 1	2.16E-01	4.36E-04	--
3430	641573.5	4168686.2	Worker	Scenario 1	2.06E-01	4.16E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3431	641448.5	4168711.2	Worker	Scenario 1	2.97E-01	5.99E-04	--
3432	641473.5	4168711.2	Worker	Scenario 1	2.64E-01	5.33E-04	--
3433	641498.5	4168711.2	Worker	Scenario 1	2.41E-01	4.87E-04	--
3434	641373.5	4168736.2	Worker	Scenario 1	5.50E-01	1.11E-03	--
3435	641398.5	4168736.2	Worker	Scenario 1	4.09E-01	8.25E-04	--
3436	641423.5	4168736.2	Worker	Scenario 1	3.34E-01	6.75E-04	--
3437	641298.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
3438	641323.5	4168761.2	Roadway/Waterway	Scenario 1	--	--	--
3439	641348.5	4168761.2	Worker	Scenario 1	6.64E-01	1.34E-03	--
3440	641373.5	4168761.2	Worker	Scenario 1	5.24E-01	1.06E-03	--
3441	641398.5	4168761.2	Worker	Scenario 1	4.01E-01	8.10E-04	--
3442	641423.5	4168761.2	Worker	Scenario 1	3.32E-01	6.71E-04	--
3443	641248.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
3444	641273.5	4168786.2	Roadway/Waterway	Scenario 1	--	--	--
3445	641348.5	4168786.2	Worker	Scenario 1	6.52E-01	1.32E-03	--
3446	641373.5	4168786.2	Worker	Scenario 1	5.21E-01	1.05E-03	--
3447	641398.5	4168786.2	Worker	Scenario 1	3.99E-01	8.05E-04	--
3448	641423.5	4168786.2	Worker	Scenario 1	3.30E-01	6.67E-04	--
3449	641173.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
3450	641198.5	4168811.2	Roadway/Waterway	Scenario 1	--	--	--
3451	641348.5	4168811.2	Worker	Scenario 1	7.26E-01	1.47E-03	--
3452	641373.5	4168811.2	Worker	Scenario 1	5.18E-01	1.05E-03	--
3453	641398.5	4168811.2	Worker	Scenario 1	3.97E-01	8.01E-04	--
3454	641423.5	4168811.2	Worker	Scenario 1	3.29E-01	6.64E-04	--
3455	641098.5	4168836.2	Roadway/Waterway	Scenario 1	--	--	--
3456	641348.5	4168836.2	Worker	Scenario 1	7.16E-01	1.45E-03	--
3457	641373.5	4168836.2	Worker	Scenario 1	5.15E-01	1.04E-03	--
3458	641398.5	4168836.2	Worker	Scenario 1	3.94E-01	7.97E-04	--
3459	641423.5	4168836.2	Worker	Scenario 1	3.27E-01	6.60E-04	--
3460	641023.5	4168861.2	Roadway/Waterway	Scenario 1	--	--	--
3461	641348.5	4168861.2	Worker	Scenario 1	7.86E-01	1.59E-03	--
3462	641373.5	4168861.2	Worker	Scenario 1	5.10E-01	1.03E-03	--
3463	641398.5	4168861.2	Worker	Scenario 1	3.91E-01	7.90E-04	--
3464	641423.5	4168861.2	Worker	Scenario 1	3.25E-01	6.56E-04	--
3465	640948.5	4168886.2	Roadway/Waterway	Scenario 1	--	--	--
3466	641348.5	4168886.2	Worker	Scenario 1	7.29E-01	1.47E-03	--
3467	641373.5	4168886.2	Worker	Scenario 1	5.01E-01	1.01E-03	--
3468	641398.5	4168886.2	Worker	Scenario 1	3.88E-01	7.85E-04	--
3469	641423.5	4168886.2	Worker	Scenario 1	3.23E-01	6.53E-04	--
3470	640873.5	4168911.2	Roadway/Waterway	Scenario 1	--	--	--
3471	641348.5	4168911.2	Worker	Scenario 1	7.67E-01	1.55E-03	--
3472	641373.5	4168911.2	Worker	Scenario 1	5.08E-01	1.03E-03	--
3473	641398.5	4168911.2	Worker	Scenario 1	3.90E-01	7.87E-04	--
3474	641423.5	4168911.2	Worker	Scenario 1	3.23E-01	6.53E-04	--
3475	640773.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
3476	640798.5	4168936.2	Roadway/Waterway	Scenario 1	--	--	--
3477	641348.5	4168936.2	Worker	Scenario 1	7.65E-01	1.54E-03	--
3478	641373.5	4168936.2	Worker	Scenario 1	5.08E-01	1.03E-03	--
3479	641398.5	4168936.2	Worker	Scenario 1	3.90E-01	7.88E-04	--
3480	641423.5	4168936.2	Worker	Scenario 1	3.23E-01	6.53E-04	--
3481	640548.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
3482	640573.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
3483	640698.5	4168961.2	Roadway/Waterway	Scenario 1	--	--	--
3484	641348.5	4168961.2	Worker	Scenario 1	7.59E-01	1.53E-03	--
3485	641373.5	4168961.2	Worker	Scenario 1	5.07E-01	1.02E-03	--
3486	641398.5	4168961.2	Worker	Scenario 1	3.89E-01	7.87E-04	--
3487	641423.5	4168961.2	Worker	Scenario 1	3.23E-01	6.51E-04	--
3488	640598.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
3489	640623.5	4168986.2	Roadway/Waterway	Scenario 1	--	--	--
3490	641348.5	4168986.2	Worker	Scenario 1	7.57E-01	1.53E-03	--
3491	641373.5	4168986.2	Worker	Scenario 1	5.06E-01	1.02E-03	--
3492	641398.5	4168986.2	Worker	Scenario 1	3.88E-01	7.84E-04	--
3493	641423.5	4168986.2	Worker	Scenario 1	3.22E-01	6.50E-04	--
3494	640448.5	4169011.2	Worker	Scenario 1	5.16E-02	1.04E-04	--
3495	640523.5	4169011.2	Worker	Scenario 1	5.48E-02	1.11E-04	--
3496	641348.5	4169011.2	Worker	Scenario 1	7.56E-01	1.53E-03	--
3497	641373.5	4169011.2	Worker	Scenario 1	5.04E-01	1.02E-03	--
3498	641398.5	4169011.2	Worker	Scenario 1	3.87E-01	7.82E-04	--
3499	641423.5	4169011.2	Worker	Scenario 1	3.21E-01	6.48E-04	--
3500	640448.5	4169036.2	Worker	Scenario 1	5.16E-02	1.04E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3501	640473.5	4169036.2	Worker	Scenario 1	5.27E-02	1.06E-04	--
3502	640523.5	4169036.2	Worker	Scenario 1	5.48E-02	1.11E-04	--
3503	641348.5	4169036.2	Worker	Scenario 1	7.54E-01	1.52E-03	--
3504	641373.5	4169036.2	Worker	Scenario 1	5.03E-01	1.02E-03	--
3505	641398.5	4169036.2	Worker	Scenario 1	3.86E-01	7.79E-04	--
3506	641423.5	4169036.2	Worker	Scenario 1	3.19E-01	6.45E-04	--
3507	640448.5	4169061.2	Worker	Scenario 1	5.17E-02	1.04E-04	--
3508	640473.5	4169061.2	Worker	Scenario 1	5.27E-02	1.06E-04	--
3509	640523.5	4169061.2	Worker	Scenario 1	5.48E-02	1.11E-04	--
3510	641348.5	4169061.2	Worker	Scenario 1	7.52E-01	1.52E-03	--
3511	641373.5	4169061.2	Worker	Scenario 1	5.03E-01	1.02E-03	--
3512	641398.5	4169061.2	Worker	Scenario 1	3.84E-01	7.75E-04	--
3513	641423.5	4169061.2	Worker	Scenario 1	3.17E-01	6.39E-04	--
3514	640448.5	4169086.2	Worker	Scenario 1	5.17E-02	1.04E-04	--
3515	640473.5	4169086.2	Worker	Scenario 1	5.27E-02	1.06E-04	--
3516	640523.5	4169086.2	Worker	Scenario 1	5.48E-02	1.11E-04	--
3517	641348.5	4169086.2	Worker	Scenario 1	7.51E-01	1.52E-03	--
3518	641373.5	4169086.2	Worker	Scenario 1	4.99E-01	1.01E-03	--
3519	641398.5	4169086.2	Worker	Scenario 1	3.80E-01	7.68E-04	--
3520	641423.5	4169086.2	Worker	Scenario 1	3.15E-01	6.36E-04	--
3521	640448.5	4169111.2	Worker	Scenario 1	5.17E-02	1.04E-04	--
3522	640473.5	4169111.2	Worker	Scenario 1	5.27E-02	1.06E-04	--
3523	640523.5	4169111.2	Worker	Scenario 1	5.48E-02	1.11E-04	--
3524	641348.5	4169111.2	Worker	Scenario 1	7.47E-01	1.51E-03	--
3525	641373.5	4169111.2	Worker	Scenario 1	4.95E-01	9.99E-04	--
3526	641398.5	4169111.2	Worker	Scenario 1	3.79E-01	7.66E-04	--
3527	641423.5	4169111.2	Worker	Scenario 1	3.14E-01	6.35E-04	--
3528	640448.5	4169136.2	Worker	Scenario 1	5.16E-02	1.04E-04	--
3529	640473.5	4169136.2	Worker	Scenario 1	5.26E-02	1.06E-04	--
3530	640523.5	4169136.2	Worker	Scenario 1	5.47E-02	1.11E-04	--
3531	641348.5	4169136.2	Worker	Scenario 1	7.36E-01	1.49E-03	--
3532	641373.5	4169136.2	Worker	Scenario 1	4.94E-01	9.97E-04	--
3533	641398.5	4169136.2	Worker	Scenario 1	3.79E-01	7.65E-04	--
3534	641423.5	4169136.2	Worker	Scenario 1	3.14E-01	6.33E-04	--
3535	640448.5	4169161.2	Worker	Scenario 1	5.16E-02	1.04E-04	--
3536	640473.5	4169161.2	Worker	Scenario 1	5.26E-02	1.06E-04	--
3537	640523.5	4169161.2	Worker	Scenario 1	5.47E-02	1.10E-04	--
3538	641348.5	4169161.2	Worker	Scenario 1	7.31E-01	1.48E-03	--
3539	641373.5	4169161.2	Worker	Scenario 1	4.92E-01	9.93E-04	--
3540	641398.5	4169161.2	Worker	Scenario 1	3.77E-01	7.62E-04	--
3541	641423.5	4169161.2	Worker	Scenario 1	3.12E-01	6.31E-04	--
3542	640448.5	4169186.2	Worker	Scenario 1	5.16E-02	1.04E-04	--
3543	640473.5	4169186.2	Worker	Scenario 1	5.25E-02	1.06E-04	--
3544	640523.5	4169186.2	Worker	Scenario 1	5.46E-02	1.10E-04	--
3545	641348.5	4169186.2	Worker	Scenario 1	7.26E-01	1.47E-03	--
3546	641373.5	4169186.2	Worker	Scenario 1	4.90E-01	9.89E-04	--
3547	641398.5	4169186.2	Worker	Scenario 1	3.76E-01	7.59E-04	--
3548	641423.5	4169186.2	Worker	Scenario 1	3.11E-01	6.29E-04	--
3549	640448.5	4169211.2	Worker	Scenario 1	5.15E-02	1.04E-04	--
3550	640473.5	4169211.2	Worker	Scenario 1	5.25E-02	1.06E-04	--
3551	640498.5	4169211.2	Worker	Scenario 1	5.35E-02	1.08E-04	--
3552	640523.5	4169211.2	Worker	Scenario 1	5.45E-02	1.10E-04	--
3553	641348.5	4169211.2	Worker	Scenario 1	7.21E-01	1.46E-03	--
3554	641373.5	4169211.2	Worker	Scenario 1	4.87E-01	9.83E-04	--
3555	641398.5	4169211.2	Worker	Scenario 1	3.74E-01	7.56E-04	--
3556	641423.5	4169211.2	Worker	Scenario 1	3.10E-01	6.26E-04	--
3557	640448.5	4169236.2	Worker	Scenario 1	5.14E-02	1.04E-04	--
3558	640473.5	4169236.2	Worker	Scenario 1	5.24E-02	1.06E-04	--
3559	640498.5	4169236.2	Worker	Scenario 1	5.34E-02	1.08E-04	--
3560	640523.5	4169236.2	Worker	Scenario 1	5.45E-02	1.10E-04	--
3561	641348.5	4169236.2	Worker	Scenario 1	7.15E-01	1.45E-03	--
3562	641373.5	4169236.2	Worker	Scenario 1	4.84E-01	9.77E-04	--
3563	641398.5	4169236.2	Worker	Scenario 1	3.72E-01	7.52E-04	--
3564	641423.5	4169236.2	Worker	Scenario 1	3.09E-01	6.23E-04	--
3565	640448.5	4169261.2	Worker	Scenario 1	5.14E-02	1.04E-04	--
3566	640473.5	4169261.2	Worker	Scenario 1	5.23E-02	1.06E-04	--
3567	640498.5	4169261.2	Worker	Scenario 1	5.33E-02	1.08E-04	--
3568	640523.5	4169261.2	Worker	Scenario 1	5.44E-02	1.10E-04	--
3569	641348.5	4169261.2	Worker	Scenario 1	7.10E-01	1.43E-03	--
3570	641373.5	4169261.2	Worker	Scenario 1	4.81E-01	9.72E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3571	641398.5	4169261.2	Worker	Scenario 1	3.71E-01	7.49E-04	--
3572	641423.5	4169261.2	Worker	Scenario 1	3.07E-01	6.21E-04	--
3573	640448.5	4169286.2	Worker	Scenario 1	5.13E-02	1.04E-04	--
3574	640473.5	4169286.2	Worker	Scenario 1	5.23E-02	1.06E-04	--
3575	640498.5	4169286.2	Worker	Scenario 1	5.32E-02	1.08E-04	--
3576	640523.5	4169286.2	Worker	Scenario 1	5.43E-02	1.10E-04	--
3577	640923.5	4169286.2	Worker	Scenario 1	7.96E-02	1.61E-04	--
3578	640948.5	4169286.2	Worker	Scenario 1	8.23E-02	1.66E-04	--
3579	640973.5	4169286.2	Worker	Scenario 1	8.52E-02	1.72E-04	--
3580	640998.5	4169286.2	Worker	Scenario 1	8.84E-02	1.79E-04	--
3581	641023.5	4169286.2	Worker	Scenario 1	9.20E-02	1.86E-04	--
3582	641048.5	4169286.2	Worker	Scenario 1	9.60E-02	1.94E-04	--
3583	641073.5	4169286.2	Worker	Scenario 1	1.01E-01	2.03E-04	--
3584	641098.5	4169286.2	Worker	Scenario 1	1.06E-01	2.14E-04	--
3585	641123.5	4169286.2	Worker	Scenario 1	1.12E-01	2.27E-04	--
3586	641148.5	4169286.2	Worker	Scenario 1	1.20E-01	2.42E-04	--
3587	641173.5	4169286.2	Worker	Scenario 1	1.30E-01	2.62E-04	--
3588	641348.5	4169286.2	Worker	Scenario 1	7.08E-01	1.43E-03	--
3589	641373.5	4169286.2	Worker	Scenario 1	4.81E-01	9.71E-04	--
3590	641398.5	4169286.2	Worker	Scenario 1	3.70E-01	7.47E-04	--
3591	641423.5	4169286.2	Worker	Scenario 1	3.06E-01	6.18E-04	--
3592	640423.5	4169311.2	Worker	Scenario 1	5.03E-02	1.02E-04	--
3593	640448.5	4169311.2	Worker	Scenario 1	5.12E-02	1.03E-04	--
3594	640473.5	4169311.2	Worker	Scenario 1	5.22E-02	1.05E-04	--
3595	640498.5	4169311.2	Worker	Scenario 1	5.31E-02	1.07E-04	--
3596	640873.5	4169311.2	Worker	Scenario 1	7.47E-02	1.51E-04	--
3597	640898.5	4169311.2	Worker	Scenario 1	7.70E-02	1.55E-04	--
3598	640923.5	4169311.2	Worker	Scenario 1	7.94E-02	1.60E-04	--
3599	640948.5	4169311.2	Worker	Scenario 1	8.20E-02	1.66E-04	--
3600	640973.5	4169311.2	Worker	Scenario 1	8.49E-02	1.72E-04	--
3601	640998.5	4169311.2	Worker	Scenario 1	8.81E-02	1.78E-04	--
3602	641023.5	4169311.2	Worker	Scenario 1	9.17E-02	1.85E-04	--
3603	641048.5	4169311.2	Worker	Scenario 1	9.57E-02	1.93E-04	--
3604	641073.5	4169311.2	Worker	Scenario 1	1.00E-01	2.03E-04	--
3605	641098.5	4169311.2	Worker	Scenario 1	1.06E-01	2.13E-04	--
3606	641123.5	4169311.2	Worker	Scenario 1	1.12E-01	2.26E-04	--
3607	641148.5	4169311.2	Worker	Scenario 1	1.20E-01	2.42E-04	--
3608	641173.5	4169311.2	Worker	Scenario 1	1.29E-01	2.61E-04	--
3609	641348.5	4169311.2	Worker	Scenario 1	7.02E-01	1.42E-03	--
3610	641373.5	4169311.2	Worker	Scenario 1	4.79E-01	9.68E-04	--
3611	641398.5	4169311.2	Worker	Scenario 1	3.69E-01	7.44E-04	--
3612	641423.5	4169311.2	Worker	Scenario 1	3.05E-01	6.16E-04	--
3613	640423.5	4169336.2	Worker	Scenario 1	5.02E-02	1.01E-04	--
3614	640448.5	4169336.2	Worker	Scenario 1	5.11E-02	1.03E-04	--
3615	640473.5	4169336.2	Worker	Scenario 1	5.21E-02	1.05E-04	--
3616	640498.5	4169336.2	Worker	Scenario 1	5.30E-02	1.07E-04	--
3617	640823.5	4169336.2	Worker	Scenario 1	7.05E-02	1.42E-04	--
3618	640848.5	4169336.2	Worker	Scenario 1	7.24E-02	1.46E-04	--
3619	640873.5	4169336.2	Worker	Scenario 1	7.45E-02	1.51E-04	--
3620	640898.5	4169336.2	Worker	Scenario 1	7.68E-02	1.55E-04	--
3621	640923.5	4169336.2	Worker	Scenario 1	7.92E-02	1.60E-04	--
3622	640948.5	4169336.2	Worker	Scenario 1	8.18E-02	1.65E-04	--
3623	640973.5	4169336.2	Worker	Scenario 1	8.47E-02	1.71E-04	--
3624	640998.5	4169336.2	Worker	Scenario 1	8.79E-02	1.77E-04	--
3625	641023.5	4169336.2	Worker	Scenario 1	9.14E-02	1.85E-04	--
3626	641048.5	4169336.2	Worker	Scenario 1	9.54E-02	1.93E-04	--
3627	641073.5	4169336.2	Worker	Scenario 1	1.00E-01	2.02E-04	--
3628	641098.5	4169336.2	Worker	Scenario 1	1.05E-01	2.13E-04	--
3629	641123.5	4169336.2	Worker	Scenario 1	1.12E-01	2.26E-04	--
3630	641148.5	4169336.2	Worker	Scenario 1	1.19E-01	2.41E-04	--
3631	641348.5	4169336.2	Worker	Scenario 1	6.94E-01	1.40E-03	--
3632	641373.5	4169336.2	Worker	Scenario 1	4.76E-01	9.61E-04	--
3633	641398.5	4169336.2	Worker	Scenario 1	3.67E-01	7.41E-04	--
3634	641423.5	4169336.2	Worker	Scenario 1	3.04E-01	6.13E-04	--
3635	640423.5	4169361.2	Worker	Scenario 1	5.01E-02	1.01E-04	--
3636	640448.5	4169361.2	Worker	Scenario 1	5.10E-02	1.03E-04	--
3637	640473.5	4169361.2	Worker	Scenario 1	5.20E-02	1.05E-04	--
3638	640498.5	4169361.2	Worker	Scenario 1	5.29E-02	1.07E-04	--
3639	640798.5	4169361.2	Worker	Scenario 1	6.85E-02	1.38E-04	--
3640	640823.5	4169361.2	Worker	Scenario 1	7.03E-02	1.42E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3641	640848.5	4169361.2	Worker	Scenario 1	7.22E-02	1.46E-04	--
3642	640873.5	4169361.2	Worker	Scenario 1	7.43E-02	1.50E-04	--
3643	640898.5	4169361.2	Worker	Scenario 1	7.65E-02	1.55E-04	--
3644	640923.5	4169361.2	Worker	Scenario 1	7.89E-02	1.59E-04	--
3645	640948.5	4169361.2	Worker	Scenario 1	8.16E-02	1.65E-04	--
3646	640973.5	4169361.2	Worker	Scenario 1	8.44E-02	1.71E-04	--
3647	640998.5	4169361.2	Worker	Scenario 1	8.76E-02	1.77E-04	--
3648	641023.5	4169361.2	Worker	Scenario 1	9.12E-02	1.84E-04	--
3649	641048.5	4169361.2	Worker	Scenario 1	9.52E-02	1.92E-04	--
3650	641073.5	4169361.2	Worker	Scenario 1	9.98E-02	2.01E-04	--
3651	641098.5	4169361.2	Worker	Scenario 1	1.05E-01	2.12E-04	--
3652	641123.5	4169361.2	Worker	Scenario 1	1.11E-01	2.25E-04	--
3653	641148.5	4169361.2	Worker	Scenario 1	1.19E-01	2.41E-04	--
3654	641348.5	4169361.2	Worker	Scenario 1	6.85E-01	1.38E-03	--
3655	641373.5	4169361.2	Worker	Scenario 1	4.72E-01	9.53E-04	--
3656	641398.5	4169361.2	Worker	Scenario 1	3.64E-01	7.36E-04	--
3657	641423.5	4169361.2	Worker	Scenario 1	3.02E-01	6.10E-04	--
3658	640423.5	4169386.2	Worker	Scenario 1	5.00E-02	1.01E-04	--
3659	640448.5	4169386.2	Worker	Scenario 1	5.09E-02	1.03E-04	--
3660	640473.5	4169386.2	Worker	Scenario 1	5.19E-02	1.05E-04	--
3661	640498.5	4169386.2	Worker	Scenario 1	5.28E-02	1.07E-04	--
3662	640773.5	4169386.2	Worker	Scenario 1	6.67E-02	1.35E-04	--
3663	640798.5	4169386.2	Worker	Scenario 1	6.83E-02	1.38E-04	--
3664	640823.5	4169386.2	Worker	Scenario 1	7.01E-02	1.42E-04	--
3665	640848.5	4169386.2	Worker	Scenario 1	7.20E-02	1.46E-04	--
3666	640873.5	4169386.2	Worker	Scenario 1	7.41E-02	1.50E-04	--
3667	640898.5	4169386.2	Worker	Scenario 1	7.63E-02	1.54E-04	--
3668	640923.5	4169386.2	Worker	Scenario 1	7.87E-02	1.59E-04	--
3669	641098.5	4169386.2	Worker	Scenario 1	1.05E-01	2.12E-04	--
3670	641123.5	4169386.2	Worker	Scenario 1	1.11E-01	2.24E-04	--
3671	641148.5	4169386.2	Worker	Scenario 1	1.19E-01	2.40E-04	--
3672	641173.5	4169386.2	Worker	Scenario 1	1.29E-01	2.60E-04	--
3673	641198.5	4169386.2	Worker	Scenario 1	1.41E-01	2.85E-04	--
3674	641223.5	4169386.2	Worker	Scenario 1	1.59E-01	3.21E-04	--
3675	641248.5	4169386.2	Worker	Scenario 1	1.86E-01	3.75E-04	--
3676	641273.5	4169386.2	Worker	Scenario 1	2.30E-01	4.65E-04	--
3677	641298.5	4169386.2	Worker	Scenario 1	3.20E-01	6.47E-04	--
3678	641348.5	4169386.2	Worker	Scenario 1	6.77E-01	1.37E-03	--
3679	641373.5	4169386.2	Worker	Scenario 1	4.68E-01	9.45E-04	--
3680	641398.5	4169386.2	Worker	Scenario 1	3.62E-01	7.31E-04	--
3681	641423.5	4169386.2	Worker	Scenario 1	3.00E-01	6.06E-04	--
3682	640423.5	4169411.2	Worker	Scenario 1	4.99E-02	1.01E-04	--
3683	640448.5	4169411.2	Worker	Scenario 1	5.08E-02	1.03E-04	--
3684	640473.5	4169411.2	Worker	Scenario 1	5.17E-02	1.05E-04	--
3685	640498.5	4169411.2	Worker	Scenario 1	5.27E-02	1.06E-04	--
3686	640698.5	4169411.2	Worker	Scenario 1	6.20E-02	1.25E-04	--
3687	640723.5	4169411.2	Worker	Scenario 1	6.34E-02	1.28E-04	--
3688	640748.5	4169411.2	Worker	Scenario 1	6.49E-02	1.31E-04	--
3689	640773.5	4169411.2	Worker	Scenario 1	6.65E-02	1.34E-04	--
3690	640798.5	4169411.2	Worker	Scenario 1	6.81E-02	1.38E-04	--
3691	640823.5	4169411.2	Worker	Scenario 1	6.99E-02	1.41E-04	--
3692	640848.5	4169411.2	Worker	Scenario 1	7.18E-02	1.45E-04	--
3693	640873.5	4169411.2	Worker	Scenario 1	7.39E-02	1.49E-04	--
3694	641098.5	4169411.2	Worker	Scenario 1	1.04E-01	2.11E-04	--
3695	641123.5	4169411.2	Worker	Scenario 1	1.11E-01	2.24E-04	--
3696	641148.5	4169411.2	Worker	Scenario 1	1.19E-01	2.39E-04	--
3697	641173.5	4169411.2	Worker	Scenario 1	1.28E-01	2.59E-04	--
3698	641198.5	4169411.2	Worker	Scenario 1	1.41E-01	2.85E-04	--
3699	641223.5	4169411.2	Worker	Scenario 1	1.59E-01	3.21E-04	--
3700	641248.5	4169411.2	Worker	Scenario 1	1.86E-01	3.75E-04	--
3701	641273.5	4169411.2	Worker	Scenario 1	2.31E-01	4.66E-04	--
3702	641298.5	4169411.2	Worker	Scenario 1	3.22E-01	6.51E-04	--
3703	641348.5	4169411.2	Worker	Scenario 1	6.69E-01	1.35E-03	--
3704	641373.5	4169411.2	Worker	Scenario 1	4.64E-01	9.37E-04	--
3705	641398.5	4169411.2	Worker	Scenario 1	3.59E-01	7.26E-04	--
3706	641423.5	4169411.2	Worker	Scenario 1	2.98E-01	6.03E-04	--
3707	640423.5	4169436.2	Worker	Scenario 1	4.98E-02	1.01E-04	--
3708	640448.5	4169436.2	Worker	Scenario 1	5.07E-02	1.02E-04	--
3709	640473.5	4169436.2	Worker	Scenario 1	5.16E-02	1.04E-04	--
3710	640498.5	4169436.2	Worker	Scenario 1	5.26E-02	1.06E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3711	640523.5	4169436.2	Worker	Scenario 1	5.36E-02	1.08E-04	--
3712	640548.5	4169436.2	Worker	Scenario 1	5.46E-02	1.10E-04	--
3713	640573.5	4169436.2	Worker	Scenario 1	5.57E-02	1.12E-04	--
3714	640598.5	4169436.2	Worker	Scenario 1	5.68E-02	1.15E-04	--
3715	640623.5	4169436.2	Worker	Scenario 1	5.79E-02	1.17E-04	--
3716	640648.5	4169436.2	Worker	Scenario 1	5.92E-02	1.20E-04	--
3717	640673.5	4169436.2	Worker	Scenario 1	6.05E-02	1.22E-04	--
3718	640698.5	4169436.2	Worker	Scenario 1	6.18E-02	1.25E-04	--
3719	640723.5	4169436.2	Worker	Scenario 1	6.32E-02	1.28E-04	--
3720	640748.5	4169436.2	Worker	Scenario 1	6.47E-02	1.31E-04	--
3721	640773.5	4169436.2	Worker	Scenario 1	6.63E-02	1.34E-04	--
3722	640798.5	4169436.2	Worker	Scenario 1	6.79E-02	1.37E-04	--
3723	640823.5	4169436.2	Worker	Scenario 1	6.97E-02	1.41E-04	--
3724	641098.5	4169436.2	Worker	Scenario 1	1.04E-01	2.10E-04	--
3725	641123.5	4169436.2	Worker	Scenario 1	1.10E-01	2.23E-04	--
3726	641148.5	4169436.2	Worker	Scenario 1	1.18E-01	2.39E-04	--
3727	641173.5	4169436.2	Worker	Scenario 1	1.28E-01	2.59E-04	--
3728	641198.5	4169436.2	Worker	Scenario 1	1.41E-01	2.85E-04	--
3729	641223.5	4169436.2	Worker	Scenario 1	1.59E-01	3.21E-04	--
3730	641248.5	4169436.2	Worker	Scenario 1	1.86E-01	3.75E-04	--
3731	641273.5	4169436.2	Worker	Scenario 1	2.32E-01	4.68E-04	--
3732	641298.5	4169436.2	Worker	Scenario 1	3.25E-01	6.56E-04	--
3733	641348.5	4169436.2	Worker	Scenario 1	6.61E-01	1.34E-03	--
3734	641373.5	4169436.2	Worker	Scenario 1	4.60E-01	9.28E-04	--
3735	641398.5	4169436.2	Worker	Scenario 1	3.57E-01	7.21E-04	--
3736	640423.5	4169461.2	Worker	Scenario 1	4.97E-02	1.00E-04	--
3737	640448.5	4169461.2	Worker	Scenario 1	5.06E-02	1.02E-04	--
3738	640473.5	4169461.2	Worker	Scenario 1	5.15E-02	1.04E-04	--
3739	640498.5	4169461.2	Worker	Scenario 1	5.25E-02	1.06E-04	--
3740	640523.5	4169461.2	Worker	Scenario 1	5.34E-02	1.08E-04	--
3741	640548.5	4169461.2	Worker	Scenario 1	5.44E-02	1.10E-04	--
3742	640573.5	4169461.2	Worker	Scenario 1	5.55E-02	1.12E-04	--
3743	640598.5	4169461.2	Worker	Scenario 1	5.66E-02	1.14E-04	--
3744	640623.5	4169461.2	Worker	Scenario 1	5.78E-02	1.17E-04	--
3745	640648.5	4169461.2	Worker	Scenario 1	5.90E-02	1.19E-04	--
3746	640673.5	4169461.2	Worker	Scenario 1	6.03E-02	1.22E-04	--
3747	640698.5	4169461.2	Worker	Scenario 1	6.16E-02	1.24E-04	--
3748	640723.5	4169461.2	Worker	Scenario 1	6.30E-02	1.27E-04	--
3749	640748.5	4169461.2	Worker	Scenario 1	6.45E-02	1.30E-04	--
3750	640773.5	4169461.2	Worker	Scenario 1	6.61E-02	1.33E-04	--
3751	640798.5	4169461.2	Worker	Scenario 1	6.77E-02	1.37E-04	--
3752	641148.5	4169461.2	Worker	Scenario 1	1.18E-01	2.38E-04	--
3753	641173.5	4169461.2	Worker	Scenario 1	1.28E-01	2.58E-04	--
3754	641198.5	4169461.2	Worker	Scenario 1	1.41E-01	2.84E-04	--
3755	641223.5	4169461.2	Worker	Scenario 1	1.59E-01	3.21E-04	--
3756	641248.5	4169461.2	Worker	Scenario 1	1.86E-01	3.76E-04	--
3757	641273.5	4169461.2	Worker	Scenario 1	2.32E-01	4.69E-04	--
3758	641298.5	4169461.2	Worker	Scenario 1	3.27E-01	6.60E-04	--
3759	641348.5	4169461.2	Worker	Scenario 1	6.53E-01	1.32E-03	--
3760	641373.5	4169461.2	Worker	Scenario 1	4.55E-01	9.20E-04	--
3761	638073.5	4169486.2	Worker	Scenario 1	1.39E-02	2.81E-05	--
3762	639398.5	4169486.2	Worker	Scenario 1	2.78E-02	5.62E-05	--
3763	640448.5	4169486.2	Worker	Scenario 1	5.04E-02	1.02E-04	--
3764	640473.5	4169486.2	Worker	Scenario 1	5.13E-02	1.04E-04	--
3765	640498.5	4169486.2	Worker	Scenario 1	5.23E-02	1.06E-04	--
3766	640523.5	4169486.2	Worker	Scenario 1	5.33E-02	1.08E-04	--
3767	640548.5	4169486.2	Worker	Scenario 1	5.43E-02	1.10E-04	--
3768	640573.5	4169486.2	Worker	Scenario 1	5.53E-02	1.12E-04	--
3769	640598.5	4169486.2	Worker	Scenario 1	5.64E-02	1.14E-04	--
3770	640623.5	4169486.2	Worker	Scenario 1	5.76E-02	1.16E-04	--
3771	640648.5	4169486.2	Worker	Scenario 1	5.88E-02	1.19E-04	--
3772	640673.5	4169486.2	Worker	Scenario 1	6.01E-02	1.21E-04	--
3773	640698.5	4169486.2	Worker	Scenario 1	6.14E-02	1.24E-04	--
3774	640723.5	4169486.2	Worker	Scenario 1	6.28E-02	1.27E-04	--
3775	640748.5	4169486.2	Worker	Scenario 1	6.43E-02	1.30E-04	--
3776	640773.5	4169486.2	Worker	Scenario 1	6.59E-02	1.33E-04	--
3777	638048.5	4169511.2	Worker	Scenario 1	1.38E-02	2.79E-05	--
3778	638073.5	4169511.2	Worker	Scenario 1	1.40E-02	2.84E-05	--
3779	640473.5	4169511.2	Worker	Scenario 1	5.12E-02	1.03E-04	--
3780	640498.5	4169511.2	Worker	Scenario 1	5.21E-02	1.05E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3781	640523.5	4169511.2	Worker	Scenario 1	5.31E-02	1.07E-04	--
3782	640548.5	4169511.2	Worker	Scenario 1	5.41E-02	1.09E-04	--
3783	640573.5	4169511.2	Worker	Scenario 1	5.52E-02	1.11E-04	--
3784	640598.5	4169511.2	Worker	Scenario 1	5.63E-02	1.14E-04	--
3785	640623.5	4169511.2	Worker	Scenario 1	5.75E-02	1.16E-04	--
3786	640648.5	4169511.2	Worker	Scenario 1	5.87E-02	1.18E-04	--
3787	640673.5	4169511.2	Worker	Scenario 1	5.99E-02	1.21E-04	--
3788	638023.5	4169536.2	Worker	Scenario 1	1.38E-02	2.78E-05	--
3789	638048.5	4169536.2	Worker	Scenario 1	1.40E-02	2.82E-05	--
3790	638073.5	4169536.2	Worker	Scenario 1	1.41E-02	2.85E-05	--
3791	637998.5	4169561.2	Worker	Scenario 1	1.37E-02	2.77E-05	--
3792	638023.5	4169561.2	Worker	Scenario 1	1.39E-02	2.81E-05	--
3793	638048.5	4169561.2	Worker	Scenario 1	1.41E-02	2.84E-05	--
3794	638073.5	4169561.2	Worker	Scenario 1	1.42E-02	2.87E-05	--
3795	637998.5	4169586.2	Worker	Scenario 1	1.38E-02	2.80E-05	--
3796	638023.5	4169586.2	Worker	Scenario 1	1.40E-02	2.83E-05	--
3797	638048.5	4169586.2	Worker	Scenario 1	1.42E-02	2.86E-05	--
3798	638073.5	4169586.2	Worker	Scenario 1	1.43E-02	2.89E-05	--
3799	637998.5	4169611.2	Worker	Scenario 1	1.39E-02	2.81E-05	--
3800	638023.5	4169611.2	Worker	Scenario 1	1.41E-02	2.85E-05	--
3801	638048.5	4169611.2	Worker	Scenario 1	1.42E-02	2.88E-05	--
3802	638073.5	4169611.2	Worker	Scenario 1	1.44E-02	2.91E-05	--
3803	639248.5	4169611.2	Worker	Scenario 1	2.62E-02	5.28E-05	--
3804	637998.5	4169636.2	Worker	Scenario 1	1.40E-02	2.83E-05	--
3805	638023.5	4169636.2	Worker	Scenario 1	1.42E-02	2.86E-05	--
3806	638048.5	4169636.2	Worker	Scenario 1	1.43E-02	2.89E-05	--
3807	638073.5	4169636.2	Worker	Scenario 1	1.45E-02	2.92E-05	--
3808	637998.5	4169661.2	Worker	Scenario 1	1.41E-02	2.85E-05	--
3809	638023.5	4169661.2	Worker	Scenario 1	1.42E-02	2.88E-05	--
3810	638048.5	4169661.2	Worker	Scenario 1	1.44E-02	2.91E-05	--
3811	638073.5	4169661.2	Worker	Scenario 1	1.45E-02	2.94E-05	--
3812	637998.5	4169686.2	Worker	Scenario 1	1.42E-02	2.86E-05	--
3813	638023.5	4169686.2	Worker	Scenario 1	1.43E-02	2.89E-05	--
3814	638048.5	4169686.2	Worker	Scenario 1	1.45E-02	2.92E-05	--
3815	638073.5	4169686.2	Worker	Scenario 1	1.46E-02	2.96E-05	--
3816	637998.5	4169711.2	Worker	Scenario 1	1.43E-02	2.88E-05	--
3817	638023.5	4169711.2	Worker	Scenario 1	1.44E-02	2.91E-05	--
3818	638048.5	4169711.2	Worker	Scenario 1	1.44E-02	2.91E-05	--
3819	638073.5	4169711.2	Worker	Scenario 1	1.47E-02	2.97E-05	--
3820	637998.5	4169736.2	Worker	Scenario 1	1.43E-02	2.90E-05	--
3821	638023.5	4169736.2	Worker	Scenario 1	1.45E-02	2.92E-05	--
3822	638048.5	4169736.2	Worker	Scenario 1	1.44E-02	2.91E-05	--
3823	638073.5	4169736.2	Worker	Scenario 1	1.48E-02	2.99E-05	--
3824	639098.5	4169736.2	Worker	Scenario 1	2.47E-02	4.98E-05	--
3825	637998.5	4169761.2	Worker	Scenario 1	1.44E-02	2.91E-05	--
3826	638023.5	4169761.2	Worker	Scenario 1	1.46E-02	2.94E-05	--
3827	638048.5	4169761.2	Worker	Scenario 1	1.46E-02	2.96E-05	--
3828	638073.5	4169761.2	Worker	Scenario 1	1.49E-02	3.01E-05	--
3829	639073.5	4169761.2	Worker	Scenario 1	2.44E-02	4.93E-05	--
3830	637998.5	4169786.2	Worker	Scenario 1	1.45E-02	2.93E-05	--
3831	638023.5	4169786.2	Worker	Scenario 1	1.47E-02	2.96E-05	--
3832	638048.5	4169786.2	Worker	Scenario 1	1.48E-02	2.99E-05	--
3833	638073.5	4169786.2	Worker	Scenario 1	1.50E-02	3.03E-05	--
3834	639048.5	4169786.2	Worker	Scenario 1	2.42E-02	4.88E-05	--
3835	637998.5	4169811.2	Worker	Scenario 1	1.46E-02	2.95E-05	--
3836	638023.5	4169811.2	Worker	Scenario 1	1.47E-02	2.98E-05	--
3837	638048.5	4169811.2	Worker	Scenario 1	1.49E-02	3.01E-05	--
3838	638073.5	4169811.2	Worker	Scenario 1	1.51E-02	3.04E-05	--
3839	637998.5	4169836.2	Worker	Scenario 1	1.47E-02	2.97E-05	--
3840	638023.5	4169836.2	Worker	Scenario 1	1.48E-02	2.99E-05	--
3841	638048.5	4169836.2	Worker	Scenario 1	1.50E-02	3.03E-05	--
3842	638073.5	4169836.2	Worker	Scenario 1	1.52E-02	3.06E-05	--
3843	637998.5	4169861.2	Worker	Scenario 1	1.48E-02	2.98E-05	--
3844	638023.5	4169861.2	Worker	Scenario 1	1.49E-02	3.01E-05	--
3845	638048.5	4169861.2	Worker	Scenario 1	1.51E-02	3.04E-05	--
3846	638073.5	4169861.2	Worker	Scenario 1	1.52E-02	3.08E-05	--
3847	637998.5	4169886.2	Worker	Scenario 1	1.48E-02	3.00E-05	--
3848	638023.5	4169886.2	Worker	Scenario 1	1.50E-02	3.03E-05	--
3849	638048.5	4169886.2	Worker	Scenario 1	1.51E-02	3.06E-05	--
3850	638073.5	4169886.2	Worker	Scenario 1	1.53E-02	3.09E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3851	637998.5	4169911.2	Worker	Scenario 1	1.49E-02	3.02E-05	--
3852	638023.5	4169911.2	Worker	Scenario 1	1.51E-02	3.05E-05	--
3853	638048.5	4169911.2	Worker	Scenario 1	1.52E-02	3.08E-05	--
3854	638073.5	4169911.2	Worker	Scenario 1	1.54E-02	3.11E-05	--
3855	637998.5	4169936.2	Worker	Scenario 1	1.50E-02	3.03E-05	--
3856	638023.5	4169936.2	Worker	Scenario 1	1.52E-02	3.06E-05	--
3857	638048.5	4169936.2	Worker	Scenario 1	1.53E-02	3.10E-05	--
3858	638073.5	4169936.2	Worker	Scenario 1	1.55E-02	3.13E-05	--
3859	637998.5	4169961.2	Worker	Scenario 1	1.51E-02	3.05E-05	--
3860	638023.5	4169961.2	Worker	Scenario 1	1.52E-02	3.08E-05	--
3861	638048.5	4169961.2	Worker	Scenario 1	1.54E-02	3.11E-05	--
3862	638073.5	4169961.2	Worker	Scenario 1	1.56E-02	3.15E-05	--
3863	637998.5	4169986.2	Worker	Scenario 1	1.52E-02	3.06E-05	--
3864	638023.5	4169986.2	Worker	Scenario 1	1.53E-02	3.10E-05	--
3865	638048.5	4169986.2	Worker	Scenario 1	1.55E-02	3.13E-05	--
3866	638073.5	4169986.2	Worker	Scenario 1	1.56E-02	3.16E-05	--
3867	637998.5	4170011.2	Worker	Scenario 1	1.53E-02	3.08E-05	--
3868	638023.5	4170011.2	Worker	Scenario 1	1.54E-02	3.11E-05	--
3869	638048.5	4170011.2	Worker	Scenario 1	1.56E-02	3.14E-05	--
3870	638073.5	4170011.2	Worker	Scenario 1	1.57E-02	3.18E-05	--
3871	637998.5	4170036.2	Worker	Scenario 1	1.53E-02	3.08E-05	--
3872	638023.5	4170036.2	Worker	Scenario 1	1.54E-02	3.11E-05	--
3873	638048.5	4170036.2	Worker	Scenario 1	1.56E-02	3.15E-05	--
3874	638073.5	4170036.2	Worker	Scenario 1	1.58E-02	3.19E-05	--
3875	638098.5	4170036.2	Worker	Scenario 1	1.60E-02	3.24E-05	--
3876	638123.5	4170036.2	Worker	Scenario 1	1.62E-02	3.27E-05	--
3877	638148.5	4170036.2	Worker	Scenario 1	1.63E-02	3.30E-05	--
3878	638173.5	4170036.2	Worker	Scenario 1	1.65E-02	3.33E-05	--
3879	638198.5	4170036.2	Worker	Scenario 1	1.66E-02	3.36E-05	--
3880	638223.5	4170036.2	Worker	Scenario 1	1.68E-02	3.40E-05	--
3881	638248.5	4170036.2	Worker	Scenario 1	1.70E-02	3.43E-05	--
3882	638273.5	4170036.2	Worker	Scenario 1	1.72E-02	3.47E-05	--
3883	638298.5	4170036.2	Worker	Scenario 1	1.74E-02	3.52E-05	--
3884	638323.5	4170036.2	Worker	Scenario 1	1.76E-02	3.56E-05	--
3885	638348.5	4170036.2	Worker	Scenario 1	1.78E-02	3.60E-05	--
3886	638373.5	4170036.2	Worker	Scenario 1	1.80E-02	3.64E-05	--
3887	638398.5	4170036.2	Worker	Scenario 1	1.82E-02	3.68E-05	--
3888	638423.5	4170036.2	Worker	Scenario 1	1.84E-02	3.73E-05	--
3889	638448.5	4170036.2	Worker	Scenario 1	1.87E-02	3.77E-05	--
3890	638473.5	4170036.2	Worker	Scenario 1	1.89E-02	3.81E-05	--
3891	638498.5	4170036.2	Worker	Scenario 1	1.91E-02	3.86E-05	--
3892	638523.5	4170036.2	Worker	Scenario 1	1.93E-02	3.90E-05	--
3893	638548.5	4170036.2	Worker	Scenario 1	1.96E-02	3.95E-05	--
3894	638573.5	4170036.2	Worker	Scenario 1	1.98E-02	4.00E-05	--
3895	638598.5	4170036.2	Worker	Scenario 1	2.00E-02	4.05E-05	--
3896	638623.5	4170036.2	Worker	Scenario 1	2.03E-02	4.10E-05	--
3897	638648.5	4170036.2	Worker	Scenario 1	2.05E-02	4.15E-05	--
3898	638673.5	4170036.2	Worker	Scenario 1	2.08E-02	4.20E-05	--
3899	638698.5	4170036.2	Worker	Scenario 1	2.10E-02	4.25E-05	--
3900	638723.5	4170036.2	Worker	Scenario 1	2.13E-02	4.30E-05	--
3901	638748.5	4170036.2	Worker	Scenario 1	2.15E-02	4.35E-05	--
3902	638023.5	4170061.2	Worker	Scenario 1	1.60E-02	3.24E-05	--
3903	638048.5	4170061.2	Worker	Scenario 1	1.58E-02	3.18E-05	--
3904	638073.5	4170061.2	Worker	Scenario 1	1.58E-02	3.20E-05	--
3905	638098.5	4170061.2	Worker	Scenario 1	1.61E-02	3.25E-05	--
3906	638123.5	4170061.2	Worker	Scenario 1	1.59E-02	3.21E-05	--
3907	638148.5	4170061.2	Worker	Scenario 1	1.57E-02	3.17E-05	--
3908	638173.5	4170061.2	Worker	Scenario 1	1.57E-02	3.18E-05	--
3909	638198.5	4170061.2	Worker	Scenario 1	1.58E-02	3.20E-05	--
3910	638223.5	4170061.2	Worker	Scenario 1	1.60E-02	3.23E-05	--
3911	638248.5	4170061.2	Worker	Scenario 1	1.61E-02	3.26E-05	--
3912	638273.5	4170061.2	Worker	Scenario 1	1.63E-02	3.30E-05	--
3913	638298.5	4170061.2	Worker	Scenario 1	1.65E-02	3.34E-05	--
3914	638323.5	4170061.2	Worker	Scenario 1	1.67E-02	3.38E-05	--
3915	638348.5	4170061.2	Worker	Scenario 1	1.69E-02	3.42E-05	--
3916	638373.5	4170061.2	Worker	Scenario 1	1.71E-02	3.46E-05	--
3917	638398.5	4170061.2	Worker	Scenario 1	1.73E-02	3.50E-05	--
3918	638423.5	4170061.2	Worker	Scenario 1	1.76E-02	3.55E-05	--
3919	638448.5	4170061.2	Worker	Scenario 1	1.79E-02	3.61E-05	--
3920	638473.5	4170061.2	Worker	Scenario 1	1.83E-02	3.69E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3921	638498.5	4170061.2	Worker	Scenario 1	1.91E-02	3.85E-05	--
3922	638523.5	4170061.2	Worker	Scenario 1	1.93E-02	3.91E-05	--
3923	638548.5	4170061.2	Worker	Scenario 1	1.95E-02	3.93E-05	--
3924	638573.5	4170061.2	Worker	Scenario 1	1.97E-02	3.97E-05	--
3925	638598.5	4170061.2	Worker	Scenario 1	1.99E-02	4.02E-05	--
3926	638623.5	4170061.2	Worker	Scenario 1	2.01E-02	4.06E-05	--
3927	638648.5	4170061.2	Worker	Scenario 1	2.04E-02	4.11E-05	--
3928	638673.5	4170061.2	Worker	Scenario 1	2.06E-02	4.16E-05	--
3929	638698.5	4170061.2	Worker	Scenario 1	2.09E-02	4.22E-05	--
3930	638723.5	4170061.2	Worker	Scenario 1	2.12E-02	4.27E-05	--
3931	638748.5	4170061.2	Worker	Scenario 1	2.16E-02	4.35E-05	--
3932	638048.5	4170086.2	Worker	Scenario 1	1.59E-02	3.22E-05	--
3933	638073.5	4170086.2	Worker	Scenario 1	1.59E-02	3.22E-05	--
3934	638098.5	4170086.2	Worker	Scenario 1	1.61E-02	3.26E-05	--
3935	638123.5	4170086.2	Worker	Scenario 1	1.60E-02	3.22E-05	--
3936	638148.5	4170086.2	Worker	Scenario 1	1.63E-02	3.29E-05	--
3937	638173.5	4170086.2	Worker	Scenario 1	1.65E-02	3.34E-05	--
3938	638198.5	4170086.2	Worker	Scenario 1	1.67E-02	3.37E-05	--
3939	638223.5	4170086.2	Worker	Scenario 1	1.69E-02	3.41E-05	--
3940	638248.5	4170086.2	Worker	Scenario 1	1.71E-02	3.44E-05	--
3941	638273.5	4170086.2	Worker	Scenario 1	1.72E-02	3.48E-05	--
3942	638298.5	4170086.2	Worker	Scenario 1	1.74E-02	3.52E-05	--
3943	638323.5	4170086.2	Worker	Scenario 1	1.76E-02	3.56E-05	--
3944	638348.5	4170086.2	Worker	Scenario 1	1.78E-02	3.59E-05	--
3945	638373.5	4170086.2	Worker	Scenario 1	1.80E-02	3.64E-05	--
3946	638398.5	4170086.2	Worker	Scenario 1	1.82E-02	3.68E-05	--
3947	638423.5	4170086.2	Worker	Scenario 1	1.84E-02	3.72E-05	--
3948	638448.5	4170086.2	Worker	Scenario 1	1.86E-02	3.77E-05	--
3949	638473.5	4170086.2	Worker	Scenario 1	1.87E-02	3.78E-05	--
3950	638498.5	4170086.2	Worker	Scenario 1	1.90E-02	3.85E-05	--
3951	638523.5	4170086.2	Worker	Scenario 1	1.95E-02	3.93E-05	--
3952	638548.5	4170086.2	Worker	Scenario 1	1.96E-02	3.97E-05	--
3953	638573.5	4170086.2	Worker	Scenario 1	1.99E-02	4.01E-05	--
3954	638598.5	4170086.2	Worker	Scenario 1	2.01E-02	4.06E-05	--
3955	638623.5	4170086.2	Worker	Scenario 1	2.03E-02	4.11E-05	--
3956	638648.5	4170086.2	Worker	Scenario 1	2.06E-02	4.16E-05	--
3957	638673.5	4170086.2	Worker	Scenario 1	2.08E-02	4.21E-05	--
3958	638698.5	4170086.2	Worker	Scenario 1	2.11E-02	4.27E-05	--
3959	638723.5	4170086.2	Worker	Scenario 1	2.14E-02	4.32E-05	--
3960	638323.5	4170111.2	Worker	Scenario 1	1.78E-02	3.60E-05	--
3961	638348.5	4170111.2	Worker	Scenario 1	1.80E-02	3.64E-05	--
3962	638373.5	4170111.2	Worker	Scenario 1	1.82E-02	3.68E-05	--
3963	638398.5	4170111.2	Worker	Scenario 1	1.84E-02	3.72E-05	--
3964	638423.5	4170111.2	Worker	Scenario 1	1.86E-02	3.76E-05	--
3965	638448.5	4170111.2	Worker	Scenario 1	1.89E-02	3.81E-05	--
3966	638473.5	4170111.2	Worker	Scenario 1	1.91E-02	3.85E-05	--
3967	638498.5	4170111.2	Worker	Scenario 1	1.93E-02	3.89E-05	--
3968	638523.5	4170111.2	Worker	Scenario 1	1.96E-02	3.95E-05	--
3969	638548.5	4170111.2	Worker	Scenario 1	1.98E-02	3.99E-05	--
3970	638573.5	4170111.2	Worker	Scenario 1	2.00E-02	4.04E-05	--
3971	638598.5	4170111.2	Worker	Scenario 1	2.02E-02	4.09E-05	--
3972	638623.5	4170111.2	Worker	Scenario 1	2.05E-02	4.14E-05	--
3973	638648.5	4170111.2	Worker	Scenario 1	2.07E-02	4.19E-05	--
3974	638673.5	4170111.2	Worker	Scenario 1	2.10E-02	4.24E-05	--
3975	638698.5	4170111.2	Worker	Scenario 1	2.12E-02	4.29E-05	--
3976	642711.0	4166673.7	Worker	Scenario 1	1.11E-01	2.25E-04	--
3977	642761.0	4166673.7	Worker	Scenario 1	1.15E-01	2.33E-04	--
3978	642811.0	4166673.7	Worker	Scenario 1	1.18E-01	2.38E-04	--
3979	642861.0	4166673.7	Worker	Scenario 1	1.24E-01	2.50E-04	--
3980	642911.0	4166673.7	Worker	Scenario 1	1.26E-01	2.55E-04	--
3981	642961.0	4166673.7	Worker	Scenario 1	1.28E-01	2.59E-04	--
3982	643011.0	4166673.7	Worker	Scenario 1	1.37E-01	2.76E-04	--
3983	643061.0	4166673.7	Worker	Scenario 1	1.43E-01	2.88E-04	--
3984	643111.0	4166673.7	Worker	Scenario 1	1.50E-01	3.03E-04	--
3985	643161.0	4166673.7	Worker	Scenario 1	1.59E-01	3.22E-04	--
3986	643211.0	4166673.7	Worker	Scenario 1	1.69E-01	3.42E-04	--
3987	643261.0	4166673.7	Worker	Scenario 1	1.80E-01	3.63E-04	--
3988	643311.0	4166673.7	Worker	Scenario 1	1.91E-01	3.85E-04	--
3989	643361.0	4166673.7	Worker	Scenario 1	2.02E-01	4.07E-04	--
3990	643411.0	4166673.7	Worker	Scenario 1	2.12E-01	4.29E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3991	643461.0	4166673.7	Worker	Scenario 1	2.22E-01	4.49E-04	--
3992	643511.0	4166673.7	Worker	Scenario 1	2.31E-01	4.67E-04	--
3993	643561.0	4166673.7	Worker	Scenario 1	2.39E-01	4.83E-04	--
3994	643611.0	4166673.7	Worker	Scenario 1	2.45E-01	4.94E-04	--
3995	643661.0	4166673.7	Worker	Scenario 1	2.48E-01	5.01E-04	--
3996	643711.0	4166673.7	Worker	Scenario 1	2.49E-01	5.03E-04	--
3997	643761.0	4166673.7	Worker	Scenario 1	2.48E-01	5.00E-04	--
3998	643811.0	4166673.7	Worker	Scenario 1	2.45E-01	4.94E-04	--
3999	643861.0	4166673.7	Worker	Scenario 1	2.40E-01	4.85E-04	--
4000	643911.0	4166673.7	Worker	Scenario 1	2.36E-01	4.76E-04	--
4001	643961.0	4166673.7	Worker	Scenario 1	2.31E-01	4.66E-04	--
4002	644011.0	4166673.7	Worker	Scenario 1	2.26E-01	4.57E-04	--
4003	644061.0	4166673.7	Worker	Scenario 1	2.22E-01	4.49E-04	--
4004	644111.0	4166673.7	Worker	Scenario 1	2.19E-01	4.41E-04	--
4005	641461.0	4166723.7	Worker	Scenario 1	2.52E-01	5.08E-04	--
4006	641511.0	4166723.7	Worker	Scenario 1	1.83E-01	3.69E-04	--
4007	641561.0	4166723.7	Worker	Scenario 1	1.47E-01	2.96E-04	--
4008	641611.0	4166723.7	Worker	Scenario 1	1.25E-01	2.52E-04	--
4009	641661.0	4166723.7	Worker	Scenario 1	1.11E-01	2.24E-04	--
4010	641711.0	4166723.7	Worker	Scenario 1	1.01E-01	2.04E-04	--
4011	641761.0	4166723.7	Worker	Scenario 1	9.42E-02	1.90E-04	--
4012	641811.0	4166723.7	Worker	Scenario 1	8.94E-02	1.81E-04	--
4013	641861.0	4166723.7	Worker	Scenario 1	8.59E-02	1.73E-04	--
4014	641911.0	4166723.7	Worker	Scenario 1	8.35E-02	1.69E-04	--
4015	641961.0	4166723.7	Worker	Scenario 1	8.19E-02	1.65E-04	--
4016	642011.0	4166723.7	Worker	Scenario 1	8.11E-02	1.64E-04	--
4017	642061.0	4166723.7	Worker	Scenario 1	8.07E-02	1.63E-04	--
4018	642111.0	4166723.7	Worker	Scenario 1	8.09E-02	1.63E-04	--
4019	642161.0	4166723.7	Worker	Scenario 1	8.18E-02	1.65E-04	--
4020	642211.0	4166723.7	Worker	Scenario 1	8.32E-02	1.68E-04	--
4021	642261.0	4166723.7	Worker	Scenario 1	8.52E-02	1.72E-04	--
4022	642311.0	4166723.7	Worker	Scenario 1	8.80E-02	1.78E-04	--
4023	642361.0	4166723.7	Worker	Scenario 1	9.13E-02	1.84E-04	--
4024	642411.0	4166723.7	Worker	Scenario 1	9.53E-02	1.92E-04	--
4025	642661.0	4166723.7	Worker	Scenario 1	1.18E-01	2.39E-04	--
4026	642711.0	4166723.7	Worker	Scenario 1	1.23E-01	2.48E-04	--
4027	642761.0	4166723.7	Worker	Scenario 1	1.27E-01	2.57E-04	--
4028	642811.0	4166723.7	Worker	Scenario 1	1.31E-01	2.65E-04	--
4029	642861.0	4166723.7	Worker	Scenario 1	1.34E-01	2.71E-04	--
4030	642911.0	4166723.7	Worker	Scenario 1	1.42E-01	2.86E-04	--
4031	642961.0	4166723.7	Worker	Scenario 1	1.43E-01	2.89E-04	--
4032	643011.0	4166723.7	Worker	Scenario 1	1.52E-01	3.08E-04	--
4033	643061.0	4166723.7	Worker	Scenario 1	1.59E-01	3.21E-04	--
4034	643111.0	4166723.7	Worker	Scenario 1	1.68E-01	3.40E-04	--
4035	643161.0	4166723.7	Worker	Scenario 1	1.79E-01	3.62E-04	--
4036	643211.0	4166723.7	Worker	Scenario 1	1.92E-01	3.87E-04	--
4037	643261.0	4166723.7	Worker	Scenario 1	2.04E-01	4.12E-04	--
4038	643311.0	4166723.7	Worker	Scenario 1	2.17E-01	4.39E-04	--
4039	643361.0	4166723.7	Worker	Scenario 1	2.30E-01	4.65E-04	--
4040	643411.0	4166723.7	Worker	Scenario 1	2.43E-01	4.90E-04	--
4041	643461.0	4166723.7	Worker	Scenario 1	2.54E-01	5.13E-04	--
4042	643511.0	4166723.7	Worker	Scenario 1	2.64E-01	5.33E-04	--
4043	643561.0	4166723.7	Worker	Scenario 1	2.71E-01	5.48E-04	--
4044	643611.0	4166723.7	Worker	Scenario 1	2.76E-01	5.58E-04	--
4045	643661.0	4166723.7	Worker	Scenario 1	2.78E-01	5.61E-04	--
4046	643711.0	4166723.7	Worker	Scenario 1	2.77E-01	5.59E-04	--
4047	643761.0	4166723.7	Worker	Scenario 1	2.73E-01	5.52E-04	--
4048	643811.0	4166723.7	Worker	Scenario 1	2.69E-01	5.42E-04	--
4049	643861.0	4166723.7	Worker	Scenario 1	2.63E-01	5.31E-04	--
4050	643911.0	4166723.7	Worker	Scenario 1	2.57E-01	5.19E-04	--
4051	643961.0	4166723.7	Worker	Scenario 1	2.52E-01	5.08E-04	--
4052	644011.0	4166723.7	Worker	Scenario 1	2.47E-01	4.99E-04	--
4053	644061.0	4166723.7	Worker	Scenario 1	2.43E-01	4.90E-04	--
4054	644111.0	4166723.7	Worker	Scenario 1	2.39E-01	4.83E-04	--
4055	644161.0	4166723.7	Worker	Scenario 1	2.36E-01	4.77E-04	--
4056	644211.0	4166723.7	Worker	Scenario 1	2.33E-01	4.71E-04	--
4057	644261.0	4166723.7	Worker	Scenario 1	2.31E-01	4.67E-04	--
4058	644311.0	4166723.7	Worker	Scenario 1	2.28E-01	4.61E-04	--
4059	644361.0	4166723.7	Worker	Scenario 1	2.26E-01	4.56E-04	--
4060	644411.0	4166723.7	Worker	Scenario 1	2.23E-01	4.51E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4061	641461.0	4166773.7	Worker	Scenario 1	2.56E-01	5.16E-04	--
4062	641511.0	4166773.7	Worker	Scenario 1	1.87E-01	3.78E-04	--
4063	641561.0	4166773.7	Worker	Scenario 1	1.51E-01	3.06E-04	--
4064	641611.0	4166773.7	Worker	Scenario 1	1.30E-01	2.62E-04	--
4065	641661.0	4166773.7	Worker	Scenario 1	1.15E-01	2.33E-04	--
4066	641711.0	4166773.7	Worker	Scenario 1	1.06E-01	2.13E-04	--
4067	641761.0	4166773.7	Worker	Scenario 1	9.87E-02	1.99E-04	--
4068	641811.0	4166773.7	Worker	Scenario 1	9.39E-02	1.90E-04	--
4069	641861.0	4166773.7	Worker	Scenario 1	9.05E-02	1.83E-04	--
4070	641911.0	4166773.7	Worker	Scenario 1	8.81E-02	1.78E-04	--
4071	641961.0	4166773.7	Worker	Scenario 1	8.67E-02	1.75E-04	--
4072	642011.0	4166773.7	Worker	Scenario 1	8.61E-02	1.74E-04	--
4073	642061.0	4166773.7	Worker	Scenario 1	8.58E-02	1.73E-04	--
4074	642111.0	4166773.7	Worker	Scenario 1	8.63E-02	1.74E-04	--
4075	642161.0	4166773.7	Worker	Scenario 1	8.74E-02	1.77E-04	--
4076	642211.0	4166773.7	Worker	Scenario 1	8.92E-02	1.80E-04	--
4077	642261.0	4166773.7	Worker	Scenario 1	9.19E-02	1.86E-04	--
4078	642311.0	4166773.7	Worker	Scenario 1	9.51E-02	1.92E-04	--
4079	642361.0	4166773.7	Worker	Scenario 1	9.91E-02	2.00E-04	--
4080	642611.0	4166773.7	Worker	Scenario 1	1.26E-01	2.54E-04	--
4081	642661.0	4166773.7	Worker	Scenario 1	1.31E-01	2.65E-04	--
4082	642711.0	4166773.7	Worker	Scenario 1	1.36E-01	2.75E-04	--
4083	642761.0	4166773.7	Worker	Scenario 1	1.42E-01	2.86E-04	--
4084	642811.0	4166773.7	Worker	Scenario 1	1.47E-01	2.97E-04	--
4085	642861.0	4166773.7	Worker	Scenario 1	1.52E-01	3.06E-04	--
4086	642911.0	4166773.7	Worker	Scenario 1	1.55E-01	3.14E-04	--
4087	642961.0	4166773.7	Worker	Scenario 1	1.64E-01	3.32E-04	--
4088	643011.0	4166773.7	Worker	Scenario 1	1.71E-01	3.46E-04	--
4089	643061.0	4166773.7	Worker	Scenario 1	1.80E-01	3.63E-04	--
4090	643111.0	4166773.7	Worker	Scenario 1	1.91E-01	3.85E-04	--
4091	643161.0	4166773.7	Worker	Scenario 1	2.04E-01	4.13E-04	--
4092	643211.0	4166773.7	Worker	Scenario 1	2.19E-01	4.43E-04	--
4093	643261.0	4166773.7	Worker	Scenario 1	2.35E-01	4.74E-04	--
4094	643311.0	4166773.7	Worker	Scenario 1	2.50E-01	5.05E-04	--
4095	643361.0	4166773.7	Worker	Scenario 1	2.66E-01	5.37E-04	--
4096	643411.0	4166773.7	Worker	Scenario 1	2.80E-01	5.66E-04	--
4097	643461.0	4166773.7	Worker	Scenario 1	2.93E-01	5.93E-04	--
4098	643511.0	4166773.7	Worker	Scenario 1	3.03E-01	6.12E-04	--
4099	643561.0	4166773.7	Worker	Scenario 1	3.10E-01	6.26E-04	--
4100	643611.0	4166773.7	Worker	Scenario 1	3.12E-01	6.31E-04	--
4101	643661.0	4166773.7	Worker	Scenario 1	3.12E-01	6.30E-04	--
4102	643711.0	4166773.7	Worker	Scenario 1	3.08E-01	6.23E-04	--
4103	643761.0	4166773.7	Worker	Scenario 1	3.03E-01	6.11E-04	--
4104	643811.0	4166773.7	Worker	Scenario 1	2.96E-01	5.98E-04	--
4105	643861.0	4166773.7	Worker	Scenario 1	2.89E-01	5.83E-04	--
4106	643911.0	4166773.7	Worker	Scenario 1	2.82E-01	5.70E-04	--
4107	643961.0	4166773.7	Worker	Scenario 1	2.76E-01	5.58E-04	--
4108	644011.0	4166773.7	Worker	Scenario 1	2.72E-01	5.49E-04	--
4109	644061.0	4166773.7	Worker	Scenario 1	2.68E-01	5.41E-04	--
4110	644111.0	4166773.7	Worker	Scenario 1	2.65E-01	5.34E-04	--
4111	644161.0	4166773.7	Worker	Scenario 1	2.62E-01	5.28E-04	--
4112	644211.0	4166773.7	Worker	Scenario 1	2.59E-01	5.23E-04	--
4113	644261.0	4166773.7	Worker	Scenario 1	2.56E-01	5.17E-04	--
4114	644311.0	4166773.7	Worker	Scenario 1	2.53E-01	5.11E-04	--
4115	644361.0	4166773.7	Worker	Scenario 1	2.50E-01	5.05E-04	--
4116	644411.0	4166773.7	Worker	Scenario 1	2.47E-01	4.99E-04	--
4117	644461.0	4166773.7	Worker	Scenario 1	2.42E-01	4.89E-04	--
4118	644511.0	4166773.7	Worker	Scenario 1	2.34E-01	4.73E-04	--
4119	641511.0	4166823.7	Worker	Scenario 1	1.92E-01	3.89E-04	--
4120	641561.0	4166823.7	Worker	Scenario 1	1.56E-01	3.16E-04	--
4121	641611.0	4166823.7	Worker	Scenario 1	1.34E-01	2.71E-04	--
4122	641661.0	4166823.7	Worker	Scenario 1	1.20E-01	2.41E-04	--
4123	641711.0	4166823.7	Worker	Scenario 1	1.10E-01	2.21E-04	--
4124	641761.0	4166823.7	Worker	Scenario 1	1.03E-01	2.08E-04	--
4125	641811.0	4166823.7	Worker	Scenario 1	9.80E-02	1.98E-04	--
4126	641861.0	4166823.7	Worker	Scenario 1	9.48E-02	1.91E-04	--
4127	641911.0	4166823.7	Worker	Scenario 1	9.26E-02	1.87E-04	--
4128	641961.0	4166823.7	Worker	Scenario 1	9.14E-02	1.85E-04	--
4129	642011.0	4166823.7	Worker	Scenario 1	9.10E-02	1.84E-04	--
4130	642061.0	4166823.7	Worker	Scenario 1	9.13E-02	1.84E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4131	642111.0	4166823.7	Worker	Scenario 1	9.20E-02	1.86E-04	--
4132	642161.0	4166823.7	Worker	Scenario 1	9.37E-02	1.89E-04	--
4133	642211.0	4166823.7	Worker	Scenario 1	9.61E-02	1.94E-04	--
4134	642261.0	4166823.7	Worker	Scenario 1	9.96E-02	2.01E-04	--
4135	642311.0	4166823.7	Worker	Scenario 1	1.04E-01	2.09E-04	--
4136	644111.0	4166823.7	Worker	Scenario 1	2.96E-01	5.98E-04	--
4137	644161.0	4166823.7	Worker	Scenario 1	2.93E-01	5.91E-04	--
4138	644211.0	4166823.7	Worker	Scenario 1	2.90E-01	5.85E-04	--
4139	644261.0	4166823.7	Worker	Scenario 1	2.87E-01	5.79E-04	--
4140	644311.0	4166823.7	Worker	Scenario 1	2.83E-01	5.72E-04	--
4141	644411.0	4166823.7	Worker	Scenario 1	2.73E-01	5.51E-04	--
4142	644461.0	4166823.7	Worker	Scenario 1	2.70E-01	5.45E-04	--
4143	644511.0	4166823.7	Worker	Scenario 1	2.64E-01	5.33E-04	--
4144	644711.0	4166973.7	Worker	Scenario 1	3.16E-01	6.39E-04	--
4145	644761.0	4166973.7	Worker	Scenario 1	3.06E-01	6.18E-04	--
4146	641161.0	4167023.7	Worker	Scenario 1	7.35E-02	1.49E-04	--
4147	641211.0	4167023.7	Worker	Scenario 1	8.95E-02	1.81E-04	--
4148	641261.0	4167023.7	Worker	Scenario 1	1.17E-01	2.36E-04	--
4149	644711.0	4167023.7	Worker	Scenario 1	3.39E-01	6.85E-04	--
4150	644761.0	4167023.7	Worker	Scenario 1	3.27E-01	6.60E-04	--
4151	644811.0	4167023.7	Worker	Scenario 1	3.15E-01	6.37E-04	--
4152	641161.0	4167073.7	Worker	Scenario 1	7.61E-02	1.54E-04	--
4153	641211.0	4167073.7	Worker	Scenario 1	9.24E-02	1.87E-04	--
4154	641261.0	4167073.7	Worker	Scenario 1	1.21E-01	2.44E-04	--
4155	644711.0	4167073.7	Worker	Scenario 1	3.60E-01	7.27E-04	--
4156	644761.0	4167073.7	Worker	Scenario 1	3.45E-01	6.97E-04	--
4157	644811.0	4167073.7	Worker	Scenario 1	3.32E-01	6.70E-04	--
4158	641161.0	4167123.7	Worker	Scenario 1	7.86E-02	1.59E-04	--
4159	641211.0	4167123.7	Worker	Scenario 1	9.53E-02	1.92E-04	--
4160	641261.0	4167123.7	Worker	Scenario 1	1.24E-01	2.51E-04	--
4161	644711.0	4167123.7	Worker	Scenario 1	3.77E-01	7.61E-04	--
4162	644761.0	4167123.7	Worker	Scenario 1	3.59E-01	7.26E-04	--
4163	644811.0	4167123.7	Worker	Scenario 1	3.43E-01	6.92E-04	--
4164	641161.0	4167173.7	Worker	Scenario 1	8.11E-02	1.64E-04	--
4165	641211.0	4167173.7	Worker	Scenario 1	9.82E-02	1.98E-04	--
4166	641261.0	4167173.7	Worker	Scenario 1	1.28E-01	2.59E-04	--
4167	644711.0	4167173.7	Worker	Scenario 1	3.89E-01	7.85E-04	--
4168	644761.0	4167173.7	Worker	Scenario 1	3.72E-01	7.51E-04	--
4169	644811.0	4167173.7	Worker	Scenario 1	3.56E-01	7.20E-04	--
4170	641161.0	4167223.7	Worker	Scenario 1	8.35E-02	1.69E-04	--
4171	641211.0	4167223.7	Worker	Scenario 1	1.01E-01	2.04E-04	--
4172	641261.0	4167223.7	Worker	Scenario 1	1.32E-01	2.66E-04	--
4173	644711.0	4167223.7	Worker	Scenario 1	4.02E-01	8.12E-04	--
4174	644761.0	4167223.7	Worker	Scenario 1	3.84E-01	7.76E-04	--
4175	644811.0	4167223.7	Worker	Scenario 1	3.68E-01	7.43E-04	--
4176	641161.0	4167273.7	Worker	Scenario 1	8.58E-02	1.73E-04	--
4177	641211.0	4167273.7	Worker	Scenario 1	1.04E-01	2.10E-04	--
4178	641261.0	4167273.7	Worker	Scenario 1	1.36E-01	2.74E-04	--
4179	641161.0	4167323.7	Worker	Scenario 1	8.79E-02	1.78E-04	--
4180	641211.0	4167323.7	Worker	Scenario 1	1.06E-01	2.15E-04	--
4181	641261.0	4167323.7	Worker	Scenario 1	1.39E-01	2.81E-04	--
4182	641161.0	4167373.7	Worker	Scenario 1	8.99E-02	1.82E-04	--
4183	641211.0	4167373.7	Worker	Scenario 1	1.09E-01	2.20E-04	--
4184	641261.0	4167373.7	Worker	Scenario 1	1.42E-01	2.87E-04	--
4185	644511.0	4167373.7	Worker	Scenario 1	5.16E-01	1.04E-03	--
4186	644561.0	4167373.7	Worker	Scenario 1	4.90E-01	9.90E-04	--
4187	644611.0	4167373.7	Worker	Scenario 1	4.66E-01	9.41E-04	--
4188	644661.0	4167373.7	Worker	Scenario 1	4.44E-01	8.97E-04	--
4189	644711.0	4167373.7	Worker	Scenario 1	4.24E-01	8.55E-04	--
4190	644761.0	4167373.7	Worker	Scenario 1	4.05E-01	8.17E-04	--
4191	644811.0	4167373.7	Worker	Scenario 1	3.87E-01	7.81E-04	--
4192	640961.0	4167423.7	Worker	Scenario 1	5.75E-02	1.16E-04	--
4193	641011.0	4167423.7	Worker	Scenario 1	6.30E-02	1.27E-04	--
4194	641061.0	4167423.7	Worker	Scenario 1	7.00E-02	1.41E-04	--
4195	641111.0	4167423.7	Worker	Scenario 1	7.91E-02	1.60E-04	--
4196	641161.0	4167423.7	Worker	Scenario 1	9.18E-02	1.85E-04	--
4197	641211.0	4167423.7	Worker	Scenario 1	1.11E-01	2.24E-04	--
4198	641261.0	4167423.7	Worker	Scenario 1	1.45E-01	2.93E-04	--
4199	644361.0	4167423.7	Worker	Scenario 1	6.11E-01	1.23E-03	--
4200	644411.0	4167423.7	Worker	Scenario 1	5.77E-01	1.17E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4201	644461.0	4167423.7	Worker	Scenario 1	5.46E-01	1.10E-03	--
4202	644511.0	4167423.7	Worker	Scenario 1	5.18E-01	1.05E-03	--
4203	644561.0	4167423.7	Worker	Scenario 1	4.92E-01	9.93E-04	--
4204	644611.0	4167423.7	Worker	Scenario 1	4.67E-01	9.43E-04	--
4205	644661.0	4167423.7	Worker	Scenario 1	4.45E-01	9.00E-04	--
4206	644711.0	4167423.7	Worker	Scenario 1	4.25E-01	8.58E-04	--
4207	644761.0	4167423.7	Worker	Scenario 1	4.06E-01	8.19E-04	--
4208	640761.0	4167473.7	Worker	Scenario 1	4.40E-02	8.89E-05	--
4209	640811.0	4167473.7	Worker	Scenario 1	4.68E-02	9.46E-05	--
4210	640861.0	4167473.7	Worker	Scenario 1	5.01E-02	1.01E-04	--
4211	640911.0	4167473.7	Worker	Scenario 1	5.40E-02	1.09E-04	--
4212	640961.0	4167473.7	Worker	Scenario 1	5.86E-02	1.18E-04	--
4213	641011.0	4167473.7	Worker	Scenario 1	6.43E-02	1.30E-04	--
4214	641061.0	4167473.7	Worker	Scenario 1	7.14E-02	1.44E-04	--
4215	641111.0	4167473.7	Worker	Scenario 1	8.07E-02	1.63E-04	--
4216	643361.0	4167473.7	Worker	Scenario 1	5.42E+00	1.09E-02	--
4217	643411.0	4167473.7	Worker	Scenario 1	4.27E+00	8.63E-03	--
4218	643461.0	4167473.7	Worker	Scenario 1	3.48E+00	7.03E-03	--
4219	643511.0	4167473.7	Worker	Scenario 1	2.90E+00	5.86E-03	--
4220	643561.0	4167473.7	Worker	Scenario 1	2.47E+00	4.98E-03	--
4221	643611.0	4167473.7	Worker	Scenario 1	2.14E+00	4.31E-03	--
4222	643661.0	4167473.7	Worker	Scenario 1	1.87E+00	3.79E-03	--
4223	643711.0	4167473.7	Worker	Scenario 1	1.66E+00	3.36E-03	--
4224	643761.0	4167473.7	Worker	Scenario 1	1.49E+00	3.02E-03	--
4225	643811.0	4167473.7	Worker	Scenario 1	1.35E+00	2.73E-03	--
4226	643861.0	4167473.7	Worker	Scenario 1	1.23E+00	2.49E-03	--
4227	643911.0	4167473.7	Worker	Scenario 1	1.13E+00	2.29E-03	--
4228	643961.0	4167473.7	Worker	Scenario 1	1.04E+00	2.11E-03	--
4229	644211.0	4167473.7	Worker	Scenario 1	7.27E-01	1.47E-03	--
4230	644261.0	4167473.7	Worker	Scenario 1	6.83E-01	1.38E-03	--
4231	644311.0	4167473.7	Worker	Scenario 1	6.42E-01	1.30E-03	--
4232	644361.0	4167473.7	Worker	Scenario 1	6.06E-01	1.22E-03	--
4233	644411.0	4167473.7	Worker	Scenario 1	5.73E-01	1.16E-03	--
4234	644461.0	4167473.7	Worker	Scenario 1	5.42E-01	1.10E-03	--
4235	644511.0	4167473.7	Worker	Scenario 1	5.14E-01	1.04E-03	--
4236	644561.0	4167473.7	Worker	Scenario 1	4.89E-01	9.87E-04	--
4237	644611.0	4167473.7	Worker	Scenario 1	4.64E-01	9.38E-04	--
4238	644661.0	4167473.7	Worker	Scenario 1	4.42E-01	8.94E-04	--
4239	640561.0	4167523.7	Worker	Scenario 1	3.67E-02	7.41E-05	--
4240	640611.0	4167523.7	Worker	Scenario 1	3.81E-02	7.69E-05	--
4241	640661.0	4167523.7	Worker	Scenario 1	4.00E-02	8.08E-05	--
4242	640711.0	4167523.7	Worker	Scenario 1	4.22E-02	8.52E-05	--
4243	640761.0	4167523.7	Worker	Scenario 1	4.48E-02	9.05E-05	--
4244	640811.0	4167523.7	Worker	Scenario 1	4.77E-02	9.64E-05	--
4245	640861.0	4167523.7	Worker	Scenario 1	5.10E-02	1.03E-04	--
4246	640911.0	4167523.7	Worker	Scenario 1	5.50E-02	1.11E-04	--
4247	640961.0	4167523.7	Worker	Scenario 1	5.97E-02	1.21E-04	--
4248	643361.0	4167523.7	Worker	Scenario 1	5.14E+00	1.04E-02	--
4249	643411.0	4167523.7	Worker	Scenario 1	4.07E+00	8.22E-03	--
4250	643461.0	4167523.7	Worker	Scenario 1	3.33E+00	6.73E-03	--
4251	643511.0	4167523.7	Worker	Scenario 1	2.79E+00	5.63E-03	--
4252	643561.0	4167523.7	Worker	Scenario 1	2.38E+00	4.80E-03	--
4253	643611.0	4167523.7	Worker	Scenario 1	2.06E+00	4.17E-03	--
4254	643661.0	4167523.7	Worker	Scenario 1	1.82E+00	3.67E-03	--
4255	643711.0	4167523.7	Worker	Scenario 1	1.62E+00	3.26E-03	--
4256	643761.0	4167523.7	Worker	Scenario 1	1.45E+00	2.93E-03	--
4257	643811.0	4167523.7	Worker	Scenario 1	1.32E+00	2.66E-03	--
4258	643861.0	4167523.7	Worker	Scenario 1	1.20E+00	2.43E-03	--
4259	643911.0	4167523.7	Worker	Scenario 1	1.10E+00	2.23E-03	--
4260	643961.0	4167523.7	Worker	Scenario 1	1.02E+00	2.05E-03	--
4261	644011.0	4167523.7	Worker	Scenario 1	9.41E-01	1.90E-03	--
4262	644061.0	4167523.7	Worker	Scenario 1	8.73E-01	1.76E-03	--
4263	644111.0	4167523.7	Worker	Scenario 1	8.12E-01	1.64E-03	--
4264	644161.0	4167523.7	Worker	Scenario 1	7.59E-01	1.53E-03	--
4265	644211.0	4167523.7	Worker	Scenario 1	7.11E-01	1.44E-03	--
4266	644261.0	4167523.7	Worker	Scenario 1	6.68E-01	1.35E-03	--
4267	644311.0	4167523.7	Worker	Scenario 1	6.29E-01	1.27E-03	--
4268	644361.0	4167523.7	Worker	Scenario 1	5.95E-01	1.20E-03	--
4269	644411.0	4167523.7	Worker	Scenario 1	5.62E-01	1.14E-03	--
4270	644461.0	4167523.7	Worker	Scenario 1	5.33E-01	1.08E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4271	644511.0	4167523.7	Worker	Scenario 1	5.06E-01	1.02E-03	--
4272	640361.0	4167573.7	Worker	Scenario 1	3.10E-02	6.25E-05	--
4273	640411.0	4167573.7	Worker	Scenario 1	3.21E-02	6.48E-05	--
4274	640461.0	4167573.7	Worker	Scenario 1	3.36E-02	6.78E-05	--
4275	640511.0	4167573.7	Worker	Scenario 1	3.55E-02	7.17E-05	--
4276	640561.0	4167573.7	Worker	Scenario 1	3.70E-02	7.47E-05	--
4277	640611.0	4167573.7	Worker	Scenario 1	3.87E-02	7.81E-05	--
4278	640661.0	4167573.7	Worker	Scenario 1	4.06E-02	8.21E-05	--
4279	640711.0	4167573.7	Worker	Scenario 1	4.30E-02	8.68E-05	--
4280	640761.0	4167573.7	Worker	Scenario 1	4.56E-02	9.20E-05	--
4281	640811.0	4167573.7	Worker	Scenario 1	4.86E-02	9.81E-05	--
4282	643311.0	4167573.7	Worker	Scenario 1	4.37E+00	8.83E-03	--
4283	643361.0	4167573.7	Worker	Scenario 1	3.72E+00	7.50E-03	--
4284	643411.0	4167573.7	Worker	Scenario 1	3.17E+00	6.40E-03	--
4285	643461.0	4167573.7	Worker	Scenario 1	2.73E+00	5.51E-03	--
4286	643511.0	4167573.7	Worker	Scenario 1	2.37E+00	4.78E-03	--
4287	643561.0	4167573.7	Worker	Scenario 1	2.07E+00	4.19E-03	--
4288	643611.0	4167573.7	Worker	Scenario 1	1.84E+00	3.71E-03	--
4289	643661.0	4167573.7	Worker	Scenario 1	1.64E+00	3.32E-03	--
4290	643711.0	4167573.7	Worker	Scenario 1	1.48E+00	2.99E-03	--
4291	643761.0	4167573.7	Worker	Scenario 1	1.34E+00	2.71E-03	--
4292	643811.0	4167573.7	Worker	Scenario 1	1.23E+00	2.48E-03	--
4293	643861.0	4167573.7	Worker	Scenario 1	1.13E+00	2.27E-03	--
4294	643911.0	4167573.7	Worker	Scenario 1	1.04E+00	2.10E-03	--
4295	643961.0	4167573.7	Worker	Scenario 1	9.62E-01	1.94E-03	--
4296	644011.0	4167573.7	Worker	Scenario 1	8.95E-01	1.81E-03	--
4297	644061.0	4167573.7	Worker	Scenario 1	8.33E-01	1.68E-03	--
4298	644111.0	4167573.7	Worker	Scenario 1	7.77E-01	1.57E-03	--
4299	644161.0	4167573.7	Worker	Scenario 1	7.28E-01	1.47E-03	--
4300	644211.0	4167573.7	Worker	Scenario 1	6.84E-01	1.38E-03	--
4301	644261.0	4167573.7	Worker	Scenario 1	6.44E-01	1.30E-03	--
4302	644311.0	4167573.7	Worker	Scenario 1	6.09E-01	1.23E-03	--
4303	644361.0	4167573.7	Worker	Scenario 1	5.76E-01	1.16E-03	--
4304	640261.0	4167623.7	Worker	Scenario 1	2.87E-02	5.79E-05	--
4305	640311.0	4167623.7	Worker	Scenario 1	3.00E-02	6.05E-05	--
4306	640361.0	4167623.7	Worker	Scenario 1	3.15E-02	6.37E-05	--
4307	640411.0	4167623.7	Worker	Scenario 1	3.27E-02	6.61E-05	--
4308	640461.0	4167623.7	Worker	Scenario 1	3.41E-02	6.90E-05	--
4309	640511.0	4167623.7	Worker	Scenario 1	3.58E-02	7.23E-05	--
4310	640561.0	4167623.7	Worker	Scenario 1	3.75E-02	7.57E-05	--
4311	640611.0	4167623.7	Worker	Scenario 1	3.93E-02	7.93E-05	--
4312	640661.0	4167623.7	Worker	Scenario 1	4.13E-02	8.34E-05	--
4313	643261.0	4167623.7	Worker	Scenario 1	2.02E+00	4.07E-03	--
4314	643311.0	4167623.7	Worker	Scenario 1	2.20E+00	4.45E-03	--
4315	643361.0	4167623.7	Worker	Scenario 1	2.20E+00	4.45E-03	--
4316	643411.0	4167623.7	Worker	Scenario 1	2.11E+00	4.25E-03	--
4317	644011.0	4167623.7	Worker	Scenario 1	8.29E-01	1.67E-03	--
4318	644061.0	4167623.7	Worker	Scenario 1	7.77E-01	1.57E-03	--
4319	644111.0	4167623.7	Worker	Scenario 1	7.29E-01	1.47E-03	--
4320	644161.0	4167623.7	Worker	Scenario 1	6.86E-01	1.38E-03	--
4321	644211.0	4167623.7	Worker	Scenario 1	6.47E-01	1.31E-03	--
4322	640211.0	4167673.7	Worker	Scenario 1	2.79E-02	5.64E-05	--
4323	640261.0	4167673.7	Worker	Scenario 1	2.91E-02	5.88E-05	--
4324	640311.0	4167673.7	Worker	Scenario 1	3.01E-02	6.09E-05	--
4325	640361.0	4167673.7	Worker	Scenario 1	3.18E-02	6.42E-05	--
4326	640411.0	4167673.7	Worker	Scenario 1	3.32E-02	6.70E-05	--
4327	640461.0	4167673.7	Worker	Scenario 1	3.45E-02	6.98E-05	--
4328	640511.0	4167673.7	Worker	Scenario 1	3.61E-02	7.30E-05	--
4329	643211.0	4167673.7	Worker	Scenario 1	8.73E-01	1.76E-03	--
4330	643261.0	4167673.7	Worker	Scenario 1	9.68E-01	1.96E-03	--
4331	643311.0	4167673.7	Worker	Scenario 1	1.12E+00	2.26E-03	--
4332	643361.0	4167673.7	Worker	Scenario 1	1.24E+00	2.50E-03	--
4333	640111.0	4167723.7	Worker	Scenario 1	2.63E-02	5.31E-05	--
4334	640161.0	4167723.7	Worker	Scenario 1	2.73E-02	5.52E-05	--
4335	640211.0	4167723.7	Worker	Scenario 1	2.84E-02	5.75E-05	--
4336	640261.0	4167723.7	Worker	Scenario 1	2.97E-02	6.00E-05	--
4337	640311.0	4167723.7	Worker	Scenario 1	3.10E-02	6.26E-05	--
4338	640361.0	4167723.7	Worker	Scenario 1	3.20E-02	6.47E-05	--
4339	643161.0	4167723.7	Worker	Scenario 1	7.69E-01	1.55E-03	--
4340	643211.0	4167723.7	Worker	Scenario 1	6.73E-01	1.36E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4341	643261.0	4167723.7	Worker	Scenario 1	6.51E-01	1.32E-03	--
4342	643311.0	4167723.7	Worker	Scenario 1	6.90E-01	1.39E-03	--
4343	640011.0	4167773.7	Worker	Scenario 1	2.47E-02	4.99E-05	--
4344	640061.0	4167773.7	Worker	Scenario 1	2.57E-02	5.18E-05	--
4345	640111.0	4167773.7	Worker	Scenario 1	2.67E-02	5.40E-05	--
4346	640161.0	4167773.7	Worker	Scenario 1	2.78E-02	5.62E-05	--
4347	640211.0	4167773.7	Worker	Scenario 1	2.90E-02	5.86E-05	--
4348	640261.0	4167773.7	Worker	Scenario 1	3.03E-02	6.12E-05	--
4349	643161.0	4167773.7	Worker	Scenario 1	6.63E-01	1.34E-03	--
4350	643211.0	4167773.7	Worker	Scenario 1	5.75E-01	1.16E-03	--
4351	643261.0	4167773.7	Worker	Scenario 1	5.32E-01	1.07E-03	--
4352	639961.0	4167823.7	Worker	Scenario 1	2.42E-02	4.89E-05	--
4353	640011.0	4167823.7	Worker	Scenario 1	2.51E-02	5.07E-05	--
4354	640061.0	4167823.7	Worker	Scenario 1	2.61E-02	5.27E-05	--
4355	640111.0	4167823.7	Worker	Scenario 1	2.72E-02	5.50E-05	--
4356	640161.0	4167823.7	Worker	Scenario 1	2.83E-02	5.73E-05	--
4357	643111.0	4167823.7	Worker	Scenario 1	6.87E-01	1.39E-03	--
4358	643161.0	4167823.7	Worker	Scenario 1	5.84E-01	1.18E-03	--
4359	643211.0	4167823.7	Worker	Scenario 1	5.10E-01	1.03E-03	--
4360	643261.0	4167823.7	Worker	Scenario 1	4.67E-01	9.44E-04	--
4361	639861.0	4167873.7	Worker	Scenario 1	2.30E-02	4.65E-05	--
4362	639911.0	4167873.7	Worker	Scenario 1	2.38E-02	4.81E-05	--
4363	639961.0	4167873.7	Worker	Scenario 1	2.47E-02	5.00E-05	--
4364	640011.0	4167873.7	Worker	Scenario 1	2.56E-02	5.17E-05	--
4365	640061.0	4167873.7	Worker	Scenario 1	2.66E-02	5.38E-05	--
4366	643061.0	4167873.7	Worker	Scenario 1	6.70E-01	1.35E-03	--
4367	643111.0	4167873.7	Worker	Scenario 1	5.98E-01	1.21E-03	--
4368	643161.0	4167873.7	Worker	Scenario 1	5.23E-01	1.06E-03	--
4369	643211.0	4167873.7	Worker	Scenario 1	4.63E-01	9.34E-04	--
4370	639811.0	4167923.7	Worker	Scenario 1	2.27E-02	4.58E-05	--
4371	639861.0	4167923.7	Worker	Scenario 1	2.34E-02	4.73E-05	--
4372	639911.0	4167923.7	Worker	Scenario 1	2.43E-02	4.91E-05	--
4373	639961.0	4167923.7	Worker	Scenario 1	2.52E-02	5.09E-05	--
4374	640011.0	4167923.7	Worker	Scenario 1	2.61E-02	5.27E-05	--
4375	643011.0	4167923.7	Worker	Scenario 1	6.28E-01	1.27E-03	--
4376	643061.0	4167923.7	Worker	Scenario 1	5.81E-01	1.17E-03	--
4377	643111.0	4167923.7	Worker	Scenario 1	5.29E-01	1.07E-03	--
4378	643161.0	4167923.7	Worker	Scenario 1	4.73E-01	9.56E-04	--
4379	639711.0	4167973.7	Worker	Scenario 1	2.17E-02	4.39E-05	--
4380	639761.0	4167973.7	Worker	Scenario 1	2.26E-02	4.57E-05	--
4381	639811.0	4167973.7	Worker	Scenario 1	2.30E-02	4.65E-05	--
4382	639861.0	4167973.7	Worker	Scenario 1	2.38E-02	4.81E-05	--
4383	639911.0	4167973.7	Worker	Scenario 1	2.47E-02	4.99E-05	--
4384	642911.0	4167973.7	Worker	Scenario 1	6.11E-01	1.23E-03	--
4385	642961.0	4167973.7	Worker	Scenario 1	5.81E-01	1.17E-03	--
4386	643011.0	4167973.7	Worker	Scenario 1	5.47E-01	1.10E-03	--
4387	643061.0	4167973.7	Worker	Scenario 1	5.11E-01	1.03E-03	--
4388	643111.0	4167973.7	Worker	Scenario 1	4.72E-01	9.53E-04	--
4389	639661.0	4168023.7	Worker	Scenario 1	2.13E-02	4.30E-05	--
4390	639711.0	4168023.7	Worker	Scenario 1	2.21E-02	4.47E-05	--
4391	639761.0	4168023.7	Worker	Scenario 1	2.28E-02	4.60E-05	--
4392	639811.0	4168023.7	Worker	Scenario 1	2.35E-02	4.75E-05	--
4393	642861.0	4168023.7	Worker	Scenario 1	5.52E-01	1.11E-03	--
4394	642911.0	4168023.7	Worker	Scenario 1	5.34E-01	1.08E-03	--
4395	642961.0	4168023.7	Worker	Scenario 1	5.09E-01	1.03E-03	--
4396	643011.0	4168023.7	Worker	Scenario 1	4.82E-01	9.74E-04	--
4397	643061.0	4168023.7	Worker	Scenario 1	4.55E-01	9.18E-04	--
4398	639561.0	4168073.7	Worker	Scenario 1	2.03E-02	4.09E-05	--
4399	639611.0	4168073.7	Worker	Scenario 1	2.09E-02	4.23E-05	--
4400	639661.0	4168073.7	Worker	Scenario 1	2.16E-02	4.37E-05	--
4401	639711.0	4168073.7	Worker	Scenario 1	2.23E-02	4.50E-05	--
4402	639761.0	4168073.7	Worker	Scenario 1	2.31E-02	4.66E-05	--
4403	642761.0	4168073.7	Worker	Scenario 1	4.97E-01	1.00E-03	--
4404	642811.0	4168073.7	Worker	Scenario 1	4.96E-01	1.00E-03	--
4405	642861.0	4168073.7	Worker	Scenario 1	4.87E-01	9.84E-04	--
4406	642911.0	4168073.7	Worker	Scenario 1	4.72E-01	9.53E-04	--
4407	642961.0	4168073.7	Worker	Scenario 1	4.52E-01	9.13E-04	--
4408	639561.0	4168123.7	Worker	Scenario 1	2.05E-02	4.14E-05	--
4409	639611.0	4168123.7	Worker	Scenario 1	2.11E-02	4.27E-05	--
4410	639661.0	4168123.7	Worker	Scenario 1	2.18E-02	4.41E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4411	642661.0	4168123.7	Worker	Scenario 1	4.33E-01	8.75E-04	--
4412	642711.0	4168123.7	Worker	Scenario 1	4.41E-01	8.91E-04	--
4413	642761.0	4168123.7	Worker	Scenario 1	4.44E-01	8.97E-04	--
4414	642811.0	4168123.7	Worker	Scenario 1	4.42E-01	8.92E-04	--
4415	642861.0	4168123.7	Worker	Scenario 1	4.34E-01	8.76E-04	--
4416	642911.0	4168123.7	Worker	Scenario 1	4.21E-01	8.51E-04	--
4417	639511.0	4168173.7	Worker	Scenario 1	2.01E-02	4.06E-05	--
4418	639561.0	4168173.7	Worker	Scenario 1	2.07E-02	4.18E-05	--
4419	642611.0	4168173.7	Worker	Scenario 1	3.86E-01	7.80E-04	--
4420	642661.0	4168173.7	Worker	Scenario 1	3.94E-01	7.96E-04	--
4421	642711.0	4168173.7	Worker	Scenario 1	3.99E-01	8.06E-04	--
4422	642761.0	4168173.7	Worker	Scenario 1	4.00E-01	8.08E-04	--
4423	642811.0	4168173.7	Worker	Scenario 1	3.96E-01	8.01E-04	--
4424	639311.0	4168223.7	Worker	Scenario 1	1.81E-02	3.66E-05	--
4425	639361.0	4168223.7	Worker	Scenario 1	1.86E-02	3.76E-05	--
4426	639411.0	4168223.7	Worker	Scenario 1	1.92E-02	3.88E-05	--
4427	639461.0	4168223.7	Worker	Scenario 1	1.97E-02	3.99E-05	--
4428	639511.0	4168223.7	Worker	Scenario 1	2.03E-02	4.10E-05	--
4429	642511.0	4168223.7	Worker	Scenario 1	3.39E-01	6.84E-04	--
4430	642561.0	4168223.7	Worker	Scenario 1	3.48E-01	7.02E-04	--
4431	642611.0	4168223.7	Worker	Scenario 1	3.55E-01	7.17E-04	--
4432	642661.0	4168223.7	Worker	Scenario 1	3.60E-01	7.28E-04	--
4433	642711.0	4168223.7	Worker	Scenario 1	3.63E-01	7.33E-04	--
4434	642761.0	4168223.7	Worker	Scenario 1	3.62E-01	7.32E-04	--
4435	639261.0	4168273.7	Worker	Scenario 1	1.79E-02	3.61E-05	--
4436	639311.0	4168273.7	Worker	Scenario 1	1.83E-02	3.71E-05	--
4437	639361.0	4168273.7	Worker	Scenario 1	1.88E-02	3.81E-05	--
4438	639411.0	4168273.7	Worker	Scenario 1	1.94E-02	3.92E-05	--
4439	642461.0	4168273.7	Worker	Scenario 1	3.08E-01	6.22E-04	--
4440	642511.0	4168273.7	Worker	Scenario 1	3.16E-01	6.38E-04	--
4441	642561.0	4168273.7	Worker	Scenario 1	3.23E-01	6.52E-04	--
4442	642611.0	4168273.7	Worker	Scenario 1	3.28E-01	6.62E-04	--
4443	642661.0	4168273.7	Worker	Scenario 1	3.31E-01	6.69E-04	--
4444	639211.0	4168323.7	Worker	Scenario 1	1.77E-02	3.57E-05	--
4445	639261.0	4168323.7	Worker	Scenario 1	1.81E-02	3.65E-05	--
4446	639311.0	4168323.7	Worker	Scenario 1	1.86E-02	3.76E-05	--
4447	639361.0	4168323.7	Worker	Scenario 1	1.91E-02	3.86E-05	--
4448	642461.0	4168323.7	Worker	Scenario 1	2.89E-01	5.84E-04	--
4449	642511.0	4168323.7	Worker	Scenario 1	2.95E-01	5.96E-04	--
4450	642561.0	4168323.7	Worker	Scenario 1	3.00E-01	6.06E-04	--
4451	642611.0	4168323.7	Worker	Scenario 1	3.04E-01	6.13E-04	--
4452	639111.0	4168373.7	Worker	Scenario 1	1.70E-02	3.44E-05	--
4453	639161.0	4168373.7	Worker	Scenario 1	1.75E-02	3.53E-05	--
4454	639211.0	4168373.7	Worker	Scenario 1	1.79E-02	3.61E-05	--
4455	639261.0	4168373.7	Worker	Scenario 1	1.83E-02	3.71E-05	--
4456	642361.0	4168373.7	Worker	Scenario 1	2.60E-01	5.26E-04	--
4457	642411.0	4168373.7	Worker	Scenario 1	2.66E-01	5.38E-04	--
4458	642461.0	4168373.7	Worker	Scenario 1	2.72E-01	5.49E-04	--
4459	642511.0	4168373.7	Worker	Scenario 1	2.76E-01	5.58E-04	--
4460	642561.0	4168373.7	Worker	Scenario 1	2.80E-01	5.65E-04	--
4461	639061.0	4168423.7	Worker	Scenario 1	1.68E-02	3.40E-05	--
4462	639111.0	4168423.7	Worker	Scenario 1	1.72E-02	3.48E-05	--
4463	639161.0	4168423.7	Worker	Scenario 1	1.77E-02	3.58E-05	--
4464	642261.0	4168423.7	Worker	Scenario 1	2.36E-01	4.76E-04	--
4465	642311.0	4168423.7	Worker	Scenario 1	2.42E-01	4.88E-04	--
4466	642361.0	4168423.7	Worker	Scenario 1	2.47E-01	4.99E-04	--
4467	642411.0	4168423.7	Worker	Scenario 1	2.52E-01	5.08E-04	--
4468	642461.0	4168423.7	Worker	Scenario 1	2.56E-01	5.17E-04	--
4469	642511.0	4168423.7	Worker	Scenario 1	2.59E-01	5.24E-04	--
4470	639011.0	4168473.7	Worker	Scenario 1	1.67E-02	3.36E-05	--
4471	639061.0	4168473.7	Worker	Scenario 1	1.71E-02	3.45E-05	--
4472	639111.0	4168473.7	Worker	Scenario 1	1.75E-02	3.53E-05	--
4473	642161.0	4168473.7	Worker	Scenario 1	2.15E-01	4.35E-04	--
4474	642211.0	4168473.7	Worker	Scenario 1	2.20E-01	4.45E-04	--
4475	642261.0	4168473.7	Worker	Scenario 1	2.26E-01	4.56E-04	--
4476	642311.0	4168473.7	Worker	Scenario 1	2.30E-01	4.65E-04	--
4477	642361.0	4168473.7	Worker	Scenario 1	2.35E-01	4.74E-04	--
4478	642411.0	4168473.7	Worker	Scenario 1	2.38E-01	4.82E-04	--
4479	642461.0	4168473.7	Worker	Scenario 1	2.41E-01	4.88E-04	--
4480	638911.0	4168523.7	Worker	Scenario 1	1.61E-02	3.25E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4481	638961.0	4168523.7	Worker	Scenario 1	1.65E-02	3.33E-05	--
4482	639011.0	4168523.7	Worker	Scenario 1	1.69E-02	3.42E-05	--
4483	642061.0	4168523.7	Worker	Scenario 1	1.99E-01	4.02E-04	--
4484	642111.0	4168523.7	Worker	Scenario 1	2.03E-01	4.11E-04	--
4485	642161.0	4168523.7	Worker	Scenario 1	2.08E-01	4.19E-04	--
4486	642211.0	4168523.7	Worker	Scenario 1	2.12E-01	4.28E-04	--
4487	642261.0	4168523.7	Worker	Scenario 1	2.16E-01	4.36E-04	--
4488	642311.0	4168523.7	Worker	Scenario 1	2.20E-01	4.44E-04	--
4489	642361.0	4168523.7	Worker	Scenario 1	2.23E-01	4.51E-04	--
4490	638861.0	4168573.7	Worker	Scenario 1	1.59E-02	3.21E-05	--
4491	638911.0	4168573.7	Worker	Scenario 1	1.63E-02	3.29E-05	--
4492	638961.0	4168573.7	Worker	Scenario 1	1.68E-02	3.38E-05	--
4493	641911.0	4168573.7	Worker	Scenario 1	1.85E-01	3.74E-04	--
4494	641961.0	4168573.7	Worker	Scenario 1	1.87E-01	3.78E-04	--
4495	642011.0	4168573.7	Worker	Scenario 1	1.90E-01	3.83E-04	--
4496	642061.0	4168573.7	Worker	Scenario 1	1.93E-01	3.90E-04	--
4497	642111.0	4168573.7	Worker	Scenario 1	1.97E-01	3.97E-04	--
4498	642161.0	4168573.7	Worker	Scenario 1	2.00E-01	4.04E-04	--
4499	642211.0	4168573.7	Worker	Scenario 1	2.03E-01	4.11E-04	--
4500	642261.0	4168573.7	Worker	Scenario 1	2.07E-01	4.17E-04	--
4501	638811.0	4168623.7	Worker	Scenario 1	1.58E-02	3.19E-05	--
4502	638861.0	4168623.7	Worker	Scenario 1	1.61E-02	3.25E-05	--
4503	641811.0	4168623.7	Worker	Scenario 1	1.80E-01	3.64E-04	--
4504	641861.0	4168623.7	Worker	Scenario 1	1.80E-01	3.64E-04	--
4505	641911.0	4168623.7	Worker	Scenario 1	1.81E-01	3.65E-04	--
4506	641961.0	4168623.7	Worker	Scenario 1	1.82E-01	3.68E-04	--
4507	642011.0	4168623.7	Worker	Scenario 1	1.85E-01	3.73E-04	--
4508	642061.0	4168623.7	Worker	Scenario 1	1.87E-01	3.78E-04	--
4509	642111.0	4168623.7	Worker	Scenario 1	1.90E-01	3.84E-04	--
4510	638711.0	4168673.7	Worker	Scenario 1	1.54E-02	3.12E-05	--
4511	638761.0	4168673.7	Worker	Scenario 1	1.57E-02	3.18E-05	--
4512	638811.0	4168673.7	Worker	Scenario 1	1.61E-02	3.24E-05	--
4513	641661.0	4168673.7	Worker	Scenario 1	1.87E-01	3.78E-04	--
4514	641711.0	4168673.7	Worker	Scenario 1	1.82E-01	3.67E-04	--
4515	641761.0	4168673.7	Worker	Scenario 1	1.78E-01	3.60E-04	--
4516	641811.0	4168673.7	Worker	Scenario 1	1.77E-01	3.57E-04	--
4517	641861.0	4168673.7	Worker	Scenario 1	1.76E-01	3.56E-04	--
4518	641911.0	4168673.7	Worker	Scenario 1	1.77E-01	3.57E-04	--
4519	641961.0	4168673.7	Worker	Scenario 1	1.78E-01	3.59E-04	--
4520	642011.0	4168673.7	Worker	Scenario 1	1.80E-01	3.63E-04	--
4521	638661.0	4168723.7	Worker	Scenario 1	1.54E-02	3.11E-05	--
4522	638711.0	4168723.7	Worker	Scenario 1	1.57E-02	3.17E-05	--
4523	641511.0	4168723.7	Worker	Scenario 1	2.32E-01	4.69E-04	--
4524	641561.0	4168723.7	Worker	Scenario 1	2.08E-01	4.21E-04	--
4525	641611.0	4168723.7	Worker	Scenario 1	1.94E-01	3.91E-04	--
4526	641661.0	4168723.7	Worker	Scenario 1	1.85E-01	3.73E-04	--
4527	641711.0	4168723.7	Worker	Scenario 1	1.79E-01	3.62E-04	--
4528	641761.0	4168723.7	Worker	Scenario 1	1.76E-01	3.55E-04	--
4529	641811.0	4168723.7	Worker	Scenario 1	1.74E-01	3.51E-04	--
4530	641861.0	4168723.7	Worker	Scenario 1	1.73E-01	3.49E-04	--
4531	641911.0	4168723.7	Worker	Scenario 1	1.73E-01	3.49E-04	--
4532	638561.0	4168773.7	Worker	Scenario 1	1.50E-02	3.04E-05	--
4533	638611.0	4168773.7	Worker	Scenario 1	1.53E-02	3.09E-05	--
4534	638661.0	4168773.7	Worker	Scenario 1	1.56E-02	3.16E-05	--
4535	641461.0	4168773.7	Worker	Scenario 1	2.72E-01	5.50E-04	--
4536	641511.0	4168773.7	Worker	Scenario 1	2.30E-01	4.64E-04	--
4537	641561.0	4168773.7	Worker	Scenario 1	2.06E-01	4.16E-04	--
4538	641611.0	4168773.7	Worker	Scenario 1	1.91E-01	3.87E-04	--
4539	641661.0	4168773.7	Worker	Scenario 1	1.82E-01	3.68E-04	--
4540	641711.0	4168773.7	Worker	Scenario 1	1.76E-01	3.56E-04	--
4541	641761.0	4168773.7	Worker	Scenario 1	1.73E-01	3.49E-04	--
4542	638511.0	4168823.7	Worker	Scenario 1	1.49E-02	3.02E-05	--
4543	638561.0	4168823.7	Worker	Scenario 1	1.52E-02	3.07E-05	--
4544	641461.0	4168823.7	Worker	Scenario 1	2.70E-01	5.44E-04	--
4545	641511.0	4168823.7	Worker	Scenario 1	2.27E-01	4.59E-04	--
4546	641561.0	4168823.7	Worker	Scenario 1	2.04E-01	4.11E-04	--
4547	641611.0	4168823.7	Worker	Scenario 1	1.89E-01	3.82E-04	--
4548	638461.0	4168873.7	Worker	Scenario 1	1.45E-02	2.93E-05	--
4549	638511.0	4168873.7	Worker	Scenario 1	1.50E-02	3.02E-05	--
4550	640211.0	4168873.7	Worker	Scenario 1	4.23E-02	8.53E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4551	641461.0	4168873.7	Worker	Scenario 1	2.67E-01	5.39E-04	--
4552	641511.0	4168873.7	Worker	Scenario 1	2.25E-01	4.55E-04	--
4553	641561.0	4168873.7	Worker	Scenario 1	2.01E-01	4.07E-04	--
4554	638361.0	4168923.7	Worker	Scenario 1	1.39E-02	2.80E-05	--
4555	638411.0	4168923.7	Worker	Scenario 1	1.42E-02	2.88E-05	--
4556	638461.0	4168923.7	Worker	Scenario 1	1.47E-02	2.96E-05	--
4557	640111.0	4168923.7	Worker	Scenario 1	3.98E-02	8.04E-05	--
4558	640161.0	4168923.7	Worker	Scenario 1	4.13E-02	8.34E-05	--
4559	640211.0	4168923.7	Worker	Scenario 1	4.28E-02	8.65E-05	--
4560	640261.0	4168923.7	Worker	Scenario 1	4.44E-02	8.98E-05	--
4561	640311.0	4168923.7	Worker	Scenario 1	4.62E-02	9.33E-05	--
4562	640361.0	4168923.7	Worker	Scenario 1	4.80E-02	9.70E-05	--
4563	641461.0	4168923.7	Worker	Scenario 1	2.65E-01	5.36E-04	--
4564	641511.0	4168923.7	Worker	Scenario 1	2.23E-01	4.51E-04	--
4565	641561.0	4168923.7	Worker	Scenario 1	1.99E-01	4.03E-04	--
4566	638311.0	4168973.7	Worker	Scenario 1	1.37E-02	2.78E-05	--
4567	638361.0	4168973.7	Worker	Scenario 1	1.41E-02	2.85E-05	--
4568	638411.0	4168973.7	Worker	Scenario 1	1.45E-02	2.92E-05	--
4569	640061.0	4168973.7	Worker	Scenario 1	3.88E-02	7.83E-05	--
4570	640111.0	4168973.7	Worker	Scenario 1	4.01E-02	8.10E-05	--
4571	640161.0	4168973.7	Worker	Scenario 1	4.16E-02	8.39E-05	--
4572	640211.0	4168973.7	Worker	Scenario 1	4.31E-02	8.70E-05	--
4573	640261.0	4168973.7	Worker	Scenario 1	4.47E-02	9.03E-05	--
4574	640311.0	4168973.7	Worker	Scenario 1	4.64E-02	9.37E-05	--
4575	640361.0	4168973.7	Worker	Scenario 1	4.82E-02	9.73E-05	--
4576	640411.0	4168973.7	Worker	Scenario 1	5.01E-02	1.01E-04	--
4577	641461.0	4168973.7	Worker	Scenario 1	2.64E-01	5.33E-04	--
4578	641511.0	4168973.7	Worker	Scenario 1	2.22E-01	4.48E-04	--
4579	641561.0	4168973.7	Worker	Scenario 1	1.97E-01	3.99E-04	--
4580	638261.0	4169023.7	Worker	Scenario 1	1.36E-02	2.76E-05	--
4581	638311.0	4169023.7	Worker	Scenario 1	1.40E-02	2.82E-05	--
4582	638361.0	4169023.7	Worker	Scenario 1	1.43E-02	2.90E-05	--
4583	640011.0	4169023.7	Worker	Scenario 1	3.77E-02	7.61E-05	--
4584	640061.0	4169023.7	Worker	Scenario 1	3.90E-02	7.87E-05	--
4585	640111.0	4169023.7	Worker	Scenario 1	4.03E-02	8.15E-05	--
4586	640161.0	4169023.7	Worker	Scenario 1	4.18E-02	8.43E-05	--
4587	640311.0	4169023.7	Worker	Scenario 1	4.66E-02	9.40E-05	--
4588	640361.0	4169023.7	Worker	Scenario 1	4.83E-02	9.76E-05	--
4589	640411.0	4169023.7	Worker	Scenario 1	5.02E-02	1.01E-04	--
4590	641461.0	4169023.7	Worker	Scenario 1	2.62E-01	5.28E-04	--
4591	641511.0	4169023.7	Worker	Scenario 1	2.19E-01	4.42E-04	--
4592	641561.0	4169023.7	Worker	Scenario 1	1.95E-01	3.94E-04	--
4593	638161.0	4169073.7	Worker	Scenario 1	1.32E-02	2.68E-05	--
4594	638211.0	4169073.7	Worker	Scenario 1	1.36E-02	2.74E-05	--
4595	638261.0	4169073.7	Worker	Scenario 1	1.39E-02	2.80E-05	--
4596	639961.0	4169073.7	Worker	Scenario 1	3.67E-02	7.41E-05	--
4597	640011.0	4169073.7	Worker	Scenario 1	3.79E-02	7.66E-05	--
4598	640061.0	4169073.7	Worker	Scenario 1	3.92E-02	7.91E-05	--
4599	640111.0	4169073.7	Worker	Scenario 1	4.05E-02	8.18E-05	--
4600	640311.0	4169073.7	Worker	Scenario 1	4.66E-02	9.42E-05	--
4601	640361.0	4169073.7	Worker	Scenario 1	4.84E-02	9.78E-05	--
4602	640411.0	4169073.7	Worker	Scenario 1	5.02E-02	1.01E-04	--
4603	641461.0	4169073.7	Worker	Scenario 1	2.59E-01	5.23E-04	--
4604	641511.0	4169073.7	Worker	Scenario 1	2.17E-01	4.39E-04	--
4605	641561.0	4169073.7	Worker	Scenario 1	1.93E-01	3.91E-04	--
4606	638161.0	4169123.7	Worker	Scenario 1	1.34E-02	2.70E-05	--
4607	638211.0	4169123.7	Worker	Scenario 1	1.37E-02	2.77E-05	--
4608	639911.0	4169123.7	Worker	Scenario 1	3.57E-02	7.22E-05	--
4609	639961.0	4169123.7	Worker	Scenario 1	3.69E-02	7.45E-05	--
4610	640011.0	4169123.7	Worker	Scenario 1	3.81E-02	7.69E-05	--
4611	640061.0	4169123.7	Worker	Scenario 1	3.93E-02	7.94E-05	--
4612	640311.0	4169123.7	Worker	Scenario 1	4.67E-02	9.43E-05	--
4613	640361.0	4169123.7	Worker	Scenario 1	4.84E-02	9.78E-05	--
4614	640411.0	4169123.7	Worker	Scenario 1	5.02E-02	1.01E-04	--
4615	641461.0	4169123.7	Worker	Scenario 1	2.57E-01	5.20E-04	--
4616	641511.0	4169123.7	Worker	Scenario 1	2.16E-01	4.36E-04	--
4617	641561.0	4169123.7	Worker	Scenario 1	1.91E-01	3.87E-04	--
4618	638061.0	4169173.7	Worker	Scenario 1	1.29E-02	2.60E-05	--
4619	638161.0	4169173.7	Worker	Scenario 1	1.35E-02	2.73E-05	--
4620	639861.0	4169173.7	Worker	Scenario 1	3.48E-02	7.03E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4621	639911.0	4169173.7	Worker	Scenario 1	3.59E-02	7.25E-05	--
4622	639961.0	4169173.7	Worker	Scenario 1	3.70E-02	7.48E-05	--
4623	640011.0	4169173.7	Worker	Scenario 1	3.82E-02	7.72E-05	--
4624	640311.0	4169173.7	Worker	Scenario 1	4.67E-02	9.43E-05	--
4625	640361.0	4169173.7	Worker	Scenario 1	4.84E-02	9.77E-05	--
4626	640411.0	4169173.7	Worker	Scenario 1	5.02E-02	1.01E-04	--
4627	641461.0	4169173.7	Worker	Scenario 1	2.55E-01	5.16E-04	--
4628	641511.0	4169173.7	Worker	Scenario 1	2.14E-01	4.32E-04	--
4629	641561.0	4169173.7	Worker	Scenario 1	1.89E-01	3.82E-04	--
4630	638011.0	4169223.7	Worker	Scenario 1	1.27E-02	2.57E-05	--
4631	638061.0	4169223.7	Worker	Scenario 1	1.30E-02	2.63E-05	--
4632	639661.0	4169223.7	Worker	Scenario 1	3.11E-02	6.28E-05	--
4633	639761.0	4169223.7	Worker	Scenario 1	3.29E-02	6.65E-05	--
4634	639811.0	4169223.7	Worker	Scenario 1	3.39E-02	6.85E-05	--
4635	639861.0	4169223.7	Worker	Scenario 1	3.49E-02	7.06E-05	--
4636	639911.0	4169223.7	Worker	Scenario 1	3.60E-02	7.27E-05	--
4637	639961.0	4169223.7	Worker	Scenario 1	3.71E-02	7.50E-05	--
4638	640311.0	4169223.7	Worker	Scenario 1	4.66E-02	9.42E-05	--
4639	640361.0	4169223.7	Worker	Scenario 1	4.83E-02	9.75E-05	--
4640	640411.0	4169223.7	Worker	Scenario 1	5.01E-02	1.01E-04	--
4641	641461.0	4169223.7	Worker	Scenario 1	2.53E-01	5.11E-04	--
4642	641511.0	4169223.7	Worker	Scenario 1	2.12E-01	4.27E-04	--
4643	641561.0	4169223.7	Worker	Scenario 1	1.87E-01	3.78E-04	--
4644	637961.0	4169273.7	Worker	Scenario 1	1.26E-02	2.55E-05	--
4645	638011.0	4169273.7	Worker	Scenario 1	1.29E-02	2.60E-05	--
4646	638061.0	4169273.7	Worker	Scenario 1	1.32E-02	2.66E-05	--
4647	639611.0	4169273.7	Worker	Scenario 1	3.04E-02	6.15E-05	--
4648	639661.0	4169273.7	Worker	Scenario 1	3.13E-02	6.32E-05	--
4649	639761.0	4169273.7	Worker	Scenario 1	3.31E-02	6.68E-05	--
4650	639811.0	4169273.7	Worker	Scenario 1	3.40E-02	6.87E-05	--
4651	639861.0	4169273.7	Worker	Scenario 1	3.51E-02	7.08E-05	--
4652	639911.0	4169273.7	Worker	Scenario 1	3.61E-02	7.29E-05	--
4653	640311.0	4169273.7	Worker	Scenario 1	4.66E-02	9.40E-05	--
4654	640361.0	4169273.7	Worker	Scenario 1	4.82E-02	9.74E-05	--
4655	640411.0	4169273.7	Worker	Scenario 1	5.00E-02	1.01E-04	--
4656	641461.0	4169273.7	Worker	Scenario 1	2.51E-01	5.07E-04	--
4657	641511.0	4169273.7	Worker	Scenario 1	2.09E-01	4.23E-04	--
4658	641561.0	4169273.7	Worker	Scenario 1	1.85E-01	3.74E-04	--
4659	637911.0	4169323.7	Worker	Scenario 1	1.25E-02	2.53E-05	--
4660	637961.0	4169323.7	Worker	Scenario 1	1.28E-02	2.58E-05	--
4661	638011.0	4169323.7	Worker	Scenario 1	1.30E-02	2.63E-05	--
4662	639611.0	4169323.7	Worker	Scenario 1	3.06E-02	6.18E-05	--
4663	639661.0	4169323.7	Worker	Scenario 1	3.14E-02	6.35E-05	--
4664	639761.0	4169323.7	Worker	Scenario 1	3.32E-02	6.70E-05	--
4665	639811.0	4169323.7	Worker	Scenario 1	3.41E-02	6.89E-05	--
4666	640311.0	4169323.7	Worker	Scenario 1	4.65E-02	9.38E-05	--
4667	640361.0	4169323.7	Worker	Scenario 1	4.81E-02	9.71E-05	--
4668	640411.0	4169323.7	Worker	Scenario 1	4.98E-02	1.01E-04	--
4669	641461.0	4169323.7	Worker	Scenario 1	2.49E-01	5.03E-04	--
4670	641511.0	4169323.7	Worker	Scenario 1	2.07E-01	4.19E-04	--
4671	641561.0	4169323.7	Worker	Scenario 1	1.83E-01	3.69E-04	--
4672	637861.0	4169373.7	Worker	Scenario 1	1.24E-02	2.51E-05	--
4673	637911.0	4169373.7	Worker	Scenario 1	1.27E-02	2.56E-05	--
4674	637961.0	4169373.7	Worker	Scenario 1	1.29E-02	2.61E-05	--
4675	639561.0	4169373.7	Worker	Scenario 1	2.99E-02	6.04E-05	--
4676	639611.0	4169373.7	Worker	Scenario 1	3.07E-02	6.20E-05	--
4677	639661.0	4169373.7	Worker	Scenario 1	3.15E-02	6.37E-05	--
4678	640311.0	4169373.7	Worker	Scenario 1	4.63E-02	9.36E-05	--
4679	640361.0	4169373.7	Worker	Scenario 1	4.79E-02	9.68E-05	--
4680	640411.0	4169373.7	Worker	Scenario 1	4.96E-02	1.00E-04	--
4681	641461.0	4169373.7	Worker	Scenario 1	2.46E-01	4.97E-04	--
4682	641511.0	4169373.7	Worker	Scenario 1	2.05E-01	4.14E-04	--
4683	641561.0	4169373.7	Worker	Scenario 1	1.81E-01	3.65E-04	--
4684	637861.0	4169423.7	Worker	Scenario 1	1.26E-02	2.54E-05	--
4685	637911.0	4169423.7	Worker	Scenario 1	1.28E-02	2.59E-05	--
4686	639511.0	4169423.7	Worker	Scenario 1	2.93E-02	5.91E-05	--
4687	639561.0	4169423.7	Worker	Scenario 1	3.00E-02	6.06E-05	--
4688	639611.0	4169423.7	Worker	Scenario 1	3.08E-02	6.22E-05	--
4689	639661.0	4169423.7	Worker	Scenario 1	3.16E-02	6.39E-05	--
4690	640311.0	4169423.7	Worker	Scenario 1	4.62E-02	9.32E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4691	640361.0	4169423.7	Worker	Scenario 1	4.77E-02	9.64E-05	--
4692	640411.0	4169423.7	Worker	Scenario 1	4.94E-02	9.98E-05	--
4693	640861.0	4169423.7	Worker	Scenario 1	7.27E-02	1.47E-04	--
4694	640911.0	4169423.7	Worker	Scenario 1	7.71E-02	1.56E-04	--
4695	640961.0	4169423.7	Worker	Scenario 1	8.23E-02	1.66E-04	--
4696	641011.0	4169423.7	Worker	Scenario 1	8.86E-02	1.79E-04	--
4697	641061.0	4169423.7	Worker	Scenario 1	9.66E-02	1.95E-04	--
4698	641461.0	4169423.7	Worker	Scenario 1	2.43E-01	4.92E-04	--
4699	641511.0	4169423.7	Worker	Scenario 1	2.03E-01	4.09E-04	--
4700	641561.0	4169423.7	Worker	Scenario 1	1.78E-01	3.60E-04	--
4701	637861.0	4169473.7	Worker	Scenario 1	1.27E-02	2.57E-05	--
4702	639461.0	4169473.7	Worker	Scenario 1	2.86E-02	5.78E-05	--
4703	639511.0	4169473.7	Worker	Scenario 1	2.94E-02	5.93E-05	--
4704	639561.0	4169473.7	Worker	Scenario 1	3.01E-02	6.08E-05	--
4705	639611.0	4169473.7	Worker	Scenario 1	3.09E-02	6.24E-05	--
4706	640311.0	4169473.7	Worker	Scenario 1	4.60E-02	9.29E-05	--
4707	640361.0	4169473.7	Worker	Scenario 1	4.76E-02	9.61E-05	--
4708	640411.0	4169473.7	Worker	Scenario 1	4.92E-02	9.94E-05	--
4709	640811.0	4169473.7	Worker	Scenario 1	6.85E-02	1.38E-04	--
4710	640861.0	4169473.7	Worker	Scenario 1	7.22E-02	1.46E-04	--
4711	640911.0	4169473.7	Worker	Scenario 1	7.66E-02	1.55E-04	--
4712	640961.0	4169473.7	Worker	Scenario 1	8.17E-02	1.65E-04	--
4713	641011.0	4169473.7	Worker	Scenario 1	8.79E-02	1.78E-04	--
4714	641061.0	4169473.7	Worker	Scenario 1	9.59E-02	1.94E-04	--
4715	641111.0	4169473.7	Worker	Scenario 1	1.07E-01	2.15E-04	--
4716	641161.0	4169473.7	Worker	Scenario 1	1.22E-01	2.47E-04	--
4717	641211.0	4169473.7	Worker	Scenario 1	1.49E-01	3.01E-04	--
4718	641361.0	4169473.7	Worker	Scenario 1	5.33E-01	1.08E-03	--
4719	641411.0	4169473.7	Worker	Scenario 1	3.20E-01	6.46E-04	--
4720	641461.0	4169473.7	Worker	Scenario 1	2.40E-01	4.85E-04	--
4721	641511.0	4169473.7	Worker	Scenario 1	2.00E-01	4.04E-04	--
4722	639361.0	4169523.7	Worker	Scenario 1	2.74E-02	5.53E-05	--
4723	639411.0	4169523.7	Worker	Scenario 1	2.80E-02	5.66E-05	--
4724	639461.0	4169523.7	Worker	Scenario 1	2.87E-02	5.80E-05	--
4725	639511.0	4169523.7	Worker	Scenario 1	2.94E-02	5.94E-05	--
4726	639561.0	4169523.7	Worker	Scenario 1	3.02E-02	6.09E-05	--
4727	640311.0	4169523.7	Worker	Scenario 1	4.58E-02	9.24E-05	--
4728	640361.0	4169523.7	Worker	Scenario 1	4.73E-02	9.55E-05	--
4729	640411.0	4169523.7	Worker	Scenario 1	4.89E-02	9.88E-05	--
4730	640461.0	4169523.7	Worker	Scenario 1	5.07E-02	1.02E-04	--
4731	640611.0	4169523.7	Worker	Scenario 1	5.68E-02	1.15E-04	--
4732	640661.0	4169523.7	Worker	Scenario 1	5.92E-02	1.20E-04	--
4733	640711.0	4169523.7	Worker	Scenario 1	6.18E-02	1.25E-04	--
4734	640761.0	4169523.7	Worker	Scenario 1	6.48E-02	1.31E-04	--
4735	640811.0	4169523.7	Worker	Scenario 1	6.80E-02	1.37E-04	--
4736	640861.0	4169523.7	Worker	Scenario 1	7.17E-02	1.45E-04	--
4737	640911.0	4169523.7	Worker	Scenario 1	7.60E-02	1.53E-04	--
4738	640961.0	4169523.7	Worker	Scenario 1	8.10E-02	1.64E-04	--
4739	641011.0	4169523.7	Worker	Scenario 1	8.72E-02	1.76E-04	--
4740	641061.0	4169523.7	Worker	Scenario 1	9.52E-02	1.92E-04	--
4741	641111.0	4169523.7	Worker	Scenario 1	1.06E-01	2.14E-04	--
4742	641161.0	4169523.7	Worker	Scenario 1	1.22E-01	2.46E-04	--
4743	641211.0	4169523.7	Worker	Scenario 1	1.48E-01	3.00E-04	--
4744	641261.0	4169523.7	Worker	Scenario 1	2.07E-01	4.17E-04	--
4745	641361.0	4169523.7	Worker	Scenario 1	5.23E-01	1.06E-03	--
4746	641411.0	4169523.7	Worker	Scenario 1	3.15E-01	6.37E-04	--
4747	641461.0	4169523.7	Worker	Scenario 1	2.37E-01	4.79E-04	--
4748	641511.0	4169523.7	Worker	Scenario 1	1.97E-01	3.98E-04	--
4749	639311.0	4169573.7	Worker	Scenario 1	2.68E-02	5.41E-05	--
4750	639361.0	4169573.7	Worker	Scenario 1	2.74E-02	5.54E-05	--
4751	639411.0	4169573.7	Worker	Scenario 1	2.81E-02	5.67E-05	--
4752	639461.0	4169573.7	Worker	Scenario 1	2.88E-02	5.81E-05	--
4753	639511.0	4169573.7	Worker	Scenario 1	2.95E-02	5.95E-05	--
4754	640361.0	4169573.7	Worker	Scenario 1	4.71E-02	9.51E-05	--
4755	640411.0	4169573.7	Worker	Scenario 1	4.87E-02	9.84E-05	--
4756	640461.0	4169573.7	Worker	Scenario 1	5.04E-02	1.02E-04	--
4757	640511.0	4169573.7	Worker	Scenario 1	5.23E-02	1.06E-04	--
4758	640561.0	4169573.7	Worker	Scenario 1	5.43E-02	1.10E-04	--
4759	640611.0	4169573.7	Worker	Scenario 1	5.65E-02	1.14E-04	--
4760	640661.0	4169573.7	Worker	Scenario 1	5.88E-02	1.19E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4761	640711.0	4169573.7	Worker	Scenario 1	6.14E-02	1.24E-04	--
4762	640761.0	4169573.7	Worker	Scenario 1	6.43E-02	1.30E-04	--
4763	640811.0	4169573.7	Worker	Scenario 1	6.75E-02	1.36E-04	--
4764	640861.0	4169573.7	Worker	Scenario 1	7.11E-02	1.44E-04	--
4765	640911.0	4169573.7	Worker	Scenario 1	7.53E-02	1.52E-04	--
4766	641061.0	4169573.7	Worker	Scenario 1	9.43E-02	1.91E-04	--
4767	641111.0	4169573.7	Worker	Scenario 1	1.05E-01	2.12E-04	--
4768	641161.0	4169573.7	Worker	Scenario 1	1.21E-01	2.44E-04	--
4769	641211.0	4169573.7	Worker	Scenario 1	1.48E-01	2.99E-04	--
4770	641261.0	4169573.7	Worker	Scenario 1	2.07E-01	4.19E-04	--
4771	641361.0	4169573.7	Worker	Scenario 1	5.14E-01	1.04E-03	--
4772	641411.0	4169573.7	Worker	Scenario 1	3.11E-01	6.29E-04	--
4773	641461.0	4169573.7	Worker	Scenario 1	2.33E-01	4.71E-04	--
4774	637961.0	4169623.7	Worker	Scenario 1	1.37E-02	2.78E-05	--
4775	639261.0	4169623.7	Worker	Scenario 1	2.63E-02	5.30E-05	--
4776	639311.0	4169623.7	Worker	Scenario 1	2.69E-02	5.42E-05	--
4777	639361.0	4169623.7	Worker	Scenario 1	2.75E-02	5.55E-05	--
4778	639411.0	4169623.7	Worker	Scenario 1	2.81E-02	5.68E-05	--
4779	639461.0	4169623.7	Worker	Scenario 1	2.88E-02	5.81E-05	--
4780	640361.0	4169623.7	Worker	Scenario 1	4.69E-02	9.46E-05	--
4781	640411.0	4169623.7	Worker	Scenario 1	4.85E-02	9.79E-05	--
4782	640461.0	4169623.7	Worker	Scenario 1	5.02E-02	1.01E-04	--
4783	640511.0	4169623.7	Worker	Scenario 1	5.20E-02	1.05E-04	--
4784	640561.0	4169623.7	Worker	Scenario 1	5.40E-02	1.09E-04	--
4785	640611.0	4169623.7	Worker	Scenario 1	5.61E-02	1.13E-04	--
4786	640661.0	4169623.7	Worker	Scenario 1	5.84E-02	1.18E-04	--
4787	640711.0	4169623.7	Worker	Scenario 1	6.10E-02	1.23E-04	--
4788	640761.0	4169623.7	Worker	Scenario 1	6.38E-02	1.29E-04	--
4789	640811.0	4169623.7	Worker	Scenario 1	6.69E-02	1.35E-04	--
4790	641261.0	4169623.7	Worker	Scenario 1	2.08E-01	4.19E-04	--
4791	637911.0	4169673.7	Worker	Scenario 1	1.36E-02	2.75E-05	--
4792	637961.0	4169673.7	Worker	Scenario 1	1.39E-02	2.81E-05	--
4793	639211.0	4169673.7	Worker	Scenario 1	2.57E-02	5.20E-05	--
4794	639261.0	4169673.7	Worker	Scenario 1	2.63E-02	5.32E-05	--
4795	639311.0	4169673.7	Worker	Scenario 1	2.69E-02	5.43E-05	--
4796	639361.0	4169673.7	Worker	Scenario 1	2.75E-02	5.56E-05	--
4797	640461.0	4169673.7	Worker	Scenario 1	4.99E-02	1.01E-04	--
4798	640511.0	4169673.7	Worker	Scenario 1	5.17E-02	1.04E-04	--
4799	640561.0	4169673.7	Worker	Scenario 1	5.36E-02	1.08E-04	--
4800	640611.0	4169673.7	Worker	Scenario 1	5.57E-02	1.13E-04	--
4801	637861.0	4169723.7	Worker	Scenario 1	1.35E-02	2.73E-05	--
4802	637911.0	4169723.7	Worker	Scenario 1	1.38E-02	2.79E-05	--
4803	637961.0	4169723.7	Worker	Scenario 1	1.41E-02	2.84E-05	--
4804	639161.0	4169723.7	Worker	Scenario 1	2.52E-02	5.10E-05	--
4805	639211.0	4169723.7	Worker	Scenario 1	2.58E-02	5.21E-05	--
4806	639261.0	4169723.7	Worker	Scenario 1	2.64E-02	5.32E-05	--
4807	639311.0	4169723.7	Worker	Scenario 1	2.69E-02	5.44E-05	--
4808	637861.0	4169773.7	Worker	Scenario 1	1.37E-02	2.76E-05	--
4809	637911.0	4169773.7	Worker	Scenario 1	1.40E-02	2.82E-05	--
4810	637961.0	4169773.7	Worker	Scenario 1	1.42E-02	2.87E-05	--
4811	639111.0	4169773.7	Worker	Scenario 1	2.48E-02	5.00E-05	--
4812	639161.0	4169773.7	Worker	Scenario 1	2.53E-02	5.11E-05	--
4813	639211.0	4169773.7	Worker	Scenario 1	2.58E-02	5.22E-05	--
4814	639261.0	4169773.7	Worker	Scenario 1	2.64E-02	5.33E-05	--
4815	637861.0	4169823.7	Worker	Scenario 1	1.38E-02	2.79E-05	--
4816	637911.0	4169823.7	Worker	Scenario 1	1.41E-02	2.85E-05	--
4817	637961.0	4169823.7	Worker	Scenario 1	1.44E-02	2.91E-05	--
4818	639061.0	4169823.7	Worker	Scenario 1	2.43E-02	4.91E-05	--
4819	639111.0	4169823.7	Worker	Scenario 1	2.48E-02	5.01E-05	--
4820	639161.0	4169823.7	Worker	Scenario 1	2.53E-02	5.11E-05	--
4821	639211.0	4169823.7	Worker	Scenario 1	2.58E-02	5.22E-05	--
4822	637861.0	4169873.7	Worker	Scenario 1	1.40E-02	2.83E-05	--
4823	637911.0	4169873.7	Worker	Scenario 1	1.43E-02	2.88E-05	--
4824	637961.0	4169873.7	Worker	Scenario 1	1.46E-02	2.94E-05	--
4825	639011.0	4169873.7	Worker	Scenario 1	2.38E-02	4.82E-05	--
4826	639061.0	4169873.7	Worker	Scenario 1	2.43E-02	4.91E-05	--
4827	639111.0	4169873.7	Worker	Scenario 1	2.48E-02	5.01E-05	--
4828	639161.0	4169873.7	Worker	Scenario 1	2.53E-02	5.12E-05	--
4829	637861.0	4169923.7	Worker	Scenario 1	1.42E-02	2.86E-05	--
4830	637911.0	4169923.7	Worker	Scenario 1	1.44E-02	2.92E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4831	637961.0	4169923.7	Worker	Scenario 1	1.47E-02	2.98E-05	--
4832	638961.0	4169923.7	Worker	Scenario 1	2.34E-02	4.73E-05	--
4833	639011.0	4169923.7	Worker	Scenario 1	2.39E-02	4.82E-05	--
4834	639061.0	4169923.7	Worker	Scenario 1	2.43E-02	4.92E-05	--
4835	639111.0	4169923.7	Worker	Scenario 1	2.48E-02	5.02E-05	--
4836	637861.0	4169973.7	Worker	Scenario 1	1.43E-02	2.89E-05	--
4837	637911.0	4169973.7	Worker	Scenario 1	1.46E-02	2.95E-05	--
4838	637961.0	4169973.7	Worker	Scenario 1	1.49E-02	3.01E-05	--
4839	638911.0	4169973.7	Worker	Scenario 1	2.30E-02	4.65E-05	--
4840	638961.0	4169973.7	Worker	Scenario 1	2.34E-02	4.73E-05	--
4841	639011.0	4169973.7	Worker	Scenario 1	2.39E-02	4.83E-05	--
4842	639061.0	4169973.7	Worker	Scenario 1	2.44E-02	4.92E-05	--
4843	637861.0	4170023.7	Worker	Scenario 1	1.44E-02	2.92E-05	--
4844	637911.0	4170023.7	Worker	Scenario 1	1.47E-02	2.98E-05	--
4845	637961.0	4170023.7	Worker	Scenario 1	1.50E-02	3.04E-05	--
4846	638911.0	4170023.7	Worker	Scenario 1	2.30E-02	4.65E-05	--
4847	638961.0	4170023.7	Worker	Scenario 1	2.35E-02	4.74E-05	--
4848	639011.0	4170023.7	Worker	Scenario 1	2.39E-02	4.83E-05	--
4849	637861.0	4170073.7	Worker	Scenario 1	1.55E-02	3.13E-05	--
4850	637911.0	4170073.7	Worker	Scenario 1	1.57E-02	3.18E-05	--
4851	637961.0	4170073.7	Worker	Scenario 1	1.60E-02	3.24E-05	--
4852	638011.0	4170073.7	Worker	Scenario 1	1.63E-02	3.29E-05	--
4853	638911.0	4170073.7	Worker	Scenario 1	2.30E-02	4.66E-05	--
4854	638961.0	4170073.7	Worker	Scenario 1	2.35E-02	4.74E-05	--
4855	637911.0	4170123.7	Worker	Scenario 1	1.56E-02	3.16E-05	--
4856	637961.0	4170123.7	Worker	Scenario 1	1.60E-02	3.24E-05	--
4857	638011.0	4170123.7	Worker	Scenario 1	1.64E-02	3.32E-05	--
4858	638061.0	4170123.7	Worker	Scenario 1	1.59E-02	3.22E-05	--
4859	638111.0	4170123.7	Worker	Scenario 1	1.62E-02	3.27E-05	--
4860	638161.0	4170123.7	Worker	Scenario 1	1.67E-02	3.37E-05	--
4861	638211.0	4170123.7	Worker	Scenario 1	1.70E-02	3.43E-05	--
4862	638261.0	4170123.7	Worker	Scenario 1	1.74E-02	3.51E-05	--
4863	638311.0	4170123.7	Worker	Scenario 1	1.77E-02	3.58E-05	--
4864	638361.0	4170123.7	Worker	Scenario 1	1.81E-02	3.66E-05	--
4865	638411.0	4170123.7	Worker	Scenario 1	1.85E-02	3.74E-05	--
4866	638461.0	4170123.7	Worker	Scenario 1	1.90E-02	3.84E-05	--
4867	638511.0	4170123.7	Worker	Scenario 1	1.95E-02	3.94E-05	--
4868	638561.0	4170123.7	Worker	Scenario 1	1.99E-02	4.03E-05	--
4869	638611.0	4170123.7	Worker	Scenario 1	2.04E-02	4.12E-05	--
4870	638661.0	4170123.7	Worker	Scenario 1	2.09E-02	4.22E-05	--
4871	638911.0	4170123.7	Worker	Scenario 1	2.31E-02	4.66E-05	--
4872	638961.0	4170123.7	Worker	Scenario 1	2.35E-02	4.74E-05	--
4873	637911.0	4170173.7	Worker	Scenario 1	1.55E-02	3.13E-05	--
4874	637961.0	4170173.7	Worker	Scenario 1	1.59E-02	3.21E-05	--
4875	638011.0	4170173.7	Worker	Scenario 1	1.62E-02	3.27E-05	--
4876	638061.0	4170173.7	Worker	Scenario 1	1.60E-02	3.24E-05	--
4877	638111.0	4170173.7	Worker	Scenario 1	1.63E-02	3.29E-05	--
4878	638161.0	4170173.7	Worker	Scenario 1	1.68E-02	3.39E-05	--
4879	638211.0	4170173.7	Worker	Scenario 1	1.71E-02	3.46E-05	--
4880	638261.0	4170173.7	Worker	Scenario 1	1.75E-02	3.53E-05	--
4881	638311.0	4170173.7	Worker	Scenario 1	1.79E-02	3.61E-05	--
4882	638361.0	4170173.7	Worker	Scenario 1	1.83E-02	3.69E-05	--
4883	638411.0	4170173.7	Worker	Scenario 1	1.87E-02	3.77E-05	--
4884	638461.0	4170173.7	Worker	Scenario 1	1.91E-02	3.86E-05	--
4885	638511.0	4170173.7	Worker	Scenario 1	1.96E-02	3.96E-05	--
4886	638561.0	4170173.7	Worker	Scenario 1	2.01E-02	4.05E-05	--
4887	638611.0	4170173.7	Worker	Scenario 1	2.05E-02	4.15E-05	--
4888	638861.0	4170173.7	Worker	Scenario 1	2.26E-02	4.57E-05	--
4889	638911.0	4170173.7	Worker	Scenario 1	2.30E-02	4.65E-05	--
4890	638961.0	4170173.7	Worker	Scenario 1	2.35E-02	4.74E-05	--
4891	638011.0	4170223.7	Worker	Scenario 1	1.59E-02	3.21E-05	--
4892	638061.0	4170223.7	Worker	Scenario 1	1.61E-02	3.25E-05	--
4893	638111.0	4170223.7	Worker	Scenario 1	1.64E-02	3.31E-05	--
4894	638161.0	4170223.7	Worker	Scenario 1	1.70E-02	3.43E-05	--
4895	638211.0	4170223.7	Worker	Scenario 1	1.73E-02	3.49E-05	--
4896	638261.0	4170223.7	Worker	Scenario 1	1.77E-02	3.57E-05	--
4897	638311.0	4170223.7	Worker	Scenario 1	1.82E-02	3.67E-05	--
4898	638361.0	4170223.7	Worker	Scenario 1	1.86E-02	3.76E-05	--
4899	638411.0	4170223.7	Worker	Scenario 1	1.90E-02	3.83E-05	--
4900	638461.0	4170223.7	Worker	Scenario 1	1.93E-02	3.90E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4901	638511.0	4170223.7	Worker	Scenario 1	1.97E-02	3.99E-05	--
4902	638561.0	4170223.7	Worker	Scenario 1	2.02E-02	4.07E-05	--
4903	638811.0	4170223.7	Worker	Scenario 1	2.22E-02	4.49E-05	--
4904	638861.0	4170223.7	Worker	Scenario 1	2.26E-02	4.57E-05	--
4905	638911.0	4170223.7	Worker	Scenario 1	2.30E-02	4.65E-05	--
4906	638761.0	4170273.7	Worker	Scenario 1	2.19E-02	4.41E-05	--
4907	641536.2	4164448.9	Worker	Scenario 1	5.91E-03	1.19E-05	--
4908	641636.2	4164448.9	Worker	Scenario 1	6.38E-03	1.29E-05	--
4909	641736.2	4164448.9	Worker	Scenario 1	6.35E-03	1.28E-05	--
4910	641836.2	4164448.9	Worker	Scenario 1	6.44E-03	1.30E-05	--
4911	641936.2	4164448.9	Worker	Scenario 1	6.58E-03	1.33E-05	--
4912	642036.2	4164448.9	Worker	Scenario 1	6.73E-03	1.36E-05	--
4913	642136.2	4164448.9	Worker	Scenario 1	6.85E-03	1.38E-05	--
4914	642236.2	4164448.9	Worker	Scenario 1	7.13E-03	1.44E-05	--
4915	642336.2	4164448.9	Worker	Scenario 1	7.37E-03	1.49E-05	--
4916	642436.2	4164448.9	Worker	Scenario 1	7.40E-03	1.49E-05	--
4917	642536.2	4164448.9	Worker	Scenario 1	7.27E-03	1.47E-05	--
4918	642636.2	4164448.9	Worker	Scenario 1	7.42E-03	1.50E-05	--
4919	642736.2	4164448.9	Worker	Scenario 1	7.95E-03	1.61E-05	--
4920	642836.2	4164448.9	Worker	Scenario 1	8.98E-03	1.81E-05	--
4921	642936.2	4164448.9	Worker	Scenario 1	9.17E-03	1.85E-05	--
4922	643036.2	4164448.9	Worker	Scenario 1	9.62E-03	1.94E-05	--
4923	643136.2	4164448.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
4924	643236.2	4164448.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
4925	643336.2	4164448.9	Worker	Scenario 1	1.36E-02	2.74E-05	--
4926	643436.2	4164448.9	Worker	Scenario 1	1.47E-02	2.96E-05	--
4927	643536.2	4164448.9	Worker	Scenario 1	1.55E-02	3.13E-05	--
4928	643636.2	4164448.9	Worker	Scenario 1	1.68E-02	3.39E-05	--
4929	643736.2	4164448.9	Worker	Scenario 1	1.76E-02	3.56E-05	--
4930	643836.2	4164448.9	Worker	Scenario 1	1.86E-02	3.75E-05	--
4931	643936.2	4164448.9	Worker	Scenario 1	1.97E-02	3.98E-05	--
4932	644036.2	4164448.9	Worker	Scenario 1	2.08E-02	4.19E-05	--
4933	644136.2	4164448.9	Worker	Scenario 1	2.15E-02	4.35E-05	--
4934	644336.2	4164448.9	Worker	Scenario 1	2.27E-02	4.58E-05	--
4935	644436.2	4164448.9	Worker	Scenario 1	2.32E-02	4.69E-05	--
4936	644536.2	4164448.9	Worker	Scenario 1	2.32E-02	4.69E-05	--
4937	640936.2	4164548.9	Worker	Scenario 1	5.24E-03	1.06E-05	--
4938	641036.2	4164548.9	Worker	Scenario 1	5.16E-03	1.04E-05	--
4939	641136.2	4164548.9	Worker	Scenario 1	5.30E-03	1.07E-05	--
4940	641236.2	4164548.9	Worker	Scenario 1	5.44E-03	1.10E-05	--
4941	641336.2	4164548.9	Worker	Scenario 1	5.61E-03	1.13E-05	--
4942	641436.2	4164548.9	Worker	Scenario 1	5.68E-03	1.15E-05	--
4943	641536.2	4164548.9	Worker	Scenario 1	5.87E-03	1.19E-05	--
4944	641636.2	4164548.9	Worker	Scenario 1	6.17E-03	1.25E-05	--
4945	641736.2	4164548.9	Worker	Scenario 1	6.64E-03	1.34E-05	--
4946	641836.2	4164548.9	Worker	Scenario 1	7.16E-03	1.45E-05	--
4947	641936.2	4164548.9	Worker	Scenario 1	7.19E-03	1.45E-05	--
4948	642036.2	4164548.9	Worker	Scenario 1	7.02E-03	1.42E-05	--
4949	642136.2	4164548.9	Worker	Scenario 1	7.21E-03	1.46E-05	--
4950	642236.2	4164548.9	Worker	Scenario 1	7.23E-03	1.46E-05	--
4951	642336.2	4164548.9	Worker	Scenario 1	7.47E-03	1.51E-05	--
4952	642436.2	4164548.9	Worker	Scenario 1	8.51E-03	1.72E-05	--
4953	642536.2	4164548.9	Worker	Scenario 1	7.69E-03	1.55E-05	--
4954	642636.2	4164548.9	Worker	Scenario 1	7.78E-03	1.57E-05	--
4955	642736.2	4164548.9	Worker	Scenario 1	7.99E-03	1.61E-05	--
4956	642836.2	4164548.9	Worker	Scenario 1	9.10E-03	1.84E-05	--
4957	642936.2	4164548.9	Worker	Scenario 1	1.03E-02	2.07E-05	--
4958	643036.2	4164548.9	Worker	Scenario 1	1.02E-02	2.06E-05	--
4959	643136.2	4164548.9	Worker	Scenario 1	1.12E-02	2.27E-05	--
4960	643236.2	4164548.9	Worker	Scenario 1	1.27E-02	2.57E-05	--
4961	643336.2	4164548.9	Worker	Scenario 1	1.42E-02	2.87E-05	--
4962	643436.2	4164548.9	Worker	Scenario 1	1.53E-02	3.09E-05	--
4963	643536.2	4164548.9	Worker	Scenario 1	1.66E-02	3.35E-05	--
4964	643636.2	4164548.9	Worker	Scenario 1	1.77E-02	3.57E-05	--
4965	643736.2	4164548.9	Worker	Scenario 1	1.88E-02	3.80E-05	--
4966	643836.2	4164548.9	Worker	Scenario 1	1.96E-02	3.96E-05	--
4967	643936.2	4164548.9	Worker	Scenario 1	2.05E-02	4.14E-05	--
4968	644036.2	4164548.9	Worker	Scenario 1	2.20E-02	4.45E-05	--
4969	644236.2	4164548.9	Worker	Scenario 1	2.23E-02	4.51E-05	--
4970	644336.2	4164548.9	Worker	Scenario 1	2.34E-02	4.72E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4971	644436.2	4164548.9	Worker	Scenario 1	2.40E-02	4.85E-05	--
4972	644536.2	4164548.9	Worker	Scenario 1	2.47E-02	4.99E-05	--
4973	644636.2	4164548.9	Worker	Scenario 1	2.54E-02	5.13E-05	--
4974	644736.2	4164548.9	Worker	Scenario 1	2.61E-02	5.28E-05	--
4975	644836.2	4164548.9	Worker	Scenario 1	2.67E-02	5.40E-05	--
4976	644936.2	4164548.9	Worker	Scenario 1	2.71E-02	5.47E-05	--
4977	645036.2	4164548.9	Worker	Scenario 1	2.82E-02	5.70E-05	--
4978	640536.2	4164648.9	Worker	Scenario 1	4.71E-03	9.52E-06	--
4979	640636.2	4164648.9	Worker	Scenario 1	4.97E-03	1.00E-05	--
4980	640736.2	4164648.9	Worker	Scenario 1	4.96E-03	1.00E-05	--
4981	640836.2	4164648.9	Worker	Scenario 1	5.14E-03	1.04E-05	--
4982	640936.2	4164648.9	Worker	Scenario 1	5.36E-03	1.08E-05	--
4983	641036.2	4164648.9	Worker	Scenario 1	5.30E-03	1.07E-05	--
4984	641136.2	4164648.9	Worker	Scenario 1	5.45E-03	1.10E-05	--
4985	641236.2	4164648.9	Worker	Scenario 1	5.60E-03	1.13E-05	--
4986	641336.2	4164648.9	Worker	Scenario 1	5.89E-03	1.19E-05	--
4987	641436.2	4164648.9	Worker	Scenario 1	5.87E-03	1.19E-05	--
4988	641536.2	4164648.9	Worker	Scenario 1	6.03E-03	1.22E-05	--
4989	641636.2	4164648.9	Worker	Scenario 1	6.25E-03	1.26E-05	--
4990	641736.2	4164648.9	Worker	Scenario 1	6.50E-03	1.31E-05	--
4991	641836.2	4164648.9	Worker	Scenario 1	7.16E-03	1.45E-05	--
4992	641936.2	4164648.9	Worker	Scenario 1	7.94E-03	1.60E-05	--
4993	642036.2	4164648.9	Worker	Scenario 1	7.57E-03	1.53E-05	--
4994	642136.2	4164648.9	Worker	Scenario 1	7.48E-03	1.51E-05	--
4995	642236.2	4164648.9	Worker	Scenario 1	7.58E-03	1.53E-05	--
4996	642336.2	4164648.9	Worker	Scenario 1	7.70E-03	1.56E-05	--
4997	642436.2	4164648.9	Worker	Scenario 1	8.19E-03	1.65E-05	--
4998	642536.2	4164648.9	Worker	Scenario 1	9.06E-03	1.83E-05	--
4999	642636.2	4164648.9	Worker	Scenario 1	8.29E-03	1.68E-05	--
5000	642736.2	4164648.9	Worker	Scenario 1	8.38E-03	1.69E-05	--
5001	642836.2	4164648.9	Worker	Scenario 1	9.19E-03	1.86E-05	--
5002	642936.2	4164648.9	Worker	Scenario 1	1.05E-02	2.13E-05	--
5003	643036.2	4164648.9	Worker	Scenario 1	1.13E-02	2.28E-05	--
5004	643136.2	4164648.9	Worker	Scenario 1	1.17E-02	2.36E-05	--
5005	643236.2	4164648.9	Worker	Scenario 1	1.34E-02	2.72E-05	--
5006	643336.2	4164648.9	Worker	Scenario 1	1.47E-02	2.96E-05	--
5007	643436.2	4164648.9	Worker	Scenario 1	1.62E-02	3.28E-05	--
5008	643536.2	4164648.9	Worker	Scenario 1	1.76E-02	3.56E-05	--
5009	643636.2	4164648.9	Worker	Scenario 1	1.88E-02	3.79E-05	--
5010	643736.2	4164648.9	Worker	Scenario 1	2.00E-02	4.04E-05	--
5011	643836.2	4164648.9	Worker	Scenario 1	2.09E-02	4.22E-05	--
5012	644136.2	4164648.9	Worker	Scenario 1	2.34E-02	4.72E-05	--
5013	644236.2	4164648.9	Worker	Scenario 1	2.40E-02	4.86E-05	--
5014	644336.2	4164648.9	Worker	Scenario 1	2.49E-02	5.03E-05	--
5015	644436.2	4164648.9	Worker	Scenario 1	2.56E-02	5.18E-05	--
5016	644536.2	4164648.9	Worker	Scenario 1	2.63E-02	5.32E-05	--
5017	644736.2	4164648.9	Worker	Scenario 1	2.80E-02	5.65E-05	--
5018	644836.2	4164648.9	Worker	Scenario 1	2.88E-02	5.82E-05	--
5019	644936.2	4164648.9	Worker	Scenario 1	2.95E-02	5.95E-05	--
5020	645036.2	4164648.9	Worker	Scenario 1	3.01E-02	6.07E-05	--
5021	645136.2	4164648.9	Worker	Scenario 1	3.03E-02	6.12E-05	--
5022	645236.2	4164648.9	Worker	Scenario 1	3.10E-02	6.26E-05	--
5023	640336.2	4164748.9	Worker	Scenario 1	5.91E-03	1.19E-05	--
5024	640436.2	4164748.9	Worker	Scenario 1	4.95E-03	9.99E-06	--
5025	640536.2	4164748.9	Worker	Scenario 1	4.84E-03	9.78E-06	--
5026	640636.2	4164748.9	Worker	Scenario 1	5.04E-03	1.02E-05	--
5027	640736.2	4164748.9	Worker	Scenario 1	5.11E-03	1.03E-05	--
5028	640836.2	4164748.9	Worker	Scenario 1	5.26E-03	1.06E-05	--
5029	640936.2	4164748.9	Worker	Scenario 1	5.50E-03	1.11E-05	--
5030	641036.2	4164748.9	Worker	Scenario 1	5.45E-03	1.10E-05	--
5031	641136.2	4164748.9	Worker	Scenario 1	5.60E-03	1.13E-05	--
5032	641236.2	4164748.9	Worker	Scenario 1	5.80E-03	1.17E-05	--
5033	641336.2	4164748.9	Worker	Scenario 1	6.07E-03	1.23E-05	--
5034	641436.2	4164748.9	Worker	Scenario 1	6.07E-03	1.23E-05	--
5035	641536.2	4164748.9	Worker	Scenario 1	6.27E-03	1.27E-05	--
5036	641636.2	4164748.9	Worker	Scenario 1	6.49E-03	1.31E-05	--
5037	641736.2	4164748.9	Worker	Scenario 1	6.71E-03	1.35E-05	--
5038	641836.2	4164748.9	Worker	Scenario 1	7.06E-03	1.43E-05	--
5039	641936.2	4164748.9	Worker	Scenario 1	7.90E-03	1.60E-05	--
5040	642036.2	4164748.9	Worker	Scenario 1	7.86E-03	1.59E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5041	642136.2	4164748.9	Worker	Scenario 1	7.75E-03	1.57E-05	--
5042	642236.2	4164748.9	Worker	Scenario 1	8.13E-03	1.64E-05	--
5043	642336.2	4164748.9	Worker	Scenario 1	8.19E-03	1.65E-05	--
5044	642436.2	4164748.9	Worker	Scenario 1	8.27E-03	1.67E-05	--
5045	642536.2	4164748.9	Worker	Scenario 1	9.37E-03	1.89E-05	--
5046	642636.2	4164748.9	Worker	Scenario 1	8.96E-03	1.81E-05	--
5047	642736.2	4164748.9	Worker	Scenario 1	8.87E-03	1.79E-05	--
5048	642836.2	4164748.9	Worker	Scenario 1	9.24E-03	1.87E-05	--
5049	642936.2	4164748.9	Worker	Scenario 1	1.01E-02	2.04E-05	--
5050	643036.2	4164748.9	Worker	Scenario 1	1.20E-02	2.43E-05	--
5051	643136.2	4164748.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
5052	643236.2	4164748.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
5053	643336.2	4164748.9	Worker	Scenario 1	1.57E-02	3.16E-05	--
5054	643436.2	4164748.9	Worker	Scenario 1	1.70E-02	3.43E-05	--
5055	643536.2	4164748.9	Worker	Scenario 1	1.86E-02	3.76E-05	--
5056	643636.2	4164748.9	Worker	Scenario 1	2.01E-02	4.05E-05	--
5057	643736.2	4164748.9	Worker	Scenario 1	2.12E-02	4.28E-05	--
5058	644036.2	4164748.9	Worker	Scenario 1	2.40E-02	4.85E-05	--
5059	644136.2	4164748.9	Worker	Scenario 1	2.51E-02	5.07E-05	--
5060	644236.2	4164748.9	Worker	Scenario 1	2.58E-02	5.22E-05	--
5061	644336.2	4164748.9	Worker	Scenario 1	2.66E-02	5.37E-05	--
5062	644436.2	4164748.9	Worker	Scenario 1	2.74E-02	5.54E-05	--
5063	644536.2	4164748.9	Worker	Scenario 1	2.83E-02	5.72E-05	--
5064	644736.2	4164748.9	Worker	Scenario 1	3.02E-02	6.09E-05	--
5065	644836.2	4164748.9	Worker	Scenario 1	3.09E-02	6.24E-05	--
5066	644936.2	4164748.9	Worker	Scenario 1	3.16E-02	6.37E-05	--
5067	645036.2	4164748.9	Worker	Scenario 1	3.15E-02	6.37E-05	--
5068	645136.2	4164748.9	Worker	Scenario 1	3.25E-02	6.57E-05	--
5069	645236.2	4164748.9	Worker	Scenario 1	3.28E-02	6.62E-05	--
5070	645336.2	4164748.9	Worker	Scenario 1	3.28E-02	6.63E-05	--
5071	645436.2	4164748.9	Worker	Scenario 1	3.32E-02	6.71E-05	--
5072	640136.2	4164848.9	Worker	Scenario 1	4.56E-03	9.21E-06	--
5073	640236.2	4164848.9	Worker	Scenario 1	5.14E-03	1.04E-05	--
5074	640336.2	4164848.9	Worker	Scenario 1	6.19E-03	1.25E-05	--
5075	640436.2	4164848.9	Worker	Scenario 1	5.09E-03	1.03E-05	--
5076	640536.2	4164848.9	Worker	Scenario 1	4.91E-03	9.92E-06	--
5077	640636.2	4164848.9	Worker	Scenario 1	5.12E-03	1.03E-05	--
5078	640736.2	4164848.9	Worker	Scenario 1	5.39E-03	1.09E-05	--
5079	640836.2	4164848.9	Worker	Scenario 1	5.42E-03	1.09E-05	--
5080	640936.2	4164848.9	Worker	Scenario 1	5.70E-03	1.15E-05	--
5081	641036.2	4164848.9	Worker	Scenario 1	5.62E-03	1.13E-05	--
5082	641136.2	4164848.9	Worker	Scenario 1	5.78E-03	1.17E-05	--
5083	641236.2	4164848.9	Worker	Scenario 1	6.00E-03	1.21E-05	--
5084	641336.2	4164848.9	Worker	Scenario 1	6.26E-03	1.26E-05	--
5085	641436.2	4164848.9	Worker	Scenario 1	6.33E-03	1.28E-05	--
5086	641536.2	4164848.9	Worker	Scenario 1	6.49E-03	1.31E-05	--
5087	641636.2	4164848.9	Worker	Scenario 1	6.68E-03	1.35E-05	--
5088	641736.2	4164848.9	Worker	Scenario 1	7.04E-03	1.42E-05	--
5089	641836.2	4164848.9	Worker	Scenario 1	7.33E-03	1.48E-05	--
5090	641936.2	4164848.9	Worker	Scenario 1	7.84E-03	1.58E-05	--
5091	642036.2	4164848.9	Worker	Scenario 1	9.33E-03	1.88E-05	--
5092	642136.2	4164848.9	Worker	Scenario 1	8.15E-03	1.65E-05	--
5093	642236.2	4164848.9	Worker	Scenario 1	8.37E-03	1.69E-05	--
5094	642336.2	4164848.9	Worker	Scenario 1	8.98E-03	1.81E-05	--
5095	642436.2	4164848.9	Worker	Scenario 1	8.72E-03	1.76E-05	--
5096	642536.2	4164848.9	Worker	Scenario 1	9.19E-03	1.86E-05	--
5097	642636.2	4164848.9	Worker	Scenario 1	9.86E-03	1.99E-05	--
5098	642736.2	4164848.9	Worker	Scenario 1	9.39E-03	1.90E-05	--
5099	642836.2	4164848.9	Worker	Scenario 1	9.76E-03	1.97E-05	--
5100	642936.2	4164848.9	Worker	Scenario 1	1.04E-02	2.11E-05	--
5101	643036.2	4164848.9	Worker	Scenario 1	1.13E-02	2.28E-05	--
5102	643136.2	4164848.9	Worker	Scenario 1	1.46E-02	2.95E-05	--
5103	643236.2	4164848.9	Worker	Scenario 1	1.52E-02	3.08E-05	--
5104	643336.2	4164848.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
5105	643436.2	4164848.9	Worker	Scenario 1	1.84E-02	3.72E-05	--
5106	643536.2	4164848.9	Worker	Scenario 1	1.97E-02	3.98E-05	--
5107	643636.2	4164848.9	Worker	Scenario 1	2.13E-02	4.30E-05	--
5108	643936.2	4164848.9	Worker	Scenario 1	2.49E-02	5.03E-05	--
5109	644036.2	4164848.9	Worker	Scenario 1	2.59E-02	5.24E-05	--
5110	644136.2	4164848.9	Worker	Scenario 1	2.69E-02	5.44E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5111	644236.2	4164848.9	Worker	Scenario 1	2.77E-02	5.59E-05	--
5112	644336.2	4164848.9	Worker	Scenario 1	2.85E-02	5.75E-05	--
5113	644436.2	4164848.9	Worker	Scenario 1	2.94E-02	5.95E-05	--
5114	644536.2	4164848.9	Worker	Scenario 1	3.04E-02	6.14E-05	--
5115	644736.2	4164848.9	Worker	Scenario 1	3.24E-02	6.55E-05	--
5116	644836.2	4164848.9	Worker	Scenario 1	3.29E-02	6.64E-05	--
5117	644936.2	4164848.9	Worker	Scenario 1	3.35E-02	6.77E-05	--
5118	645036.2	4164848.9	Worker	Scenario 1	3.43E-02	6.93E-05	--
5119	645136.2	4164848.9	Worker	Scenario 1	3.46E-02	6.98E-05	--
5120	645236.2	4164848.9	Worker	Scenario 1	3.47E-02	7.01E-05	--
5121	645336.2	4164848.9	Worker	Scenario 1	3.46E-02	6.98E-05	--
5122	645436.2	4164848.9	Worker	Scenario 1	3.43E-02	6.93E-05	--
5123	645536.2	4164848.9	Worker	Scenario 1	3.42E-02	6.90E-05	--
5124	645636.2	4164848.9	Worker	Scenario 1	3.54E-02	7.16E-05	--
5125	645736.2	4164848.9	Worker	Scenario 1	3.50E-02	7.07E-05	--
5126	640036.2	4164948.9	Worker	Scenario 1	4.41E-03	8.92E-06	--
5127	640136.2	4164948.9	Worker	Scenario 1	4.77E-03	9.63E-06	--
5128	640236.2	4164948.9	Worker	Scenario 1	5.37E-03	1.08E-05	--
5129	640336.2	4164948.9	Worker	Scenario 1	6.46E-03	1.30E-05	--
5130	640436.2	4164948.9	Worker	Scenario 1	5.57E-03	1.13E-05	--
5131	640536.2	4164948.9	Worker	Scenario 1	5.04E-03	1.02E-05	--
5132	640636.2	4164948.9	Worker	Scenario 1	5.17E-03	1.04E-05	--
5133	640736.2	4164948.9	Worker	Scenario 1	5.36E-03	1.08E-05	--
5134	640836.2	4164948.9	Worker	Scenario 1	5.73E-03	1.16E-05	--
5135	640936.2	4164948.9	Worker	Scenario 1	6.00E-03	1.21E-05	--
5136	641036.2	4164948.9	Worker	Scenario 1	5.80E-03	1.17E-05	--
5137	641136.2	4164948.9	Worker	Scenario 1	5.95E-03	1.20E-05	--
5138	641236.2	4164948.9	Worker	Scenario 1	6.23E-03	1.26E-05	--
5139	641336.2	4164948.9	Worker	Scenario 1	6.46E-03	1.31E-05	--
5140	641436.2	4164948.9	Worker	Scenario 1	6.64E-03	1.34E-05	--
5141	641536.2	4164948.9	Worker	Scenario 1	6.74E-03	1.36E-05	--
5142	641636.2	4164948.9	Worker	Scenario 1	6.91E-03	1.40E-05	--
5143	641736.2	4164948.9	Worker	Scenario 1	7.26E-03	1.47E-05	--
5144	641836.2	4164948.9	Worker	Scenario 1	7.94E-03	1.60E-05	--
5145	641936.2	4164948.9	Worker	Scenario 1	8.01E-03	1.62E-05	--
5146	642036.2	4164948.9	Worker	Scenario 1	9.74E-03	1.97E-05	--
5147	642136.2	4164948.9	Worker	Scenario 1	8.56E-03	1.73E-05	--
5148	642236.2	4164948.9	Worker	Scenario 1	8.71E-03	1.76E-05	--
5149	642336.2	4164948.9	Worker	Scenario 1	9.27E-03	1.87E-05	--
5150	642436.2	4164948.9	Worker	Scenario 1	9.80E-03	1.98E-05	--
5151	642536.2	4164948.9	Worker	Scenario 1	9.84E-03	1.99E-05	--
5152	642636.2	4164948.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
5153	642736.2	4164948.9	Worker	Scenario 1	1.03E-02	2.07E-05	--
5154	642836.2	4164948.9	Worker	Scenario 1	1.03E-02	2.08E-05	--
5155	642936.2	4164948.9	Worker	Scenario 1	1.10E-02	2.23E-05	--
5156	643036.2	4164948.9	Worker	Scenario 1	1.18E-02	2.39E-05	--
5157	643136.2	4164948.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
5158	643236.2	4164948.9	Worker	Scenario 1	1.67E-02	3.37E-05	--
5159	643336.2	4164948.9	Worker	Scenario 1	1.87E-02	3.77E-05	--
5160	643436.2	4164948.9	Worker	Scenario 1	2.00E-02	4.04E-05	--
5161	643536.2	4164948.9	Worker	Scenario 1	2.14E-02	4.33E-05	--
5162	643736.2	4164948.9	Worker	Scenario 1	2.41E-02	4.86E-05	--
5163	643836.2	4164948.9	Worker	Scenario 1	2.57E-02	5.20E-05	--
5164	643936.2	4164948.9	Worker	Scenario 1	2.70E-02	5.46E-05	--
5165	644036.2	4164948.9	Worker	Scenario 1	2.81E-02	5.68E-05	--
5166	644136.2	4164948.9	Worker	Scenario 1	2.88E-02	5.82E-05	--
5167	644236.2	4164948.9	Worker	Scenario 1	2.97E-02	6.00E-05	--
5168	644336.2	4164948.9	Worker	Scenario 1	3.08E-02	6.21E-05	--
5169	644436.2	4164948.9	Worker	Scenario 1	3.18E-02	6.42E-05	--
5170	644536.2	4164948.9	Worker	Scenario 1	3.29E-02	6.65E-05	--
5171	644736.2	4164948.9	Worker	Scenario 1	3.49E-02	7.05E-05	--
5172	644836.2	4164948.9	Worker	Scenario 1	3.57E-02	7.21E-05	--
5173	644936.2	4164948.9	Worker	Scenario 1	3.51E-02	7.10E-05	--
5174	645036.2	4164948.9	Worker	Scenario 1	3.65E-02	7.38E-05	--
5175	645136.2	4164948.9	Worker	Scenario 1	3.68E-02	7.43E-05	--
5176	645236.2	4164948.9	Worker	Scenario 1	3.65E-02	7.38E-05	--
5177	645336.2	4164948.9	Worker	Scenario 1	3.65E-02	7.37E-05	--
5178	645436.2	4164948.9	Worker	Scenario 1	3.62E-02	7.30E-05	--
5179	645536.2	4164948.9	Worker	Scenario 1	3.76E-02	7.59E-05	--
5180	645636.2	4164948.9	Worker	Scenario 1	3.71E-02	7.49E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5181	645736.2	4164948.9	Worker	Scenario 1	3.65E-02	7.37E-05	--
5182	645836.2	4164948.9	Worker	Scenario 1	3.60E-02	7.27E-05	--
5183	639836.2	4165048.9	Worker	Scenario 1	4.48E-03	9.05E-06	--
5184	639936.2	4165048.9	Worker	Scenario 1	4.42E-03	8.92E-06	--
5185	640036.2	4165048.9	Worker	Scenario 1	4.60E-03	9.28E-06	--
5186	640136.2	4165048.9	Worker	Scenario 1	4.74E-03	9.58E-06	--
5187	640236.2	4165048.9	Worker	Scenario 1	5.14E-03	1.04E-05	--
5188	640336.2	4165048.9	Worker	Scenario 1	6.22E-03	1.26E-05	--
5189	640436.2	4165048.9	Worker	Scenario 1	6.71E-03	1.35E-05	--
5190	640536.2	4165048.9	Worker	Scenario 1	5.23E-03	1.06E-05	--
5191	640636.2	4165048.9	Worker	Scenario 1	5.35E-03	1.08E-05	--
5192	640736.2	4165048.9	Worker	Scenario 1	5.44E-03	1.10E-05	--
5193	640836.2	4165048.9	Worker	Scenario 1	5.68E-03	1.15E-05	--
5194	640936.2	4165048.9	Worker	Scenario 1	6.26E-03	1.26E-05	--
5195	641036.2	4165048.9	Worker	Scenario 1	5.96E-03	1.20E-05	--
5196	641136.2	4165048.9	Worker	Scenario 1	6.13E-03	1.24E-05	--
5197	641236.2	4165048.9	Worker	Scenario 1	6.47E-03	1.31E-05	--
5198	641336.2	4165048.9	Worker	Scenario 1	6.59E-03	1.33E-05	--
5199	641436.2	4165048.9	Worker	Scenario 1	7.24E-03	1.46E-05	--
5200	641536.2	4165048.9	Worker	Scenario 1	7.24E-03	1.46E-05	--
5201	641636.2	4165048.9	Worker	Scenario 1	7.25E-03	1.46E-05	--
5202	641736.2	4165048.9	Worker	Scenario 1	7.48E-03	1.51E-05	--
5203	641836.2	4165048.9	Worker	Scenario 1	7.88E-03	1.59E-05	--
5204	641936.2	4165048.9	Worker	Scenario 1	9.07E-03	1.83E-05	--
5205	642036.2	4165048.9	Worker	Scenario 1	9.36E-03	1.89E-05	--
5206	642136.2	4165048.9	Worker	Scenario 1	9.74E-03	1.97E-05	--
5207	642236.2	4165048.9	Worker	Scenario 1	9.20E-03	1.86E-05	--
5208	642336.2	4165048.9	Worker	Scenario 1	9.53E-03	1.93E-05	--
5209	642436.2	4165048.9	Worker	Scenario 1	1.00E-02	2.02E-05	--
5210	642536.2	4165048.9	Worker	Scenario 1	1.19E-02	2.40E-05	--
5211	642636.2	4165048.9	Worker	Scenario 1	1.29E-02	2.61E-05	--
5212	642736.2	4165048.9	Worker	Scenario 1	1.17E-02	2.36E-05	--
5213	642836.2	4165048.9	Worker	Scenario 1	1.11E-02	2.24E-05	--
5214	642936.2	4165048.9	Worker	Scenario 1	1.18E-02	2.38E-05	--
5215	643036.2	4165048.9	Worker	Scenario 1	1.42E-02	2.86E-05	--
5216	643136.2	4165048.9	Worker	Scenario 1	1.63E-02	3.29E-05	--
5217	643236.2	4165048.9	Worker	Scenario 1	1.96E-02	3.96E-05	--
5218	643336.2	4165048.9	Worker	Scenario 1	2.05E-02	4.15E-05	--
5219	643436.2	4165048.9	Worker	Scenario 1	2.22E-02	4.48E-05	--
5220	643636.2	4165048.9	Worker	Scenario 1	2.48E-02	5.02E-05	--
5221	643736.2	4165048.9	Worker	Scenario 1	2.64E-02	5.32E-05	--
5222	643836.2	4165048.9	Worker	Scenario 1	2.83E-02	5.71E-05	--
5223	643936.2	4165048.9	Worker	Scenario 1	2.95E-02	5.95E-05	--
5224	644036.2	4165048.9	Worker	Scenario 1	3.03E-02	6.11E-05	--
5225	644136.2	4165048.9	Worker	Scenario 1	3.11E-02	6.29E-05	--
5226	644236.2	4165048.9	Worker	Scenario 1	3.21E-02	6.48E-05	--
5227	644336.2	4165048.9	Worker	Scenario 1	3.33E-02	6.72E-05	--
5228	644436.2	4165048.9	Worker	Scenario 1	3.45E-02	6.96E-05	--
5229	644536.2	4165048.9	Worker	Scenario 1	3.56E-02	7.19E-05	--
5230	644736.2	4165048.9	Worker	Scenario 1	3.77E-02	7.62E-05	--
5231	644836.2	4165048.9	Worker	Scenario 1	3.85E-02	7.77E-05	--
5232	644936.2	4165048.9	Worker	Scenario 1	3.89E-02	7.87E-05	--
5233	645036.2	4165048.9	Worker	Scenario 1	3.92E-02	7.91E-05	--
5234	645136.2	4165048.9	Worker	Scenario 1	3.91E-02	7.89E-05	--
5235	645236.2	4165048.9	Worker	Scenario 1	3.87E-02	7.81E-05	--
5236	645336.2	4165048.9	Worker	Scenario 1	4.03E-02	8.13E-05	--
5237	645436.2	4165048.9	Worker	Scenario 1	3.99E-02	8.06E-05	--
5238	645536.2	4165048.9	Worker	Scenario 1	3.93E-02	7.95E-05	--
5239	645636.2	4165048.9	Worker	Scenario 1	3.88E-02	7.83E-05	--
5240	645736.2	4165048.9	Worker	Scenario 1	3.82E-02	7.71E-05	--
5241	646036.2	4165048.9	Worker	Scenario 1	3.55E-02	7.17E-05	--
5242	639736.2	4165148.9	Worker	Scenario 1	4.47E-03	9.03E-06	--
5243	639836.2	4165148.9	Worker	Scenario 1	4.65E-03	9.39E-06	--
5244	639936.2	4165148.9	Worker	Scenario 1	4.54E-03	9.17E-06	--
5245	640036.2	4165148.9	Worker	Scenario 1	4.65E-03	9.40E-06	--
5246	640136.2	4165148.9	Worker	Scenario 1	4.86E-03	9.82E-06	--
5247	640236.2	4165148.9	Worker	Scenario 1	5.05E-03	1.02E-05	--
5248	640336.2	4165148.9	Worker	Scenario 1	5.92E-03	1.20E-05	--
5249	640436.2	4165148.9	Worker	Scenario 1	7.37E-03	1.49E-05	--
5250	640536.2	4165148.9	Worker	Scenario 1	5.54E-03	1.12E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5251	640636.2	4165148.9	Worker	Scenario 1	5.58E-03	1.13E-05	--
5252	640736.2	4165148.9	Worker	Scenario 1	5.58E-03	1.13E-05	--
5253	640836.2	4165148.9	Worker	Scenario 1	5.80E-03	1.17E-05	--
5254	640936.2	4165148.9	Worker	Scenario 1	6.48E-03	1.31E-05	--
5255	641036.2	4165148.9	Worker	Scenario 1	6.13E-03	1.24E-05	--
5256	641136.2	4165148.9	Worker	Scenario 1	6.32E-03	1.28E-05	--
5257	641236.2	4165148.9	Worker	Scenario 1	6.58E-03	1.33E-05	--
5258	641336.2	4165148.9	Worker	Scenario 1	7.01E-03	1.42E-05	--
5259	641436.2	4165148.9	Worker	Scenario 1	7.20E-03	1.45E-05	--
5260	641536.2	4165148.9	Worker	Scenario 1	7.57E-03	1.53E-05	--
5261	641636.2	4165148.9	Worker	Scenario 1	7.62E-03	1.54E-05	--
5262	641736.2	4165148.9	Worker	Scenario 1	7.87E-03	1.59E-05	--
5263	641836.2	4165148.9	Worker	Scenario 1	8.16E-03	1.65E-05	--
5264	641936.2	4165148.9	Worker	Scenario 1	8.70E-03	1.76E-05	--
5265	642036.2	4165148.9	Worker	Scenario 1	1.01E-02	2.04E-05	--
5266	642136.2	4165148.9	Worker	Scenario 1	1.17E-02	2.36E-05	--
5267	642236.2	4165148.9	Worker	Scenario 1	9.87E-03	1.99E-05	--
5268	642336.2	4165148.9	Worker	Scenario 1	1.02E-02	2.05E-05	--
5269	642436.2	4165148.9	Worker	Scenario 1	1.05E-02	2.13E-05	--
5270	642536.2	4165148.9	Worker	Scenario 1	1.08E-02	2.19E-05	--
5271	642636.2	4165148.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
5272	642736.2	4165148.9	Worker	Scenario 1	1.37E-02	2.77E-05	--
5273	642836.2	4165148.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
5274	642936.2	4165148.9	Worker	Scenario 1	1.28E-02	2.59E-05	--
5275	643036.2	4165148.9	Worker	Scenario 1	1.58E-02	3.19E-05	--
5276	643136.2	4165148.9	Worker	Scenario 1	1.83E-02	3.69E-05	--
5277	643236.2	4165148.9	Worker	Scenario 1	2.03E-02	4.11E-05	--
5278	643336.2	4165148.9	Worker	Scenario 1	2.31E-02	4.66E-05	--
5279	643536.2	4165148.9	Worker	Scenario 1	2.61E-02	5.26E-05	--
5280	643636.2	4165148.9	Worker	Scenario 1	2.80E-02	5.66E-05	--
5281	643736.2	4165148.9	Worker	Scenario 1	2.99E-02	6.03E-05	--
5282	643836.2	4165148.9	Worker	Scenario 1	3.10E-02	6.27E-05	--
5283	643936.2	4165148.9	Worker	Scenario 1	3.19E-02	6.44E-05	--
5284	644036.2	4165148.9	Worker	Scenario 1	3.28E-02	6.62E-05	--
5285	644136.2	4165148.9	Worker	Scenario 1	3.38E-02	6.82E-05	--
5286	644236.2	4165148.9	Worker	Scenario 1	3.49E-02	7.05E-05	--
5287	644336.2	4165148.9	Worker	Scenario 1	3.62E-02	7.31E-05	--
5288	644436.2	4165148.9	Worker	Scenario 1	3.75E-02	7.57E-05	--
5289	644536.2	4165148.9	Worker	Scenario 1	3.87E-02	7.81E-05	--
5290	644736.2	4165148.9	Worker	Scenario 1	4.06E-02	8.21E-05	--
5291	644836.2	4165148.9	Worker	Scenario 1	4.13E-02	8.33E-05	--
5292	644936.2	4165148.9	Worker	Scenario 1	4.17E-02	8.42E-05	--
5293	645036.2	4165148.9	Worker	Scenario 1	4.17E-02	8.42E-05	--
5294	645136.2	4165148.9	Worker	Scenario 1	4.12E-02	8.32E-05	--
5295	645236.2	4165148.9	Worker	Scenario 1	4.09E-02	8.26E-05	--
5296	645336.2	4165148.9	Worker	Scenario 1	4.22E-02	8.53E-05	--
5297	645436.2	4165148.9	Worker	Scenario 1	4.18E-02	8.43E-05	--
5298	645536.2	4165148.9	Worker	Scenario 1	4.12E-02	8.33E-05	--
5299	645636.2	4165148.9	Worker	Scenario 1	4.07E-02	8.22E-05	--
5300	645736.2	4165148.9	Worker	Scenario 1	3.85E-02	7.77E-05	--
5301	645936.2	4165148.9	Worker	Scenario 1	3.77E-02	7.60E-05	--
5302	646036.2	4165148.9	Worker	Scenario 1	3.74E-02	7.55E-05	--
5303	646136.2	4165148.9	Worker	Scenario 1	3.72E-02	7.51E-05	--
5304	639636.2	4165248.9	Worker	Scenario 1	4.40E-03	8.89E-06	--
5305	639736.2	4165248.9	Worker	Scenario 1	4.51E-03	9.12E-06	--
5306	639836.2	4165248.9	Worker	Scenario 1	4.66E-03	9.41E-06	--
5307	639936.2	4165248.9	Worker	Scenario 1	4.82E-03	9.73E-06	--
5308	640036.2	4165248.9	Worker	Scenario 1	4.79E-03	9.68E-06	--
5309	640136.2	4165248.9	Worker	Scenario 1	4.99E-03	1.01E-05	--
5310	640236.2	4165248.9	Worker	Scenario 1	5.35E-03	1.08E-05	--
5311	640336.2	4165248.9	Worker	Scenario 1	6.05E-03	1.22E-05	--
5312	640436.2	4165248.9	Worker	Scenario 1	7.59E-03	1.53E-05	--
5313	640536.2	4165248.9	Worker	Scenario 1	7.02E-03	1.42E-05	--
5314	640636.2	4165248.9	Worker	Scenario 1	5.63E-03	1.14E-05	--
5315	640736.2	4165248.9	Worker	Scenario 1	5.73E-03	1.16E-05	--
5316	640836.2	4165248.9	Worker	Scenario 1	5.98E-03	1.21E-05	--
5317	640936.2	4165248.9	Worker	Scenario 1	6.76E-03	1.37E-05	--
5318	641036.2	4165248.9	Worker	Scenario 1	6.43E-03	1.30E-05	--
5319	641136.2	4165248.9	Worker	Scenario 1	6.52E-03	1.32E-05	--
5320	641236.2	4165248.9	Worker	Scenario 1	6.98E-03	1.41E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5321	641336.2	4165248.9	Worker	Scenario 1	7.47E-03	1.51E-05	--
5322	641436.2	4165248.9	Worker	Scenario 1	7.42E-03	1.50E-05	--
5323	641536.2	4165248.9	Worker	Scenario 1	8.08E-03	1.63E-05	--
5324	641636.2	4165248.9	Worker	Scenario 1	7.96E-03	1.61E-05	--
5325	641736.2	4165248.9	Worker	Scenario 1	8.30E-03	1.68E-05	--
5326	641836.2	4165248.9	Worker	Scenario 1	8.58E-03	1.73E-05	--
5327	641936.2	4165248.9	Worker	Scenario 1	8.98E-03	1.81E-05	--
5328	642036.2	4165248.9	Worker	Scenario 1	9.98E-03	2.02E-05	--
5329	642136.2	4165248.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
5330	642236.2	4165248.9	Worker	Scenario 1	1.14E-02	2.31E-05	--
5331	642336.2	4165248.9	Worker	Scenario 1	1.15E-02	2.31E-05	--
5332	642436.2	4165248.9	Worker	Scenario 1	1.13E-02	2.28E-05	--
5333	642536.2	4165248.9	Worker	Scenario 1	1.19E-02	2.41E-05	--
5334	642636.2	4165248.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
5335	642736.2	4165248.9	Worker	Scenario 1	1.80E-02	3.63E-05	--
5336	642836.2	4165248.9	Worker	Scenario 1	1.31E-02	2.65E-05	--
5337	642936.2	4165248.9	Worker	Scenario 1	1.44E-02	2.91E-05	--
5338	643036.2	4165248.9	Worker	Scenario 1	1.79E-02	3.62E-05	--
5339	643136.2	4165248.9	Worker	Scenario 1	2.02E-02	4.07E-05	--
5340	643436.2	4165248.9	Worker	Scenario 1	2.79E-02	5.63E-05	--
5341	643536.2	4165248.9	Worker	Scenario 1	2.99E-02	6.04E-05	--
5342	643636.2	4165248.9	Worker	Scenario 1	3.15E-02	6.37E-05	--
5343	643736.2	4165248.9	Worker	Scenario 1	3.27E-02	6.60E-05	--
5344	643836.2	4165248.9	Worker	Scenario 1	3.37E-02	6.81E-05	--
5345	643936.2	4165248.9	Worker	Scenario 1	3.46E-02	6.99E-05	--
5346	644036.2	4165248.9	Worker	Scenario 1	3.57E-02	7.21E-05	--
5347	644136.2	4165248.9	Worker	Scenario 1	3.68E-02	7.44E-05	--
5348	644236.2	4165248.9	Worker	Scenario 1	3.82E-02	7.71E-05	--
5349	644336.2	4165248.9	Worker	Scenario 1	3.96E-02	8.00E-05	--
5350	644436.2	4165248.9	Worker	Scenario 1	4.10E-02	8.28E-05	--
5351	644536.2	4165248.9	Worker	Scenario 1	4.22E-02	8.52E-05	--
5352	644736.2	4165248.9	Worker	Scenario 1	4.40E-02	8.88E-05	--
5353	644836.2	4165248.9	Worker	Scenario 1	4.44E-02	8.97E-05	--
5354	644936.2	4165248.9	Worker	Scenario 1	4.46E-02	9.00E-05	--
5355	645036.2	4165248.9	Worker	Scenario 1	4.44E-02	8.96E-05	--
5356	645136.2	4165248.9	Worker	Scenario 1	4.38E-02	8.85E-05	--
5357	645236.2	4165248.9	Worker	Scenario 1	4.33E-02	8.75E-05	--
5358	645336.2	4165248.9	Worker	Scenario 1	4.27E-02	8.63E-05	--
5359	645436.2	4165248.9	Worker	Scenario 1	4.20E-02	8.47E-05	--
5360	645536.2	4165248.9	Worker	Scenario 1	4.12E-02	8.32E-05	--
5361	645636.2	4165248.9	Worker	Scenario 1	4.05E-02	8.18E-05	--
5362	645936.2	4165248.9	Worker	Scenario 1	3.98E-02	8.04E-05	--
5363	646036.2	4165248.9	Worker	Scenario 1	3.95E-02	7.98E-05	--
5364	646136.2	4165248.9	Worker	Scenario 1	3.94E-02	7.95E-05	--
5365	639536.2	4165348.9	Worker	Scenario 1	4.41E-03	8.91E-06	--
5366	639636.2	4165348.9	Worker	Scenario 1	4.61E-03	9.31E-06	--
5367	639736.2	4165348.9	Worker	Scenario 1	4.60E-03	9.29E-06	--
5368	639836.2	4165348.9	Worker	Scenario 1	4.78E-03	9.66E-06	--
5369	639936.2	4165348.9	Worker	Scenario 1	5.09E-03	1.03E-05	--
5370	640036.2	4165348.9	Worker	Scenario 1	4.91E-03	9.92E-06	--
5371	640136.2	4165348.9	Worker	Scenario 1	5.08E-03	1.03E-05	--
5372	640236.2	4165348.9	Worker	Scenario 1	5.31E-03	1.07E-05	--
5373	640336.2	4165348.9	Worker	Scenario 1	5.65E-03	1.14E-05	--
5374	640436.2	4165348.9	Worker	Scenario 1	7.26E-03	1.47E-05	--
5375	640536.2	4165348.9	Worker	Scenario 1	8.56E-03	1.73E-05	--
5376	640636.2	4165348.9	Worker	Scenario 1	6.16E-03	1.24E-05	--
5377	640736.2	4165348.9	Worker	Scenario 1	5.94E-03	1.20E-05	--
5378	640836.2	4165348.9	Worker	Scenario 1	6.27E-03	1.27E-05	--
5379	640936.2	4165348.9	Worker	Scenario 1	7.07E-03	1.43E-05	--
5380	641036.2	4165348.9	Worker	Scenario 1	6.49E-03	1.31E-05	--
5381	641136.2	4165348.9	Worker	Scenario 1	6.69E-03	1.35E-05	--
5382	641236.2	4165348.9	Worker	Scenario 1	7.05E-03	1.42E-05	--
5383	641336.2	4165348.9	Worker	Scenario 1	7.66E-03	1.55E-05	--
5384	641436.2	4165348.9	Worker	Scenario 1	8.39E-03	1.69E-05	--
5385	641536.2	4165348.9	Worker	Scenario 1	8.69E-03	1.75E-05	--
5386	641636.2	4165348.9	Worker	Scenario 1	8.43E-03	1.70E-05	--
5387	641736.2	4165348.9	Worker	Scenario 1	8.78E-03	1.77E-05	--
5388	641836.2	4165348.9	Worker	Scenario 1	9.12E-03	1.84E-05	--
5389	641936.2	4165348.9	Worker	Scenario 1	9.51E-03	1.92E-05	--
5390	642036.2	4165348.9	Worker	Scenario 1	1.01E-02	2.05E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5391	642136.2	4165348.9	Worker	Scenario 1	1.12E-02	2.25E-05	--
5392	642236.2	4165348.9	Worker	Scenario 1	1.57E-02	3.17E-05	--
5393	642336.2	4165348.9	Worker	Scenario 1	1.26E-02	2.54E-05	--
5394	642436.2	4165348.9	Worker	Scenario 1	1.24E-02	2.50E-05	--
5395	642536.2	4165348.9	Worker	Scenario 1	1.35E-02	2.72E-05	--
5396	642636.2	4165348.9	Worker	Scenario 1	1.34E-02	2.70E-05	--
5397	642736.2	4165348.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
5398	642836.2	4165348.9	Worker	Scenario 1	1.77E-02	3.58E-05	--
5399	642936.2	4165348.9	Worker	Scenario 1	1.63E-02	3.28E-05	--
5400	643036.2	4165348.9	Worker	Scenario 1	2.02E-02	4.08E-05	--
5401	643236.2	4165348.9	Worker	Scenario 1	2.77E-02	5.60E-05	--
5402	643336.2	4165348.9	Worker	Scenario 1	2.99E-02	6.04E-05	--
5403	643436.2	4165348.9	Worker	Scenario 1	3.13E-02	6.31E-05	--
5404	643536.2	4165348.9	Worker	Scenario 1	3.30E-02	6.67E-05	--
5405	643636.2	4165348.9	Worker	Scenario 1	3.44E-02	6.96E-05	--
5406	643736.2	4165348.9	Worker	Scenario 1	3.56E-02	7.20E-05	--
5407	643836.2	4165348.9	Worker	Scenario 1	3.67E-02	7.41E-05	--
5408	643936.2	4165348.9	Worker	Scenario 1	3.78E-02	7.64E-05	--
5409	644036.2	4165348.9	Worker	Scenario 1	3.90E-02	7.88E-05	--
5410	644136.2	4165348.9	Worker	Scenario 1	4.04E-02	8.15E-05	--
5411	644236.2	4165348.9	Worker	Scenario 1	4.19E-02	8.47E-05	--
5412	644336.2	4165348.9	Worker	Scenario 1	4.35E-02	8.79E-05	--
5413	644436.2	4165348.9	Worker	Scenario 1	4.49E-02	9.08E-05	--
5414	644536.2	4165348.9	Worker	Scenario 1	4.61E-02	9.31E-05	--
5415	644736.2	4165348.9	Worker	Scenario 1	4.76E-02	9.61E-05	--
5416	644836.2	4165348.9	Worker	Scenario 1	4.77E-02	9.64E-05	--
5417	644936.2	4165348.9	Worker	Scenario 1	4.75E-02	9.60E-05	--
5418	645036.2	4165348.9	Worker	Scenario 1	4.72E-02	9.53E-05	--
5419	645136.2	4165348.9	Worker	Scenario 1	4.65E-02	9.40E-05	--
5420	645236.2	4165348.9	Worker	Scenario 1	4.58E-02	9.25E-05	--
5421	645336.2	4165348.9	Worker	Scenario 1	4.50E-02	9.09E-05	--
5422	645436.2	4165348.9	Worker	Scenario 1	4.43E-02	8.96E-05	--
5423	645536.2	4165348.9	Worker	Scenario 1	4.37E-02	8.84E-05	--
5424	645636.2	4165348.9	Worker	Scenario 1	4.32E-02	8.73E-05	--
5425	639436.2	4165448.9	Worker	Scenario 1	4.43E-03	8.94E-06	--
5426	639536.2	4165448.9	Worker	Scenario 1	4.63E-03	9.36E-06	--
5427	639636.2	4165448.9	Worker	Scenario 1	4.79E-03	9.68E-06	--
5428	639736.2	4165448.9	Worker	Scenario 1	4.74E-03	9.57E-06	--
5429	639836.2	4165448.9	Worker	Scenario 1	4.86E-03	9.81E-06	--
5430	639936.2	4165448.9	Worker	Scenario 1	5.23E-03	1.06E-05	--
5431	640036.2	4165448.9	Worker	Scenario 1	5.14E-03	1.04E-05	--
5432	640136.2	4165448.9	Worker	Scenario 1	5.20E-03	1.05E-05	--
5433	640236.2	4165448.9	Worker	Scenario 1	5.46E-03	1.10E-05	--
5434	640336.2	4165448.9	Worker	Scenario 1	5.69E-03	1.15E-05	--
5435	640436.2	4165448.9	Worker	Scenario 1	6.81E-03	1.38E-05	--
5436	640536.2	4165448.9	Worker	Scenario 1	9.06E-03	1.83E-05	--
5437	640636.2	4165448.9	Worker	Scenario 1	7.16E-03	1.45E-05	--
5438	640736.2	4165448.9	Worker	Scenario 1	6.12E-03	1.24E-05	--
5439	640836.2	4165448.9	Worker	Scenario 1	6.52E-03	1.32E-05	--
5440	640936.2	4165448.9	Worker	Scenario 1	6.98E-03	1.41E-05	--
5441	641036.2	4165448.9	Worker	Scenario 1	6.71E-03	1.36E-05	--
5442	641136.2	4165448.9	Worker	Scenario 1	6.91E-03	1.40E-05	--
5443	641236.2	4165448.9	Worker	Scenario 1	7.21E-03	1.46E-05	--
5444	641336.2	4165448.9	Worker	Scenario 1	7.55E-03	1.53E-05	--
5445	641436.2	4165448.9	Worker	Scenario 1	8.14E-03	1.64E-05	--
5446	641536.2	4165448.9	Worker	Scenario 1	9.99E-03	2.02E-05	--
5447	641636.2	4165448.9	Worker	Scenario 1	9.59E-03	1.94E-05	--
5448	641736.2	4165448.9	Worker	Scenario 1	9.20E-03	1.86E-05	--
5449	641836.2	4165448.9	Worker	Scenario 1	9.86E-03	1.99E-05	--
5450	641936.2	4165448.9	Worker	Scenario 1	1.02E-02	2.07E-05	--
5451	642036.2	4165448.9	Worker	Scenario 1	1.10E-02	2.21E-05	--
5452	642136.2	4165448.9	Worker	Scenario 1	1.14E-02	2.30E-05	--
5453	642236.2	4165448.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
5454	642336.2	4165448.9	Worker	Scenario 1	1.68E-02	3.40E-05	--
5455	642436.2	4165448.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
5456	642536.2	4165448.9	Worker	Scenario 1	1.46E-02	2.94E-05	--
5457	642636.2	4165448.9	Worker	Scenario 1	1.71E-02	3.46E-05	--
5458	642736.2	4165448.9	Worker	Scenario 1	1.57E-02	3.17E-05	--
5459	642836.2	4165448.9	Worker	Scenario 1	2.26E-02	4.56E-05	--
5460	642936.2	4165448.9	Worker	Scenario 1	2.31E-02	4.66E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5461	643136.2	4165448.9	Worker	Scenario 1	2.81E-02	5.68E-05	--
5462	643236.2	4165448.9	Worker	Scenario 1	3.07E-02	6.19E-05	--
5463	643336.2	4165448.9	Worker	Scenario 1	3.30E-02	6.67E-05	--
5464	643436.2	4165448.9	Worker	Scenario 1	3.44E-02	6.94E-05	--
5465	643536.2	4165448.9	Worker	Scenario 1	3.62E-02	7.32E-05	--
5466	643636.2	4165448.9	Worker	Scenario 1	3.77E-02	7.61E-05	--
5467	643736.2	4165448.9	Worker	Scenario 1	3.90E-02	7.88E-05	--
5468	643836.2	4165448.9	Worker	Scenario 1	4.01E-02	8.11E-05	--
5469	643936.2	4165448.9	Worker	Scenario 1	4.15E-02	8.38E-05	--
5470	644036.2	4165448.9	Worker	Scenario 1	4.29E-02	8.67E-05	--
5471	644136.2	4165448.9	Worker	Scenario 1	4.46E-02	9.00E-05	--
5472	644236.2	4165448.9	Worker	Scenario 1	4.62E-02	9.33E-05	--
5473	644336.2	4165448.9	Worker	Scenario 1	4.80E-02	9.69E-05	--
5474	644436.2	4165448.9	Worker	Scenario 1	5.34E-02	1.08E-04	--
5475	644536.2	4165448.9	Worker	Scenario 1	5.46E-02	1.10E-04	--
5476	644636.2	4165448.9	Worker	Scenario 1	5.12E-02	1.03E-04	--
5477	644736.2	4165448.9	Worker	Scenario 1	5.31E-02	1.07E-04	--
5478	644836.2	4165448.9	Worker	Scenario 1	5.06E-02	1.02E-04	--
5479	644936.2	4165448.9	Worker	Scenario 1	4.97E-02	1.00E-04	--
5480	645036.2	4165448.9	Worker	Scenario 1	5.01E-02	1.01E-04	--
5481	645136.2	4165448.9	Worker	Scenario 1	5.07E-02	1.02E-04	--
5482	645236.2	4165448.9	Worker	Scenario 1	5.12E-02	1.03E-04	--
5483	645336.2	4165448.9	Worker	Scenario 1	5.26E-02	1.06E-04	--
5484	645436.2	4165448.9	Worker	Scenario 1	5.13E-02	1.04E-04	--
5485	645536.2	4165448.9	Worker	Scenario 1	4.91E-02	9.92E-05	--
5486	645636.2	4165448.9	Worker	Scenario 1	4.83E-02	9.75E-05	--
5487	645936.2	4165448.9	Worker	Scenario 1	4.51E-02	9.10E-05	--
5488	646036.2	4165448.9	Worker	Scenario 1	4.50E-02	9.09E-05	--
5489	646136.2	4165448.9	Worker	Scenario 1	4.47E-02	9.02E-05	--
5490	646336.2	4165448.9	Worker	Scenario 1	4.44E-02	8.97E-05	--
5491	646436.2	4165448.9	Worker	Scenario 1	4.43E-02	8.95E-05	--
5492	639436.2	4165548.9	Worker	Scenario 1	4.64E-03	9.36E-06	--
5493	639536.2	4165548.9	Worker	Scenario 1	4.71E-03	9.52E-06	--
5494	639636.2	4165548.9	Worker	Scenario 1	5.02E-03	1.01E-05	--
5495	639736.2	4165548.9	Worker	Scenario 1	4.97E-03	1.00E-05	--
5496	639836.2	4165548.9	Worker	Scenario 1	5.13E-03	1.04E-05	--
5497	639936.2	4165548.9	Worker	Scenario 1	5.45E-03	1.10E-05	--
5498	640036.2	4165548.9	Worker	Scenario 1	5.35E-03	1.08E-05	--
5499	640136.2	4165548.9	Worker	Scenario 1	5.34E-03	1.08E-05	--
5500	640236.2	4165548.9	Worker	Scenario 1	5.53E-03	1.12E-05	--
5501	640336.2	4165548.9	Worker	Scenario 1	5.91E-03	1.19E-05	--
5502	640436.2	4165548.9	Worker	Scenario 1	6.17E-03	1.25E-05	--
5503	640536.2	4165548.9	Worker	Scenario 1	9.09E-03	1.84E-05	--
5504	640636.2	4165548.9	Worker	Scenario 1	7.93E-03	1.60E-05	--
5505	640736.2	4165548.9	Worker	Scenario 1	6.56E-03	1.33E-05	--
5506	640836.2	4165548.9	Worker	Scenario 1	6.86E-03	1.39E-05	--
5507	640936.2	4165548.9	Worker	Scenario 1	7.19E-03	1.45E-05	--
5508	641036.2	4165548.9	Worker	Scenario 1	6.98E-03	1.41E-05	--
5509	641136.2	4165548.9	Worker	Scenario 1	7.24E-03	1.46E-05	--
5510	641236.2	4165548.9	Worker	Scenario 1	7.55E-03	1.52E-05	--
5511	641336.2	4165548.9	Worker	Scenario 1	7.86E-03	1.59E-05	--
5512	641436.2	4165548.9	Worker	Scenario 1	8.33E-03	1.68E-05	--
5513	641536.2	4165548.9	Worker	Scenario 1	9.21E-03	1.86E-05	--
5514	641636.2	4165548.9	Worker	Scenario 1	1.07E-02	2.16E-05	--
5515	641736.2	4165548.9	Worker	Scenario 1	9.83E-03	1.99E-05	--
5516	641836.2	4165548.9	Worker	Scenario 1	1.04E-02	2.09E-05	--
5517	641936.2	4165548.9	Worker	Scenario 1	1.12E-02	2.27E-05	--
5518	642036.2	4165548.9	Worker	Scenario 1	1.18E-02	2.38E-05	--
5519	642136.2	4165548.9	Worker	Scenario 1	1.24E-02	2.51E-05	--
5520	642236.2	4165548.9	Worker	Scenario 1	1.35E-02	2.72E-05	--
5521	642336.2	4165548.9	Worker	Scenario 1	2.34E-02	4.72E-05	--
5522	642436.2	4165548.9	Worker	Scenario 1	1.58E-02	3.19E-05	--
5523	642536.2	4165548.9	Worker	Scenario 1	1.92E-02	3.88E-05	--
5524	642636.2	4165548.9	Worker	Scenario 1	1.79E-02	3.62E-05	--
5525	642736.2	4165548.9	Worker	Scenario 1	2.32E-02	4.70E-05	--
5526	643036.2	4165548.9	Worker	Scenario 1	2.89E-02	5.83E-05	--
5527	643136.2	4165548.9	Worker	Scenario 1	3.11E-02	6.28E-05	--
5528	643236.2	4165548.9	Worker	Scenario 1	3.37E-02	6.81E-05	--
5529	643336.2	4165548.9	Worker	Scenario 1	3.63E-02	7.33E-05	--
5530	643436.2	4165548.9	Worker	Scenario 1	3.79E-02	7.65E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5531	643536.2	4165548.9	Worker	Scenario 1	3.98E-02	8.04E-05	--
5532	643636.2	4165548.9	Worker	Scenario 1	4.14E-02	8.37E-05	--
5533	643736.2	4165548.9	Worker	Scenario 1	4.29E-02	8.66E-05	--
5534	643836.2	4165548.9	Worker	Scenario 1	4.42E-02	8.93E-05	--
5535	643936.2	4165548.9	Worker	Scenario 1	4.57E-02	9.23E-05	--
5536	644036.2	4165548.9	Worker	Scenario 1	4.75E-02	9.60E-05	--
5537	644136.2	4165548.9	Worker	Scenario 1	5.75E-02	1.16E-04	--
5538	644236.2	4165548.9	Worker	Scenario 1	5.99E-02	1.21E-04	--
5539	644336.2	4165548.9	Worker	Scenario 1	6.15E-02	1.24E-04	--
5540	644436.2	4165548.9	Worker	Scenario 1	6.27E-02	1.27E-04	--
5541	644536.2	4165548.9	Worker	Scenario 1	6.07E-02	1.23E-04	--
5542	644636.2	4165548.9	Worker	Scenario 1	5.57E-02	1.13E-04	--
5543	644736.2	4165548.9	Worker	Scenario 1	5.86E-02	1.18E-04	--
5544	644836.2	4165548.9	Worker	Scenario 1	5.85E-02	1.18E-04	--
5545	644936.2	4165548.9	Worker	Scenario 1	5.76E-02	1.16E-04	--
5546	645036.2	4165548.9	Worker	Scenario 1	5.30E-02	1.07E-04	--
5547	645136.2	4165548.9	Worker	Scenario 1	5.23E-02	1.06E-04	--
5548	645236.2	4165548.9	Worker	Scenario 1	5.40E-02	1.09E-04	--
5549	645336.2	4165548.9	Worker	Scenario 1	5.30E-02	1.07E-04	--
5550	645436.2	4165548.9	Worker	Scenario 1	5.29E-02	1.07E-04	--
5551	645536.2	4165548.9	Worker	Scenario 1	5.20E-02	1.05E-04	--
5552	645636.2	4165548.9	Worker	Scenario 1	5.13E-02	1.04E-04	--
5553	645936.2	4165548.9	Worker	Scenario 1	4.84E-02	9.77E-05	--
5554	646036.2	4165548.9	Worker	Scenario 1	4.81E-02	9.72E-05	--
5555	646136.2	4165548.9	Worker	Scenario 1	4.80E-02	9.69E-05	--
5556	646336.2	4165548.9	Worker	Scenario 1	4.77E-02	9.63E-05	--
5557	646436.2	4165548.9	Worker	Scenario 1	4.76E-02	9.61E-05	--
5558	646536.2	4165548.9	Worker	Scenario 1	4.75E-02	9.59E-05	--
5559	639236.2	4165648.9	Worker	Scenario 1	4.76E-03	9.62E-06	--
5560	639336.2	4165648.9	Worker	Scenario 1	5.25E-03	1.06E-05	--
5561	639436.2	4165648.9	Worker	Scenario 1	4.95E-03	1.00E-05	--
5562	639536.2	4165648.9	Worker	Scenario 1	4.77E-03	9.64E-06	--
5563	639636.2	4165648.9	Worker	Scenario 1	5.03E-03	1.02E-05	--
5564	639736.2	4165648.9	Worker	Scenario 1	5.29E-03	1.07E-05	--
5565	639836.2	4165648.9	Worker	Scenario 1	5.57E-03	1.13E-05	--
5566	639936.2	4165648.9	Worker	Scenario 1	5.66E-03	1.14E-05	--
5567	640036.2	4165648.9	Worker	Scenario 1	5.48E-03	1.11E-05	--
5568	640136.2	4165648.9	Worker	Scenario 1	5.59E-03	1.13E-05	--
5569	640236.2	4165648.9	Worker	Scenario 1	5.83E-03	1.18E-05	--
5570	640336.2	4165648.9	Worker	Scenario 1	6.34E-03	1.28E-05	--
5571	640436.2	4165648.9	Worker	Scenario 1	7.35E-03	1.49E-05	--
5572	640536.2	4165648.9	Worker	Scenario 1	8.35E-03	1.69E-05	--
5573	640636.2	4165648.9	Worker	Scenario 1	9.67E-03	1.95E-05	--
5574	640736.2	4165648.9	Worker	Scenario 1	6.66E-03	1.35E-05	--
5575	640836.2	4165648.9	Worker	Scenario 1	6.81E-03	1.38E-05	--
5576	640936.2	4165648.9	Worker	Scenario 1	8.61E-03	1.74E-05	--
5577	641036.2	4165648.9	Worker	Scenario 1	7.60E-03	1.54E-05	--
5578	641136.2	4165648.9	Worker	Scenario 1	7.84E-03	1.58E-05	--
5579	641236.2	4165648.9	Worker	Scenario 1	7.81E-03	1.58E-05	--
5580	641336.2	4165648.9	Worker	Scenario 1	8.48E-03	1.71E-05	--
5581	641436.2	4165648.9	Worker	Scenario 1	8.92E-03	1.80E-05	--
5582	641536.2	4165648.9	Worker	Scenario 1	9.45E-03	1.91E-05	--
5583	641636.2	4165648.9	Worker	Scenario 1	1.31E-02	2.64E-05	--
5584	641736.2	4165648.9	Worker	Scenario 1	1.07E-02	2.17E-05	--
5585	641836.2	4165648.9	Worker	Scenario 1	1.16E-02	2.34E-05	--
5586	641936.2	4165648.9	Worker	Scenario 1	1.30E-02	2.62E-05	--
5587	642036.2	4165648.9	Worker	Scenario 1	1.44E-02	2.91E-05	--
5588	642136.2	4165648.9	Worker	Scenario 1	1.55E-02	3.13E-05	--
5589	642236.2	4165648.9	Worker	Scenario 1	1.46E-02	2.96E-05	--
5590	642336.2	4165648.9	Worker	Scenario 1	1.91E-02	3.86E-05	--
5591	642436.2	4165648.9	Worker	Scenario 1	2.56E-02	5.18E-05	--
5592	642536.2	4165648.9	Worker	Scenario 1	2.25E-02	4.55E-05	--
5593	642636.2	4165648.9	Worker	Scenario 1	2.85E-02	5.76E-05	--
5594	642836.2	4165648.9	Worker	Scenario 1	3.00E-02	6.06E-05	--
5595	642936.2	4165648.9	Worker	Scenario 1	3.02E-02	6.11E-05	--
5596	643036.2	4165648.9	Worker	Scenario 1	3.17E-02	6.40E-05	--
5597	643136.2	4165648.9	Worker	Scenario 1	3.42E-02	6.90E-05	--
5598	643236.2	4165648.9	Worker	Scenario 1	3.71E-02	7.50E-05	--
5599	643336.2	4165648.9	Worker	Scenario 1	3.93E-02	7.94E-05	--
5600	643436.2	4165648.9	Worker	Scenario 1	4.18E-02	8.45E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5601	643536.2	4165648.9	Worker	Scenario 1	4.40E-02	8.88E-05	--
5602	643636.2	4165648.9	Worker	Scenario 1	4.57E-02	9.24E-05	--
5603	643736.2	4165648.9	Worker	Scenario 1	4.74E-02	9.56E-05	--
5604	643836.2	4165648.9	Worker	Scenario 1	5.27E-02	1.06E-04	--
5605	643936.2	4165648.9	Worker	Scenario 1	5.93E-02	1.20E-04	--
5606	644036.2	4165648.9	Worker	Scenario 1	6.07E-02	1.23E-04	--
5607	644136.2	4165648.9	Worker	Scenario 1	6.29E-02	1.27E-04	--
5608	644236.2	4165648.9	Worker	Scenario 1	6.52E-02	1.32E-04	--
5609	644336.2	4165648.9	Worker	Scenario 1	6.64E-02	1.34E-04	--
5610	644436.2	4165648.9	Worker	Scenario 1	6.73E-02	1.36E-04	--
5611	644536.2	4165648.9	Worker	Scenario 1	6.47E-02	1.31E-04	--
5612	644636.2	4165648.9	Worker	Scenario 1	6.05E-02	1.22E-04	--
5613	644736.2	4165648.9	Worker	Scenario 1	6.30E-02	1.27E-04	--
5614	644836.2	4165648.9	Worker	Scenario 1	6.16E-02	1.24E-04	--
5615	644936.2	4165648.9	Worker	Scenario 1	6.10E-02	1.23E-04	--
5616	645036.2	4165648.9	Worker	Scenario 1	6.36E-02	1.28E-04	--
5617	645136.2	4165648.9	Worker	Scenario 1	5.60E-02	1.13E-04	--
5618	645236.2	4165648.9	Worker	Scenario 1	5.48E-02	1.11E-04	--
5619	645336.2	4165648.9	Worker	Scenario 1	5.94E-02	1.20E-04	--
5620	645436.2	4165648.9	Worker	Scenario 1	5.63E-02	1.14E-04	--
5621	645536.2	4165648.9	Worker	Scenario 1	5.72E-02	1.16E-04	--
5622	645836.2	4165648.9	Worker	Scenario 1	5.24E-02	1.06E-04	--
5623	645936.2	4165648.9	Worker	Scenario 1	5.21E-02	1.05E-04	--
5624	646036.2	4165648.9	Worker	Scenario 1	5.20E-02	1.05E-04	--
5625	646136.2	4165648.9	Worker	Scenario 1	5.17E-02	1.05E-04	--
5626	646336.2	4165648.9	Worker	Scenario 1	5.13E-02	1.04E-04	--
5627	646436.2	4165648.9	Worker	Scenario 1	5.12E-02	1.03E-04	--
5628	646536.2	4165648.9	Worker	Scenario 1	5.11E-02	1.03E-04	--
5629	646636.2	4165648.9	Worker	Scenario 1	5.10E-02	1.03E-04	--
5630	639036.2	4165748.9	Worker	Scenario 1	4.40E-03	8.89E-06	--
5631	639136.2	4165748.9	Worker	Scenario 1	4.52E-03	9.13E-06	--
5632	639236.2	4165748.9	Worker	Scenario 1	4.85E-03	9.80E-06	--
5633	639336.2	4165748.9	Worker	Scenario 1	5.66E-03	1.14E-05	--
5634	639436.2	4165748.9	Worker	Scenario 1	5.04E-03	1.02E-05	--
5635	639536.2	4165748.9	Worker	Scenario 1	4.91E-03	9.91E-06	--
5636	639636.2	4165748.9	Worker	Scenario 1	5.05E-03	1.02E-05	--
5637	639736.2	4165748.9	Worker	Scenario 1	5.65E-03	1.14E-05	--
5638	639836.2	4165748.9	Worker	Scenario 1	6.15E-03	1.24E-05	--
5639	639936.2	4165748.9	Worker	Scenario 1	5.87E-03	1.18E-05	--
5640	640036.2	4165748.9	Worker	Scenario 1	5.93E-03	1.20E-05	--
5641	640136.2	4165748.9	Worker	Scenario 1	6.10E-03	1.23E-05	--
5642	640236.2	4165748.9	Worker	Scenario 1	6.03E-03	1.22E-05	--
5643	640336.2	4165748.9	Worker	Scenario 1	6.27E-03	1.27E-05	--
5644	640436.2	4165748.9	Worker	Scenario 1	6.53E-03	1.32E-05	--
5645	640536.2	4165748.9	Worker	Scenario 1	8.30E-03	1.68E-05	--
5646	640636.2	4165748.9	Worker	Scenario 1	1.20E-02	2.43E-05	--
5647	640736.2	4165748.9	Worker	Scenario 1	7.75E-03	1.57E-05	--
5648	640836.2	4165748.9	Worker	Scenario 1	7.20E-03	1.45E-05	--
5649	640936.2	4165748.9	Worker	Scenario 1	7.51E-03	1.52E-05	--
5650	641036.2	4165748.9	Worker	Scenario 1	9.35E-03	1.89E-05	--
5651	641136.2	4165748.9	Worker	Scenario 1	8.53E-03	1.72E-05	--
5652	641236.2	4165748.9	Worker	Scenario 1	8.29E-03	1.68E-05	--
5653	641336.2	4165748.9	Worker	Scenario 1	8.94E-03	1.81E-05	--
5654	641436.2	4165748.9	Worker	Scenario 1	9.75E-03	1.97E-05	--
5655	641536.2	4165748.9	Worker	Scenario 1	1.01E-02	2.04E-05	--
5656	641636.2	4165748.9	Worker	Scenario 1	1.53E-02	3.09E-05	--
5657	641736.2	4165748.9	Worker	Scenario 1	1.18E-02	2.38E-05	--
5658	641836.2	4165748.9	Worker	Scenario 1	1.30E-02	2.63E-05	--
5659	641936.2	4165748.9	Worker	Scenario 1	1.65E-02	3.33E-05	--
5660	642036.2	4165748.9	Worker	Scenario 1	1.79E-02	3.62E-05	--
5661	642136.2	4165748.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
5662	642236.2	4165748.9	Worker	Scenario 1	1.88E-02	3.79E-05	--
5663	642336.2	4165748.9	Worker	Scenario 1	2.51E-02	5.07E-05	--
5664	642436.2	4165748.9	Worker	Scenario 1	3.07E-02	6.19E-05	--
5665	642536.2	4165748.9	Worker	Scenario 1	3.29E-02	6.64E-05	--
5666	642736.2	4165748.9	Worker	Scenario 1	3.34E-02	6.75E-05	--
5667	642836.2	4165748.9	Worker	Scenario 1	3.32E-02	6.71E-05	--
5668	642936.2	4165748.9	Worker	Scenario 1	3.36E-02	6.79E-05	--
5669	643036.2	4165748.9	Worker	Scenario 1	3.50E-02	7.07E-05	--
5670	643136.2	4165748.9	Worker	Scenario 1	3.77E-02	7.62E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5671	643236.2	4165748.9	Worker	Scenario 1	4.11E-02	8.29E-05	--
5672	643336.2	4165748.9	Worker	Scenario 1	4.37E-02	8.82E-05	--
5673	643436.2	4165748.9	Worker	Scenario 1	4.64E-02	9.37E-05	--
5674	643536.2	4165748.9	Worker	Scenario 1	4.92E-02	9.94E-05	--
5675	643636.2	4165748.9	Worker	Scenario 1	5.92E-02	1.20E-04	--
5676	643736.2	4165748.9	Worker	Scenario 1	6.13E-02	1.24E-04	--
5677	643836.2	4165748.9	Worker	Scenario 1	6.34E-02	1.28E-04	--
5678	643936.2	4165748.9	Worker	Scenario 1	6.55E-02	1.32E-04	--
5679	644036.2	4165748.9	Worker	Scenario 1	6.74E-02	1.36E-04	--
5680	644136.2	4165748.9	Worker	Scenario 1	6.90E-02	1.39E-04	--
5681	644236.2	4165748.9	Worker	Scenario 1	7.04E-02	1.42E-04	--
5682	644336.2	4165748.9	Worker	Scenario 1	7.15E-02	1.44E-04	--
5683	644436.2	4165748.9	Worker	Scenario 1	7.27E-02	1.47E-04	--
5684	644536.2	4165748.9	Worker	Scenario 1	6.84E-02	1.38E-04	--
5685	644636.2	4165748.9	Worker	Scenario 1	6.56E-02	1.33E-04	--
5686	644736.2	4165748.9	Worker	Scenario 1	6.79E-02	1.37E-04	--
5687	644836.2	4165748.9	Worker	Scenario 1	6.60E-02	1.33E-04	--
5688	644936.2	4165748.9	Worker	Scenario 1	6.44E-02	1.30E-04	--
5689	645036.2	4165748.9	Worker	Scenario 1	6.86E-02	1.39E-04	--
5690	645136.2	4165748.9	Worker	Scenario 1	6.24E-02	1.26E-04	--
5691	645236.2	4165748.9	Worker	Scenario 1	5.93E-02	1.20E-04	--
5692	645336.2	4165748.9	Worker	Scenario 1	5.78E-02	1.17E-04	--
5693	645736.2	4165748.9	Worker	Scenario 1	5.69E-02	1.15E-04	--
5694	645836.2	4165748.9	Worker	Scenario 1	5.67E-02	1.15E-04	--
5695	645936.2	4165748.9	Worker	Scenario 1	5.65E-02	1.14E-04	--
5696	646036.2	4165748.9	Worker	Scenario 1	5.63E-02	1.14E-04	--
5697	646136.2	4165748.9	Worker	Scenario 1	5.60E-02	1.13E-04	--
5698	646336.2	4165748.9	Worker	Scenario 1	5.55E-02	1.12E-04	--
5699	646436.2	4165748.9	Worker	Scenario 1	5.53E-02	1.12E-04	--
5700	646536.2	4165748.9	Worker	Scenario 1	5.51E-02	1.11E-04	--
5701	646636.2	4165748.9	Worker	Scenario 1	5.49E-02	1.11E-04	--
5702	638936.2	4165848.9	Worker	Scenario 1	4.46E-03	9.02E-06	--
5703	639036.2	4165848.9	Worker	Scenario 1	4.55E-03	9.18E-06	--
5704	639136.2	4165848.9	Worker	Scenario 1	4.71E-03	9.52E-06	--
5705	639236.2	4165848.9	Worker	Scenario 1	4.90E-03	9.89E-06	--
5706	639336.2	4165848.9	Worker	Scenario 1	5.54E-03	1.12E-05	--
5707	639436.2	4165848.9	Worker	Scenario 1	5.64E-03	1.14E-05	--
5708	639536.2	4165848.9	Worker	Scenario 1	5.23E-03	1.06E-05	--
5709	639636.2	4165848.9	Worker	Scenario 1	5.21E-03	1.05E-05	--
5710	639736.2	4165848.9	Worker	Scenario 1	5.42E-03	1.09E-05	--
5711	639836.2	4165848.9	Worker	Scenario 1	5.80E-03	1.17E-05	--
5712	639936.2	4165848.9	Worker	Scenario 1	6.34E-03	1.28E-05	--
5713	640036.2	4165848.9	Worker	Scenario 1	6.89E-03	1.39E-05	--
5714	640136.2	4165848.9	Worker	Scenario 1	6.10E-03	1.23E-05	--
5715	640236.2	4165848.9	Worker	Scenario 1	6.21E-03	1.25E-05	--
5716	640336.2	4165848.9	Worker	Scenario 1	6.46E-03	1.30E-05	--
5717	640436.2	4165848.9	Worker	Scenario 1	6.65E-03	1.34E-05	--
5718	640536.2	4165848.9	Worker	Scenario 1	7.35E-03	1.48E-05	--
5719	640636.2	4165848.9	Worker	Scenario 1	9.95E-03	2.01E-05	--
5720	640736.2	4165848.9	Worker	Scenario 1	1.38E-02	2.78E-05	--
5721	640836.2	4165848.9	Worker	Scenario 1	1.00E-02	2.03E-05	--
5722	640936.2	4165848.9	Worker	Scenario 1	8.72E-03	1.76E-05	--
5723	641036.2	4165848.9	Worker	Scenario 1	8.51E-03	1.72E-05	--
5724	641136.2	4165848.9	Worker	Scenario 1	1.26E-02	2.55E-05	--
5725	641236.2	4165848.9	Worker	Scenario 1	9.88E-03	2.00E-05	--
5726	641336.2	4165848.9	Worker	Scenario 1	9.72E-03	1.96E-05	--
5727	641436.2	4165848.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
5728	641536.2	4165848.9	Worker	Scenario 1	1.13E-02	2.29E-05	--
5729	641636.2	4165848.9	Worker	Scenario 1	1.75E-02	3.53E-05	--
5730	641736.2	4165848.9	Worker	Scenario 1	1.37E-02	2.76E-05	--
5731	641836.2	4165848.9	Worker	Scenario 1	1.53E-02	3.08E-05	--
5732	641936.2	4165848.9	Worker	Scenario 1	1.79E-02	3.62E-05	--
5733	642036.2	4165848.9	Worker	Scenario 1	2.23E-02	4.51E-05	--
5734	642136.2	4165848.9	Worker	Scenario 1	2.66E-02	5.37E-05	--
5735	642236.2	4165848.9	Worker	Scenario 1	3.17E-02	6.40E-05	--
5736	642336.2	4165848.9	Worker	Scenario 1	3.38E-02	6.84E-05	--
5737	642636.2	4165848.9	Worker	Scenario 1	3.68E-02	7.43E-05	--
5738	642736.2	4165848.9	Worker	Scenario 1	3.69E-02	7.46E-05	--
5739	642836.2	4165848.9	Worker	Scenario 1	3.69E-02	7.45E-05	--
5740	642936.2	4165848.9	Worker	Scenario 1	3.74E-02	7.56E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5741	643036.2	4165848.9	Worker	Scenario 1	3.90E-02	7.87E-05	--
5742	643136.2	4165848.9	Worker	Scenario 1	4.12E-02	8.33E-05	--
5743	643236.2	4165848.9	Worker	Scenario 1	4.51E-02	9.11E-05	--
5744	643336.2	4165848.9	Worker	Scenario 1	4.88E-02	9.86E-05	--
5745	643436.2	4165848.9	Worker	Scenario 1	5.55E-02	1.12E-04	--
5746	643536.2	4165848.9	Worker	Scenario 1	6.52E-02	1.32E-04	--
5747	643636.2	4165848.9	Worker	Scenario 1	5.86E-02	1.18E-04	--
5748	643736.2	4165848.9	Worker	Scenario 1	5.93E-02	1.20E-04	--
5749	643836.2	4165848.9	Worker	Scenario 1	6.18E-02	1.25E-04	--
5750	643936.2	4165848.9	Worker	Scenario 1	6.46E-02	1.30E-04	--
5751	644036.2	4165848.9	Worker	Scenario 1	6.74E-02	1.36E-04	--
5752	644136.2	4165848.9	Worker	Scenario 1	6.99E-02	1.41E-04	--
5753	644236.2	4165848.9	Worker	Scenario 1	7.20E-02	1.45E-04	--
5754	644336.2	4165848.9	Worker	Scenario 1	7.33E-02	1.48E-04	--
5755	644436.2	4165848.9	Worker	Scenario 1	7.35E-02	1.48E-04	--
5756	644536.2	4165848.9	Worker	Scenario 1	7.25E-02	1.47E-04	--
5757	644636.2	4165848.9	Worker	Scenario 1	7.11E-02	1.44E-04	--
5758	644736.2	4165848.9	Worker	Scenario 1	7.27E-02	1.47E-04	--
5759	644836.2	4165848.9	Worker	Scenario 1	7.11E-02	1.44E-04	--
5760	644936.2	4165848.9	Worker	Scenario 1	7.44E-02	1.50E-04	--
5761	645036.2	4165848.9	Worker	Scenario 1	6.87E-02	1.39E-04	--
5762	645436.2	4165848.9	Worker	Scenario 1	6.27E-02	1.27E-04	--
5763	645536.2	4165848.9	Worker	Scenario 1	6.25E-02	1.26E-04	--
5764	645636.2	4165848.9	Worker	Scenario 1	6.21E-02	1.25E-04	--
5765	645736.2	4165848.9	Worker	Scenario 1	6.19E-02	1.25E-04	--
5766	645836.2	4165848.9	Worker	Scenario 1	6.17E-02	1.25E-04	--
5767	645936.2	4165848.9	Worker	Scenario 1	6.15E-02	1.24E-04	--
5768	646036.2	4165848.9	Worker	Scenario 1	6.12E-02	1.24E-04	--
5769	646136.2	4165848.9	Worker	Scenario 1	6.09E-02	1.23E-04	--
5770	646336.2	4165848.9	Worker	Scenario 1	6.02E-02	1.22E-04	--
5771	646436.2	4165848.9	Worker	Scenario 1	5.98E-02	1.21E-04	--
5772	646536.2	4165848.9	Worker	Scenario 1	5.95E-02	1.20E-04	--
5773	646636.2	4165848.9	Worker	Scenario 1	5.92E-02	1.20E-04	--
5774	646736.2	4165848.9	Worker	Scenario 1	5.88E-02	1.19E-04	--
5775	638736.2	4165948.9	Worker	Scenario 1	4.50E-03	9.09E-06	--
5776	638836.2	4165948.9	Worker	Scenario 1	4.97E-03	1.00E-05	--
5777	638936.2	4165948.9	Worker	Scenario 1	4.76E-03	9.62E-06	--
5778	639036.2	4165948.9	Worker	Scenario 1	4.82E-03	9.74E-06	--
5779	639136.2	4165948.9	Worker	Scenario 1	4.99E-03	1.01E-05	--
5780	639236.2	4165948.9	Worker	Scenario 1	5.09E-03	1.03E-05	--
5781	639336.2	4165948.9	Worker	Scenario 1	5.70E-03	1.15E-05	--
5782	639436.2	4165948.9	Worker	Scenario 1	5.78E-03	1.17E-05	--
5783	639536.2	4165948.9	Worker	Scenario 1	5.24E-03	1.06E-05	--
5784	639636.2	4165948.9	Worker	Scenario 1	5.47E-03	1.10E-05	--
5785	639736.2	4165948.9	Worker	Scenario 1	5.63E-03	1.14E-05	--
5786	639836.2	4165948.9	Worker	Scenario 1	5.83E-03	1.18E-05	--
5787	639936.2	4165948.9	Worker	Scenario 1	6.06E-03	1.22E-05	--
5788	640036.2	4165948.9	Worker	Scenario 1	7.39E-03	1.49E-05	--
5789	640136.2	4165948.9	Worker	Scenario 1	6.49E-03	1.31E-05	--
5790	640236.2	4165948.9	Worker	Scenario 1	6.68E-03	1.35E-05	--
5791	640336.2	4165948.9	Worker	Scenario 1	6.99E-03	1.41E-05	--
5792	640436.2	4165948.9	Worker	Scenario 1	7.37E-03	1.49E-05	--
5793	640536.2	4165948.9	Worker	Scenario 1	8.27E-03	1.67E-05	--
5794	640636.2	4165948.9	Worker	Scenario 1	9.66E-03	1.95E-05	--
5795	640736.2	4165948.9	Worker	Scenario 1	1.16E-02	2.34E-05	--
5796	640836.2	4165948.9	Worker	Scenario 1	1.56E-02	3.15E-05	--
5797	640936.2	4165948.9	Worker	Scenario 1	1.61E-02	3.26E-05	--
5798	641036.2	4165948.9	Worker	Scenario 1	1.51E-02	3.06E-05	--
5799	641136.2	4165948.9	Worker	Scenario 1	1.04E-02	2.10E-05	--
5800	641236.2	4165948.9	Worker	Scenario 1	1.14E-02	2.31E-05	--
5801	641336.2	4165948.9	Worker	Scenario 1	1.16E-02	2.33E-05	--
5802	641436.2	4165948.9	Worker	Scenario 1	1.49E-02	3.01E-05	--
5803	641536.2	4165948.9	Worker	Scenario 1	1.56E-02	3.16E-05	--
5804	641636.2	4165948.9	Worker	Scenario 1	1.95E-02	3.93E-05	--
5805	641736.2	4165948.9	Worker	Scenario 1	2.10E-02	4.25E-05	--
5806	641836.2	4165948.9	Worker	Scenario 1	2.48E-02	5.00E-05	--
5807	642136.2	4165948.9	Worker	Scenario 1	3.41E-02	6.89E-05	--
5808	642236.2	4165948.9	Worker	Scenario 1	3.57E-02	7.21E-05	--
5809	642436.2	4165948.9	Worker	Scenario 1	3.83E-02	7.74E-05	--
5810	642536.2	4165948.9	Worker	Scenario 1	3.95E-02	7.98E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5811	642636.2	4165948.9	Worker	Scenario 1	4.05E-02	8.17E-05	--
5812	642736.2	4165948.9	Worker	Scenario 1	4.09E-02	8.26E-05	--
5813	642836.2	4165948.9	Worker	Scenario 1	4.11E-02	8.30E-05	--
5814	642936.2	4165948.9	Worker	Scenario 1	4.18E-02	8.44E-05	--
5815	643036.2	4165948.9	Worker	Scenario 1	4.32E-02	8.72E-05	--
5816	643136.2	4165948.9	Worker	Scenario 1	4.65E-02	9.39E-05	--
5817	643236.2	4165948.9	Worker	Scenario 1	5.06E-02	1.02E-04	--
5818	643336.2	4165948.9	Worker	Scenario 1	5.84E-02	1.18E-04	--
5819	643436.2	4165948.9	Worker	Scenario 1	6.51E-02	1.32E-04	--
5820	643536.2	4165948.9	Worker	Scenario 1	6.16E-02	1.25E-04	--
5821	643636.2	4165948.9	Worker	Scenario 1	6.46E-02	1.30E-04	--
5822	643736.2	4165948.9	Worker	Scenario 1	6.74E-02	1.36E-04	--
5823	643836.2	4165948.9	Worker	Scenario 1	7.04E-02	1.42E-04	--
5824	643936.2	4165948.9	Worker	Scenario 1	7.37E-02	1.49E-04	--
5825	644036.2	4165948.9	Worker	Scenario 1	7.68E-02	1.55E-04	--
5826	644136.2	4165948.9	Worker	Scenario 1	7.92E-02	1.60E-04	--
5827	644236.2	4165948.9	Worker	Scenario 1	8.08E-02	1.63E-04	--
5828	644336.2	4165948.9	Worker	Scenario 1	8.12E-02	1.64E-04	--
5829	644436.2	4165948.9	Worker	Scenario 1	7.97E-02	1.61E-04	--
5830	644536.2	4165948.9	Worker	Scenario 1	7.83E-02	1.58E-04	--
5831	644636.2	4165948.9	Worker	Scenario 1	7.72E-02	1.56E-04	--
5832	644736.2	4165948.9	Worker	Scenario 1	7.59E-02	1.53E-04	--
5833	645236.2	4165948.9	Worker	Scenario 1	7.01E-02	1.41E-04	--
5834	645336.2	4165948.9	Worker	Scenario 1	6.95E-02	1.40E-04	--
5835	645436.2	4165948.9	Worker	Scenario 1	6.87E-02	1.39E-04	--
5836	645536.2	4165948.9	Worker	Scenario 1	6.83E-02	1.38E-04	--
5837	645636.2	4165948.9	Worker	Scenario 1	6.80E-02	1.37E-04	--
5838	645736.2	4165948.9	Worker	Scenario 1	6.77E-02	1.37E-04	--
5839	645836.2	4165948.9	Worker	Scenario 1	6.75E-02	1.36E-04	--
5840	645936.2	4165948.9	Worker	Scenario 1	6.72E-02	1.36E-04	--
5841	646036.2	4165948.9	Worker	Scenario 1	6.68E-02	1.35E-04	--
5842	646136.2	4165948.9	Worker	Scenario 1	6.64E-02	1.34E-04	--
5843	646336.2	4165948.9	Worker	Scenario 1	6.55E-02	1.32E-04	--
5844	646436.2	4165948.9	Worker	Scenario 1	6.49E-02	1.31E-04	--
5845	646536.2	4165948.9	Worker	Scenario 1	6.44E-02	1.30E-04	--
5846	646636.2	4165948.9	Worker	Scenario 1	6.39E-02	1.29E-04	--
5847	646736.2	4165948.9	Worker	Scenario 1	6.33E-02	1.28E-04	--
5848	638536.2	4166048.9	Worker	Scenario 1	5.17E-03	1.04E-05	--
5849	638636.2	4166048.9	Worker	Scenario 1	4.72E-03	9.53E-06	--
5850	638736.2	4166048.9	Worker	Scenario 1	4.63E-03	9.36E-06	--
5851	638836.2	4166048.9	Worker	Scenario 1	5.05E-03	1.02E-05	--
5852	638936.2	4166048.9	Worker	Scenario 1	5.18E-03	1.05E-05	--
5853	639036.2	4166048.9	Worker	Scenario 1	5.07E-03	1.02E-05	--
5854	639136.2	4166048.9	Worker	Scenario 1	5.10E-03	1.03E-05	--
5855	639236.2	4166048.9	Worker	Scenario 1	5.27E-03	1.06E-05	--
5856	639336.2	4166048.9	Worker	Scenario 1	5.96E-03	1.20E-05	--
5857	639436.2	4166048.9	Worker	Scenario 1	5.94E-03	1.20E-05	--
5858	639536.2	4166048.9	Worker	Scenario 1	5.43E-03	1.10E-05	--
5859	639636.2	4166048.9	Worker	Scenario 1	5.69E-03	1.15E-05	--
5860	639736.2	4166048.9	Worker	Scenario 1	5.81E-03	1.17E-05	--
5861	639836.2	4166048.9	Worker	Scenario 1	6.09E-03	1.23E-05	--
5862	639936.2	4166048.9	Worker	Scenario 1	6.30E-03	1.27E-05	--
5863	640036.2	4166048.9	Worker	Scenario 1	6.55E-03	1.32E-05	--
5864	640136.2	4166048.9	Worker	Scenario 1	8.74E-03	1.77E-05	--
5865	640236.2	4166048.9	Worker	Scenario 1	7.56E-03	1.53E-05	--
5866	640336.2	4166048.9	Worker	Scenario 1	7.57E-03	1.53E-05	--
5867	640436.2	4166048.9	Worker	Scenario 1	7.86E-03	1.59E-05	--
5868	640536.2	4166048.9	Worker	Scenario 1	8.08E-03	1.63E-05	--
5869	640636.2	4166048.9	Worker	Scenario 1	9.28E-03	1.87E-05	--
5870	640736.2	4166048.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
5871	640836.2	4166048.9	Worker	Scenario 1	1.37E-02	2.77E-05	--
5872	640936.2	4166048.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
5873	641036.2	4166048.9	Worker	Scenario 1	1.95E-02	3.95E-05	--
5874	641136.2	4166048.9	Worker	Scenario 1	1.52E-02	3.06E-05	--
5875	641236.2	4166048.9	Worker	Scenario 1	1.73E-02	3.49E-05	--
5876	641336.2	4166048.9	Worker	Scenario 1	1.98E-02	3.99E-05	--
5877	641436.2	4166048.9	Worker	Scenario 1	2.19E-02	4.41E-05	--
5878	641636.2	4166048.9	Worker	Scenario 1	2.70E-02	5.46E-05	--
5879	641736.2	4166048.9	Worker	Scenario 1	2.83E-02	5.72E-05	--
5880	641836.2	4166048.9	Worker	Scenario 1	3.16E-02	6.38E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5881	641936.2	4166048.9	Worker	Scenario 1	3.38E-02	6.82E-05	--
5882	642036.2	4166048.9	Worker	Scenario 1	3.54E-02	7.15E-05	--
5883	642136.2	4166048.9	Worker	Scenario 1	3.70E-02	7.47E-05	--
5884	642336.2	4166048.9	Worker	Scenario 1	4.03E-02	8.14E-05	--
5885	642436.2	4166048.9	Worker	Scenario 1	4.19E-02	8.47E-05	--
5886	642536.2	4166048.9	Worker	Scenario 1	4.35E-02	8.79E-05	--
5887	642636.2	4166048.9	Worker	Scenario 1	4.48E-02	9.05E-05	--
5888	642736.2	4166048.9	Worker	Scenario 1	4.56E-02	9.20E-05	--
5889	642836.2	4166048.9	Worker	Scenario 1	4.55E-02	9.19E-05	--
5890	642936.2	4166048.9	Worker	Scenario 1	4.66E-02	9.42E-05	--
5891	643036.2	4166048.9	Worker	Scenario 1	4.89E-02	9.88E-05	--
5892	643136.2	4166048.9	Worker	Scenario 1	5.26E-02	1.06E-04	--
5893	643236.2	4166048.9	Worker	Scenario 1	5.79E-02	1.17E-04	--
5894	643336.2	4166048.9	Worker	Scenario 1	6.27E-02	1.27E-04	--
5895	643436.2	4166048.9	Worker	Scenario 1	6.66E-02	1.35E-04	--
5896	643536.2	4166048.9	Worker	Scenario 1	7.04E-02	1.42E-04	--
5897	643636.2	4166048.9	Worker	Scenario 1	7.40E-02	1.49E-04	--
5898	643736.2	4166048.9	Worker	Scenario 1	7.78E-02	1.57E-04	--
5899	643836.2	4166048.9	Worker	Scenario 1	8.10E-02	1.64E-04	--
5900	643936.2	4166048.9	Worker	Scenario 1	8.48E-02	1.71E-04	--
5901	644036.2	4166048.9	Worker	Scenario 1	8.79E-02	1.78E-04	--
5902	644136.2	4166048.9	Worker	Scenario 1	9.00E-02	1.82E-04	--
5903	644236.2	4166048.9	Worker	Scenario 1	9.06E-02	1.83E-04	--
5904	644336.2	4166048.9	Worker	Scenario 1	9.02E-02	1.82E-04	--
5905	644936.2	4166048.9	Worker	Scenario 1	8.00E-02	1.61E-04	--
5906	645036.2	4166048.9	Worker	Scenario 1	7.90E-02	1.59E-04	--
5907	645136.2	4166048.9	Worker	Scenario 1	7.80E-02	1.57E-04	--
5908	645236.2	4166048.9	Worker	Scenario 1	7.70E-02	1.56E-04	--
5909	645336.2	4166048.9	Worker	Scenario 1	7.66E-02	1.55E-04	--
5910	645436.2	4166048.9	Worker	Scenario 1	7.55E-02	1.53E-04	--
5911	645536.2	4166048.9	Worker	Scenario 1	7.52E-02	1.52E-04	--
5912	645636.2	4166048.9	Worker	Scenario 1	7.49E-02	1.51E-04	--
5913	645736.2	4166048.9	Worker	Scenario 1	7.45E-02	1.50E-04	--
5914	645836.2	4166048.9	Worker	Scenario 1	7.41E-02	1.50E-04	--
5915	645936.2	4166048.9	Worker	Scenario 1	7.37E-02	1.49E-04	--
5916	646036.2	4166048.9	Worker	Scenario 1	7.32E-02	1.48E-04	--
5917	646136.2	4166048.9	Worker	Scenario 1	7.27E-02	1.47E-04	--
5918	646336.2	4166048.9	Worker	Scenario 1	7.14E-02	1.44E-04	--
5919	646436.2	4166048.9	Worker	Scenario 1	7.06E-02	1.43E-04	--
5920	646536.2	4166048.9	Worker	Scenario 1	6.98E-02	1.41E-04	--
5921	646636.2	4166048.9	Worker	Scenario 1	6.91E-02	1.39E-04	--
5922	646736.2	4166048.9	Worker	Scenario 1	6.83E-02	1.38E-04	--
5923	646836.2	4166048.9	Worker	Scenario 1	6.73E-02	1.36E-04	--
5924	638436.2	4166148.9	Worker	Scenario 1	4.88E-03	9.86E-06	--
5925	638536.2	4166148.9	Worker	Scenario 1	5.08E-03	1.03E-05	--
5926	638636.2	4166148.9	Worker	Scenario 1	4.81E-03	9.72E-06	--
5927	638736.2	4166148.9	Worker	Scenario 1	4.79E-03	9.67E-06	--
5928	638836.2	4166148.9	Worker	Scenario 1	5.07E-03	1.02E-05	--
5929	638936.2	4166148.9	Worker	Scenario 1	5.61E-03	1.13E-05	--
5930	639036.2	4166148.9	Worker	Scenario 1	5.48E-03	1.11E-05	--
5931	639136.2	4166148.9	Worker	Scenario 1	5.21E-03	1.05E-05	--
5932	639236.2	4166148.9	Worker	Scenario 1	5.39E-03	1.09E-05	--
5933	639336.2	4166148.9	Worker	Scenario 1	5.88E-03	1.19E-05	--
5934	639436.2	4166148.9	Worker	Scenario 1	6.65E-03	1.34E-05	--
5935	639536.2	4166148.9	Worker	Scenario 1	5.90E-03	1.19E-05	--
5936	639636.2	4166148.9	Worker	Scenario 1	6.30E-03	1.27E-05	--
5937	639736.2	4166148.9	Worker	Scenario 1	6.29E-03	1.27E-05	--
5938	639836.2	4166148.9	Worker	Scenario 1	6.64E-03	1.34E-05	--
5939	639936.2	4166148.9	Worker	Scenario 1	7.21E-03	1.46E-05	--
5940	640036.2	4166148.9	Worker	Scenario 1	7.36E-03	1.49E-05	--
5941	640136.2	4166148.9	Worker	Scenario 1	9.10E-03	1.84E-05	--
5942	640236.2	4166148.9	Worker	Scenario 1	8.75E-03	1.77E-05	--
5943	640336.2	4166148.9	Worker	Scenario 1	7.82E-03	1.58E-05	--
5944	640436.2	4166148.9	Worker	Scenario 1	9.21E-03	1.86E-05	--
5945	640536.2	4166148.9	Worker	Scenario 1	9.00E-03	1.82E-05	--
5946	640636.2	4166148.9	Worker	Scenario 1	1.02E-02	2.06E-05	--
5947	640736.2	4166148.9	Worker	Scenario 1	1.20E-02	2.41E-05	--
5948	640836.2	4166148.9	Worker	Scenario 1	1.51E-02	3.05E-05	--
5949	640936.2	4166148.9	Worker	Scenario 1	1.83E-02	3.70E-05	--
5950	641036.2	4166148.9	Worker	Scenario 1	2.08E-02	4.20E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million) Receptor Risk	Chronic Hazard Index Receptor Risk	Acute Hazard Index Receptor Risk
5951	641136.2	4166148.9	Worker	Scenario 1	2.32E-02	4.68E-05	--
5952	641236.2	4166148.9	Worker	Scenario 1	2.32E-02	4.69E-05	--
5953	641336.2	4166148.9	Worker	Scenario 1	2.56E-02	5.17E-05	--
5954	641436.2	4166148.9	Worker	Scenario 1	2.83E-02	5.71E-05	--
5955	641536.2	4166148.9	Worker	Scenario 1	3.08E-02	6.23E-05	--
5956	641636.2	4166148.9	Worker	Scenario 1	3.24E-02	6.55E-05	--
5957	641736.2	4166148.9	Worker	Scenario 1	3.36E-02	6.78E-05	--
5958	641836.2	4166148.9	Worker	Scenario 1	3.57E-02	7.22E-05	--
5959	641936.2	4166148.9	Worker	Scenario 1	3.76E-02	7.59E-05	--
5960	642236.2	4166148.9	Worker	Scenario 1	4.22E-02	8.53E-05	--
5961	642336.2	4166148.9	Worker	Scenario 1	4.42E-02	8.92E-05	--
5962	642436.2	4166148.9	Worker	Scenario 1	4.62E-02	9.32E-05	--
5963	642536.2	4166148.9	Worker	Scenario 1	4.83E-02	9.75E-05	--
5964	642636.2	4166148.9	Worker	Scenario 1	5.01E-02	1.01E-04	--
5965	642736.2	4166148.9	Worker	Scenario 1	5.07E-02	1.02E-04	--
5966	642836.2	4166148.9	Worker	Scenario 1	5.15E-02	1.04E-04	--
5967	642936.2	4166148.9	Worker	Scenario 1	5.31E-02	1.07E-04	--
5968	643036.2	4166148.9	Worker	Scenario 1	5.58E-02	1.13E-04	--
5969	644536.2	4166148.9	Worker	Scenario 1	9.49E-02	1.92E-04	--
5970	644636.2	4166148.9	Worker	Scenario 1	9.31E-02	1.88E-04	--
5971	644736.2	4166148.9	Worker	Scenario 1	9.12E-02	1.84E-04	--
5972	644836.2	4166148.9	Worker	Scenario 1	8.97E-02	1.81E-04	--
5973	644936.2	4166148.9	Worker	Scenario 1	8.85E-02	1.79E-04	--
5974	645036.2	4166148.9	Worker	Scenario 1	8.75E-02	1.77E-04	--
5975	645136.2	4166148.9	Worker	Scenario 1	8.65E-02	1.75E-04	--
5976	645236.2	4166148.9	Worker	Scenario 1	8.55E-02	1.73E-04	--
5977	645336.2	4166148.9	Worker	Scenario 1	8.51E-02	1.72E-04	--
5978	645436.2	4166148.9	Worker	Scenario 1	8.37E-02	1.69E-04	--
5979	645536.2	4166148.9	Worker	Scenario 1	8.33E-02	1.68E-04	--
5980	645636.2	4166148.9	Worker	Scenario 1	8.28E-02	1.67E-04	--
5981	645736.2	4166148.9	Worker	Scenario 1	8.23E-02	1.66E-04	--
5982	645836.2	4166148.9	Worker	Scenario 1	8.18E-02	1.65E-04	--
5983	645936.2	4166148.9	Worker	Scenario 1	8.12E-02	1.64E-04	--
5984	646036.2	4166148.9	Worker	Scenario 1	8.04E-02	1.62E-04	--
5985	646136.2	4166148.9	Worker	Scenario 1	7.96E-02	1.61E-04	--
5986	646336.2	4166148.9	Worker	Scenario 1	7.78E-02	1.57E-04	--
5987	646436.2	4166148.9	Worker	Scenario 1	7.68E-02	1.55E-04	--
5988	646536.2	4166148.9	Worker	Scenario 1	7.57E-02	1.53E-04	--
5989	646636.2	4166148.9	Worker	Scenario 1	7.46E-02	1.51E-04	--
5990	646736.2	4166148.9	Worker	Scenario 1	7.34E-02	1.48E-04	--
5991	646836.2	4166148.9	Worker	Scenario 1	7.19E-02	1.45E-04	--
5992	638236.2	4166248.9	Worker	Scenario 1	4.79E-03	9.68E-06	--
5993	638336.2	4166248.9	Worker	Scenario 1	5.32E-03	1.07E-05	--
5994	638436.2	4166248.9	Worker	Scenario 1	5.32E-03	1.07E-05	--
5995	638536.2	4166248.9	Worker	Scenario 1	5.15E-03	1.04E-05	--
5996	638636.2	4166248.9	Worker	Scenario 1	4.92E-03	9.94E-06	--
5997	638736.2	4166248.9	Worker	Scenario 1	5.00E-03	1.01E-05	--
5998	638836.2	4166248.9	Worker	Scenario 1	5.65E-03	1.14E-05	--
5999	638936.2	4166248.9	Worker	Scenario 1	5.52E-03	1.12E-05	--
6000	639036.2	4166248.9	Worker	Scenario 1	5.33E-03	1.08E-05	--
6001	639136.2	4166248.9	Worker	Scenario 1	5.46E-03	1.10E-05	--
6002	639236.2	4166248.9	Worker	Scenario 1	5.84E-03	1.18E-05	--
6003	639336.2	4166248.9	Worker	Scenario 1	5.95E-03	1.20E-05	--
6004	639436.2	4166248.9	Worker	Scenario 1	8.33E-03	1.68E-05	--
6005	639536.2	4166248.9	Worker	Scenario 1	6.51E-03	1.31E-05	--
6006	639636.2	4166248.9	Worker	Scenario 1	7.16E-03	1.45E-05	--
6007	639736.2	4166248.9	Worker	Scenario 1	7.26E-03	1.47E-05	--
6008	639836.2	4166248.9	Worker	Scenario 1	8.21E-03	1.66E-05	--
6009	639936.2	4166248.9	Worker	Scenario 1	8.73E-03	1.76E-05	--
6010	640036.2	4166248.9	Worker	Scenario 1	7.88E-03	1.59E-05	--
6011	640136.2	4166248.9	Worker	Scenario 1	8.62E-03	1.74E-05	--
6012	640236.2	4166248.9	Worker	Scenario 1	9.67E-03	1.95E-05	--
6013	640336.2	4166248.9	Worker	Scenario 1	9.92E-03	2.00E-05	--
6014	640436.2	4166248.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
6015	640536.2	4166248.9	Worker	Scenario 1	1.35E-02	2.73E-05	--
6016	640636.2	4166248.9	Worker	Scenario 1	1.67E-02	3.38E-05	--
6017	640736.2	4166248.9	Worker	Scenario 1	1.97E-02	3.98E-05	--
6018	640836.2	4166248.9	Worker	Scenario 1	2.19E-02	4.42E-05	--
6019	640936.2	4166248.9	Worker	Scenario 1	2.30E-02	4.65E-05	--
6020	641036.2	4166248.9	Worker	Scenario 1	2.42E-02	4.89E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6021	641136.2	4166248.9	Worker	Scenario 1	2.62E-02	5.30E-05	--
6022	641236.2	4166248.9	Worker	Scenario 1	2.76E-02	5.57E-05	--
6023	641336.2	4166248.9	Worker	Scenario 1	2.97E-02	6.00E-05	--
6024	641436.2	4166248.9	Worker	Scenario 1	3.29E-02	6.65E-05	--
6025	641536.2	4166248.9	Worker	Scenario 1	3.64E-02	7.35E-05	--
6026	641636.2	4166248.9	Worker	Scenario 1	3.87E-02	7.82E-05	--
6027	641736.2	4166248.9	Worker	Scenario 1	3.96E-02	8.00E-05	--
6028	641836.2	4166248.9	Worker	Scenario 1	4.07E-02	8.21E-05	--
6029	641936.2	4166248.9	Worker	Scenario 1	4.19E-02	8.47E-05	--
6030	642036.2	4166248.9	Worker	Scenario 1	4.35E-02	8.78E-05	--
6031	642136.2	4166248.9	Worker	Scenario 1	4.50E-02	9.09E-05	--
6032	642236.2	4166248.9	Worker	Scenario 1	4.69E-02	9.46E-05	--
6033	642336.2	4166248.9	Worker	Scenario 1	4.90E-02	9.89E-05	--
6034	642436.2	4166248.9	Worker	Scenario 1	5.14E-02	1.04E-04	--
6035	642536.2	4166248.9	Worker	Scenario 1	5.32E-02	1.07E-04	--
6036	642636.2	4166248.9	Worker	Scenario 1	5.59E-02	1.13E-04	--
6037	642736.2	4166248.9	Worker	Scenario 1	5.80E-02	1.17E-04	--
6038	642836.2	4166248.9	Worker	Scenario 1	5.93E-02	1.20E-04	--
6039	642936.2	4166248.9	Worker	Scenario 1	6.08E-02	1.23E-04	--
6040	644236.2	4166248.9	Worker	Scenario 1	1.15E-01	2.32E-04	--
6041	644336.2	4166248.9	Worker	Scenario 1	1.16E-01	2.34E-04	--
6042	644436.2	4166248.9	Worker	Scenario 1	1.13E-01	2.27E-04	--
6043	644536.2	4166248.9	Worker	Scenario 1	1.09E-01	2.21E-04	--
6044	644636.2	4166248.9	Worker	Scenario 1	1.03E-01	2.09E-04	--
6045	644736.2	4166248.9	Worker	Scenario 1	1.02E-01	2.05E-04	--
6046	644836.2	4166248.9	Worker	Scenario 1	1.00E-01	2.02E-04	--
6047	644936.2	4166248.9	Worker	Scenario 1	9.90E-02	2.00E-04	--
6048	645036.2	4166248.9	Worker	Scenario 1	9.80E-02	1.98E-04	--
6049	645136.2	4166248.9	Worker	Scenario 1	9.69E-02	1.96E-04	--
6050	645236.2	4166248.9	Worker	Scenario 1	9.57E-02	1.93E-04	--
6051	645336.2	4166248.9	Worker	Scenario 1	9.49E-02	1.92E-04	--
6052	645436.2	4166248.9	Worker	Scenario 1	9.36E-02	1.89E-04	--
6053	645536.2	4166248.9	Worker	Scenario 1	9.29E-02	1.88E-04	--
6054	645636.2	4166248.9	Worker	Scenario 1	9.21E-02	1.86E-04	--
6055	645736.2	4166248.9	Worker	Scenario 1	9.14E-02	1.85E-04	--
6056	645836.2	4166248.9	Worker	Scenario 1	9.06E-02	1.83E-04	--
6057	645936.2	4166248.9	Worker	Scenario 1	8.96E-02	1.81E-04	--
6058	646036.2	4166248.9	Worker	Scenario 1	8.85E-02	1.79E-04	--
6059	646136.2	4166248.9	Worker	Scenario 1	8.74E-02	1.77E-04	--
6060	646336.2	4166248.9	Worker	Scenario 1	8.48E-02	1.71E-04	--
6061	646436.2	4166248.9	Worker	Scenario 1	8.34E-02	1.68E-04	--
6062	646536.2	4166248.9	Worker	Scenario 1	8.19E-02	1.65E-04	--
6063	646636.2	4166248.9	Worker	Scenario 1	8.03E-02	1.62E-04	--
6064	646736.2	4166248.9	Worker	Scenario 1	7.85E-02	1.58E-04	--
6065	646836.2	4166248.9	Worker	Scenario 1	7.67E-02	1.55E-04	--
6066	646936.2	4166248.9	Worker	Scenario 1	7.50E-02	1.51E-04	--
6067	638136.2	4166348.9	Worker	Scenario 1	4.84E-03	9.77E-06	--
6068	638236.2	4166348.9	Worker	Scenario 1	5.45E-03	1.10E-05	--
6069	638336.2	4166348.9	Worker	Scenario 1	5.33E-03	1.08E-05	--
6070	638436.2	4166348.9	Worker	Scenario 1	5.33E-03	1.08E-05	--
6071	638536.2	4166348.9	Worker	Scenario 1	4.93E-03	9.96E-06	--
6072	638636.2	4166348.9	Worker	Scenario 1	5.13E-03	1.04E-05	--
6073	638736.2	4166348.9	Worker	Scenario 1	5.69E-03	1.15E-05	--
6074	638836.2	4166348.9	Worker	Scenario 1	5.86E-03	1.18E-05	--
6075	638936.2	4166348.9	Worker	Scenario 1	5.59E-03	1.13E-05	--
6076	639036.2	4166348.9	Worker	Scenario 1	5.90E-03	1.19E-05	--
6077	639136.2	4166348.9	Worker	Scenario 1	6.10E-03	1.23E-05	--
6078	639236.2	4166348.9	Worker	Scenario 1	6.68E-03	1.35E-05	--
6079	639336.2	4166348.9	Worker	Scenario 1	6.63E-03	1.34E-05	--
6080	639436.2	4166348.9	Worker	Scenario 1	7.62E-03	1.54E-05	--
6081	639536.2	4166348.9	Worker	Scenario 1	9.19E-03	1.86E-05	--
6082	639636.2	4166348.9	Worker	Scenario 1	8.14E-03	1.64E-05	--
6083	639736.2	4166348.9	Worker	Scenario 1	8.00E-03	1.62E-05	--
6084	639836.2	4166348.9	Worker	Scenario 1	1.00E-02	2.03E-05	--
6085	639936.2	4166348.9	Worker	Scenario 1	1.06E-02	2.14E-05	--
6086	640036.2	4166348.9	Worker	Scenario 1	1.11E-02	2.25E-05	--
6087	640136.2	4166348.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
6088	640236.2	4166348.9	Worker	Scenario 1	1.27E-02	2.56E-05	--
6089	640336.2	4166348.9	Worker	Scenario 1	1.46E-02	2.95E-05	--
6090	640436.2	4166348.9	Worker	Scenario 1	1.75E-02	3.54E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6091	640536.2	4166348.9	Worker	Scenario 1	2.00E-02	4.04E-05	--
6092	640636.2	4166348.9	Worker	Scenario 1	2.18E-02	4.41E-05	--
6093	640736.2	4166348.9	Worker	Scenario 1	2.33E-02	4.72E-05	--
6094	640836.2	4166348.9	Worker	Scenario 1	2.42E-02	4.89E-05	--
6095	640936.2	4166348.9	Worker	Scenario 1	2.56E-02	5.17E-05	--
6096	641036.2	4166348.9	Worker	Scenario 1	2.73E-02	5.51E-05	--
6097	641136.2	4166348.9	Worker	Scenario 1	2.99E-02	6.04E-05	--
6098	641236.2	4166348.9	Worker	Scenario 1	3.26E-02	6.58E-05	--
6099	641336.2	4166348.9	Worker	Scenario 1	3.57E-02	7.22E-05	--
6100	641436.2	4166348.9	Worker	Scenario 1	4.05E-02	8.18E-05	--
6101	641536.2	4166348.9	Worker	Scenario 1	4.52E-02	9.13E-05	--
6102	641636.2	4166348.9	Worker	Scenario 1	4.70E-02	9.49E-05	--
6103	641936.2	4166348.9	Worker	Scenario 1	4.79E-02	9.68E-05	--
6104	642036.2	4166348.9	Worker	Scenario 1	4.91E-02	9.91E-05	--
6105	642136.2	4166348.9	Worker	Scenario 1	5.06E-02	1.02E-04	--
6106	642236.2	4166348.9	Worker	Scenario 1	5.16E-02	1.04E-04	--
6107	642336.2	4166348.9	Worker	Scenario 1	5.41E-02	1.09E-04	--
6108	642436.2	4166348.9	Worker	Scenario 1	5.72E-02	1.16E-04	--
6109	642536.2	4166348.9	Worker	Scenario 1	6.07E-02	1.23E-04	--
6110	642636.2	4166348.9	Worker	Scenario 1	6.41E-02	1.29E-04	--
6111	642736.2	4166348.9	Worker	Scenario 1	6.70E-02	1.35E-04	--
6112	642836.2	4166348.9	Worker	Scenario 1	6.89E-02	1.39E-04	--
6113	643036.2	4166348.9	Worker	Scenario 1	7.84E-02	1.58E-04	--
6114	643136.2	4166348.9	Worker	Scenario 1	8.58E-02	1.73E-04	--
6115	643236.2	4166348.9	Worker	Scenario 1	9.39E-02	1.90E-04	--
6116	643336.2	4166348.9	Worker	Scenario 1	1.02E-01	2.06E-04	--
6117	643436.2	4166348.9	Worker	Scenario 1	1.10E-01	2.22E-04	--
6118	643536.2	4166348.9	Worker	Scenario 1	1.15E-01	2.32E-04	--
6119	643636.2	4166348.9	Worker	Scenario 1	1.21E-01	2.44E-04	--
6120	643736.2	4166348.9	Worker	Scenario 1	1.28E-01	2.58E-04	--
6121	643836.2	4166348.9	Worker	Scenario 1	1.33E-01	2.69E-04	--
6122	643936.2	4166348.9	Worker	Scenario 1	1.37E-01	2.76E-04	--
6123	644036.2	4166348.9	Worker	Scenario 1	1.40E-01	2.82E-04	--
6124	644136.2	4166348.9	Worker	Scenario 1	1.37E-01	2.77E-04	--
6125	644236.2	4166348.9	Worker	Scenario 1	1.33E-01	2.69E-04	--
6126	644336.2	4166348.9	Worker	Scenario 1	1.30E-01	2.62E-04	--
6127	644436.2	4166348.9	Worker	Scenario 1	1.26E-01	2.54E-04	--
6128	644536.2	4166348.9	Worker	Scenario 1	1.23E-01	2.48E-04	--
6129	644636.2	4166348.9	Worker	Scenario 1	1.16E-01	2.35E-04	--
6130	644736.2	4166348.9	Worker	Scenario 1	1.15E-01	2.32E-04	--
6131	644836.2	4166348.9	Worker	Scenario 1	1.13E-01	2.29E-04	--
6132	644936.2	4166348.9	Worker	Scenario 1	1.12E-01	2.26E-04	--
6133	645036.2	4166348.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
6134	645136.2	4166348.9	Worker	Scenario 1	1.10E-01	2.21E-04	--
6135	645236.2	4166348.9	Worker	Scenario 1	1.08E-01	2.18E-04	--
6136	645336.2	4166348.9	Worker	Scenario 1	1.07E-01	2.16E-04	--
6137	645436.2	4166348.9	Worker	Scenario 1	1.05E-01	2.13E-04	--
6138	645536.2	4166348.9	Worker	Scenario 1	1.04E-01	2.10E-04	--
6139	645636.2	4166348.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
6140	645736.2	4166348.9	Worker	Scenario 1	1.02E-01	2.06E-04	--
6141	645836.2	4166348.9	Worker	Scenario 1	1.00E-01	2.03E-04	--
6142	645936.2	4166348.9	Worker	Scenario 1	9.90E-02	2.00E-04	--
6143	646036.2	4166348.9	Worker	Scenario 1	9.75E-02	1.97E-04	--
6144	646136.2	4166348.9	Worker	Scenario 1	9.58E-02	1.93E-04	--
6145	646336.2	4166348.9	Worker	Scenario 1	9.22E-02	1.86E-04	--
6146	646436.2	4166348.9	Worker	Scenario 1	9.02E-02	1.82E-04	--
6147	646536.2	4166348.9	Worker	Scenario 1	8.80E-02	1.78E-04	--
6148	646636.2	4166348.9	Worker	Scenario 1	8.57E-02	1.73E-04	--
6149	646736.2	4166348.9	Worker	Scenario 1	8.36E-02	1.69E-04	--
6150	646836.2	4166348.9	Worker	Scenario 1	8.15E-02	1.65E-04	--
6151	637936.2	4166448.9	Worker	Scenario 1	4.43E-03	8.95E-06	--
6152	638036.2	4166448.9	Worker	Scenario 1	4.58E-03	9.26E-06	--
6153	638136.2	4166448.9	Worker	Scenario 1	4.70E-03	9.49E-06	--
6154	638236.2	4166448.9	Worker	Scenario 1	4.87E-03	9.84E-06	--
6155	638336.2	4166448.9	Worker	Scenario 1	6.11E-03	1.23E-05	--
6156	638436.2	4166448.9	Worker	Scenario 1	5.43E-03	1.10E-05	--
6157	638536.2	4166448.9	Worker	Scenario 1	5.07E-03	1.02E-05	--
6158	638636.2	4166448.9	Worker	Scenario 1	5.52E-03	1.11E-05	--
6159	638736.2	4166448.9	Worker	Scenario 1	5.97E-03	1.21E-05	--
6160	638836.2	4166448.9	Worker	Scenario 1	6.20E-03	1.25E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6161	638936.2	4166448.9	Worker	Scenario 1	6.20E-03	1.25E-05	--
6162	639036.2	4166448.9	Worker	Scenario 1	7.38E-03	1.49E-05	--
6163	639136.2	4166448.9	Worker	Scenario 1	6.92E-03	1.40E-05	--
6164	639236.2	4166448.9	Worker	Scenario 1	7.33E-03	1.48E-05	--
6165	639336.2	4166448.9	Worker	Scenario 1	7.91E-03	1.60E-05	--
6166	639436.2	4166448.9	Worker	Scenario 1	8.49E-03	1.72E-05	--
6167	639536.2	4166448.9	Worker	Scenario 1	9.64E-03	1.95E-05	--
6168	639636.2	4166448.9	Worker	Scenario 1	1.07E-02	2.17E-05	--
6169	639736.2	4166448.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
6170	639836.2	4166448.9	Worker	Scenario 1	1.33E-02	2.69E-05	--
6171	639936.2	4166448.9	Worker	Scenario 1	1.46E-02	2.95E-05	--
6172	640036.2	4166448.9	Worker	Scenario 1	1.58E-02	3.18E-05	--
6173	640136.2	4166448.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
6174	640236.2	4166448.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
6175	640336.2	4166448.9	Worker	Scenario 1	1.76E-02	3.55E-05	--
6176	640436.2	4166448.9	Worker	Scenario 1	1.95E-02	3.94E-05	--
6177	640536.2	4166448.9	Worker	Scenario 1	2.16E-02	4.36E-05	--
6178	641436.2	4166448.9	Worker	Scenario 1	5.94E-02	1.20E-04	--
6179	641536.2	4166448.9	Worker	Scenario 1	6.30E-02	1.27E-04	--
6180	641736.2	4166448.9	Worker	Scenario 1	5.80E-02	1.17E-04	--
6181	641836.2	4166448.9	Worker	Scenario 1	5.65E-02	1.14E-04	--
6182	641936.2	4166448.9	Worker	Scenario 1	5.48E-02	1.11E-04	--
6183	642036.2	4166448.9	Worker	Scenario 1	5.53E-02	1.12E-04	--
6184	642136.2	4166448.9	Worker	Scenario 1	5.65E-02	1.14E-04	--
6185	642236.2	4166448.9	Worker	Scenario 1	5.84E-02	1.18E-04	--
6186	642336.2	4166448.9	Worker	Scenario 1	6.09E-02	1.23E-04	--
6187	642436.2	4166448.9	Worker	Scenario 1	6.45E-02	1.30E-04	--
6188	642536.2	4166448.9	Worker	Scenario 1	6.89E-02	1.39E-04	--
6189	642636.2	4166448.9	Worker	Scenario 1	7.41E-02	1.50E-04	--
6190	642936.2	4166448.9	Worker	Scenario 1	8.31E-02	1.68E-04	--
6191	643036.2	4166448.9	Worker	Scenario 1	9.28E-02	1.87E-04	--
6192	643136.2	4166448.9	Worker	Scenario 1	1.00E-01	2.03E-04	--
6193	643236.2	4166448.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
6194	643336.2	4166448.9	Worker	Scenario 1	1.21E-01	2.45E-04	--
6195	643436.2	4166448.9	Worker	Scenario 1	1.32E-01	2.66E-04	--
6196	643536.2	4166448.9	Worker	Scenario 1	1.42E-01	2.86E-04	--
6197	643636.2	4166448.9	Worker	Scenario 1	1.52E-01	3.07E-04	--
6198	643736.2	4166448.9	Worker	Scenario 1	1.59E-01	3.22E-04	--
6199	643836.2	4166448.9	Worker	Scenario 1	1.63E-01	3.30E-04	--
6200	643936.2	4166448.9	Worker	Scenario 1	1.63E-01	3.30E-04	--
6201	644036.2	4166448.9	Worker	Scenario 1	1.60E-01	3.24E-04	--
6202	644136.2	4166448.9	Worker	Scenario 1	1.56E-01	3.14E-04	--
6203	644236.2	4166448.9	Worker	Scenario 1	1.51E-01	3.04E-04	--
6204	644336.2	4166448.9	Worker	Scenario 1	1.46E-01	2.95E-04	--
6205	644436.2	4166448.9	Worker	Scenario 1	1.43E-01	2.88E-04	--
6206	644536.2	4166448.9	Worker	Scenario 1	1.39E-01	2.82E-04	--
6207	644636.2	4166448.9	Worker	Scenario 1	1.33E-01	2.68E-04	--
6208	644736.2	4166448.9	Worker	Scenario 1	1.31E-01	2.65E-04	--
6209	644836.2	4166448.9	Worker	Scenario 1	1.30E-01	2.62E-04	--
6210	644936.2	4166448.9	Worker	Scenario 1	1.28E-01	2.59E-04	--
6211	645036.2	4166448.9	Worker	Scenario 1	1.27E-01	2.56E-04	--
6212	645136.2	4166448.9	Worker	Scenario 1	1.25E-01	2.53E-04	--
6213	645236.2	4166448.9	Worker	Scenario 1	1.23E-01	2.48E-04	--
6214	645336.2	4166448.9	Worker	Scenario 1	1.21E-01	2.45E-04	--
6215	645436.2	4166448.9	Worker	Scenario 1	1.19E-01	2.40E-04	--
6216	645536.2	4166448.9	Worker	Scenario 1	1.17E-01	2.37E-04	--
6217	645636.2	4166448.9	Worker	Scenario 1	1.15E-01	2.33E-04	--
6218	645736.2	4166448.9	Worker	Scenario 1	1.13E-01	2.29E-04	--
6219	645836.2	4166448.9	Worker	Scenario 1	1.11E-01	2.25E-04	--
6220	645936.2	4166448.9	Worker	Scenario 1	1.09E-01	2.21E-04	--
6221	646036.2	4166448.9	Worker	Scenario 1	1.07E-01	2.16E-04	--
6222	646136.2	4166448.9	Worker	Scenario 1	1.05E-01	2.11E-04	--
6223	646336.2	4166448.9	Worker	Scenario 1	9.96E-02	2.01E-04	--
6224	646436.2	4166448.9	Worker	Scenario 1	9.70E-02	1.96E-04	--
6225	646536.2	4166448.9	Worker	Scenario 1	9.40E-02	1.90E-04	--
6226	646636.2	4166448.9	Worker	Scenario 1	9.13E-02	1.84E-04	--
6227	646736.2	4166448.9	Worker	Scenario 1	8.88E-02	1.79E-04	--
6228	646836.2	4166448.9	Worker	Scenario 1	8.65E-02	1.75E-04	--
6229	637736.2	4166548.9	Worker	Scenario 1	4.59E-03	9.27E-06	--
6230	637836.2	4166548.9	Worker	Scenario 1	4.34E-03	8.78E-06	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6231	637936.2	4166548.9	Worker	Scenario 1	4.48E-03	9.04E-06	--
6232	638036.2	4166548.9	Worker	Scenario 1	4.66E-03	9.41E-06	--
6233	638136.2	4166548.9	Worker	Scenario 1	4.95E-03	1.00E-05	--
6234	638236.2	4166548.9	Worker	Scenario 1	5.69E-03	1.15E-05	--
6235	638336.2	4166548.9	Worker	Scenario 1	5.86E-03	1.18E-05	--
6236	638436.2	4166548.9	Worker	Scenario 1	5.99E-03	1.21E-05	--
6237	638536.2	4166548.9	Worker	Scenario 1	5.97E-03	1.21E-05	--
6238	638636.2	4166548.9	Worker	Scenario 1	6.33E-03	1.28E-05	--
6239	638736.2	4166548.9	Worker	Scenario 1	6.65E-03	1.34E-05	--
6240	638836.2	4166548.9	Worker	Scenario 1	7.32E-03	1.48E-05	--
6241	638936.2	4166548.9	Worker	Scenario 1	7.75E-03	1.56E-05	--
6242	639036.2	4166548.9	Worker	Scenario 1	9.01E-03	1.82E-05	--
6243	639136.2	4166548.9	Worker	Scenario 1	1.00E-02	2.02E-05	--
6244	639236.2	4166548.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
6245	639336.2	4166548.9	Worker	Scenario 1	1.01E-02	2.04E-05	--
6246	639436.2	4166548.9	Worker	Scenario 1	1.04E-02	2.11E-05	--
6247	639536.2	4166548.9	Worker	Scenario 1	1.07E-02	2.17E-05	--
6248	639636.2	4166548.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
6249	639736.2	4166548.9	Worker	Scenario 1	1.28E-02	2.59E-05	--
6250	639836.2	4166548.9	Worker	Scenario 1	1.40E-02	2.83E-05	--
6251	639936.2	4166548.9	Worker	Scenario 1	1.55E-02	3.13E-05	--
6252	640036.2	4166548.9	Worker	Scenario 1	1.69E-02	3.42E-05	--
6253	640136.2	4166548.9	Worker	Scenario 1	1.76E-02	3.55E-05	--
6254	640236.2	4166548.9	Worker	Scenario 1	1.81E-02	3.65E-05	--
6255	640336.2	4166548.9	Worker	Scenario 1	1.94E-02	3.92E-05	--
6256	640436.2	4166548.9	Worker	Scenario 1	2.10E-02	4.24E-05	--
6257	640536.2	4166548.9	Worker	Scenario 1	2.29E-02	4.63E-05	--
6258	641636.2	4166548.9	Worker	Scenario 1	8.44E-02	1.70E-04	--
6259	641736.2	4166548.9	Worker	Scenario 1	7.24E-02	1.46E-04	--
6260	641836.2	4166548.9	Worker	Scenario 1	6.72E-02	1.36E-04	--
6261	641936.2	4166548.9	Worker	Scenario 1	6.46E-02	1.31E-04	--
6262	642036.2	4166548.9	Worker	Scenario 1	6.38E-02	1.29E-04	--
6263	642136.2	4166548.9	Worker	Scenario 1	6.45E-02	1.30E-04	--
6264	642236.2	4166548.9	Worker	Scenario 1	6.64E-02	1.34E-04	--
6265	642336.2	4166548.9	Worker	Scenario 1	6.94E-02	1.40E-04	--
6266	642436.2	4166548.9	Worker	Scenario 1	7.37E-02	1.49E-04	--
6267	642536.2	4166548.9	Worker	Scenario 1	7.94E-02	1.60E-04	--
6268	642836.2	4166548.9	Worker	Scenario 1	9.61E-02	1.94E-04	--
6269	642936.2	4166548.9	Worker	Scenario 1	9.89E-02	2.00E-04	--
6270	643036.2	4166548.9	Worker	Scenario 1	1.10E-01	2.22E-04	--
6271	643136.2	4166548.9	Worker	Scenario 1	1.20E-01	2.42E-04	--
6272	643236.2	4166548.9	Worker	Scenario 1	1.33E-01	2.69E-04	--
6273	643336.2	4166548.9	Worker	Scenario 1	1.47E-01	2.97E-04	--
6274	643436.2	4166548.9	Worker	Scenario 1	1.61E-01	3.26E-04	--
6275	643536.2	4166548.9	Worker	Scenario 1	1.75E-01	3.53E-04	--
6276	643636.2	4166548.9	Worker	Scenario 1	1.86E-01	3.77E-04	--
6277	643736.2	4166548.9	Worker	Scenario 1	1.93E-01	3.91E-04	--
6278	643836.2	4166548.9	Worker	Scenario 1	1.94E-01	3.93E-04	--
6279	643936.2	4166548.9	Worker	Scenario 1	1.91E-01	3.85E-04	--
6280	644036.2	4166548.9	Worker	Scenario 1	1.85E-01	3.73E-04	--
6281	644136.2	4166548.9	Worker	Scenario 1	1.78E-01	3.60E-04	--
6282	644236.2	4166548.9	Worker	Scenario 1	1.73E-01	3.49E-04	--
6283	644336.2	4166548.9	Worker	Scenario 1	1.68E-01	3.40E-04	--
6284	644436.2	4166548.9	Worker	Scenario 1	1.64E-01	3.32E-04	--
6285	644536.2	4166548.9	Worker	Scenario 1	1.61E-01	3.25E-04	--
6286	644636.2	4166548.9	Worker	Scenario 1	1.54E-01	3.11E-04	--
6287	644736.2	4166548.9	Worker	Scenario 1	1.52E-01	3.07E-04	--
6288	644836.2	4166548.9	Worker	Scenario 1	1.50E-01	3.03E-04	--
6289	644936.2	4166548.9	Worker	Scenario 1	1.48E-01	3.00E-04	--
6290	645036.2	4166548.9	Worker	Scenario 1	1.46E-01	2.95E-04	--
6291	645136.2	4166548.9	Worker	Scenario 1	1.43E-01	2.90E-04	--
6292	645236.2	4166548.9	Worker	Scenario 1	1.41E-01	2.84E-04	--
6293	645336.2	4166548.9	Worker	Scenario 1	1.38E-01	2.78E-04	--
6294	645436.2	4166548.9	Worker	Scenario 1	1.35E-01	2.72E-04	--
6295	645536.2	4166548.9	Worker	Scenario 1	1.32E-01	2.66E-04	--
6296	645636.2	4166548.9	Worker	Scenario 1	1.29E-01	2.61E-04	--
6297	645736.2	4166548.9	Worker	Scenario 1	1.26E-01	2.55E-04	--
6298	645836.2	4166548.9	Worker	Scenario 1	1.23E-01	2.49E-04	--
6299	645936.2	4166548.9	Worker	Scenario 1	1.20E-01	2.42E-04	--
6300	646036.2	4166548.9	Worker	Scenario 1	1.17E-01	2.36E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6301	646136.2	4166548.9	Worker	Scenario 1	1.14E-01	2.29E-04	--
6302	646336.2	4166548.9	Worker	Scenario 1	1.06E-01	2.15E-04	--
6303	646436.2	4166548.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
6304	646536.2	4166548.9	Worker	Scenario 1	9.98E-02	2.02E-04	--
6305	646636.2	4166548.9	Worker	Scenario 1	9.69E-02	1.96E-04	--
6306	646936.2	4166548.9	Worker	Scenario 1	8.87E-02	1.79E-04	--
6307	637636.2	4166648.9	Worker	Scenario 1	5.27E-03	1.06E-05	--
6308	637736.2	4166648.9	Worker	Scenario 1	5.38E-03	1.09E-05	--
6309	637836.2	4166648.9	Worker	Scenario 1	5.37E-03	1.08E-05	--
6310	637936.2	4166648.9	Worker	Scenario 1	5.34E-03	1.08E-05	--
6311	638036.2	4166648.9	Worker	Scenario 1	6.05E-03	1.22E-05	--
6312	638136.2	4166648.9	Worker	Scenario 1	6.10E-03	1.23E-05	--
6313	638236.2	4166648.9	Worker	Scenario 1	6.45E-03	1.30E-05	--
6314	638336.2	4166648.9	Worker	Scenario 1	6.35E-03	1.28E-05	--
6315	638436.2	4166648.9	Worker	Scenario 1	6.92E-03	1.40E-05	--
6316	638536.2	4166648.9	Worker	Scenario 1	7.31E-03	1.48E-05	--
6317	638636.2	4166648.9	Worker	Scenario 1	7.64E-03	1.54E-05	--
6318	638736.2	4166648.9	Worker	Scenario 1	7.99E-03	1.61E-05	--
6319	638836.2	4166648.9	Worker	Scenario 1	8.09E-03	1.63E-05	--
6320	638936.2	4166648.9	Worker	Scenario 1	8.60E-03	1.74E-05	--
6321	639036.2	4166648.9	Worker	Scenario 1	9.51E-03	1.92E-05	--
6322	639136.2	4166648.9	Worker	Scenario 1	1.07E-02	2.16E-05	--
6323	639236.2	4166648.9	Worker	Scenario 1	1.18E-02	2.39E-05	--
6324	639336.2	4166648.9	Worker	Scenario 1	1.20E-02	2.41E-05	--
6325	639436.2	4166648.9	Worker	Scenario 1	1.14E-02	2.30E-05	--
6326	639536.2	4166648.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
6327	639636.2	4166648.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
6328	639736.2	4166648.9	Worker	Scenario 1	1.36E-02	2.74E-05	--
6329	639836.2	4166648.9	Worker	Scenario 1	1.47E-02	2.97E-05	--
6330	639936.2	4166648.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
6331	640036.2	4166648.9	Worker	Scenario 1	1.74E-02	3.52E-05	--
6332	640136.2	4166648.9	Worker	Scenario 1	1.88E-02	3.80E-05	--
6333	640236.2	4166648.9	Worker	Scenario 1	1.97E-02	3.98E-05	--
6334	640336.2	4166648.9	Worker	Scenario 1	2.09E-02	4.23E-05	--
6335	640436.2	4166648.9	Worker	Scenario 1	2.24E-02	4.53E-05	--
6336	640536.2	4166648.9	Worker	Scenario 1	2.44E-02	4.92E-05	--
6337	641536.2	4166648.9	Worker	Scenario 1	1.52E-01	3.07E-04	--
6338	641636.2	4166648.9	Worker	Scenario 1	1.07E-01	2.17E-04	--
6339	641736.2	4166648.9	Worker	Scenario 1	8.86E-02	1.79E-04	--
6340	641836.2	4166648.9	Worker	Scenario 1	7.96E-02	1.61E-04	--
6341	641936.2	4166648.9	Worker	Scenario 1	7.53E-02	1.52E-04	--
6342	642036.2	4166648.9	Worker	Scenario 1	7.34E-02	1.48E-04	--
6343	642136.2	4166648.9	Worker	Scenario 1	7.38E-02	1.49E-04	--
6344	642236.2	4166648.9	Worker	Scenario 1	7.59E-02	1.53E-04	--
6345	642336.2	4166648.9	Worker	Scenario 1	8.01E-02	1.62E-04	--
6346	642436.2	4166648.9	Worker	Scenario 1	8.58E-02	1.73E-04	--
6347	642736.2	4166648.9	Worker	Scenario 1	1.08E-01	2.19E-04	--
6348	642836.2	4166648.9	Worker	Scenario 1	1.17E-01	2.35E-04	--
6349	642936.2	4166648.9	Worker	Scenario 1	1.20E-01	2.43E-04	--
6350	643036.2	4166648.9	Worker	Scenario 1	1.32E-01	2.68E-04	--
6351	643136.2	4166648.9	Worker	Scenario 1	1.46E-01	2.95E-04	--
6352	643236.2	4166648.9	Worker	Scenario 1	1.65E-01	3.33E-04	--
6353	643336.2	4166648.9	Worker	Scenario 1	1.84E-01	3.73E-04	--
6354	643436.2	4166648.9	Worker	Scenario 1	2.04E-01	4.12E-04	--
6355	643536.2	4166648.9	Worker	Scenario 1	2.21E-01	4.47E-04	--
6356	643636.2	4166648.9	Worker	Scenario 1	2.33E-01	4.70E-04	--
6357	643736.2	4166648.9	Worker	Scenario 1	2.36E-01	4.77E-04	--
6358	643836.2	4166648.9	Worker	Scenario 1	2.32E-01	4.69E-04	--
6359	643936.2	4166648.9	Worker	Scenario 1	2.24E-01	4.52E-04	--
6360	644036.2	4166648.9	Worker	Scenario 1	2.15E-01	4.35E-04	--
6361	644136.2	4166648.9	Worker	Scenario 1	2.08E-01	4.20E-04	--
6362	644236.2	4166648.9	Worker	Scenario 1	2.02E-01	4.09E-04	--
6363	644336.2	4166648.9	Worker	Scenario 1	1.98E-01	4.00E-04	--
6364	644436.2	4166648.9	Worker	Scenario 1	1.94E-01	3.91E-04	--
6365	644536.2	4166648.9	Worker	Scenario 1	1.89E-01	3.83E-04	--
6366	644636.2	4166648.9	Worker	Scenario 1	1.82E-01	3.68E-04	--
6367	644736.2	4166648.9	Worker	Scenario 1	1.79E-01	3.62E-04	--
6368	644836.2	4166648.9	Worker	Scenario 1	1.76E-01	3.56E-04	--
6369	644936.2	4166648.9	Worker	Scenario 1	1.73E-01	3.50E-04	--
6370	645036.2	4166648.9	Worker	Scenario 1	1.69E-01	3.42E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6371	645136.2	4166648.9	Worker	Scenario 1	1.65E-01	3.33E-04	--
6372	645236.2	4166648.9	Worker	Scenario 1	1.61E-01	3.24E-04	--
6373	645336.2	4166648.9	Worker	Scenario 1	1.56E-01	3.16E-04	--
6374	645436.2	4166648.9	Worker	Scenario 1	1.52E-01	3.07E-04	--
6375	645536.2	4166648.9	Worker	Scenario 1	1.48E-01	2.99E-04	--
6376	645636.2	4166648.9	Worker	Scenario 1	1.44E-01	2.90E-04	--
6377	645736.2	4166648.9	Worker	Scenario 1	1.39E-01	2.82E-04	--
6378	645836.2	4166648.9	Worker	Scenario 1	1.35E-01	2.73E-04	--
6379	646836.2	4166648.9	Worker	Scenario 1	9.62E-02	1.94E-04	--
6380	646936.2	4166648.9	Worker	Scenario 1	9.32E-02	1.88E-04	--
6381	647036.2	4166648.9	Worker	Scenario 1	9.04E-02	1.83E-04	--
6382	637436.2	4166748.9	Worker	Scenario 1	4.68E-03	9.45E-06	--
6383	637536.2	4166748.9	Worker	Scenario 1	4.67E-03	9.43E-06	--
6384	637636.2	4166748.9	Worker	Scenario 1	5.15E-03	1.04E-05	--
6385	637736.2	4166748.9	Worker	Scenario 1	5.44E-03	1.10E-05	--
6386	637836.2	4166748.9	Worker	Scenario 1	6.12E-03	1.24E-05	--
6387	637936.2	4166748.9	Worker	Scenario 1	6.66E-03	1.35E-05	--
6388	638036.2	4166748.9	Worker	Scenario 1	7.42E-03	1.50E-05	--
6389	638136.2	4166748.9	Worker	Scenario 1	7.32E-03	1.48E-05	--
6390	638236.2	4166748.9	Worker	Scenario 1	6.62E-03	1.34E-05	--
6391	638336.2	4166748.9	Worker	Scenario 1	6.73E-03	1.36E-05	--
6392	638436.2	4166748.9	Worker	Scenario 1	7.08E-03	1.43E-05	--
6393	638536.2	4166748.9	Worker	Scenario 1	7.41E-03	1.50E-05	--
6394	638636.2	4166748.9	Worker	Scenario 1	8.03E-03	1.62E-05	--
6395	638736.2	4166748.9	Worker	Scenario 1	8.53E-03	1.72E-05	--
6396	638836.2	4166748.9	Worker	Scenario 1	8.85E-03	1.79E-05	--
6397	638936.2	4166748.9	Worker	Scenario 1	9.51E-03	1.92E-05	--
6398	639036.2	4166748.9	Worker	Scenario 1	1.03E-02	2.08E-05	--
6399	639136.2	4166748.9	Worker	Scenario 1	1.13E-02	2.28E-05	--
6400	639236.2	4166748.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
6401	639336.2	4166748.9	Worker	Scenario 1	1.27E-02	2.57E-05	--
6402	639436.2	4166748.9	Worker	Scenario 1	1.30E-02	2.63E-05	--
6403	639536.2	4166748.9	Worker	Scenario 1	1.35E-02	2.72E-05	--
6404	639636.2	4166748.9	Worker	Scenario 1	1.40E-02	2.82E-05	--
6405	639736.2	4166748.9	Worker	Scenario 1	1.46E-02	2.96E-05	--
6406	639836.2	4166748.9	Worker	Scenario 1	1.55E-02	3.13E-05	--
6407	639936.2	4166748.9	Worker	Scenario 1	1.68E-02	3.39E-05	--
6408	640036.2	4166748.9	Worker	Scenario 1	1.80E-02	3.64E-05	--
6409	640136.2	4166748.9	Worker	Scenario 1	1.95E-02	3.93E-05	--
6410	640236.2	4166748.9	Worker	Scenario 1	2.08E-02	4.21E-05	--
6411	640336.2	4166748.9	Worker	Scenario 1	2.22E-02	4.48E-05	--
6412	640436.2	4166748.9	Worker	Scenario 1	2.37E-02	4.79E-05	--
6413	640536.2	4166748.9	Worker	Scenario 1	2.56E-02	5.17E-05	--
6414	644536.2	4166748.9	Worker	Scenario 1	2.26E-01	4.57E-04	--
6415	644636.2	4166748.9	Worker	Scenario 1	2.18E-01	4.40E-04	--
6416	644836.2	4166748.9	Worker	Scenario 1	2.08E-01	4.19E-04	--
6417	644936.2	4166748.9	Worker	Scenario 1	2.02E-01	4.08E-04	--
6418	645036.2	4166748.9	Worker	Scenario 1	1.96E-01	3.95E-04	--
6419	645136.2	4166748.9	Worker	Scenario 1	1.89E-01	3.82E-04	--
6420	645236.2	4166748.9	Worker	Scenario 1	1.83E-01	3.69E-04	--
6421	645336.2	4166748.9	Worker	Scenario 1	1.76E-01	3.56E-04	--
6422	645436.2	4166748.9	Worker	Scenario 1	1.70E-01	3.44E-04	--
6423	645536.2	4166748.9	Worker	Scenario 1	1.64E-01	3.32E-04	--
6424	645636.2	4166748.9	Worker	Scenario 1	1.58E-01	3.20E-04	--
6425	645736.2	4166748.9	Worker	Scenario 1	1.53E-01	3.08E-04	--
6426	645936.2	4166748.9	Worker	Scenario 1	1.41E-01	2.85E-04	--
6427	646036.2	4166748.9	Worker	Scenario 1	1.35E-01	2.73E-04	--
6428	646436.2	4166748.9	Worker	Scenario 1	1.16E-01	2.34E-04	--
6429	646536.2	4166748.9	Worker	Scenario 1	1.12E-01	2.26E-04	--
6430	646636.2	4166748.9	Worker	Scenario 1	1.08E-01	2.18E-04	--
6431	646736.2	4166748.9	Worker	Scenario 1	1.04E-01	2.11E-04	--
6432	646836.2	4166748.9	Worker	Scenario 1	1.01E-01	2.04E-04	--
6433	646936.2	4166748.9	Worker	Scenario 1	9.76E-02	1.97E-04	--
6434	647036.2	4166748.9	Worker	Scenario 1	9.45E-02	1.91E-04	--
6435	637336.2	4166848.9	Worker	Scenario 1	4.61E-03	9.32E-06	--
6436	637436.2	4166848.9	Worker	Scenario 1	4.93E-03	9.96E-06	--
6437	637536.2	4166848.9	Worker	Scenario 1	4.93E-03	9.96E-06	--
6438	637636.2	4166848.9	Worker	Scenario 1	5.40E-03	1.09E-05	--
6439	637736.2	4166848.9	Worker	Scenario 1	5.90E-03	1.19E-05	--
6440	637836.2	4166848.9	Worker	Scenario 1	6.40E-03	1.29E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6441	637936.2	4166848.9	Worker	Scenario 1	7.27E-03	1.47E-05	--
6442	638036.2	4166848.9	Worker	Scenario 1	7.88E-03	1.59E-05	--
6443	638136.2	4166848.9	Worker	Scenario 1	7.88E-03	1.59E-05	--
6444	638236.2	4166848.9	Worker	Scenario 1	7.15E-03	1.44E-05	--
6445	638336.2	4166848.9	Worker	Scenario 1	7.16E-03	1.45E-05	--
6446	638436.2	4166848.9	Worker	Scenario 1	7.66E-03	1.55E-05	--
6447	638536.2	4166848.9	Worker	Scenario 1	7.92E-03	1.60E-05	--
6448	638636.2	4166848.9	Worker	Scenario 1	8.33E-03	1.68E-05	--
6449	638736.2	4166848.9	Worker	Scenario 1	8.98E-03	1.81E-05	--
6450	638836.2	4166848.9	Worker	Scenario 1	9.46E-03	1.91E-05	--
6451	638936.2	4166848.9	Worker	Scenario 1	1.00E-02	2.03E-05	--
6452	639036.2	4166848.9	Worker	Scenario 1	1.09E-02	2.21E-05	--
6453	639136.2	4166848.9	Worker	Scenario 1	1.20E-02	2.43E-05	--
6454	639236.2	4166848.9	Worker	Scenario 1	1.30E-02	2.63E-05	--
6455	639336.2	4166848.9	Worker	Scenario 1	1.35E-02	2.73E-05	--
6456	639436.2	4166848.9	Worker	Scenario 1	1.39E-02	2.82E-05	--
6457	639536.2	4166848.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
6458	639636.2	4166848.9	Worker	Scenario 1	1.52E-02	3.06E-05	--
6459	639736.2	4166848.9	Worker	Scenario 1	1.58E-02	3.20E-05	--
6460	644836.2	4166848.9	Worker	Scenario 1	2.44E-01	4.92E-04	--
6461	644936.2	4166848.9	Worker	Scenario 1	2.34E-01	4.73E-04	--
6462	645036.2	4166848.9	Worker	Scenario 1	2.24E-01	4.52E-04	--
6463	645136.2	4166848.9	Worker	Scenario 1	2.14E-01	4.33E-04	--
6464	645236.2	4166848.9	Worker	Scenario 1	2.05E-01	4.14E-04	--
6465	645336.2	4166848.9	Worker	Scenario 1	1.96E-01	3.97E-04	--
6466	645436.2	4166848.9	Worker	Scenario 1	1.88E-01	3.80E-04	--
6467	645536.2	4166848.9	Worker	Scenario 1	1.80E-01	3.64E-04	--
6468	645636.2	4166848.9	Worker	Scenario 1	1.72E-01	3.48E-04	--
6469	645836.2	4166848.9	Worker	Scenario 1	1.57E-01	3.17E-04	--
6470	645936.2	4166848.9	Worker	Scenario 1	1.49E-01	3.01E-04	--
6471	646436.2	4166848.9	Worker	Scenario 1	1.22E-01	2.46E-04	--
6472	646536.2	4166848.9	Worker	Scenario 1	1.17E-01	2.37E-04	--
6473	646636.2	4166848.9	Worker	Scenario 1	1.13E-01	2.29E-04	--
6474	646736.2	4166848.9	Worker	Scenario 1	1.09E-01	2.21E-04	--
6475	646836.2	4166848.9	Worker	Scenario 1	1.05E-01	2.13E-04	--
6476	646936.2	4166848.9	Worker	Scenario 1	1.02E-01	2.06E-04	--
6477	647036.2	4166848.9	Worker	Scenario 1	9.84E-02	1.99E-04	--
6478	637136.2	4166948.9	Worker	Scenario 1	4.66E-03	9.42E-06	--
6479	637236.2	4166948.9	Worker	Scenario 1	4.79E-03	9.68E-06	--
6480	637336.2	4166948.9	Worker	Scenario 1	4.79E-03	9.67E-06	--
6481	637436.2	4166948.9	Worker	Scenario 1	5.25E-03	1.06E-05	--
6482	637536.2	4166948.9	Worker	Scenario 1	5.26E-03	1.06E-05	--
6483	637636.2	4166948.9	Worker	Scenario 1	5.78E-03	1.17E-05	--
6484	637736.2	4166948.9	Worker	Scenario 1	6.24E-03	1.26E-05	--
6485	637836.2	4166948.9	Worker	Scenario 1	5.98E-03	1.21E-05	--
6486	637936.2	4166948.9	Worker	Scenario 1	6.21E-03	1.25E-05	--
6487	638036.2	4166948.9	Worker	Scenario 1	7.24E-03	1.46E-05	--
6488	638136.2	4166948.9	Worker	Scenario 1	8.85E-03	1.79E-05	--
6489	638236.2	4166948.9	Worker	Scenario 1	7.59E-03	1.53E-05	--
6490	638336.2	4166948.9	Worker	Scenario 1	7.56E-03	1.53E-05	--
6491	638436.2	4166948.9	Worker	Scenario 1	8.56E-03	1.73E-05	--
6492	638536.2	4166948.9	Worker	Scenario 1	8.37E-03	1.69E-05	--
6493	638636.2	4166948.9	Worker	Scenario 1	8.86E-03	1.79E-05	--
6494	638736.2	4166948.9	Worker	Scenario 1	9.39E-03	1.90E-05	--
6495	638836.2	4166948.9	Worker	Scenario 1	1.01E-02	2.05E-05	--
6496	638936.2	4166948.9	Worker	Scenario 1	1.06E-02	2.15E-05	--
6497	639036.2	4166948.9	Worker	Scenario 1	1.14E-02	2.30E-05	--
6498	639136.2	4166948.9	Worker	Scenario 1	1.22E-02	2.47E-05	--
6499	639236.2	4166948.9	Worker	Scenario 1	1.31E-02	2.65E-05	--
6500	639336.2	4166948.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
6501	639436.2	4166948.9	Worker	Scenario 1	1.50E-02	3.02E-05	--
6502	639536.2	4166948.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
6503	639636.2	4166948.9	Worker	Scenario 1	1.62E-02	3.27E-05	--
6504	639736.2	4166948.9	Worker	Scenario 1	1.70E-02	3.42E-05	--
6505	639836.2	4166948.9	Worker	Scenario 1	1.78E-02	3.60E-05	--
6506	639936.2	4166948.9	Worker	Scenario 1	1.88E-02	3.79E-05	--
6507	640036.2	4166948.9	Worker	Scenario 1	2.00E-02	4.04E-05	--
6508	640136.2	4166948.9	Worker	Scenario 1	2.07E-02	4.19E-05	--
6509	640236.2	4166948.9	Worker	Scenario 1	2.22E-02	4.48E-05	--
6510	640336.2	4166948.9	Worker	Scenario 1	2.38E-02	4.80E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6511	640436.2	4166948.9	Worker	Scenario 1	2.56E-02	5.16E-05	--
6512	640536.2	4166948.9	Worker	Scenario 1	2.76E-02	5.57E-05	--
6513	640636.2	4166948.9	Worker	Scenario 1	2.99E-02	6.04E-05	--
6514	640736.2	4166948.9	Worker	Scenario 1	3.34E-02	6.74E-05	--
6515	645636.2	4166948.9	Worker	Scenario 1	1.84E-01	3.71E-04	--
6516	637036.2	4167048.9	Worker	Scenario 1	4.36E-03	8.81E-06	--
6517	637136.2	4167048.9	Worker	Scenario 1	5.00E-03	1.01E-05	--
6518	637236.2	4167048.9	Worker	Scenario 1	5.27E-03	1.06E-05	--
6519	637336.2	4167048.9	Worker	Scenario 1	4.96E-03	1.00E-05	--
6520	637436.2	4167048.9	Worker	Scenario 1	5.53E-03	1.12E-05	--
6521	637536.2	4167048.9	Worker	Scenario 1	5.61E-03	1.13E-05	--
6522	637636.2	4167048.9	Worker	Scenario 1	5.61E-03	1.13E-05	--
6523	637736.2	4167048.9	Worker	Scenario 1	5.78E-03	1.17E-05	--
6524	637836.2	4167048.9	Worker	Scenario 1	6.50E-03	1.31E-05	--
6525	637936.2	4167048.9	Worker	Scenario 1	6.69E-03	1.35E-05	--
6526	638036.2	4167048.9	Worker	Scenario 1	7.35E-03	1.48E-05	--
6527	638136.2	4167048.9	Worker	Scenario 1	8.68E-03	1.75E-05	--
6528	638236.2	4167048.9	Worker	Scenario 1	8.71E-03	1.76E-05	--
6529	638336.2	4167048.9	Worker	Scenario 1	8.12E-03	1.64E-05	--
6530	638436.2	4167048.9	Worker	Scenario 1	9.23E-03	1.86E-05	--
6531	638536.2	4167048.9	Worker	Scenario 1	8.86E-03	1.79E-05	--
6532	638636.2	4167048.9	Worker	Scenario 1	9.58E-03	1.94E-05	--
6533	638736.2	4167048.9	Worker	Scenario 1	9.87E-03	1.99E-05	--
6534	638836.2	4167048.9	Worker	Scenario 1	1.07E-02	2.16E-05	--
6535	638936.2	4167048.9	Worker	Scenario 1	1.12E-02	2.26E-05	--
6536	639036.2	4167048.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
6537	639136.2	4167048.9	Worker	Scenario 1	1.27E-02	2.57E-05	--
6538	639236.2	4167048.9	Worker	Scenario 1	1.36E-02	2.75E-05	--
6539	639336.2	4167048.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
6540	639436.2	4167048.9	Worker	Scenario 1	1.55E-02	3.12E-05	--
6541	639536.2	4167048.9	Worker	Scenario 1	1.62E-02	3.26E-05	--
6542	639636.2	4167048.9	Worker	Scenario 1	1.65E-02	3.34E-05	--
6543	639736.2	4167048.9	Worker	Scenario 1	1.74E-02	3.52E-05	--
6544	639836.2	4167048.9	Worker	Scenario 1	1.83E-02	3.70E-05	--
6545	639936.2	4167048.9	Worker	Scenario 1	1.93E-02	3.90E-05	--
6546	640036.2	4167048.9	Worker	Scenario 1	2.06E-02	4.16E-05	--
6547	640136.2	4167048.9	Worker	Scenario 1	2.19E-02	4.42E-05	--
6548	640236.2	4167048.9	Worker	Scenario 1	2.34E-02	4.72E-05	--
6549	640336.2	4167048.9	Worker	Scenario 1	2.51E-02	5.06E-05	--
6550	640436.2	4167048.9	Worker	Scenario 1	2.71E-02	5.46E-05	--
6551	640536.2	4167048.9	Worker	Scenario 1	2.92E-02	5.91E-05	--
6552	641036.2	4167048.9	Worker	Scenario 1	5.36E-02	1.08E-04	--
6553	641136.2	4167048.9	Worker	Scenario 1	6.90E-02	1.39E-04	--
6554	644836.2	4167048.9	Worker	Scenario 1	3.18E-01	6.42E-04	--
6555	644936.2	4167048.9	Worker	Scenario 1	2.92E-01	5.90E-04	--
6556	645036.2	4167048.9	Worker	Scenario 1	2.73E-01	5.51E-04	--
6557	645136.2	4167048.9	Worker	Scenario 1	2.56E-01	5.17E-04	--
6558	645436.2	4167048.9	Worker	Scenario 1	2.15E-01	4.34E-04	--
6559	645536.2	4167048.9	Worker	Scenario 1	2.04E-01	4.11E-04	--
6560	645636.2	4167048.9	Worker	Scenario 1	1.93E-01	3.90E-04	--
6561	645836.2	4167048.9	Worker	Scenario 1	1.74E-01	3.52E-04	--
6562	645936.2	4167048.9	Worker	Scenario 1	1.66E-01	3.36E-04	--
6563	646436.2	4167048.9	Worker	Scenario 1	1.33E-01	2.68E-04	--
6564	646536.2	4167048.9	Worker	Scenario 1	1.27E-01	2.57E-04	--
6565	646636.2	4167048.9	Worker	Scenario 1	1.22E-01	2.47E-04	--
6566	646736.2	4167048.9	Worker	Scenario 1	1.18E-01	2.38E-04	--
6567	646936.2	4167048.9	Worker	Scenario 1	1.09E-01	2.20E-04	--
6568	647036.2	4167048.9	Worker	Scenario 1	1.05E-01	2.12E-04	--
6569	636936.2	4167148.9	Worker	Scenario 1	4.63E-03	9.35E-06	--
6570	637036.2	4167148.9	Worker	Scenario 1	4.41E-03	8.90E-06	--
6571	637136.2	4167148.9	Worker	Scenario 1	4.83E-03	9.75E-06	--
6572	637236.2	4167148.9	Worker	Scenario 1	5.13E-03	1.04E-05	--
6573	637336.2	4167148.9	Worker	Scenario 1	5.45E-03	1.10E-05	--
6574	637436.2	4167148.9	Worker	Scenario 1	5.78E-03	1.17E-05	--
6575	637536.2	4167148.9	Worker	Scenario 1	5.77E-03	1.17E-05	--
6576	637636.2	4167148.9	Worker	Scenario 1	5.52E-03	1.12E-05	--
6577	637736.2	4167148.9	Worker	Scenario 1	6.28E-03	1.27E-05	--
6578	637836.2	4167148.9	Worker	Scenario 1	6.44E-03	1.30E-05	--
6579	637936.2	4167148.9	Worker	Scenario 1	7.08E-03	1.43E-05	--
6580	638036.2	4167148.9	Worker	Scenario 1	8.12E-03	1.64E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6581	638136.2	4167148.9	Worker	Scenario 1	8.07E-03	1.63E-05	--
6582	638236.2	4167148.9	Worker	Scenario 1	9.86E-03	1.99E-05	--
6583	638336.2	4167148.9	Worker	Scenario 1	8.77E-03	1.77E-05	--
6584	638436.2	4167148.9	Worker	Scenario 1	9.52E-03	1.92E-05	--
6585	638536.2	4167148.9	Worker	Scenario 1	9.45E-03	1.91E-05	--
6586	638636.2	4167148.9	Worker	Scenario 1	9.97E-03	2.01E-05	--
6587	638736.2	4167148.9	Worker	Scenario 1	1.04E-02	2.11E-05	--
6588	638836.2	4167148.9	Worker	Scenario 1	1.10E-02	2.23E-05	--
6589	638936.2	4167148.9	Worker	Scenario 1	1.15E-02	2.33E-05	--
6590	639036.2	4167148.9	Worker	Scenario 1	1.22E-02	2.47E-05	--
6591	639136.2	4167148.9	Worker	Scenario 1	1.29E-02	2.61E-05	--
6592	639236.2	4167148.9	Worker	Scenario 1	1.37E-02	2.77E-05	--
6593	639336.2	4167148.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
6594	639436.2	4167148.9	Worker	Scenario 1	1.55E-02	3.14E-05	--
6595	639536.2	4167148.9	Worker	Scenario 1	1.65E-02	3.32E-05	--
6596	639636.2	4167148.9	Worker	Scenario 1	1.72E-02	3.47E-05	--
6597	639736.2	4167148.9	Worker	Scenario 1	1.81E-02	3.66E-05	--
6598	639836.2	4167148.9	Worker	Scenario 1	1.92E-02	3.87E-05	--
6599	639936.2	4167148.9	Worker	Scenario 1	2.03E-02	4.10E-05	--
6600	640036.2	4167148.9	Worker	Scenario 1	2.16E-02	4.36E-05	--
6601	640136.2	4167148.9	Worker	Scenario 1	2.30E-02	4.64E-05	--
6602	640236.2	4167148.9	Worker	Scenario 1	2.45E-02	4.96E-05	--
6603	640336.2	4167148.9	Worker	Scenario 1	2.64E-02	5.33E-05	--
6604	640436.2	4167148.9	Worker	Scenario 1	2.85E-02	5.76E-05	--
6605	640836.2	4167148.9	Worker	Scenario 1	4.17E-02	8.43E-05	--
6606	640936.2	4167148.9	Worker	Scenario 1	4.79E-02	9.68E-05	--
6607	641036.2	4167148.9	Worker	Scenario 1	5.75E-02	1.16E-04	--
6608	641136.2	4167148.9	Worker	Scenario 1	7.38E-02	1.49E-04	--
6609	644836.2	4167148.9	Worker	Scenario 1	3.43E-01	6.92E-04	--
6610	644936.2	4167148.9	Worker	Scenario 1	3.17E-01	6.40E-04	--
6611	645036.2	4167148.9	Worker	Scenario 1	2.94E-01	5.94E-04	--
6612	645136.2	4167148.9	Worker	Scenario 1	2.74E-01	5.54E-04	--
6613	645436.2	4167148.9	Worker	Scenario 1	2.28E-01	4.60E-04	--
6614	645536.2	4167148.9	Worker	Scenario 1	2.15E-01	4.34E-04	--
6615	645636.2	4167148.9	Worker	Scenario 1	2.03E-01	4.10E-04	--
6616	645836.2	4167148.9	Worker	Scenario 1	1.82E-01	3.68E-04	--
6617	645936.2	4167148.9	Worker	Scenario 1	1.73E-01	3.50E-04	--
6618	646036.2	4167148.9	Worker	Scenario 1	1.65E-01	3.33E-04	--
6619	646336.2	4167148.9	Worker	Scenario 1	1.43E-01	2.89E-04	--
6620	646436.2	4167148.9	Worker	Scenario 1	1.37E-01	2.77E-04	--
6621	646536.2	4167148.9	Worker	Scenario 1	1.31E-01	2.65E-04	--
6622	646636.2	4167148.9	Worker	Scenario 1	1.26E-01	2.54E-04	--
6623	646736.2	4167148.9	Worker	Scenario 1	1.21E-01	2.44E-04	--
6624	646836.2	4167148.9	Worker	Scenario 1	1.16E-01	2.35E-04	--
6625	646936.2	4167148.9	Worker	Scenario 1	1.12E-01	2.26E-04	--
6626	647036.2	4167148.9	Worker	Scenario 1	1.08E-01	2.17E-04	--
6627	636836.2	4167248.9	Worker	Scenario 1	4.45E-03	8.98E-06	--
6628	636936.2	4167248.9	Worker	Scenario 1	4.95E-03	9.99E-06	--
6629	637036.2	4167248.9	Worker	Scenario 1	4.65E-03	9.38E-06	--
6630	637136.2	4167248.9	Worker	Scenario 1	5.05E-03	1.02E-05	--
6631	637236.2	4167248.9	Worker	Scenario 1	5.25E-03	1.06E-05	--
6632	637336.2	4167248.9	Worker	Scenario 1	5.86E-03	1.18E-05	--
6633	637436.2	4167248.9	Worker	Scenario 1	6.07E-03	1.23E-05	--
6634	637536.2	4167248.9	Worker	Scenario 1	6.08E-03	1.23E-05	--
6635	637636.2	4167248.9	Worker	Scenario 1	5.91E-03	1.19E-05	--
6636	637736.2	4167248.9	Worker	Scenario 1	6.55E-03	1.32E-05	--
6637	637836.2	4167248.9	Worker	Scenario 1	7.79E-03	1.57E-05	--
6638	637936.2	4167248.9	Worker	Scenario 1	6.90E-03	1.39E-05	--
6639	638036.2	4167248.9	Worker	Scenario 1	7.51E-03	1.52E-05	--
6640	638136.2	4167248.9	Worker	Scenario 1	8.88E-03	1.79E-05	--
6641	638236.2	4167248.9	Worker	Scenario 1	9.11E-03	1.84E-05	--
6642	638336.2	4167248.9	Worker	Scenario 1	9.63E-03	1.95E-05	--
6643	638436.2	4167248.9	Worker	Scenario 1	9.75E-03	1.97E-05	--
6644	638536.2	4167248.9	Worker	Scenario 1	1.03E-02	2.09E-05	--
6645	638636.2	4167248.9	Worker	Scenario 1	1.03E-02	2.08E-05	--
6646	638736.2	4167248.9	Worker	Scenario 1	1.08E-02	2.17E-05	--
6647	638836.2	4167248.9	Worker	Scenario 1	1.13E-02	2.27E-05	--
6648	638936.2	4167248.9	Worker	Scenario 1	1.19E-02	2.40E-05	--
6649	639036.2	4167248.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
6650	639136.2	4167248.9	Worker	Scenario 1	1.32E-02	2.67E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6651	639236.2	4167248.9	Worker	Scenario 1	1.40E-02	2.82E-05	--
6652	639336.2	4167248.9	Worker	Scenario 1	1.48E-02	2.99E-05	--
6653	639436.2	4167248.9	Worker	Scenario 1	1.57E-02	3.17E-05	--
6654	639536.2	4167248.9	Worker	Scenario 1	1.67E-02	3.36E-05	--
6655	639636.2	4167248.9	Worker	Scenario 1	1.76E-02	3.56E-05	--
6656	639736.2	4167248.9	Worker	Scenario 1	1.86E-02	3.76E-05	--
6657	639836.2	4167248.9	Worker	Scenario 1	1.97E-02	3.99E-05	--
6658	639936.2	4167248.9	Worker	Scenario 1	2.10E-02	4.24E-05	--
6659	640036.2	4167248.9	Worker	Scenario 1	2.24E-02	4.52E-05	--
6660	640136.2	4167248.9	Worker	Scenario 1	2.39E-02	4.82E-05	--
6661	640236.2	4167248.9	Worker	Scenario 1	2.56E-02	5.16E-05	--
6662	640336.2	4167248.9	Worker	Scenario 1	2.75E-02	5.56E-05	--
6663	640636.2	4167248.9	Worker	Scenario 1	3.57E-02	7.20E-05	--
6664	640736.2	4167248.9	Worker	Scenario 1	3.99E-02	8.06E-05	--
6665	640836.2	4167248.9	Worker	Scenario 1	4.41E-02	8.91E-05	--
6666	640936.2	4167248.9	Worker	Scenario 1	5.10E-02	1.03E-04	--
6667	641036.2	4167248.9	Worker	Scenario 1	6.11E-02	1.23E-04	--
6668	641136.2	4167248.9	Worker	Scenario 1	7.82E-02	1.58E-04	--
6669	645036.2	4167248.9	Worker	Scenario 1	3.11E-01	6.28E-04	--
6670	645136.2	4167248.9	Worker	Scenario 1	2.88E-01	5.83E-04	--
6671	645336.2	4167248.9	Worker	Scenario 1	2.52E-01	5.09E-04	--
6672	645436.2	4167248.9	Worker	Scenario 1	2.37E-01	4.78E-04	--
6673	645536.2	4167248.9	Worker	Scenario 1	2.23E-01	4.51E-04	--
6674	645636.2	4167248.9	Worker	Scenario 1	2.10E-01	4.25E-04	--
6675	645736.2	4167248.9	Worker	Scenario 1	1.99E-01	4.01E-04	--
6676	645836.2	4167248.9	Worker	Scenario 1	1.88E-01	3.80E-04	--
6677	645936.2	4167248.9	Worker	Scenario 1	1.78E-01	3.60E-04	--
6678	646036.2	4167248.9	Worker	Scenario 1	1.70E-01	3.42E-04	--
6679	646136.2	4167248.9	Worker	Scenario 1	1.61E-01	3.26E-04	--
6680	646336.2	4167248.9	Worker	Scenario 1	1.47E-01	2.96E-04	--
6681	646436.2	4167248.9	Worker	Scenario 1	1.40E-01	2.83E-04	--
6682	646536.2	4167248.9	Worker	Scenario 1	1.34E-01	2.71E-04	--
6683	646636.2	4167248.9	Worker	Scenario 1	1.29E-01	2.60E-04	--
6684	646736.2	4167248.9	Worker	Scenario 1	1.23E-01	2.49E-04	--
6685	646836.2	4167248.9	Worker	Scenario 1	1.19E-01	2.39E-04	--
6686	646936.2	4167248.9	Worker	Scenario 1	1.14E-01	2.30E-04	--
6687	647036.2	4167248.9	Worker	Scenario 1	1.10E-01	2.21E-04	--
6688	636736.2	4167348.9	Worker	Scenario 1	4.64E-03	9.37E-06	--
6689	636836.2	4167348.9	Worker	Scenario 1	4.52E-03	9.13E-06	--
6690	636936.2	4167348.9	Worker	Scenario 1	5.14E-03	1.04E-05	--
6691	637036.2	4167348.9	Worker	Scenario 1	5.22E-03	1.05E-05	--
6692	637136.2	4167348.9	Worker	Scenario 1	4.89E-03	9.88E-06	--
6693	637236.2	4167348.9	Worker	Scenario 1	4.99E-03	1.01E-05	--
6694	637336.2	4167348.9	Worker	Scenario 1	5.32E-03	1.07E-05	--
6695	637436.2	4167348.9	Worker	Scenario 1	6.27E-03	1.27E-05	--
6696	637536.2	4167348.9	Worker	Scenario 1	6.41E-03	1.30E-05	--
6697	637636.2	4167348.9	Worker	Scenario 1	6.29E-03	1.27E-05	--
6698	637736.2	4167348.9	Worker	Scenario 1	6.54E-03	1.32E-05	--
6699	637836.2	4167348.9	Worker	Scenario 1	7.93E-03	1.60E-05	--
6700	637936.2	4167348.9	Worker	Scenario 1	7.92E-03	1.60E-05	--
6701	638036.2	4167348.9	Worker	Scenario 1	8.25E-03	1.67E-05	--
6702	638136.2	4167348.9	Worker	Scenario 1	8.73E-03	1.76E-05	--
6703	638236.2	4167348.9	Worker	Scenario 1	8.84E-03	1.79E-05	--
6704	638336.2	4167348.9	Worker	Scenario 1	1.04E-02	2.10E-05	--
6705	638436.2	4167348.9	Worker	Scenario 1	1.07E-02	2.15E-05	--
6706	638536.2	4167348.9	Worker	Scenario 1	9.97E-03	2.01E-05	--
6707	638636.2	4167348.9	Worker	Scenario 1	1.06E-02	2.15E-05	--
6708	638736.2	4167348.9	Worker	Scenario 1	1.09E-02	2.21E-05	--
6709	638836.2	4167348.9	Worker	Scenario 1	1.14E-02	2.31E-05	--
6710	638936.2	4167348.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
6711	639036.2	4167348.9	Worker	Scenario 1	1.27E-02	2.56E-05	--
6712	639136.2	4167348.9	Worker	Scenario 1	1.33E-02	2.69E-05	--
6713	639236.2	4167348.9	Worker	Scenario 1	1.41E-02	2.86E-05	--
6714	639336.2	4167348.9	Worker	Scenario 1	1.50E-02	3.03E-05	--
6715	639436.2	4167348.9	Worker	Scenario 1	1.59E-02	3.21E-05	--
6716	639536.2	4167348.9	Worker	Scenario 1	1.69E-02	3.40E-05	--
6717	639636.2	4167348.9	Worker	Scenario 1	1.79E-02	3.62E-05	--
6718	639736.2	4167348.9	Worker	Scenario 1	1.89E-02	3.82E-05	--
6719	639836.2	4167348.9	Worker	Scenario 1	2.01E-02	4.05E-05	--
6720	639936.2	4167348.9	Worker	Scenario 1	2.14E-02	4.32E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6721	640036.2	4167348.9	Worker	Scenario 1	2.29E-02	4.63E-05	--
6722	640136.2	4167348.9	Worker	Scenario 1	2.46E-02	4.96E-05	--
6723	640236.2	4167348.9	Worker	Scenario 1	2.64E-02	5.33E-05	--
6724	640536.2	4167348.9	Worker	Scenario 1	3.39E-02	6.84E-05	--
6725	640636.2	4167348.9	Worker	Scenario 1	3.78E-02	7.63E-05	--
6726	640736.2	4167348.9	Worker	Scenario 1	4.10E-02	8.28E-05	--
6727	640836.2	4167348.9	Worker	Scenario 1	4.62E-02	9.34E-05	--
6728	640936.2	4167348.9	Worker	Scenario 1	5.36E-02	1.08E-04	--
6729	641036.2	4167348.9	Worker	Scenario 1	6.43E-02	1.30E-04	--
6730	641136.2	4167348.9	Worker	Scenario 1	8.23E-02	1.66E-04	--
6731	644836.2	4167348.9	Worker	Scenario 1	3.77E-01	7.61E-04	--
6732	644936.2	4167348.9	Worker	Scenario 1	3.46E-01	6.99E-04	--
6733	645036.2	4167348.9	Worker	Scenario 1	3.20E-01	6.46E-04	--
6734	645136.2	4167348.9	Worker	Scenario 1	2.97E-01	6.00E-04	--
6735	645236.2	4167348.9	Worker	Scenario 1	2.77E-01	5.59E-04	--
6736	645336.2	4167348.9	Worker	Scenario 1	2.59E-01	5.23E-04	--
6737	645436.2	4167348.9	Worker	Scenario 1	2.43E-01	4.90E-04	--
6738	645536.2	4167348.9	Worker	Scenario 1	2.28E-01	4.60E-04	--
6739	645636.2	4167348.9	Worker	Scenario 1	2.15E-01	4.33E-04	--
6740	645736.2	4167348.9	Worker	Scenario 1	2.03E-01	4.09E-04	--
6741	645836.2	4167348.9	Worker	Scenario 1	1.92E-01	3.87E-04	--
6742	645936.2	4167348.9	Worker	Scenario 1	1.82E-01	3.67E-04	--
6743	646036.2	4167348.9	Worker	Scenario 1	1.72E-01	3.48E-04	--
6744	646336.2	4167348.9	Worker	Scenario 1	1.49E-01	3.00E-04	--
6745	646436.2	4167348.9	Worker	Scenario 1	1.42E-01	2.87E-04	--
6746	646536.2	4167348.9	Worker	Scenario 1	1.36E-01	2.75E-04	--
6747	646636.2	4167348.9	Worker	Scenario 1	1.30E-01	2.63E-04	--
6748	646736.2	4167348.9	Worker	Scenario 1	1.25E-01	2.52E-04	--
6749	646836.2	4167348.9	Worker	Scenario 1	1.20E-01	2.42E-04	--
6750	646936.2	4167348.9	Worker	Scenario 1	1.15E-01	2.33E-04	--
6751	647036.2	4167348.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
6752	636636.2	4167448.9	Worker	Scenario 1	4.39E-03	8.87E-06	--
6753	636736.2	4167448.9	Worker	Scenario 1	4.83E-03	9.76E-06	--
6754	636836.2	4167448.9	Worker	Scenario 1	5.25E-03	1.06E-05	--
6755	636936.2	4167448.9	Worker	Scenario 1	5.32E-03	1.07E-05	--
6756	637036.2	4167448.9	Worker	Scenario 1	4.71E-03	9.52E-06	--
6757	637136.2	4167448.9	Worker	Scenario 1	4.99E-03	1.01E-05	--
6758	637236.2	4167448.9	Worker	Scenario 1	5.18E-03	1.05E-05	--
6759	637336.2	4167448.9	Worker	Scenario 1	5.62E-03	1.14E-05	--
6760	637436.2	4167448.9	Worker	Scenario 1	5.87E-03	1.19E-05	--
6761	637536.2	4167448.9	Worker	Scenario 1	6.73E-03	1.36E-05	--
6762	637636.2	4167448.9	Worker	Scenario 1	6.64E-03	1.34E-05	--
6763	637736.2	4167448.9	Worker	Scenario 1	6.88E-03	1.39E-05	--
6764	637836.2	4167448.9	Worker	Scenario 1	6.85E-03	1.38E-05	--
6765	637936.2	4167448.9	Worker	Scenario 1	8.36E-03	1.69E-05	--
6766	638036.2	4167448.9	Worker	Scenario 1	8.30E-03	1.68E-05	--
6767	638136.2	4167448.9	Worker	Scenario 1	8.52E-03	1.72E-05	--
6768	638236.2	4167448.9	Worker	Scenario 1	9.34E-03	1.89E-05	--
6769	638336.2	4167448.9	Worker	Scenario 1	9.63E-03	1.95E-05	--
6770	638436.2	4167448.9	Worker	Scenario 1	1.08E-02	2.18E-05	--
6771	638536.2	4167448.9	Worker	Scenario 1	1.03E-02	2.08E-05	--
6772	638636.2	4167448.9	Worker	Scenario 1	1.08E-02	2.17E-05	--
6773	638736.2	4167448.9	Worker	Scenario 1	1.12E-02	2.26E-05	--
6774	638836.2	4167448.9	Worker	Scenario 1	1.17E-02	2.36E-05	--
6775	638936.2	4167448.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
6776	639036.2	4167448.9	Worker	Scenario 1	1.28E-02	2.59E-05	--
6777	639136.2	4167448.9	Worker	Scenario 1	1.34E-02	2.71E-05	--
6778	639236.2	4167448.9	Worker	Scenario 1	1.42E-02	2.87E-05	--
6779	639336.2	4167448.9	Worker	Scenario 1	1.51E-02	3.05E-05	--
6780	639436.2	4167448.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
6781	639536.2	4167448.9	Worker	Scenario 1	1.70E-02	3.43E-05	--
6782	639636.2	4167448.9	Worker	Scenario 1	1.83E-02	3.69E-05	--
6783	639736.2	4167448.9	Worker	Scenario 1	1.91E-02	3.85E-05	--
6784	639836.2	4167448.9	Worker	Scenario 1	2.03E-02	4.10E-05	--
6785	639936.2	4167448.9	Worker	Scenario 1	2.17E-02	4.37E-05	--
6786	640036.2	4167448.9	Worker	Scenario 1	2.32E-02	4.69E-05	--
6787	640136.2	4167448.9	Worker	Scenario 1	2.51E-02	5.07E-05	--
6788	640436.2	4167448.9	Worker	Scenario 1	3.17E-02	6.40E-05	--
6789	640536.2	4167448.9	Worker	Scenario 1	3.50E-02	7.07E-05	--
6790	640636.2	4167448.9	Worker	Scenario 1	3.83E-02	7.73E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6791	640736.2	4167448.9	Worker	Scenario 1	4.24E-02	8.56E-05	--
6792	640836.2	4167448.9	Worker	Scenario 1	4.80E-02	9.70E-05	--
6793	644836.2	4167448.9	Worker	Scenario 1	3.79E-01	7.66E-04	--
6794	644936.2	4167448.9	Worker	Scenario 1	3.48E-01	7.04E-04	--
6795	645036.2	4167448.9	Worker	Scenario 1	3.22E-01	6.50E-04	--
6796	645136.2	4167448.9	Worker	Scenario 1	2.99E-01	6.03E-04	--
6797	645236.2	4167448.9	Worker	Scenario 1	2.79E-01	5.63E-04	--
6798	645336.2	4167448.9	Worker	Scenario 1	2.60E-01	5.26E-04	--
6799	645436.2	4167448.9	Worker	Scenario 1	2.44E-01	4.93E-04	--
6800	645536.2	4167448.9	Worker	Scenario 1	2.29E-01	4.62E-04	--
6801	645636.2	4167448.9	Worker	Scenario 1	2.16E-01	4.35E-04	--
6802	645736.2	4167448.9	Worker	Scenario 1	2.03E-01	4.11E-04	--
6803	645836.2	4167448.9	Worker	Scenario 1	1.92E-01	3.89E-04	--
6804	645936.2	4167448.9	Worker	Scenario 1	1.82E-01	3.68E-04	--
6805	646336.2	4167448.9	Worker	Scenario 1	1.49E-01	3.01E-04	--
6806	646436.2	4167448.9	Worker	Scenario 1	1.43E-01	2.88E-04	--
6807	646536.2	4167448.9	Worker	Scenario 1	1.36E-01	2.75E-04	--
6808	646636.2	4167448.9	Worker	Scenario 1	1.31E-01	2.64E-04	--
6809	646736.2	4167448.9	Worker	Scenario 1	1.25E-01	2.53E-04	--
6810	646836.2	4167448.9	Worker	Scenario 1	1.20E-01	2.43E-04	--
6811	646936.2	4167448.9	Worker	Scenario 1	1.15E-01	2.33E-04	--
6812	647036.2	4167448.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
6813	636536.2	4167548.9	Worker	Scenario 1	4.52E-03	9.14E-06	--
6814	636636.2	4167548.9	Worker	Scenario 1	4.85E-03	9.79E-06	--
6815	636736.2	4167548.9	Worker	Scenario 1	4.97E-03	1.00E-05	--
6816	636836.2	4167548.9	Worker	Scenario 1	5.11E-03	1.03E-05	--
6817	636936.2	4167548.9	Worker	Scenario 1	4.81E-03	9.71E-06	--
6818	637036.2	4167548.9	Worker	Scenario 1	4.72E-03	9.53E-06	--
6819	637136.2	4167548.9	Worker	Scenario 1	5.12E-03	1.03E-05	--
6820	637236.2	4167548.9	Worker	Scenario 1	5.46E-03	1.10E-05	--
6821	637336.2	4167548.9	Worker	Scenario 1	5.42E-03	1.09E-05	--
6822	637436.2	4167548.9	Worker	Scenario 1	6.16E-03	1.24E-05	--
6823	637536.2	4167548.9	Worker	Scenario 1	6.12E-03	1.24E-05	--
6824	637636.2	4167548.9	Worker	Scenario 1	7.24E-03	1.46E-05	--
6825	637736.2	4167548.9	Worker	Scenario 1	7.20E-03	1.45E-05	--
6826	637836.2	4167548.9	Worker	Scenario 1	7.34E-03	1.48E-05	--
6827	637936.2	4167548.9	Worker	Scenario 1	8.76E-03	1.77E-05	--
6828	638036.2	4167548.9	Worker	Scenario 1	9.06E-03	1.83E-05	--
6829	638136.2	4167548.9	Worker	Scenario 1	8.46E-03	1.71E-05	--
6830	638236.2	4167548.9	Worker	Scenario 1	9.71E-03	1.96E-05	--
6831	638336.2	4167548.9	Worker	Scenario 1	9.39E-03	1.90E-05	--
6832	638436.2	4167548.9	Worker	Scenario 1	1.07E-02	2.17E-05	--
6833	638536.2	4167548.9	Worker	Scenario 1	1.06E-02	2.13E-05	--
6834	638636.2	4167548.9	Worker	Scenario 1	1.08E-02	2.18E-05	--
6835	638736.2	4167548.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
6836	638836.2	4167548.9	Worker	Scenario 1	1.18E-02	2.38E-05	--
6837	638936.2	4167548.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
6838	639036.2	4167548.9	Worker	Scenario 1	1.30E-02	2.62E-05	--
6839	639136.2	4167548.9	Worker	Scenario 1	1.36E-02	2.74E-05	--
6840	639236.2	4167548.9	Worker	Scenario 1	1.43E-02	2.90E-05	--
6841	639336.2	4167548.9	Worker	Scenario 1	1.52E-02	3.07E-05	--
6842	639436.2	4167548.9	Worker	Scenario 1	1.61E-02	3.26E-05	--
6843	639536.2	4167548.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
6844	639636.2	4167548.9	Worker	Scenario 1	1.83E-02	3.69E-05	--
6845	639736.2	4167548.9	Worker	Scenario 1	1.93E-02	3.89E-05	--
6846	639836.2	4167548.9	Worker	Scenario 1	2.05E-02	4.15E-05	--
6847	639936.2	4167548.9	Worker	Scenario 1	2.20E-02	4.44E-05	--
6848	640036.2	4167548.9	Worker	Scenario 1	2.36E-02	4.77E-05	--
6849	640236.2	4167548.9	Worker	Scenario 1	2.77E-02	5.59E-05	--
6850	640336.2	4167548.9	Worker	Scenario 1	3.02E-02	6.09E-05	--
6851	640436.2	4167548.9	Worker	Scenario 1	3.26E-02	6.58E-05	--
6852	644536.2	4167548.9	Worker	Scenario 1	4.87E-01	9.83E-04	--
6853	644736.2	4167548.9	Worker	Scenario 1	4.03E-01	8.14E-04	--
6854	644836.2	4167548.9	Worker	Scenario 1	3.70E-01	7.47E-04	--
6855	644936.2	4167548.9	Worker	Scenario 1	3.41E-01	6.88E-04	--
6856	645036.2	4167548.9	Worker	Scenario 1	3.16E-01	6.37E-04	--
6857	645136.2	4167548.9	Worker	Scenario 1	2.93E-01	5.92E-04	--
6858	645236.2	4167548.9	Worker	Scenario 1	2.74E-01	5.53E-04	--
6859	645336.2	4167548.9	Worker	Scenario 1	2.56E-01	5.18E-04	--
6860	645436.2	4167548.9	Worker	Scenario 1	2.40E-01	4.86E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6861	645536.2	4167548.9	Worker	Scenario 1	2.26E-01	4.57E-04	--
6862	645636.2	4167548.9	Worker	Scenario 1	2.13E-01	4.29E-04	--
6863	645736.2	4167548.9	Worker	Scenario 1	2.01E-01	4.06E-04	--
6864	645836.2	4167548.9	Worker	Scenario 1	1.90E-01	3.85E-04	--
6865	645936.2	4167548.9	Worker	Scenario 1	1.80E-01	3.64E-04	--
6866	646036.2	4167548.9	Worker	Scenario 1	1.71E-01	3.46E-04	--
6867	646236.2	4167548.9	Worker	Scenario 1	1.55E-01	3.13E-04	--
6868	646336.2	4167548.9	Worker	Scenario 1	1.48E-01	2.99E-04	--
6869	646436.2	4167548.9	Worker	Scenario 1	1.41E-01	2.85E-04	--
6870	646536.2	4167548.9	Worker	Scenario 1	1.35E-01	2.73E-04	--
6871	646636.2	4167548.9	Worker	Scenario 1	1.30E-01	2.62E-04	--
6872	646736.2	4167548.9	Worker	Scenario 1	1.24E-01	2.51E-04	--
6873	646836.2	4167548.9	Worker	Scenario 1	1.19E-01	2.41E-04	--
6874	646936.2	4167548.9	Worker	Scenario 1	1.15E-01	2.32E-04	--
6875	647036.2	4167548.9	Worker	Scenario 1	1.10E-01	2.23E-04	--
6876	636436.2	4167648.9	Worker	Scenario 1	4.53E-03	9.15E-06	--
6877	636536.2	4167648.9	Worker	Scenario 1	4.81E-03	9.72E-06	--
6878	636636.2	4167648.9	Worker	Scenario 1	5.18E-03	1.05E-05	--
6879	636736.2	4167648.9	Worker	Scenario 1	5.07E-03	1.02E-05	--
6880	636836.2	4167648.9	Worker	Scenario 1	5.31E-03	1.07E-05	--
6881	636936.2	4167648.9	Worker	Scenario 1	5.21E-03	1.05E-05	--
6882	637036.2	4167648.9	Worker	Scenario 1	5.03E-03	1.02E-05	--
6883	637136.2	4167648.9	Worker	Scenario 1	5.40E-03	1.09E-05	--
6884	637236.2	4167648.9	Worker	Scenario 1	5.40E-03	1.09E-05	--
6885	637336.2	4167648.9	Worker	Scenario 1	5.83E-03	1.18E-05	--
6886	637436.2	4167648.9	Worker	Scenario 1	6.53E-03	1.32E-05	--
6887	637536.2	4167648.9	Worker	Scenario 1	6.02E-03	1.22E-05	--
6888	637636.2	4167648.9	Worker	Scenario 1	7.02E-03	1.42E-05	--
6889	637736.2	4167648.9	Worker	Scenario 1	7.53E-03	1.52E-05	--
6890	637836.2	4167648.9	Worker	Scenario 1	7.13E-03	1.44E-05	--
6891	637936.2	4167648.9	Worker	Scenario 1	8.22E-03	1.66E-05	--
6892	638036.2	4167648.9	Worker	Scenario 1	9.48E-03	1.91E-05	--
6893	638136.2	4167648.9	Worker	Scenario 1	8.73E-03	1.76E-05	--
6894	638236.2	4167648.9	Worker	Scenario 1	9.31E-03	1.88E-05	--
6895	638336.2	4167648.9	Worker	Scenario 1	9.86E-03	1.99E-05	--
6896	638436.2	4167648.9	Worker	Scenario 1	1.04E-02	2.10E-05	--
6897	638536.2	4167648.9	Worker	Scenario 1	1.12E-02	2.27E-05	--
6898	638636.2	4167648.9	Worker	Scenario 1	1.10E-02	2.22E-05	--
6899	638736.2	4167648.9	Worker	Scenario 1	1.16E-02	2.35E-05	--
6900	638836.2	4167648.9	Worker	Scenario 1	1.20E-02	2.43E-05	--
6901	638936.2	4167648.9	Worker	Scenario 1	1.27E-02	2.56E-05	--
6902	639036.2	4167648.9	Worker	Scenario 1	1.32E-02	2.66E-05	--
6903	639136.2	4167648.9	Worker	Scenario 1	1.38E-02	2.79E-05	--
6904	639236.2	4167648.9	Worker	Scenario 1	1.46E-02	2.94E-05	--
6905	639336.2	4167648.9	Worker	Scenario 1	1.55E-02	3.12E-05	--
6906	639436.2	4167648.9	Worker	Scenario 1	1.66E-02	3.34E-05	--
6907	639536.2	4167648.9	Worker	Scenario 1	1.74E-02	3.52E-05	--
6908	639636.2	4167648.9	Worker	Scenario 1	1.86E-02	3.75E-05	--
6909	639736.2	4167648.9	Worker	Scenario 1	1.99E-02	4.02E-05	--
6910	639836.2	4167648.9	Worker	Scenario 1	2.09E-02	4.23E-05	--
6911	639936.2	4167648.9	Worker	Scenario 1	2.24E-02	4.53E-05	--
6912	640136.2	4167648.9	Worker	Scenario 1	2.61E-02	5.27E-05	--
6913	643436.2	4167648.9	Worker	Scenario 1	1.64E+00	3.31E-03	--
6914	643536.2	4167648.9	Worker	Scenario 1	1.49E+00	3.00E-03	--
6915	643636.2	4167648.9	Worker	Scenario 1	1.30E+00	2.63E-03	--
6916	643736.2	4167648.9	Worker	Scenario 1	1.13E+00	2.28E-03	--
6917	643836.2	4167648.9	Worker	Scenario 1	9.88E-01	2.00E-03	--
6918	643936.2	4167648.9	Worker	Scenario 1	8.67E-01	1.75E-03	--
6919	644036.2	4167648.9	Worker	Scenario 1	7.67E-01	1.55E-03	--
6920	644136.2	4167648.9	Worker	Scenario 1	6.80E-01	1.37E-03	--
6921	644236.2	4167648.9	Worker	Scenario 1	6.08E-01	1.23E-03	--
6922	644336.2	4167648.9	Worker	Scenario 1	5.48E-01	1.11E-03	--
6923	644436.2	4167648.9	Worker	Scenario 1	4.96E-01	1.00E-03	--
6924	644536.2	4167648.9	Worker	Scenario 1	4.52E-01	9.12E-04	--
6925	645136.2	4167648.9	Worker	Scenario 1	2.81E-01	5.67E-04	--
6926	645336.2	4167648.9	Worker	Scenario 1	2.47E-01	4.99E-04	--
6927	645436.2	4167648.9	Worker	Scenario 1	2.32E-01	4.69E-04	--
6928	645536.2	4167648.9	Worker	Scenario 1	2.19E-01	4.42E-04	--
6929	645636.2	4167648.9	Worker	Scenario 1	2.06E-01	4.17E-04	--
6930	645736.2	4167648.9	Worker	Scenario 1	1.95E-01	3.95E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6931	645836.2	4167648.9	Worker	Scenario 1	1.85E-01	3.74E-04	--
6932	645936.2	4167648.9	Worker	Scenario 1	1.76E-01	3.55E-04	--
6933	646036.2	4167648.9	Worker	Scenario 1	1.67E-01	3.38E-04	--
6934	646236.2	4167648.9	Worker	Scenario 1	1.52E-01	3.07E-04	--
6935	646336.2	4167648.9	Worker	Scenario 1	1.45E-01	2.93E-04	--
6936	646436.2	4167648.9	Worker	Scenario 1	1.39E-01	2.80E-04	--
6937	646536.2	4167648.9	Worker	Scenario 1	1.33E-01	2.68E-04	--
6938	646636.2	4167648.9	Worker	Scenario 1	1.27E-01	2.57E-04	--
6939	646736.2	4167648.9	Worker	Scenario 1	1.22E-01	2.47E-04	--
6940	646836.2	4167648.9	Worker	Scenario 1	1.17E-01	2.37E-04	--
6941	646936.2	4167648.9	Worker	Scenario 1	1.13E-01	2.28E-04	--
6942	647036.2	4167648.9	Worker	Scenario 1	1.09E-01	2.20E-04	--
6943	636336.2	4167748.9	Worker	Scenario 1	4.08E-03	8.25E-06	--
6944	636436.2	4167748.9	Worker	Scenario 1	4.50E-03	9.10E-06	--
6945	636536.2	4167748.9	Worker	Scenario 1	4.45E-03	8.98E-06	--
6946	636636.2	4167748.9	Worker	Scenario 1	5.12E-03	1.03E-05	--
6947	636736.2	4167748.9	Worker	Scenario 1	5.52E-03	1.12E-05	--
6948	636836.2	4167748.9	Worker	Scenario 1	5.89E-03	1.19E-05	--
6949	636936.2	4167748.9	Worker	Scenario 1	6.04E-03	1.22E-05	--
6950	637036.2	4167748.9	Worker	Scenario 1	5.84E-03	1.18E-05	--
6951	637136.2	4167748.9	Worker	Scenario 1	5.32E-03	1.07E-05	--
6952	637236.2	4167748.9	Worker	Scenario 1	5.57E-03	1.12E-05	--
6953	637336.2	4167748.9	Worker	Scenario 1	5.73E-03	1.16E-05	--
6954	637436.2	4167748.9	Worker	Scenario 1	6.78E-03	1.37E-05	--
6955	637536.2	4167748.9	Worker	Scenario 1	6.27E-03	1.27E-05	--
6956	637636.2	4167748.9	Worker	Scenario 1	7.32E-03	1.48E-05	--
6957	637736.2	4167748.9	Worker	Scenario 1	7.92E-03	1.60E-05	--
6958	637836.2	4167748.9	Worker	Scenario 1	7.74E-03	1.56E-05	--
6959	637936.2	4167748.9	Worker	Scenario 1	8.98E-03	1.81E-05	--
6960	638036.2	4167748.9	Worker	Scenario 1	9.66E-03	1.95E-05	--
6961	638136.2	4167748.9	Worker	Scenario 1	8.91E-03	1.80E-05	--
6962	638236.2	4167748.9	Worker	Scenario 1	1.01E-02	2.05E-05	--
6963	638336.2	4167748.9	Worker	Scenario 1	9.88E-03	2.00E-05	--
6964	638436.2	4167748.9	Worker	Scenario 1	1.09E-02	2.21E-05	--
6965	638536.2	4167748.9	Worker	Scenario 1	1.16E-02	2.34E-05	--
6966	638636.2	4167748.9	Worker	Scenario 1	1.13E-02	2.28E-05	--
6967	638736.2	4167748.9	Worker	Scenario 1	1.22E-02	2.46E-05	--
6968	638836.2	4167748.9	Worker	Scenario 1	1.24E-02	2.51E-05	--
6969	638936.2	4167748.9	Worker	Scenario 1	1.31E-02	2.64E-05	--
6970	639036.2	4167748.9	Worker	Scenario 1	1.36E-02	2.75E-05	--
6971	639136.2	4167748.9	Worker	Scenario 1	1.42E-02	2.88E-05	--
6972	639236.2	4167748.9	Worker	Scenario 1	1.49E-02	3.01E-05	--
6973	639336.2	4167748.9	Worker	Scenario 1	1.59E-02	3.21E-05	--
6974	639436.2	4167748.9	Worker	Scenario 1	1.68E-02	3.40E-05	--
6975	639536.2	4167748.9	Worker	Scenario 1	1.80E-02	3.63E-05	--
6976	639636.2	4167748.9	Worker	Scenario 1	1.91E-02	3.86E-05	--
6977	639736.2	4167748.9	Worker	Scenario 1	2.06E-02	4.17E-05	--
6978	640036.2	4167748.9	Worker	Scenario 1	2.50E-02	5.04E-05	--
6979	643336.2	4167748.9	Worker	Scenario 1	6.05E-01	1.22E-03	--
6980	643436.2	4167748.9	Worker	Scenario 1	7.01E-01	1.42E-03	--
6981	643536.2	4167748.9	Worker	Scenario 1	7.67E-01	1.55E-03	--
6982	643636.2	4167748.9	Worker	Scenario 1	7.81E-01	1.58E-03	--
6983	643736.2	4167748.9	Worker	Scenario 1	7.51E-01	1.52E-03	--
6984	643836.2	4167748.9	Worker	Scenario 1	7.11E-01	1.44E-03	--
6985	643936.2	4167748.9	Worker	Scenario 1	6.61E-01	1.34E-03	--
6986	644036.2	4167748.9	Worker	Scenario 1	6.10E-01	1.23E-03	--
6987	644336.2	4167748.9	Worker	Scenario 1	4.75E-01	9.58E-04	--
6988	644436.2	4167748.9	Worker	Scenario 1	4.35E-01	8.79E-04	--
6989	644636.2	4167748.9	Worker	Scenario 1	3.73E-01	7.53E-04	--
6990	644736.2	4167748.9	Worker	Scenario 1	3.46E-01	6.98E-04	--
6991	644836.2	4167748.9	Worker	Scenario 1	3.22E-01	6.50E-04	--
6992	644936.2	4167748.9	Worker	Scenario 1	3.00E-01	6.06E-04	--
6993	646036.2	4167748.9	Worker	Scenario 1	1.61E-01	3.26E-04	--
6994	646236.2	4167748.9	Worker	Scenario 1	1.47E-01	2.97E-04	--
6995	646336.2	4167748.9	Worker	Scenario 1	1.41E-01	2.84E-04	--
6996	646436.2	4167748.9	Worker	Scenario 1	1.35E-01	2.72E-04	--
6997	646536.2	4167748.9	Worker	Scenario 1	1.29E-01	2.61E-04	--
6998	646636.2	4167748.9	Worker	Scenario 1	1.24E-01	2.50E-04	--
6999	646736.2	4167748.9	Worker	Scenario 1	1.19E-01	2.41E-04	--
7000	646836.2	4167748.9	Worker	Scenario 1	1.15E-01	2.31E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7001	646936.2	4167748.9	Worker	Scenario 1	1.10E-01	2.23E-04	--
7002	647036.2	4167748.9	Worker	Scenario 1	1.06E-01	2.15E-04	--
7003	636236.2	4167848.9	Worker	Scenario 1	3.92E-03	7.91E-06	--
7004	636336.2	4167848.9	Worker	Scenario 1	4.16E-03	8.41E-06	--
7005	636436.2	4167848.9	Worker	Scenario 1	4.13E-03	8.35E-06	--
7006	636536.2	4167848.9	Worker	Scenario 1	4.41E-03	8.92E-06	--
7007	636636.2	4167848.9	Worker	Scenario 1	4.38E-03	8.85E-06	--
7008	636736.2	4167848.9	Worker	Scenario 1	4.70E-03	9.49E-06	--
7009	636836.2	4167848.9	Worker	Scenario 1	5.74E-03	1.16E-05	--
7010	636936.2	4167848.9	Worker	Scenario 1	6.48E-03	1.31E-05	--
7011	637036.2	4167848.9	Worker	Scenario 1	6.12E-03	1.24E-05	--
7012	637136.2	4167848.9	Worker	Scenario 1	5.38E-03	1.09E-05	--
7013	637236.2	4167848.9	Worker	Scenario 1	6.14E-03	1.24E-05	--
7014	637336.2	4167848.9	Worker	Scenario 1	6.24E-03	1.26E-05	--
7015	637436.2	4167848.9	Worker	Scenario 1	6.74E-03	1.36E-05	--
7016	637536.2	4167848.9	Worker	Scenario 1	6.99E-03	1.41E-05	--
7017	637636.2	4167848.9	Worker	Scenario 1	7.10E-03	1.43E-05	--
7018	637736.2	4167848.9	Worker	Scenario 1	8.29E-03	1.68E-05	--
7019	637836.2	4167848.9	Worker	Scenario 1	8.26E-03	1.67E-05	--
7020	637936.2	4167848.9	Worker	Scenario 1	8.69E-03	1.75E-05	--
7021	638036.2	4167848.9	Worker	Scenario 1	1.00E-02	2.03E-05	--
7022	638136.2	4167848.9	Worker	Scenario 1	9.44E-03	1.91E-05	--
7023	638236.2	4167848.9	Worker	Scenario 1	1.03E-02	2.09E-05	--
7024	638336.2	4167848.9	Worker	Scenario 1	1.04E-02	2.11E-05	--
7025	638436.2	4167848.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
7026	638536.2	4167848.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
7027	638636.2	4167848.9	Worker	Scenario 1	1.18E-02	2.37E-05	--
7028	638736.2	4167848.9	Worker	Scenario 1	1.26E-02	2.55E-05	--
7029	638836.2	4167848.9	Worker	Scenario 1	1.29E-02	2.61E-05	--
7030	638936.2	4167848.9	Worker	Scenario 1	1.35E-02	2.74E-05	--
7031	639036.2	4167848.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
7032	639136.2	4167848.9	Worker	Scenario 1	1.47E-02	2.98E-05	--
7033	639236.2	4167848.9	Worker	Scenario 1	1.55E-02	3.14E-05	--
7034	639336.2	4167848.9	Worker	Scenario 1	1.65E-02	3.33E-05	--
7035	639436.2	4167848.9	Worker	Scenario 1	1.74E-02	3.52E-05	--
7036	639536.2	4167848.9	Worker	Scenario 1	1.86E-02	3.75E-05	--
7037	639636.2	4167848.9	Worker	Scenario 1	1.99E-02	4.01E-05	--
7038	639836.2	4167848.9	Worker	Scenario 1	2.24E-02	4.53E-05	--
7039	643336.2	4167848.9	Worker	Scenario 1	4.14E-01	8.36E-04	--
7040	643436.2	4167848.9	Worker	Scenario 1	4.17E-01	8.42E-04	--
7041	643536.2	4167848.9	Worker	Scenario 1	4.42E-01	8.92E-04	--
7042	643636.2	4167848.9	Worker	Scenario 1	4.72E-01	9.52E-04	--
7043	643736.2	4167848.9	Worker	Scenario 1	4.88E-01	9.86E-04	--
7044	643836.2	4167848.9	Worker	Scenario 1	4.90E-01	9.90E-04	--
7045	643936.2	4167848.9	Worker	Scenario 1	4.81E-01	9.72E-04	--
7046	644036.2	4167848.9	Worker	Scenario 1	4.64E-01	9.37E-04	--
7047	644136.2	4167848.9	Worker	Scenario 1	4.42E-01	8.92E-04	--
7048	644236.2	4167848.9	Worker	Scenario 1	4.18E-01	8.44E-04	--
7049	644336.2	4167848.9	Worker	Scenario 1	3.94E-01	7.95E-04	--
7050	644436.2	4167848.9	Worker	Scenario 1	3.70E-01	7.47E-04	--
7051	644536.2	4167848.9	Worker	Scenario 1	3.48E-01	7.02E-04	--
7052	644636.2	4167848.9	Worker	Scenario 1	3.27E-01	6.60E-04	--
7053	644736.2	4167848.9	Worker	Scenario 1	3.07E-01	6.20E-04	--
7054	644836.2	4167848.9	Worker	Scenario 1	2.88E-01	5.83E-04	--
7055	644936.2	4167848.9	Worker	Scenario 1	2.71E-01	5.48E-04	--
7056	645036.2	4167848.9	Worker	Scenario 1	2.55E-01	5.16E-04	--
7057	645136.2	4167848.9	Worker	Scenario 1	2.42E-01	4.88E-04	--
7058	645236.2	4167848.9	Worker	Scenario 1	2.29E-01	4.62E-04	--
7059	645336.2	4167848.9	Worker	Scenario 1	2.17E-01	4.38E-04	--
7060	645436.2	4167848.9	Worker	Scenario 1	2.06E-01	4.17E-04	--
7061	645536.2	4167848.9	Worker	Scenario 1	1.96E-01	3.95E-04	--
7062	645636.2	4167848.9	Worker	Scenario 1	1.86E-01	3.75E-04	--
7063	645736.2	4167848.9	Worker	Scenario 1	1.77E-01	3.58E-04	--
7064	645836.2	4167848.9	Worker	Scenario 1	1.69E-01	3.41E-04	--
7065	645936.2	4167848.9	Worker	Scenario 1	1.61E-01	3.25E-04	--
7066	646036.2	4167848.9	Worker	Scenario 1	1.54E-01	3.11E-04	--
7067	646236.2	4167848.9	Worker	Scenario 1	1.41E-01	2.85E-04	--
7068	646336.2	4167848.9	Worker	Scenario 1	1.35E-01	2.73E-04	--
7069	646436.2	4167848.9	Worker	Scenario 1	1.30E-01	2.62E-04	--
7070	646536.2	4167848.9	Worker	Scenario 1	1.24E-01	2.51E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7071	646636.2	4167848.9	Worker	Scenario 1	1.20E-01	2.42E-04	--
7072	646736.2	4167848.9	Worker	Scenario 1	1.15E-01	2.33E-04	--
7073	646836.2	4167848.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
7074	646936.2	4167848.9	Worker	Scenario 1	1.07E-01	2.16E-04	--
7075	636136.2	4167948.9	Worker	Scenario 1	4.15E-03	8.37E-06	--
7076	636236.2	4167948.9	Worker	Scenario 1	4.37E-03	8.82E-06	--
7077	636336.2	4167948.9	Worker	Scenario 1	4.20E-03	8.48E-06	--
7078	636436.2	4167948.9	Worker	Scenario 1	4.38E-03	8.84E-06	--
7079	636536.2	4167948.9	Worker	Scenario 1	4.49E-03	9.07E-06	--
7080	636636.2	4167948.9	Worker	Scenario 1	4.80E-03	9.69E-06	--
7081	636736.2	4167948.9	Worker	Scenario 1	5.51E-03	1.11E-05	--
7082	636836.2	4167948.9	Worker	Scenario 1	6.28E-03	1.27E-05	--
7083	636936.2	4167948.9	Worker	Scenario 1	6.51E-03	1.31E-05	--
7084	637036.2	4167948.9	Worker	Scenario 1	6.87E-03	1.39E-05	--
7085	637136.2	4167948.9	Worker	Scenario 1	7.27E-03	1.47E-05	--
7086	637236.2	4167948.9	Worker	Scenario 1	6.48E-03	1.31E-05	--
7087	637336.2	4167948.9	Worker	Scenario 1	6.49E-03	1.31E-05	--
7088	637436.2	4167948.9	Worker	Scenario 1	7.24E-03	1.46E-05	--
7089	637536.2	4167948.9	Worker	Scenario 1	6.97E-03	1.41E-05	--
7090	637636.2	4167948.9	Worker	Scenario 1	7.28E-03	1.47E-05	--
7091	637736.2	4167948.9	Worker	Scenario 1	8.71E-03	1.76E-05	--
7092	637836.2	4167948.9	Worker	Scenario 1	8.83E-03	1.78E-05	--
7093	637936.2	4167948.9	Worker	Scenario 1	8.87E-03	1.79E-05	--
7094	638036.2	4167948.9	Worker	Scenario 1	1.04E-02	2.10E-05	--
7095	638136.2	4167948.9	Worker	Scenario 1	1.01E-02	2.05E-05	--
7096	638236.2	4167948.9	Worker	Scenario 1	1.01E-02	2.04E-05	--
7097	638336.2	4167948.9	Worker	Scenario 1	1.12E-02	2.26E-05	--
7098	638436.2	4167948.9	Worker	Scenario 1	1.12E-02	2.27E-05	--
7099	638536.2	4167948.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
7100	638636.2	4167948.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
7101	638736.2	4167948.9	Worker	Scenario 1	1.30E-02	2.63E-05	--
7102	638836.2	4167948.9	Worker	Scenario 1	1.34E-02	2.71E-05	--
7103	638936.2	4167948.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
7104	639036.2	4167948.9	Worker	Scenario 1	1.46E-02	2.95E-05	--
7105	639136.2	4167948.9	Worker	Scenario 1	1.53E-02	3.09E-05	--
7106	639236.2	4167948.9	Worker	Scenario 1	1.61E-02	3.25E-05	--
7107	639336.2	4167948.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
7108	639436.2	4167948.9	Worker	Scenario 1	1.81E-02	3.65E-05	--
7109	639536.2	4167948.9	Worker	Scenario 1	1.92E-02	3.88E-05	--
7110	639736.2	4167948.9	Worker	Scenario 1	2.19E-02	4.42E-05	--
7111	643236.2	4167948.9	Worker	Scenario 1	3.88E-01	7.83E-04	--
7112	643336.2	4167948.9	Worker	Scenario 1	3.42E-01	6.91E-04	--
7113	643436.2	4167948.9	Worker	Scenario 1	3.22E-01	6.51E-04	--
7114	643536.2	4167948.9	Worker	Scenario 1	3.22E-01	6.49E-04	--
7115	643636.2	4167948.9	Worker	Scenario 1	3.29E-01	6.64E-04	--
7116	643736.2	4167948.9	Worker	Scenario 1	3.39E-01	6.85E-04	--
7117	643836.2	4167948.9	Worker	Scenario 1	3.48E-01	7.03E-04	--
7118	643936.2	4167948.9	Worker	Scenario 1	3.53E-01	7.12E-04	--
7119	644036.2	4167948.9	Worker	Scenario 1	3.51E-01	7.09E-04	--
7120	644136.2	4167948.9	Worker	Scenario 1	3.45E-01	6.96E-04	--
7121	644236.2	4167948.9	Worker	Scenario 1	3.35E-01	6.76E-04	--
7122	644336.2	4167948.9	Worker	Scenario 1	3.22E-01	6.51E-04	--
7123	644436.2	4167948.9	Worker	Scenario 1	3.09E-01	6.23E-04	--
7124	644536.2	4167948.9	Worker	Scenario 1	2.95E-01	5.96E-04	--
7125	644636.2	4167948.9	Worker	Scenario 1	2.81E-01	5.68E-04	--
7126	644736.2	4167948.9	Worker	Scenario 1	2.68E-01	5.41E-04	--
7127	644836.2	4167948.9	Worker	Scenario 1	2.54E-01	5.13E-04	--
7128	644936.2	4167948.9	Worker	Scenario 1	2.41E-01	4.88E-04	--
7129	645036.2	4167948.9	Worker	Scenario 1	2.30E-01	4.64E-04	--
7130	645136.2	4167948.9	Worker	Scenario 1	2.19E-01	4.42E-04	--
7131	645236.2	4167948.9	Worker	Scenario 1	2.08E-01	4.21E-04	--
7132	645336.2	4167948.9	Worker	Scenario 1	1.99E-01	4.02E-04	--
7133	645436.2	4167948.9	Worker	Scenario 1	1.90E-01	3.84E-04	--
7134	645536.2	4167948.9	Worker	Scenario 1	1.81E-01	3.66E-04	--
7135	645636.2	4167948.9	Worker	Scenario 1	1.73E-01	3.50E-04	--
7136	645736.2	4167948.9	Worker	Scenario 1	1.66E-01	3.35E-04	--
7137	645836.2	4167948.9	Worker	Scenario 1	1.58E-01	3.20E-04	--
7138	645936.2	4167948.9	Worker	Scenario 1	1.52E-01	3.07E-04	--
7139	646036.2	4167948.9	Worker	Scenario 1	1.46E-01	2.94E-04	--
7140	646236.2	4167948.9	Worker	Scenario 1	1.34E-01	2.71E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7141	646336.2	4167948.9	Worker	Scenario 1	1.29E-01	2.60E-04	--
7142	646436.2	4167948.9	Worker	Scenario 1	1.24E-01	2.50E-04	--
7143	646536.2	4167948.9	Worker	Scenario 1	1.19E-01	2.40E-04	--
7144	646636.2	4167948.9	Worker	Scenario 1	1.15E-01	2.32E-04	--
7145	646736.2	4167948.9	Worker	Scenario 1	1.11E-01	2.23E-04	--
7146	646836.2	4167948.9	Worker	Scenario 1	1.07E-01	2.15E-04	--
7147	646936.2	4167948.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
7148	636036.2	4168048.9	Worker	Scenario 1	4.24E-03	8.56E-06	--
7149	636136.2	4168048.9	Worker	Scenario 1	4.50E-03	9.08E-06	--
7150	636236.2	4168048.9	Worker	Scenario 1	4.80E-03	9.69E-06	--
7151	636336.2	4168048.9	Worker	Scenario 1	5.01E-03	1.01E-05	--
7152	636436.2	4168048.9	Worker	Scenario 1	5.22E-03	1.05E-05	--
7153	636536.2	4168048.9	Worker	Scenario 1	5.51E-03	1.11E-05	--
7154	636636.2	4168048.9	Worker	Scenario 1	5.68E-03	1.15E-05	--
7155	636736.2	4168048.9	Worker	Scenario 1	5.80E-03	1.17E-05	--
7156	636836.2	4168048.9	Worker	Scenario 1	5.82E-03	1.17E-05	--
7157	636936.2	4168048.9	Worker	Scenario 1	6.04E-03	1.22E-05	--
7158	637036.2	4168048.9	Worker	Scenario 1	6.71E-03	1.36E-05	--
7159	637136.2	4168048.9	Worker	Scenario 1	7.31E-03	1.48E-05	--
7160	637236.2	4168048.9	Worker	Scenario 1	7.85E-03	1.59E-05	--
7161	637336.2	4168048.9	Worker	Scenario 1	6.99E-03	1.41E-05	--
7162	637436.2	4168048.9	Worker	Scenario 1	8.05E-03	1.63E-05	--
7163	637536.2	4168048.9	Worker	Scenario 1	7.22E-03	1.46E-05	--
7164	637636.2	4168048.9	Worker	Scenario 1	8.18E-03	1.65E-05	--
7165	637736.2	4168048.9	Worker	Scenario 1	9.07E-03	1.83E-05	--
7166	637836.2	4168048.9	Worker	Scenario 1	9.01E-03	1.82E-05	--
7167	637936.2	4168048.9	Worker	Scenario 1	9.67E-03	1.95E-05	--
7168	638036.2	4168048.9	Worker	Scenario 1	1.06E-02	2.15E-05	--
7169	638136.2	4168048.9	Worker	Scenario 1	1.06E-02	2.13E-05	--
7170	638236.2	4168048.9	Worker	Scenario 1	1.07E-02	2.16E-05	--
7171	638336.2	4168048.9	Worker	Scenario 1	1.14E-02	2.31E-05	--
7172	638436.2	4168048.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
7173	638536.2	4168048.9	Worker	Scenario 1	1.27E-02	2.56E-05	--
7174	638636.2	4168048.9	Worker	Scenario 1	1.27E-02	2.57E-05	--
7175	638736.2	4168048.9	Worker	Scenario 1	1.36E-02	2.74E-05	--
7176	638836.2	4168048.9	Worker	Scenario 1	1.40E-02	2.82E-05	--
7177	638936.2	4168048.9	Worker	Scenario 1	1.46E-02	2.94E-05	--
7178	639036.2	4168048.9	Worker	Scenario 1	1.51E-02	3.06E-05	--
7179	639136.2	4168048.9	Worker	Scenario 1	1.58E-02	3.20E-05	--
7180	639236.2	4168048.9	Worker	Scenario 1	1.67E-02	3.36E-05	--
7181	639336.2	4168048.9	Worker	Scenario 1	1.76E-02	3.55E-05	--
7182	643136.2	4168048.9	Worker	Scenario 1	3.90E-01	7.88E-04	--
7183	643236.2	4168048.9	Worker	Scenario 1	3.32E-01	6.71E-04	--
7184	643336.2	4168048.9	Worker	Scenario 1	2.95E-01	5.96E-04	--
7185	643436.2	4168048.9	Worker	Scenario 1	2.77E-01	5.60E-04	--
7186	643536.2	4168048.9	Worker	Scenario 1	2.67E-01	5.38E-04	--
7187	643636.2	4168048.9	Worker	Scenario 1	2.63E-01	5.32E-04	--
7188	643736.2	4168048.9	Worker	Scenario 1	2.64E-01	5.33E-04	--
7189	643836.2	4168048.9	Worker	Scenario 1	2.66E-01	5.37E-04	--
7190	643936.2	4168048.9	Worker	Scenario 1	2.69E-01	5.44E-04	--
7191	644036.2	4168048.9	Worker	Scenario 1	2.71E-01	5.48E-04	--
7192	644136.2	4168048.9	Worker	Scenario 1	2.71E-01	5.48E-04	--
7193	644236.2	4168048.9	Worker	Scenario 1	2.69E-01	5.42E-04	--
7194	644336.2	4168048.9	Worker	Scenario 1	2.63E-01	5.32E-04	--
7195	644436.2	4168048.9	Worker	Scenario 1	2.56E-01	5.17E-04	--
7196	644536.2	4168048.9	Worker	Scenario 1	2.49E-01	5.02E-04	--
7197	644636.2	4168048.9	Worker	Scenario 1	2.40E-01	4.84E-04	--
7198	644736.2	4168048.9	Worker	Scenario 1	2.31E-01	4.67E-04	--
7199	644836.2	4168048.9	Worker	Scenario 1	2.22E-01	4.48E-04	--
7200	644936.2	4168048.9	Worker	Scenario 1	2.13E-01	4.30E-04	--
7201	645036.2	4168048.9	Worker	Scenario 1	2.04E-01	4.12E-04	--
7202	645136.2	4168048.9	Worker	Scenario 1	1.96E-01	3.96E-04	--
7203	645236.2	4168048.9	Worker	Scenario 1	1.88E-01	3.80E-04	--
7204	645336.2	4168048.9	Worker	Scenario 1	1.81E-01	3.65E-04	--
7205	645436.2	4168048.9	Worker	Scenario 1	1.74E-01	3.51E-04	--
7206	645536.2	4168048.9	Worker	Scenario 1	1.67E-01	3.37E-04	--
7207	645636.2	4168048.9	Worker	Scenario 1	1.60E-01	3.23E-04	--
7208	645736.2	4168048.9	Worker	Scenario 1	1.54E-01	3.11E-04	--
7209	645836.2	4168048.9	Worker	Scenario 1	1.48E-01	2.98E-04	--
7210	645936.2	4168048.9	Worker	Scenario 1	1.42E-01	2.87E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7211	646036.2	4168048.9	Worker	Scenario 1	1.37E-01	2.76E-04	--
7212	646236.2	4168048.9	Worker	Scenario 1	1.26E-01	2.55E-04	--
7213	646336.2	4168048.9	Worker	Scenario 1	1.22E-01	2.46E-04	--
7214	646436.2	4168048.9	Worker	Scenario 1	1.17E-01	2.37E-04	--
7215	646536.2	4168048.9	Worker	Scenario 1	1.13E-01	2.29E-04	--
7216	646636.2	4168048.9	Worker	Scenario 1	1.09E-01	2.21E-04	--
7217	646736.2	4168048.9	Worker	Scenario 1	1.06E-01	2.13E-04	--
7218	646836.2	4168048.9	Worker	Scenario 1	1.02E-01	2.06E-04	--
7219	646936.2	4168048.9	Worker	Scenario 1	9.87E-02	1.99E-04	--
7220	636036.2	4168148.9	Worker	Scenario 1	4.14E-03	8.35E-06	--
7221	636136.2	4168148.9	Worker	Scenario 1	4.17E-03	8.43E-06	--
7222	636236.2	4168148.9	Worker	Scenario 1	4.16E-03	8.40E-06	--
7223	636336.2	4168148.9	Worker	Scenario 1	4.35E-03	8.79E-06	--
7224	636436.2	4168148.9	Worker	Scenario 1	4.71E-03	9.52E-06	--
7225	636536.2	4168148.9	Worker	Scenario 1	4.88E-03	9.85E-06	--
7226	636636.2	4168148.9	Worker	Scenario 1	5.15E-03	1.04E-05	--
7227	636736.2	4168148.9	Worker	Scenario 1	5.29E-03	1.07E-05	--
7228	636836.2	4168148.9	Worker	Scenario 1	5.63E-03	1.14E-05	--
7229	636936.2	4168148.9	Worker	Scenario 1	6.14E-03	1.24E-05	--
7230	637036.2	4168148.9	Worker	Scenario 1	6.56E-03	1.32E-05	--
7231	637136.2	4168148.9	Worker	Scenario 1	7.23E-03	1.46E-05	--
7232	637236.2	4168148.9	Worker	Scenario 1	7.83E-03	1.58E-05	--
7233	637336.2	4168148.9	Worker	Scenario 1	8.33E-03	1.68E-05	--
7234	637436.2	4168148.9	Worker	Scenario 1	8.57E-03	1.73E-05	--
7235	637536.2	4168148.9	Worker	Scenario 1	7.72E-03	1.56E-05	--
7236	637636.2	4168148.9	Worker	Scenario 1	8.25E-03	1.67E-05	--
7237	637736.2	4168148.9	Worker	Scenario 1	9.30E-03	1.88E-05	--
7238	637836.2	4168148.9	Worker	Scenario 1	9.38E-03	1.89E-05	--
7239	637936.2	4168148.9	Worker	Scenario 1	1.01E-02	2.05E-05	--
7240	638036.2	4168148.9	Worker	Scenario 1	1.10E-02	2.23E-05	--
7241	638136.2	4168148.9	Worker	Scenario 1	1.06E-02	2.15E-05	--
7242	638236.2	4168148.9	Worker	Scenario 1	1.11E-02	2.23E-05	--
7243	638336.2	4168148.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
7244	638436.2	4168148.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
7245	638536.2	4168148.9	Worker	Scenario 1	1.30E-02	2.63E-05	--
7246	638636.2	4168148.9	Worker	Scenario 1	1.31E-02	2.64E-05	--
7247	638736.2	4168148.9	Worker	Scenario 1	1.37E-02	2.78E-05	--
7248	638836.2	4168148.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
7249	638936.2	4168148.9	Worker	Scenario 1	1.50E-02	3.03E-05	--
7250	639036.2	4168148.9	Worker	Scenario 1	1.56E-02	3.15E-05	--
7251	639136.2	4168148.9	Worker	Scenario 1	1.63E-02	3.29E-05	--
7252	639236.2	4168148.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
7253	642936.2	4168148.9	Worker	Scenario 1	3.92E-01	7.93E-04	--
7254	643036.2	4168148.9	Worker	Scenario 1	3.62E-01	7.31E-04	--
7255	643136.2	4168148.9	Worker	Scenario 1	3.26E-01	6.59E-04	--
7256	643236.2	4168148.9	Worker	Scenario 1	2.91E-01	5.87E-04	--
7257	643336.2	4168148.9	Worker	Scenario 1	2.60E-01	5.26E-04	--
7258	643436.2	4168148.9	Worker	Scenario 1	2.44E-01	4.92E-04	--
7259	643536.2	4168148.9	Worker	Scenario 1	2.34E-01	4.72E-04	--
7260	643636.2	4168148.9	Worker	Scenario 1	2.26E-01	4.57E-04	--
7261	643736.2	4168148.9	Worker	Scenario 1	2.22E-01	4.49E-04	--
7262	643836.2	4168148.9	Worker	Scenario 1	2.20E-01	4.44E-04	--
7263	643936.2	4168148.9	Worker	Scenario 1	2.19E-01	4.42E-04	--
7264	644036.2	4168148.9	Worker	Scenario 1	2.19E-01	4.42E-04	--
7265	644136.2	4168148.9	Worker	Scenario 1	2.19E-01	4.42E-04	--
7266	644236.2	4168148.9	Worker	Scenario 1	2.18E-01	4.41E-04	--
7267	644336.2	4168148.9	Worker	Scenario 1	2.17E-01	4.38E-04	--
7268	644436.2	4168148.9	Worker	Scenario 1	2.14E-01	4.31E-04	--
7269	644536.2	4168148.9	Worker	Scenario 1	2.10E-01	4.24E-04	--
7270	644636.2	4168148.9	Worker	Scenario 1	2.05E-01	4.14E-04	--
7271	644736.2	4168148.9	Worker	Scenario 1	2.00E-01	4.03E-04	--
7272	644836.2	4168148.9	Worker	Scenario 1	1.93E-01	3.90E-04	--
7273	644936.2	4168148.9	Worker	Scenario 1	1.87E-01	3.78E-04	--
7274	645036.2	4168148.9	Worker	Scenario 1	1.81E-01	3.65E-04	--
7275	645136.2	4168148.9	Worker	Scenario 1	1.75E-01	3.53E-04	--
7276	645236.2	4168148.9	Worker	Scenario 1	1.69E-01	3.41E-04	--
7277	645336.2	4168148.9	Worker	Scenario 1	1.63E-01	3.30E-04	--
7278	645436.2	4168148.9	Worker	Scenario 1	1.58E-01	3.18E-04	--
7279	645536.2	4168148.9	Worker	Scenario 1	1.52E-01	3.07E-04	--
7280	645636.2	4168148.9	Worker	Scenario 1	1.47E-01	2.96E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7281	645736.2	4168148.9	Worker	Scenario 1	1.42E-01	2.86E-04	--
7282	645836.2	4168148.9	Worker	Scenario 1	1.37E-01	2.76E-04	--
7283	645936.2	4168148.9	Worker	Scenario 1	1.32E-01	2.66E-04	--
7284	646036.2	4168148.9	Worker	Scenario 1	1.27E-01	2.57E-04	--
7285	646236.2	4168148.9	Worker	Scenario 1	1.19E-01	2.39E-04	--
7286	646336.2	4168148.9	Worker	Scenario 1	1.14E-01	2.31E-04	--
7287	646436.2	4168148.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
7288	646536.2	4168148.9	Worker	Scenario 1	1.07E-01	2.16E-04	--
7289	646636.2	4168148.9	Worker	Scenario 1	1.04E-01	2.09E-04	--
7290	646736.2	4168148.9	Worker	Scenario 1	1.00E-01	2.03E-04	--
7291	646836.2	4168148.9	Worker	Scenario 1	9.71E-02	1.96E-04	--
7292	635936.2	4168248.9	Worker	Scenario 1	3.98E-03	8.04E-06	--
7293	636036.2	4168248.9	Worker	Scenario 1	4.07E-03	8.21E-06	--
7294	636136.2	4168248.9	Worker	Scenario 1	4.02E-03	8.12E-06	--
7295	636236.2	4168248.9	Worker	Scenario 1	4.20E-03	8.48E-06	--
7296	636336.2	4168248.9	Worker	Scenario 1	4.38E-03	8.84E-06	--
7297	636436.2	4168248.9	Worker	Scenario 1	4.53E-03	9.14E-06	--
7298	636536.2	4168248.9	Worker	Scenario 1	4.76E-03	9.62E-06	--
7299	636636.2	4168248.9	Worker	Scenario 1	5.00E-03	1.01E-05	--
7300	636736.2	4168248.9	Worker	Scenario 1	5.29E-03	1.07E-05	--
7301	636836.2	4168248.9	Worker	Scenario 1	5.61E-03	1.13E-05	--
7302	636936.2	4168248.9	Worker	Scenario 1	5.99E-03	1.21E-05	--
7303	637036.2	4168248.9	Worker	Scenario 1	6.44E-03	1.30E-05	--
7304	637136.2	4168248.9	Worker	Scenario 1	7.13E-03	1.44E-05	--
7305	637236.2	4168248.9	Worker	Scenario 1	7.81E-03	1.58E-05	--
7306	637336.2	4168248.9	Worker	Scenario 1	8.46E-03	1.71E-05	--
7307	637436.2	4168248.9	Worker	Scenario 1	8.94E-03	1.80E-05	--
7308	637536.2	4168248.9	Worker	Scenario 1	8.13E-03	1.64E-05	--
7309	637636.2	4168248.9	Worker	Scenario 1	8.57E-03	1.73E-05	--
7310	637736.2	4168248.9	Worker	Scenario 1	9.32E-03	1.88E-05	--
7311	637836.2	4168248.9	Worker	Scenario 1	1.00E-02	2.02E-05	--
7312	637936.2	4168248.9	Worker	Scenario 1	1.00E-02	2.02E-05	--
7313	638036.2	4168248.9	Worker	Scenario 1	1.10E-02	2.21E-05	--
7314	638136.2	4168248.9	Worker	Scenario 1	1.11E-02	2.25E-05	--
7315	638236.2	4168248.9	Worker	Scenario 1	1.13E-02	2.29E-05	--
7316	638336.2	4168248.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
7317	638436.2	4168248.9	Worker	Scenario 1	1.24E-02	2.50E-05	--
7318	638536.2	4168248.9	Worker	Scenario 1	1.32E-02	2.67E-05	--
7319	638636.2	4168248.9	Worker	Scenario 1	1.34E-02	2.71E-05	--
7320	638736.2	4168248.9	Worker	Scenario 1	1.40E-02	2.83E-05	--
7321	638836.2	4168248.9	Worker	Scenario 1	1.48E-02	2.98E-05	--
7322	638936.2	4168248.9	Worker	Scenario 1	1.53E-02	3.10E-05	--
7323	639036.2	4168248.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
7324	639136.2	4168248.9	Worker	Scenario 1	1.67E-02	3.37E-05	--
7325	642836.2	4168248.9	Worker	Scenario 1	3.40E-01	6.86E-04	--
7326	642936.2	4168248.9	Worker	Scenario 1	3.25E-01	6.56E-04	--
7327	643036.2	4168248.9	Worker	Scenario 1	3.02E-01	6.09E-04	--
7328	643136.2	4168248.9	Worker	Scenario 1	2.81E-01	5.67E-04	--
7329	643236.2	4168248.9	Worker	Scenario 1	2.56E-01	5.16E-04	--
7330	643336.2	4168248.9	Worker	Scenario 1	2.32E-01	4.69E-04	--
7331	643436.2	4168248.9	Worker	Scenario 1	2.16E-01	4.37E-04	--
7332	643536.2	4168248.9	Worker	Scenario 1	2.08E-01	4.21E-04	--
7333	643636.2	4168248.9	Worker	Scenario 1	2.02E-01	4.07E-04	--
7334	643736.2	4168248.9	Worker	Scenario 1	1.96E-01	3.96E-04	--
7335	643836.2	4168248.9	Worker	Scenario 1	1.91E-01	3.86E-04	--
7336	643936.2	4168248.9	Worker	Scenario 1	1.88E-01	3.80E-04	--
7337	644036.2	4168248.9	Worker	Scenario 1	1.86E-01	3.75E-04	--
7338	644136.2	4168248.9	Worker	Scenario 1	1.84E-01	3.71E-04	--
7339	644236.2	4168248.9	Worker	Scenario 1	1.83E-01	3.69E-04	--
7340	644336.2	4168248.9	Worker	Scenario 1	1.82E-01	3.67E-04	--
7341	644436.2	4168248.9	Worker	Scenario 1	1.80E-01	3.64E-04	--
7342	644536.2	4168248.9	Worker	Scenario 1	1.79E-01	3.61E-04	--
7343	644636.2	4168248.9	Worker	Scenario 1	1.76E-01	3.55E-04	--
7344	644736.2	4168248.9	Worker	Scenario 1	1.73E-01	3.49E-04	--
7345	644836.2	4168248.9	Worker	Scenario 1	1.69E-01	3.41E-04	--
7346	644936.2	4168248.9	Worker	Scenario 1	1.65E-01	3.32E-04	--
7347	645036.2	4168248.9	Worker	Scenario 1	1.60E-01	3.23E-04	--
7348	645136.2	4168248.9	Worker	Scenario 1	1.56E-01	3.15E-04	--
7349	645236.2	4168248.9	Worker	Scenario 1	1.51E-01	3.06E-04	--
7350	645336.2	4168248.9	Worker	Scenario 1	1.47E-01	2.97E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7351	645436.2	4168248.9	Worker	Scenario 1	1.43E-01	2.89E-04	--
7352	645536.2	4168248.9	Worker	Scenario 1	1.38E-01	2.80E-04	--
7353	645636.2	4168248.9	Worker	Scenario 1	1.34E-01	2.71E-04	--
7354	645736.2	4168248.9	Worker	Scenario 1	1.30E-01	2.63E-04	--
7355	645836.2	4168248.9	Worker	Scenario 1	1.26E-01	2.55E-04	--
7356	645936.2	4168248.9	Worker	Scenario 1	1.22E-01	2.46E-04	--
7357	646036.2	4168248.9	Worker	Scenario 1	1.18E-01	2.39E-04	--
7358	646236.2	4168248.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
7359	646336.2	4168248.9	Worker	Scenario 1	1.07E-01	2.17E-04	--
7360	646436.2	4168248.9	Worker	Scenario 1	1.04E-01	2.10E-04	--
7361	646536.2	4168248.9	Worker	Scenario 1	1.01E-01	2.04E-04	--
7362	646636.2	4168248.9	Worker	Scenario 1	9.78E-02	1.97E-04	--
7363	646736.2	4168248.9	Worker	Scenario 1	9.49E-02	1.92E-04	--
7364	646836.2	4168248.9	Worker	Scenario 1	9.21E-02	1.86E-04	--
7365	635936.2	4168348.9	Worker	Scenario 1	3.95E-03	7.97E-06	--
7366	636036.2	4168348.9	Worker	Scenario 1	3.97E-03	8.03E-06	--
7367	636136.2	4168348.9	Worker	Scenario 1	4.15E-03	8.39E-06	--
7368	636236.2	4168348.9	Worker	Scenario 1	4.34E-03	8.76E-06	--
7369	636336.2	4168348.9	Worker	Scenario 1	4.50E-03	9.09E-06	--
7370	636436.2	4168348.9	Worker	Scenario 1	4.74E-03	9.57E-06	--
7371	636536.2	4168348.9	Worker	Scenario 1	4.93E-03	9.96E-06	--
7372	636636.2	4168348.9	Worker	Scenario 1	5.15E-03	1.04E-05	--
7373	636736.2	4168348.9	Worker	Scenario 1	5.47E-03	1.11E-05	--
7374	636836.2	4168348.9	Worker	Scenario 1	5.82E-03	1.18E-05	--
7375	636936.2	4168348.9	Worker	Scenario 1	6.16E-03	1.24E-05	--
7376	637036.2	4168348.9	Worker	Scenario 1	6.50E-03	1.31E-05	--
7377	637136.2	4168348.9	Worker	Scenario 1	6.95E-03	1.40E-05	--
7378	637236.2	4168348.9	Worker	Scenario 1	7.80E-03	1.57E-05	--
7379	637336.2	4168348.9	Worker	Scenario 1	8.57E-03	1.73E-05	--
7380	637436.2	4168348.9	Worker	Scenario 1	9.14E-03	1.85E-05	--
7381	637536.2	4168348.9	Worker	Scenario 1	8.50E-03	1.72E-05	--
7382	637636.2	4168348.9	Worker	Scenario 1	9.12E-03	1.84E-05	--
7383	637736.2	4168348.9	Worker	Scenario 1	9.30E-03	1.88E-05	--
7384	637836.2	4168348.9	Worker	Scenario 1	9.99E-03	2.02E-05	--
7385	637936.2	4168348.9	Worker	Scenario 1	1.06E-02	2.13E-05	--
7386	638036.2	4168348.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
7387	638136.2	4168348.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
7388	638236.2	4168348.9	Worker	Scenario 1	1.17E-02	2.36E-05	--
7389	638336.2	4168348.9	Worker	Scenario 1	1.23E-02	2.49E-05	--
7390	638436.2	4168348.9	Worker	Scenario 1	1.26E-02	2.55E-05	--
7391	638536.2	4168348.9	Worker	Scenario 1	1.35E-02	2.73E-05	--
7392	638636.2	4168348.9	Worker	Scenario 1	1.37E-02	2.76E-05	--
7393	638736.2	4168348.9	Worker	Scenario 1	1.43E-02	2.90E-05	--
7394	638836.2	4168348.9	Worker	Scenario 1	1.50E-02	3.04E-05	--
7395	638936.2	4168348.9	Worker	Scenario 1	1.57E-02	3.16E-05	--
7396	642636.2	4168348.9	Worker	Scenario 1	2.93E-01	5.92E-04	--
7397	642736.2	4168348.9	Worker	Scenario 1	2.93E-01	5.92E-04	--
7398	642836.2	4168348.9	Worker	Scenario 1	2.86E-01	5.78E-04	--
7399	642936.2	4168348.9	Worker	Scenario 1	2.76E-01	5.57E-04	--
7400	643036.2	4168348.9	Worker	Scenario 1	2.60E-01	5.25E-04	--
7401	643136.2	4168348.9	Worker	Scenario 1	2.44E-01	4.94E-04	--
7402	643236.2	4168348.9	Worker	Scenario 1	2.27E-01	4.59E-04	--
7403	643336.2	4168348.9	Worker	Scenario 1	2.09E-01	4.22E-04	--
7404	643436.2	4168348.9	Worker	Scenario 1	1.95E-01	3.94E-04	--
7405	643536.2	4168348.9	Worker	Scenario 1	1.87E-01	3.79E-04	--
7406	643636.2	4168348.9	Worker	Scenario 1	1.83E-01	3.69E-04	--
7407	643736.2	4168348.9	Worker	Scenario 1	1.77E-01	3.57E-04	--
7408	643836.2	4168348.9	Worker	Scenario 1	1.71E-01	3.46E-04	--
7409	643936.2	4168348.9	Worker	Scenario 1	1.67E-01	3.38E-04	--
7410	644036.2	4168348.9	Worker	Scenario 1	1.64E-01	3.32E-04	--
7411	644136.2	4168348.9	Worker	Scenario 1	1.61E-01	3.26E-04	--
7412	644236.2	4168348.9	Worker	Scenario 1	1.59E-01	3.21E-04	--
7413	644336.2	4168348.9	Worker	Scenario 1	1.56E-01	3.16E-04	--
7414	644436.2	4168348.9	Worker	Scenario 1	1.55E-01	3.13E-04	--
7415	644536.2	4168348.9	Worker	Scenario 1	1.54E-01	3.10E-04	--
7416	644636.2	4168348.9	Worker	Scenario 1	1.52E-01	3.08E-04	--
7417	644736.2	4168348.9	Worker	Scenario 1	1.51E-01	3.04E-04	--
7418	644836.2	4168348.9	Worker	Scenario 1	1.48E-01	2.99E-04	--
7419	644936.2	4168348.9	Worker	Scenario 1	1.45E-01	2.94E-04	--
7420	645036.2	4168348.9	Worker	Scenario 1	1.42E-01	2.87E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7421	645136.2	4168348.9	Worker	Scenario 1	1.39E-01	2.81E-04	--
7422	645236.2	4168348.9	Worker	Scenario 1	1.36E-01	2.75E-04	--
7423	645336.2	4168348.9	Worker	Scenario 1	1.33E-01	2.69E-04	--
7424	645436.2	4168348.9	Worker	Scenario 1	1.30E-01	2.62E-04	--
7425	645536.2	4168348.9	Worker	Scenario 1	1.26E-01	2.54E-04	--
7426	645636.2	4168348.9	Worker	Scenario 1	1.23E-01	2.48E-04	--
7427	645736.2	4168348.9	Worker	Scenario 1	1.19E-01	2.41E-04	--
7428	645836.2	4168348.9	Worker	Scenario 1	1.16E-01	2.34E-04	--
7429	645936.2	4168348.9	Worker	Scenario 1	1.13E-01	2.27E-04	--
7430	646036.2	4168348.9	Worker	Scenario 1	1.09E-01	2.21E-04	--
7431	646236.2	4168348.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
7432	646336.2	4168348.9	Worker	Scenario 1	1.00E-01	2.02E-04	--
7433	646436.2	4168348.9	Worker	Scenario 1	9.73E-02	1.97E-04	--
7434	646536.2	4168348.9	Worker	Scenario 1	9.46E-02	1.91E-04	--
7435	646636.2	4168348.9	Worker	Scenario 1	9.20E-02	1.86E-04	--
7436	646736.2	4168348.9	Worker	Scenario 1	8.95E-02	1.81E-04	--
7437	646836.2	4168348.9	Worker	Scenario 1	8.70E-02	1.76E-04	--
7438	635836.2	4168448.9	Worker	Scenario 1	3.77E-03	7.62E-06	--
7439	635936.2	4168448.9	Worker	Scenario 1	3.91E-03	7.90E-06	--
7440	636036.2	4168448.9	Worker	Scenario 1	4.07E-03	8.22E-06	--
7441	636136.2	4168448.9	Worker	Scenario 1	4.24E-03	8.56E-06	--
7442	636236.2	4168448.9	Worker	Scenario 1	4.46E-03	9.01E-06	--
7443	636336.2	4168448.9	Worker	Scenario 1	4.90E-03	9.91E-06	--
7444	636436.2	4168448.9	Worker	Scenario 1	4.80E-03	9.70E-06	--
7445	636536.2	4168448.9	Worker	Scenario 1	5.04E-03	1.02E-05	--
7446	636636.2	4168448.9	Worker	Scenario 1	5.37E-03	1.09E-05	--
7447	636736.2	4168448.9	Worker	Scenario 1	5.59E-03	1.13E-05	--
7448	636836.2	4168448.9	Worker	Scenario 1	5.92E-03	1.20E-05	--
7449	636936.2	4168448.9	Worker	Scenario 1	6.26E-03	1.26E-05	--
7450	637036.2	4168448.9	Worker	Scenario 1	6.87E-03	1.39E-05	--
7451	637136.2	4168448.9	Worker	Scenario 1	7.08E-03	1.43E-05	--
7452	637236.2	4168448.9	Worker	Scenario 1	7.61E-03	1.54E-05	--
7453	637336.2	4168448.9	Worker	Scenario 1	8.63E-03	1.74E-05	--
7454	637436.2	4168448.9	Worker	Scenario 1	9.19E-03	1.86E-05	--
7455	637536.2	4168448.9	Worker	Scenario 1	8.67E-03	1.75E-05	--
7456	637636.2	4168448.9	Worker	Scenario 1	9.30E-03	1.88E-05	--
7457	637736.2	4168448.9	Worker	Scenario 1	9.62E-03	1.94E-05	--
7458	637836.2	4168448.9	Worker	Scenario 1	1.00E-02	2.02E-05	--
7459	637936.2	4168448.9	Worker	Scenario 1	1.06E-02	2.15E-05	--
7460	638036.2	4168448.9	Worker	Scenario 1	1.10E-02	2.22E-05	--
7461	638136.2	4168448.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
7462	638236.2	4168448.9	Worker	Scenario 1	1.19E-02	2.41E-05	--
7463	638336.2	4168448.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
7464	638436.2	4168448.9	Worker	Scenario 1	1.29E-02	2.61E-05	--
7465	638536.2	4168448.9	Worker	Scenario 1	1.37E-02	2.77E-05	--
7466	638636.2	4168448.9	Worker	Scenario 1	1.40E-02	2.82E-05	--
7467	638736.2	4168448.9	Worker	Scenario 1	1.47E-02	2.97E-05	--
7468	638836.2	4168448.9	Worker	Scenario 1	1.53E-02	3.10E-05	--
7469	642536.2	4168448.9	Worker	Scenario 1	2.52E-01	5.10E-04	--
7470	642636.2	4168448.9	Worker	Scenario 1	2.54E-01	5.12E-04	--
7471	642736.2	4168448.9	Worker	Scenario 1	2.52E-01	5.09E-04	--
7472	642836.2	4168448.9	Worker	Scenario 1	2.48E-01	5.00E-04	--
7473	642936.2	4168448.9	Worker	Scenario 1	2.40E-01	4.84E-04	--
7474	643036.2	4168448.9	Worker	Scenario 1	2.28E-01	4.60E-04	--
7475	643136.2	4168448.9	Worker	Scenario 1	2.17E-01	4.38E-04	--
7476	643236.2	4168448.9	Worker	Scenario 1	2.04E-01	4.12E-04	--
7477	643336.2	4168448.9	Worker	Scenario 1	1.90E-01	3.84E-04	--
7478	643436.2	4168448.9	Worker	Scenario 1	1.78E-01	3.59E-04	--
7479	643536.2	4168448.9	Worker	Scenario 1	1.70E-01	3.43E-04	--
7480	643636.2	4168448.9	Worker	Scenario 1	1.66E-01	3.34E-04	--
7481	643736.2	4168448.9	Worker	Scenario 1	1.61E-01	3.26E-04	--
7482	643836.2	4168448.9	Worker	Scenario 1	1.56E-01	3.15E-04	--
7483	643936.2	4168448.9	Worker	Scenario 1	1.52E-01	3.06E-04	--
7484	644036.2	4168448.9	Worker	Scenario 1	1.48E-01	3.00E-04	--
7485	644136.2	4168448.9	Worker	Scenario 1	1.45E-01	2.93E-04	--
7486	644236.2	4168448.9	Worker	Scenario 1	1.42E-01	2.87E-04	--
7487	644336.2	4168448.9	Worker	Scenario 1	1.39E-01	2.80E-04	--
7488	644436.2	4168448.9	Worker	Scenario 1	1.36E-01	2.76E-04	--
7489	644536.2	4168448.9	Worker	Scenario 1	1.35E-01	2.72E-04	--
7490	644636.2	4168448.9	Worker	Scenario 1	1.34E-01	2.70E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7491	644736.2	4168448.9	Worker	Scenario 1	1.32E-01	2.67E-04	--
7492	644836.2	4168448.9	Worker	Scenario 1	1.31E-01	2.64E-04	--
7493	644936.2	4168448.9	Worker	Scenario 1	1.29E-01	2.60E-04	--
7494	645036.2	4168448.9	Worker	Scenario 1	1.27E-01	2.56E-04	--
7495	645136.2	4168448.9	Worker	Scenario 1	1.25E-01	2.52E-04	--
7496	645236.2	4168448.9	Worker	Scenario 1	1.23E-01	2.48E-04	--
7497	645336.2	4168448.9	Worker	Scenario 1	1.20E-01	2.43E-04	--
7498	645436.2	4168448.9	Worker	Scenario 1	1.18E-01	2.38E-04	--
7499	645536.2	4168448.9	Worker	Scenario 1	1.15E-01	2.32E-04	--
7500	645636.2	4168448.9	Worker	Scenario 1	1.12E-01	2.27E-04	--
7501	645736.2	4168448.9	Worker	Scenario 1	1.10E-01	2.21E-04	--
7502	645836.2	4168448.9	Worker	Scenario 1	1.07E-01	2.15E-04	--
7503	645936.2	4168448.9	Worker	Scenario 1	1.04E-01	2.10E-04	--
7504	646036.2	4168448.9	Worker	Scenario 1	1.01E-01	2.04E-04	--
7505	646236.2	4168448.9	Worker	Scenario 1	9.58E-02	1.93E-04	--
7506	646336.2	4168448.9	Worker	Scenario 1	9.33E-02	1.89E-04	--
7507	646436.2	4168448.9	Worker	Scenario 1	9.10E-02	1.84E-04	--
7508	646536.2	4168448.9	Worker	Scenario 1	8.86E-02	1.79E-04	--
7509	646636.2	4168448.9	Worker	Scenario 1	8.64E-02	1.75E-04	--
7510	646736.2	4168448.9	Worker	Scenario 1	8.42E-02	1.70E-04	--
7511	635836.2	4168548.9	Worker	Scenario 1	3.83E-03	7.73E-06	--
7512	635936.2	4168548.9	Worker	Scenario 1	4.04E-03	8.15E-06	--
7513	636036.2	4168548.9	Worker	Scenario 1	4.28E-03	8.64E-06	--
7514	636136.2	4168548.9	Worker	Scenario 1	4.31E-03	8.71E-06	--
7515	636236.2	4168548.9	Worker	Scenario 1	4.51E-03	9.10E-06	--
7516	636336.2	4168548.9	Worker	Scenario 1	4.97E-03	1.00E-05	--
7517	636436.2	4168548.9	Worker	Scenario 1	5.27E-03	1.07E-05	--
7518	636536.2	4168548.9	Worker	Scenario 1	5.34E-03	1.08E-05	--
7519	636636.2	4168548.9	Worker	Scenario 1	5.68E-03	1.15E-05	--
7520	636736.2	4168548.9	Worker	Scenario 1	5.93E-03	1.20E-05	--
7521	636836.2	4168548.9	Worker	Scenario 1	6.33E-03	1.28E-05	--
7522	636936.2	4168548.9	Worker	Scenario 1	6.60E-03	1.33E-05	--
7523	637036.2	4168548.9	Worker	Scenario 1	6.94E-03	1.40E-05	--
7524	637136.2	4168548.9	Worker	Scenario 1	7.56E-03	1.53E-05	--
7525	637236.2	4168548.9	Worker	Scenario 1	7.86E-03	1.59E-05	--
7526	637336.2	4168548.9	Worker	Scenario 1	8.56E-03	1.73E-05	--
7527	637436.2	4168548.9	Worker	Scenario 1	9.15E-03	1.85E-05	--
7528	637536.2	4168548.9	Worker	Scenario 1	9.21E-03	1.86E-05	--
7529	637636.2	4168548.9	Worker	Scenario 1	9.22E-03	1.86E-05	--
7530	637736.2	4168548.9	Worker	Scenario 1	9.90E-03	2.00E-05	--
7531	637836.2	4168548.9	Worker	Scenario 1	1.03E-02	2.08E-05	--
7532	637936.2	4168548.9	Worker	Scenario 1	1.07E-02	2.16E-05	--
7533	638036.2	4168548.9	Worker	Scenario 1	1.11E-02	2.25E-05	--
7534	638136.2	4168548.9	Worker	Scenario 1	1.15E-02	2.33E-05	--
7535	638236.2	4168548.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
7536	638336.2	4168548.9	Worker	Scenario 1	1.28E-02	2.58E-05	--
7537	638436.2	4168548.9	Worker	Scenario 1	1.32E-02	2.68E-05	--
7538	638536.2	4168548.9	Worker	Scenario 1	1.38E-02	2.79E-05	--
7539	638636.2	4168548.9	Worker	Scenario 1	1.45E-02	2.94E-05	--
7540	638736.2	4168548.9	Worker	Scenario 1	1.51E-02	3.05E-05	--
7541	642336.2	4168548.9	Worker	Scenario 1	2.16E-01	4.37E-04	--
7542	642436.2	4168548.9	Worker	Scenario 1	2.21E-01	4.47E-04	--
7543	642536.2	4168548.9	Worker	Scenario 1	2.22E-01	4.48E-04	--
7544	642636.2	4168548.9	Worker	Scenario 1	2.23E-01	4.49E-04	--
7545	642736.2	4168548.9	Worker	Scenario 1	2.21E-01	4.47E-04	--
7546	642836.2	4168548.9	Worker	Scenario 1	2.18E-01	4.40E-04	--
7547	642936.2	4168548.9	Worker	Scenario 1	2.11E-01	4.26E-04	--
7548	643036.2	4168548.9	Worker	Scenario 1	2.02E-01	4.08E-04	--
7549	643136.2	4168548.9	Worker	Scenario 1	1.93E-01	3.91E-04	--
7550	643236.2	4168548.9	Worker	Scenario 1	1.84E-01	3.71E-04	--
7551	643336.2	4168548.9	Worker	Scenario 1	1.73E-01	3.50E-04	--
7552	643436.2	4168548.9	Worker	Scenario 1	1.63E-01	3.29E-04	--
7553	643536.2	4168548.9	Worker	Scenario 1	1.55E-01	3.13E-04	--
7554	643636.2	4168548.9	Worker	Scenario 1	1.51E-01	3.04E-04	--
7555	643736.2	4168548.9	Worker	Scenario 1	1.48E-01	2.98E-04	--
7556	643836.2	4168548.9	Worker	Scenario 1	1.44E-01	2.90E-04	--
7557	643936.2	4168548.9	Worker	Scenario 1	1.39E-01	2.82E-04	--
7558	644036.2	4168548.9	Worker	Scenario 1	1.36E-01	2.74E-04	--
7559	644136.2	4168548.9	Worker	Scenario 1	1.32E-01	2.67E-04	--
7560	644236.2	4168548.9	Worker	Scenario 1	1.29E-01	2.61E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7561	644336.2	4168548.9	Worker	Scenario 1	1.26E-01	2.55E-04	--
7562	644436.2	4168548.9	Worker	Scenario 1	1.23E-01	2.49E-04	--
7563	644536.2	4168548.9	Worker	Scenario 1	1.21E-01	2.45E-04	--
7564	644636.2	4168548.9	Worker	Scenario 1	1.19E-01	2.41E-04	--
7565	644736.2	4168548.9	Worker	Scenario 1	1.18E-01	2.38E-04	--
7566	645436.2	4168548.9	Worker	Scenario 1	1.07E-01	2.17E-04	--
7567	645536.2	4168548.9	Worker	Scenario 1	1.05E-01	2.12E-04	--
7568	645636.2	4168548.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
7569	645736.2	4168548.9	Worker	Scenario 1	1.01E-01	2.03E-04	--
7570	645836.2	4168548.9	Worker	Scenario 1	9.84E-02	1.99E-04	--
7571	645936.2	4168548.9	Worker	Scenario 1	9.60E-02	1.94E-04	--
7572	646036.2	4168548.9	Worker	Scenario 1	9.37E-02	1.89E-04	--
7573	646236.2	4168548.9	Worker	Scenario 1	8.92E-02	1.80E-04	--
7574	646336.2	4168548.9	Worker	Scenario 1	8.71E-02	1.76E-04	--
7575	646436.2	4168548.9	Worker	Scenario 1	8.50E-02	1.72E-04	--
7576	646536.2	4168548.9	Worker	Scenario 1	8.30E-02	1.68E-04	--
7577	646636.2	4168548.9	Worker	Scenario 1	8.10E-02	1.64E-04	--
7578	635736.2	4168648.9	Worker	Scenario 1	3.69E-03	7.44E-06	--
7579	635836.2	4168648.9	Worker	Scenario 1	3.85E-03	7.78E-06	--
7580	635936.2	4168648.9	Worker	Scenario 1	4.00E-03	8.07E-06	--
7581	636036.2	4168648.9	Worker	Scenario 1	4.20E-03	8.49E-06	--
7582	636136.2	4168648.9	Worker	Scenario 1	4.84E-03	9.78E-06	--
7583	636236.2	4168648.9	Worker	Scenario 1	4.71E-03	9.51E-06	--
7584	636336.2	4168648.9	Worker	Scenario 1	5.04E-03	1.02E-05	--
7585	636436.2	4168648.9	Worker	Scenario 1	5.38E-03	1.09E-05	--
7586	636536.2	4168648.9	Worker	Scenario 1	5.56E-03	1.12E-05	--
7587	636636.2	4168648.9	Worker	Scenario 1	5.71E-03	1.15E-05	--
7588	636736.2	4168648.9	Worker	Scenario 1	6.00E-03	1.21E-05	--
7589	636836.2	4168648.9	Worker	Scenario 1	6.47E-03	1.31E-05	--
7590	636936.2	4168648.9	Worker	Scenario 1	6.96E-03	1.41E-05	--
7591	637036.2	4168648.9	Worker	Scenario 1	7.51E-03	1.52E-05	--
7592	637136.2	4168648.9	Worker	Scenario 1	7.53E-03	1.52E-05	--
7593	637236.2	4168648.9	Worker	Scenario 1	7.96E-03	1.61E-05	--
7594	637336.2	4168648.9	Worker	Scenario 1	8.78E-03	1.77E-05	--
7595	637436.2	4168648.9	Worker	Scenario 1	9.30E-03	1.88E-05	--
7596	637536.2	4168648.9	Worker	Scenario 1	9.59E-03	1.94E-05	--
7597	637636.2	4168648.9	Worker	Scenario 1	9.41E-03	1.90E-05	--
7598	637736.2	4168648.9	Worker	Scenario 1	9.81E-03	1.98E-05	--
7599	637836.2	4168648.9	Worker	Scenario 1	1.04E-02	2.10E-05	--
7600	637936.2	4168648.9	Worker	Scenario 1	1.08E-02	2.18E-05	--
7601	638036.2	4168648.9	Worker	Scenario 1	1.13E-02	2.28E-05	--
7602	638136.2	4168648.9	Worker	Scenario 1	1.17E-02	2.36E-05	--
7603	638236.2	4168648.9	Worker	Scenario 1	1.24E-02	2.50E-05	--
7604	638336.2	4168648.9	Worker	Scenario 1	1.30E-02	2.63E-05	--
7605	638436.2	4168648.9	Worker	Scenario 1	1.39E-02	2.81E-05	--
7606	638536.2	4168648.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
7607	642136.2	4168648.9	Worker	Scenario 1	1.88E-01	3.80E-04	--
7608	642236.2	4168648.9	Worker	Scenario 1	1.93E-01	3.89E-04	--
7609	642336.2	4168648.9	Worker	Scenario 1	1.95E-01	3.95E-04	--
7610	642436.2	4168648.9	Worker	Scenario 1	1.98E-01	4.01E-04	--
7611	642536.2	4168648.9	Worker	Scenario 1	1.99E-01	4.03E-04	--
7612	642636.2	4168648.9	Worker	Scenario 1	1.99E-01	4.02E-04	--
7613	642736.2	4168648.9	Worker	Scenario 1	1.98E-01	3.99E-04	--
7614	642836.2	4168648.9	Worker	Scenario 1	1.94E-01	3.92E-04	--
7615	642936.2	4168648.9	Worker	Scenario 1	1.88E-01	3.81E-04	--
7616	643036.2	4168648.9	Worker	Scenario 1	1.82E-01	3.67E-04	--
7617	643136.2	4168648.9	Worker	Scenario 1	1.75E-01	3.53E-04	--
7618	643236.2	4168648.9	Worker	Scenario 1	1.67E-01	3.38E-04	--
7619	643336.2	4168648.9	Worker	Scenario 1	1.59E-01	3.21E-04	--
7620	643436.2	4168648.9	Worker	Scenario 1	1.50E-01	3.03E-04	--
7621	643536.2	4168648.9	Worker	Scenario 1	1.43E-01	2.88E-04	--
7622	643636.2	4168648.9	Worker	Scenario 1	1.38E-01	2.79E-04	--
7623	643736.2	4168648.9	Worker	Scenario 1	1.36E-01	2.74E-04	--
7624	643836.2	4168648.9	Worker	Scenario 1	1.33E-01	2.69E-04	--
7625	643936.2	4168648.9	Worker	Scenario 1	1.29E-01	2.62E-04	--
7626	644036.2	4168648.9	Worker	Scenario 1	1.26E-01	2.54E-04	--
7627	644136.2	4168648.9	Worker	Scenario 1	1.22E-01	2.47E-04	--
7628	644236.2	4168648.9	Worker	Scenario 1	1.19E-01	2.41E-04	--
7629	644336.2	4168648.9	Worker	Scenario 1	1.17E-01	2.35E-04	--
7630	644436.2	4168648.9	Worker	Scenario 1	1.14E-01	2.30E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7631	644536.2	4168648.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
7632	644636.2	4168648.9	Worker	Scenario 1	1.09E-01	2.20E-04	--
7633	644736.2	4168648.9	Worker	Scenario 1	1.07E-01	2.16E-04	--
7634	644836.2	4168648.9	Worker	Scenario 1	1.05E-01	2.12E-04	--
7635	644936.2	4168648.9	Worker	Scenario 1	1.04E-01	2.09E-04	--
7636	645036.2	4168648.9	Worker	Scenario 1	1.03E-01	2.07E-04	--
7637	645136.2	4168648.9	Worker	Scenario 1	1.02E-01	2.05E-04	--
7638	645236.2	4168648.9	Worker	Scenario 1	1.00E-01	2.03E-04	--
7639	645336.2	4168648.9	Worker	Scenario 1	9.91E-02	2.00E-04	--
7640	645436.2	4168648.9	Worker	Scenario 1	9.77E-02	1.97E-04	--
7641	645536.2	4168648.9	Worker	Scenario 1	9.62E-02	1.94E-04	--
7642	645636.2	4168648.9	Worker	Scenario 1	9.45E-02	1.91E-04	--
7643	645736.2	4168648.9	Worker	Scenario 1	9.28E-02	1.87E-04	--
7644	645836.2	4168648.9	Worker	Scenario 1	9.10E-02	1.84E-04	--
7645	645936.2	4168648.9	Worker	Scenario 1	8.90E-02	1.80E-04	--
7646	646036.2	4168648.9	Worker	Scenario 1	8.70E-02	1.76E-04	--
7647	646236.2	4168648.9	Worker	Scenario 1	8.31E-02	1.68E-04	--
7648	646336.2	4168648.9	Worker	Scenario 1	8.13E-02	1.64E-04	--
7649	646436.2	4168648.9	Worker	Scenario 1	7.95E-02	1.61E-04	--
7650	646536.2	4168648.9	Worker	Scenario 1	7.77E-02	1.57E-04	--
7651	635736.2	4168748.9	Worker	Scenario 1	3.72E-03	7.51E-06	--
7652	635836.2	4168748.9	Worker	Scenario 1	3.86E-03	7.81E-06	--
7653	635936.2	4168748.9	Worker	Scenario 1	4.07E-03	8.22E-06	--
7654	636036.2	4168748.9	Worker	Scenario 1	4.36E-03	8.81E-06	--
7655	636136.2	4168748.9	Worker	Scenario 1	4.58E-03	9.25E-06	--
7656	636236.2	4168748.9	Worker	Scenario 1	4.84E-03	9.78E-06	--
7657	636336.2	4168748.9	Worker	Scenario 1	5.16E-03	1.04E-05	--
7658	636436.2	4168748.9	Worker	Scenario 1	5.65E-03	1.14E-05	--
7659	636536.2	4168748.9	Worker	Scenario 1	6.44E-03	1.30E-05	--
7660	636636.2	4168748.9	Worker	Scenario 1	6.10E-03	1.23E-05	--
7661	636736.2	4168748.9	Worker	Scenario 1	6.17E-03	1.25E-05	--
7662	636836.2	4168748.9	Worker	Scenario 1	6.37E-03	1.29E-05	--
7663	636936.2	4168748.9	Worker	Scenario 1	6.76E-03	1.37E-05	--
7664	637036.2	4168748.9	Worker	Scenario 1	7.13E-03	1.44E-05	--
7665	637136.2	4168748.9	Worker	Scenario 1	7.93E-03	1.60E-05	--
7666	637236.2	4168748.9	Worker	Scenario 1	8.33E-03	1.68E-05	--
7667	637336.2	4168748.9	Worker	Scenario 1	8.87E-03	1.79E-05	--
7668	637436.2	4168748.9	Worker	Scenario 1	9.19E-03	1.86E-05	--
7669	637536.2	4168748.9	Worker	Scenario 1	9.64E-03	1.95E-05	--
7670	637636.2	4168748.9	Worker	Scenario 1	9.70E-03	1.96E-05	--
7671	637736.2	4168748.9	Worker	Scenario 1	1.01E-02	2.04E-05	--
7672	637836.2	4168748.9	Worker	Scenario 1	1.06E-02	2.13E-05	--
7673	637936.2	4168748.9	Worker	Scenario 1	1.10E-02	2.22E-05	--
7674	638036.2	4168748.9	Worker	Scenario 1	1.14E-02	2.31E-05	--
7675	638136.2	4168748.9	Worker	Scenario 1	1.19E-02	2.41E-05	--
7676	638236.2	4168748.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
7677	638336.2	4168748.9	Worker	Scenario 1	1.32E-02	2.67E-05	--
7678	638436.2	4168748.9	Worker	Scenario 1	1.41E-02	2.84E-05	--
7679	641936.2	4168748.9	Worker	Scenario 1	1.71E-01	3.45E-04	--
7680	642036.2	4168748.9	Worker	Scenario 1	1.73E-01	3.49E-04	--
7681	642136.2	4168748.9	Worker	Scenario 1	1.75E-01	3.54E-04	--
7682	642236.2	4168748.9	Worker	Scenario 1	1.77E-01	3.58E-04	--
7683	642336.2	4168748.9	Worker	Scenario 1	1.80E-01	3.63E-04	--
7684	642436.2	4168748.9	Worker	Scenario 1	1.81E-01	3.65E-04	--
7685	642536.2	4168748.9	Worker	Scenario 1	1.80E-01	3.65E-04	--
7686	642636.2	4168748.9	Worker	Scenario 1	1.80E-01	3.63E-04	--
7687	642736.2	4168748.9	Worker	Scenario 1	1.78E-01	3.60E-04	--
7688	642836.2	4168748.9	Worker	Scenario 1	1.75E-01	3.54E-04	--
7689	642936.2	4168748.9	Worker	Scenario 1	1.70E-01	3.44E-04	--
7690	643036.2	4168748.9	Worker	Scenario 1	1.65E-01	3.32E-04	--
7691	643136.2	4168748.9	Worker	Scenario 1	1.59E-01	3.21E-04	--
7692	643236.2	4168748.9	Worker	Scenario 1	1.53E-01	3.09E-04	--
7693	643336.2	4168748.9	Worker	Scenario 1	1.47E-01	2.96E-04	--
7694	643436.2	4168748.9	Worker	Scenario 1	1.39E-01	2.82E-04	--
7695	643536.2	4168748.9	Worker	Scenario 1	1.33E-01	2.68E-04	--
7696	643636.2	4168748.9	Worker	Scenario 1	1.28E-01	2.58E-04	--
7697	643736.2	4168748.9	Worker	Scenario 1	1.25E-01	2.53E-04	--
7698	643836.2	4168748.9	Worker	Scenario 1	1.23E-01	2.49E-04	--
7699	643936.2	4168748.9	Worker	Scenario 1	1.21E-01	2.44E-04	--
7700	644036.2	4168748.9	Worker	Scenario 1	1.17E-01	2.37E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7701	644136.2	4168748.9	Worker	Scenario 1	1.14E-01	2.30E-04	--
7702	644236.2	4168748.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
7703	644336.2	4168748.9	Worker	Scenario 1	1.08E-01	2.19E-04	--
7704	644436.2	4168748.9	Worker	Scenario 1	1.06E-01	2.14E-04	--
7705	644536.2	4168748.9	Worker	Scenario 1	1.03E-01	2.09E-04	--
7706	644636.2	4168748.9	Worker	Scenario 1	1.01E-01	2.04E-04	--
7707	644736.2	4168748.9	Worker	Scenario 1	9.86E-02	1.99E-04	--
7708	644836.2	4168748.9	Worker	Scenario 1	9.66E-02	1.95E-04	--
7709	644936.2	4168748.9	Worker	Scenario 1	9.49E-02	1.92E-04	--
7710	645036.2	4168748.9	Worker	Scenario 1	9.37E-02	1.89E-04	--
7711	645136.2	4168748.9	Worker	Scenario 1	9.26E-02	1.87E-04	--
7712	645236.2	4168748.9	Worker	Scenario 1	9.15E-02	1.85E-04	--
7713	645336.2	4168748.9	Worker	Scenario 1	9.05E-02	1.83E-04	--
7714	645436.2	4168748.9	Worker	Scenario 1	8.94E-02	1.81E-04	--
7715	645536.2	4168748.9	Worker	Scenario 1	8.82E-02	1.78E-04	--
7716	645636.2	4168748.9	Worker	Scenario 1	8.69E-02	1.76E-04	--
7717	645736.2	4168748.9	Worker	Scenario 1	8.56E-02	1.73E-04	--
7718	645836.2	4168748.9	Worker	Scenario 1	8.42E-02	1.70E-04	--
7719	645936.2	4168748.9	Worker	Scenario 1	8.27E-02	1.67E-04	--
7720	646036.2	4168748.9	Worker	Scenario 1	8.10E-02	1.64E-04	--
7721	646236.2	4168748.9	Worker	Scenario 1	7.77E-02	1.57E-04	--
7722	646336.2	4168748.9	Worker	Scenario 1	7.60E-02	1.54E-04	--
7723	646436.2	4168748.9	Worker	Scenario 1	7.44E-02	1.50E-04	--
7724	646536.2	4168748.9	Worker	Scenario 1	7.29E-02	1.47E-04	--
7725	635736.2	4168848.9	Worker	Scenario 1	3.78E-03	7.64E-06	--
7726	635836.2	4168848.9	Worker	Scenario 1	3.93E-03	7.93E-06	--
7727	635936.2	4168848.9	Worker	Scenario 1	4.11E-03	8.29E-06	--
7728	636036.2	4168848.9	Worker	Scenario 1	4.59E-03	9.27E-06	--
7729	636136.2	4168848.9	Worker	Scenario 1	4.68E-03	9.46E-06	--
7730	636236.2	4168848.9	Worker	Scenario 1	4.87E-03	9.83E-06	--
7731	636336.2	4168848.9	Worker	Scenario 1	5.09E-03	1.03E-05	--
7732	636436.2	4168848.9	Worker	Scenario 1	5.35E-03	1.08E-05	--
7733	636536.2	4168848.9	Worker	Scenario 1	5.64E-03	1.14E-05	--
7734	636636.2	4168848.9	Worker	Scenario 1	6.24E-03	1.26E-05	--
7735	636736.2	4168848.9	Worker	Scenario 1	7.20E-03	1.45E-05	--
7736	636836.2	4168848.9	Worker	Scenario 1	6.83E-03	1.38E-05	--
7737	636936.2	4168848.9	Worker	Scenario 1	6.93E-03	1.40E-05	--
7738	637036.2	4168848.9	Worker	Scenario 1	7.30E-03	1.47E-05	--
7739	637136.2	4168848.9	Worker	Scenario 1	7.65E-03	1.54E-05	--
7740	637236.2	4168848.9	Worker	Scenario 1	8.10E-03	1.64E-05	--
7741	637336.2	4168848.9	Worker	Scenario 1	8.54E-03	1.72E-05	--
7742	637436.2	4168848.9	Worker	Scenario 1	9.12E-03	1.84E-05	--
7743	637536.2	4168848.9	Worker	Scenario 1	9.76E-03	1.97E-05	--
7744	637636.2	4168848.9	Worker	Scenario 1	9.98E-03	2.02E-05	--
7745	637736.2	4168848.9	Worker	Scenario 1	1.03E-02	2.09E-05	--
7746	637836.2	4168848.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
7747	637936.2	4168848.9	Worker	Scenario 1	1.14E-02	2.30E-05	--
7748	638036.2	4168848.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
7749	638136.2	4168848.9	Worker	Scenario 1	1.22E-02	2.47E-05	--
7750	638236.2	4168848.9	Worker	Scenario 1	1.28E-02	2.58E-05	--
7751	641636.2	4168848.9	Worker	Scenario 1	1.83E-01	3.69E-04	--
7752	641736.2	4168848.9	Worker	Scenario 1	1.70E-01	3.44E-04	--
7753	641836.2	4168848.9	Worker	Scenario 1	1.65E-01	3.33E-04	--
7754	641936.2	4168848.9	Worker	Scenario 1	1.63E-01	3.29E-04	--
7755	642036.2	4168848.9	Worker	Scenario 1	1.63E-01	3.28E-04	--
7756	642136.2	4168848.9	Worker	Scenario 1	1.63E-01	3.30E-04	--
7757	642236.2	4168848.9	Worker	Scenario 1	1.65E-01	3.32E-04	--
7758	642336.2	4168848.9	Worker	Scenario 1	1.65E-01	3.34E-04	--
7759	642436.2	4168848.9	Worker	Scenario 1	1.65E-01	3.34E-04	--
7760	642536.2	4168848.9	Worker	Scenario 1	1.64E-01	3.32E-04	--
7761	642636.2	4168848.9	Worker	Scenario 1	1.64E-01	3.31E-04	--
7762	642736.2	4168848.9	Worker	Scenario 1	1.62E-01	3.28E-04	--
7763	642836.2	4168848.9	Worker	Scenario 1	1.59E-01	3.22E-04	--
7764	642936.2	4168848.9	Worker	Scenario 1	1.55E-01	3.13E-04	--
7765	643036.2	4168848.9	Worker	Scenario 1	1.50E-01	3.03E-04	--
7766	643136.2	4168848.9	Worker	Scenario 1	1.46E-01	2.95E-04	--
7767	643236.2	4168848.9	Worker	Scenario 1	1.41E-01	2.85E-04	--
7768	643336.2	4168848.9	Worker	Scenario 1	1.36E-01	2.74E-04	--
7769	643436.2	4168848.9	Worker	Scenario 1	1.30E-01	2.62E-04	--
7770	643536.2	4168848.9	Worker	Scenario 1	1.24E-01	2.51E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7771	643636.2	4168848.9	Worker	Scenario 1	1.19E-01	2.41E-04	--
7772	643736.2	4168848.9	Worker	Scenario 1	1.16E-01	2.35E-04	--
7773	643836.2	4168848.9	Worker	Scenario 1	1.14E-01	2.31E-04	--
7774	643936.2	4168848.9	Worker	Scenario 1	1.13E-01	2.27E-04	--
7775	644036.2	4168848.9	Worker	Scenario 1	1.10E-01	2.22E-04	--
7776	644136.2	4168848.9	Worker	Scenario 1	1.07E-01	2.16E-04	--
7777	644236.2	4168848.9	Worker	Scenario 1	1.04E-01	2.10E-04	--
7778	644336.2	4168848.9	Worker	Scenario 1	1.01E-01	2.05E-04	--
7779	644436.2	4168848.9	Worker	Scenario 1	9.90E-02	2.00E-04	--
7780	644536.2	4168848.9	Worker	Scenario 1	9.67E-02	1.95E-04	--
7781	644836.2	4168848.9	Worker	Scenario 1	9.00E-02	1.82E-04	--
7782	644936.2	4168848.9	Worker	Scenario 1	8.81E-02	1.78E-04	--
7783	645036.2	4168848.9	Worker	Scenario 1	8.66E-02	1.75E-04	--
7784	645136.2	4168848.9	Worker	Scenario 1	8.53E-02	1.72E-04	--
7785	645236.2	4168848.9	Worker	Scenario 1	8.42E-02	1.70E-04	--
7786	645336.2	4168848.9	Worker	Scenario 1	8.32E-02	1.68E-04	--
7787	645436.2	4168848.9	Worker	Scenario 1	8.21E-02	1.66E-04	--
7788	645536.2	4168848.9	Worker	Scenario 1	8.12E-02	1.64E-04	--
7789	645636.2	4168848.9	Worker	Scenario 1	8.02E-02	1.62E-04	--
7790	645736.2	4168848.9	Worker	Scenario 1	7.92E-02	1.60E-04	--
7791	645836.2	4168848.9	Worker	Scenario 1	7.80E-02	1.58E-04	--
7792	645936.2	4168848.9	Worker	Scenario 1	7.69E-02	1.55E-04	--
7793	646036.2	4168848.9	Worker	Scenario 1	7.56E-02	1.53E-04	--
7794	646236.2	4168848.9	Worker	Scenario 1	7.27E-02	1.47E-04	--
7795	646336.2	4168848.9	Worker	Scenario 1	7.13E-02	1.44E-04	--
7796	646436.2	4168848.9	Worker	Scenario 1	6.99E-02	1.41E-04	--
7797	635736.2	4168948.9	Worker	Scenario 1	3.84E-03	7.76E-06	--
7798	635836.2	4168948.9	Worker	Scenario 1	4.01E-03	8.10E-06	--
7799	635936.2	4168948.9	Worker	Scenario 1	4.25E-03	8.59E-06	--
7800	636036.2	4168948.9	Worker	Scenario 1	4.65E-03	9.38E-06	--
7801	636136.2	4168948.9	Worker	Scenario 1	4.78E-03	9.65E-06	--
7802	636236.2	4168948.9	Worker	Scenario 1	5.21E-03	1.05E-05	--
7803	636336.2	4168948.9	Worker	Scenario 1	5.63E-03	1.14E-05	--
7804	636436.2	4168948.9	Worker	Scenario 1	5.80E-03	1.17E-05	--
7805	636536.2	4168948.9	Worker	Scenario 1	6.07E-03	1.23E-05	--
7806	636636.2	4168948.9	Worker	Scenario 1	6.37E-03	1.29E-05	--
7807	636736.2	4168948.9	Worker	Scenario 1	6.54E-03	1.32E-05	--
7808	636836.2	4168948.9	Worker	Scenario 1	7.24E-03	1.46E-05	--
7809	636936.2	4168948.9	Worker	Scenario 1	7.81E-03	1.58E-05	--
7810	637036.2	4168948.9	Worker	Scenario 1	7.76E-03	1.57E-05	--
7811	637136.2	4168948.9	Worker	Scenario 1	7.93E-03	1.60E-05	--
7812	637236.2	4168948.9	Worker	Scenario 1	8.32E-03	1.68E-05	--
7813	637336.2	4168948.9	Worker	Scenario 1	8.77E-03	1.77E-05	--
7814	637436.2	4168948.9	Worker	Scenario 1	9.19E-03	1.86E-05	--
7815	637536.2	4168948.9	Worker	Scenario 1	9.72E-03	1.96E-05	--
7816	637636.2	4168948.9	Worker	Scenario 1	1.02E-02	2.07E-05	--
7817	637736.2	4168948.9	Worker	Scenario 1	1.06E-02	2.14E-05	--
7818	637836.2	4168948.9	Worker	Scenario 1	1.09E-02	2.21E-05	--
7819	637936.2	4168948.9	Worker	Scenario 1	1.16E-02	2.35E-05	--
7820	638036.2	4168948.9	Worker	Scenario 1	1.21E-02	2.44E-05	--
7821	638136.2	4168948.9	Worker	Scenario 1	1.26E-02	2.54E-05	--
7822	641636.2	4168948.9	Worker	Scenario 1	1.78E-01	3.60E-04	--
7823	641736.2	4168948.9	Worker	Scenario 1	1.65E-01	3.33E-04	--
7824	641836.2	4168948.9	Worker	Scenario 1	1.58E-01	3.19E-04	--
7825	641936.2	4168948.9	Worker	Scenario 1	1.55E-01	3.13E-04	--
7826	642036.2	4168948.9	Worker	Scenario 1	1.54E-01	3.10E-04	--
7827	642136.2	4168948.9	Worker	Scenario 1	1.53E-01	3.10E-04	--
7828	642236.2	4168948.9	Worker	Scenario 1	1.53E-01	3.09E-04	--
7829	642336.2	4168948.9	Worker	Scenario 1	1.53E-01	3.08E-04	--
7830	642436.2	4168948.9	Worker	Scenario 1	1.52E-01	3.07E-04	--
7831	642536.2	4168948.9	Worker	Scenario 1	1.51E-01	3.05E-04	--
7832	642636.2	4168948.9	Worker	Scenario 1	1.50E-01	3.03E-04	--
7833	642736.2	4168948.9	Worker	Scenario 1	1.49E-01	3.01E-04	--
7834	642836.2	4168948.9	Worker	Scenario 1	1.46E-01	2.95E-04	--
7835	642936.2	4168948.9	Worker	Scenario 1	1.42E-01	2.87E-04	--
7836	643036.2	4168948.9	Worker	Scenario 1	1.38E-01	2.79E-04	--
7837	643136.2	4168948.9	Worker	Scenario 1	1.35E-01	2.72E-04	--
7838	643236.2	4168948.9	Worker	Scenario 1	1.31E-01	2.64E-04	--
7839	643336.2	4168948.9	Worker	Scenario 1	1.26E-01	2.55E-04	--
7840	643436.2	4168948.9	Worker	Scenario 1	1.21E-01	2.45E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7841	643536.2	4168948.9	Worker	Scenario 1	1.16E-01	2.35E-04	--
7842	643636.2	4168948.9	Worker	Scenario 1	1.11E-01	2.25E-04	--
7843	643736.2	4168948.9	Worker	Scenario 1	1.08E-01	2.19E-04	--
7844	643836.2	4168948.9	Worker	Scenario 1	1.06E-01	2.15E-04	--
7845	643936.2	4168948.9	Worker	Scenario 1	1.05E-01	2.12E-04	--
7846	644036.2	4168948.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
7847	644136.2	4168948.9	Worker	Scenario 1	1.01E-01	2.03E-04	--
7848	644236.2	4168948.9	Worker	Scenario 1	9.79E-02	1.98E-04	--
7849	644336.2	4168948.9	Worker	Scenario 1	9.53E-02	1.93E-04	--
7850	644436.2	4168948.9	Worker	Scenario 1	9.30E-02	1.88E-04	--
7851	644536.2	4168948.9	Worker	Scenario 1	9.10E-02	1.84E-04	--
7852	644836.2	4168948.9	Worker	Scenario 1	8.45E-02	1.71E-04	--
7853	644936.2	4168948.9	Worker	Scenario 1	8.25E-02	1.67E-04	--
7854	645036.2	4168948.9	Worker	Scenario 1	8.10E-02	1.64E-04	--
7855	645136.2	4168948.9	Worker	Scenario 1	7.93E-02	1.60E-04	--
7856	645236.2	4168948.9	Worker	Scenario 1	7.80E-02	1.58E-04	--
7857	645336.2	4168948.9	Worker	Scenario 1	7.68E-02	1.55E-04	--
7858	645436.2	4168948.9	Worker	Scenario 1	7.57E-02	1.53E-04	--
7859	645536.2	4168948.9	Worker	Scenario 1	7.48E-02	1.51E-04	--
7860	645636.2	4168948.9	Worker	Scenario 1	7.40E-02	1.49E-04	--
7861	645736.2	4168948.9	Worker	Scenario 1	7.31E-02	1.48E-04	--
7862	645836.2	4168948.9	Worker	Scenario 1	7.22E-02	1.46E-04	--
7863	646036.2	4168948.9	Worker	Scenario 1	7.03E-02	1.42E-04	--
7864	646236.2	4168948.9	Worker	Scenario 1	6.81E-02	1.38E-04	--
7865	646336.2	4168948.9	Worker	Scenario 1	6.70E-02	1.35E-04	--
7866	635636.2	4169048.9	Worker	Scenario 1	3.72E-03	7.51E-06	--
7867	635736.2	4169048.9	Worker	Scenario 1	3.85E-03	7.78E-06	--
7868	635836.2	4169048.9	Worker	Scenario 1	4.05E-03	8.18E-06	--
7869	635936.2	4169048.9	Worker	Scenario 1	4.39E-03	8.86E-06	--
7870	636036.2	4169048.9	Worker	Scenario 1	4.68E-03	9.46E-06	--
7871	636136.2	4169048.9	Worker	Scenario 1	4.84E-03	9.77E-06	--
7872	636236.2	4169048.9	Worker	Scenario 1	5.04E-03	1.02E-05	--
7873	636336.2	4169048.9	Worker	Scenario 1	5.32E-03	1.07E-05	--
7874	636436.2	4169048.9	Worker	Scenario 1	5.64E-03	1.14E-05	--
7875	636536.2	4169048.9	Worker	Scenario 1	5.98E-03	1.21E-05	--
7876	636636.2	4169048.9	Worker	Scenario 1	6.34E-03	1.28E-05	--
7877	636736.2	4169048.9	Worker	Scenario 1	6.90E-03	1.39E-05	--
7878	636836.2	4169048.9	Worker	Scenario 1	7.32E-03	1.48E-05	--
7879	636936.2	4169048.9	Worker	Scenario 1	7.53E-03	1.52E-05	--
7880	637036.2	4169048.9	Worker	Scenario 1	8.19E-03	1.65E-05	--
7881	637136.2	4169048.9	Worker	Scenario 1	8.80E-03	1.78E-05	--
7882	637236.2	4169048.9	Worker	Scenario 1	8.78E-03	1.77E-05	--
7883	637336.2	4169048.9	Worker	Scenario 1	9.05E-03	1.83E-05	--
7884	637436.2	4169048.9	Worker	Scenario 1	9.47E-03	1.91E-05	--
7885	637536.2	4169048.9	Worker	Scenario 1	9.88E-03	2.00E-05	--
7886	637636.2	4169048.9	Worker	Scenario 1	1.05E-02	2.11E-05	--
7887	637736.2	4169048.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
7888	637836.2	4169048.9	Worker	Scenario 1	1.13E-02	2.28E-05	--
7889	637936.2	4169048.9	Worker	Scenario 1	1.19E-02	2.39E-05	--
7890	638036.2	4169048.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
7891	640236.2	4169048.9	Worker	Scenario 1	4.41E-02	8.91E-05	--
7892	641636.2	4169048.9	Worker	Scenario 1	1.73E-01	3.50E-04	--
7893	641736.2	4169048.9	Worker	Scenario 1	1.59E-01	3.21E-04	--
7894	641836.2	4169048.9	Worker	Scenario 1	1.52E-01	3.06E-04	--
7895	641936.2	4169048.9	Worker	Scenario 1	1.48E-01	2.98E-04	--
7896	642036.2	4169048.9	Worker	Scenario 1	1.45E-01	2.94E-04	--
7897	642136.2	4169048.9	Worker	Scenario 1	1.44E-01	2.91E-04	--
7898	642236.2	4169048.9	Worker	Scenario 1	1.43E-01	2.88E-04	--
7899	642336.2	4169048.9	Worker	Scenario 1	1.42E-01	2.86E-04	--
7900	642436.2	4169048.9	Worker	Scenario 1	1.40E-01	2.84E-04	--
7901	642536.2	4169048.9	Worker	Scenario 1	1.40E-01	2.82E-04	--
7902	642636.2	4169048.9	Worker	Scenario 1	1.39E-01	2.80E-04	--
7903	642736.2	4169048.9	Worker	Scenario 1	1.37E-01	2.77E-04	--
7904	642836.2	4169048.9	Worker	Scenario 1	1.34E-01	2.72E-04	--
7905	642936.2	4169048.9	Worker	Scenario 1	1.31E-01	2.64E-04	--
7906	643036.2	4169048.9	Worker	Scenario 1	1.27E-01	2.57E-04	--
7907	643136.2	4169048.9	Worker	Scenario 1	1.25E-01	2.51E-04	--
7908	643236.2	4169048.9	Worker	Scenario 1	1.21E-01	2.45E-04	--
7909	643336.2	4169048.9	Worker	Scenario 1	1.18E-01	2.38E-04	--
7910	643436.2	4169048.9	Worker	Scenario 1	1.14E-01	2.30E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7911	643536.2	4169048.9	Worker	Scenario 1	1.09E-01	2.21E-04	--
7912	643636.2	4169048.9	Worker	Scenario 1	1.05E-01	2.12E-04	--
7913	643736.2	4169048.9	Worker	Scenario 1	1.01E-01	2.05E-04	--
7914	643836.2	4169048.9	Worker	Scenario 1	9.93E-02	2.01E-04	--
7915	643936.2	4169048.9	Worker	Scenario 1	9.80E-02	1.98E-04	--
7916	644036.2	4169048.9	Worker	Scenario 1	9.68E-02	1.96E-04	--
7917	644236.2	4169048.9	Worker	Scenario 1	9.26E-02	1.87E-04	--
7918	644336.2	4169048.9	Worker	Scenario 1	9.01E-02	1.82E-04	--
7919	644436.2	4169048.9	Worker	Scenario 1	8.80E-02	1.78E-04	--
7920	644836.2	4169048.9	Worker	Scenario 1	8.00E-02	1.62E-04	--
7921	644936.2	4169048.9	Worker	Scenario 1	7.81E-02	1.58E-04	--
7922	645036.2	4169048.9	Worker	Scenario 1	7.64E-02	1.54E-04	--
7923	645136.2	4169048.9	Worker	Scenario 1	7.47E-02	1.51E-04	--
7924	645236.2	4169048.9	Worker	Scenario 1	7.32E-02	1.48E-04	--
7925	645336.2	4169048.9	Worker	Scenario 1	7.18E-02	1.45E-04	--
7926	645436.2	4169048.9	Worker	Scenario 1	7.07E-02	1.43E-04	--
7927	645536.2	4169048.9	Worker	Scenario 1	6.97E-02	1.41E-04	--
7928	645636.2	4169048.9	Worker	Scenario 1	6.88E-02	1.39E-04	--
7929	645736.2	4169048.9	Worker	Scenario 1	6.80E-02	1.37E-04	--
7930	645836.2	4169048.9	Worker	Scenario 1	6.72E-02	1.36E-04	--
7931	645936.2	4169048.9	Worker	Scenario 1	6.65E-02	1.34E-04	--
7932	646036.2	4169048.9	Worker	Scenario 1	6.57E-02	1.33E-04	--
7933	646236.2	4169048.9	Worker	Scenario 1	6.39E-02	1.29E-04	--
7934	635636.2	4169148.9	Worker	Scenario 1	4.41E-03	8.90E-06	--
7935	635736.2	4169148.9	Worker	Scenario 1	4.13E-03	8.34E-06	--
7936	635836.2	4169148.9	Worker	Scenario 1	4.16E-03	8.40E-06	--
7937	635936.2	4169148.9	Worker	Scenario 1	4.47E-03	9.02E-06	--
7938	636036.2	4169148.9	Worker	Scenario 1	4.72E-03	9.53E-06	--
7939	636136.2	4169148.9	Worker	Scenario 1	5.10E-03	1.03E-05	--
7940	636236.2	4169148.9	Worker	Scenario 1	5.48E-03	1.11E-05	--
7941	636336.2	4169148.9	Worker	Scenario 1	5.69E-03	1.15E-05	--
7942	636436.2	4169148.9	Worker	Scenario 1	5.94E-03	1.20E-05	--
7943	636536.2	4169148.9	Worker	Scenario 1	6.24E-03	1.26E-05	--
7944	636636.2	4169148.9	Worker	Scenario 1	6.50E-03	1.31E-05	--
7945	636736.2	4169148.9	Worker	Scenario 1	6.88E-03	1.39E-05	--
7946	636836.2	4169148.9	Worker	Scenario 1	7.28E-03	1.47E-05	--
7947	636936.2	4169148.9	Worker	Scenario 1	7.67E-03	1.55E-05	--
7948	637036.2	4169148.9	Worker	Scenario 1	8.10E-03	1.64E-05	--
7949	637136.2	4169148.9	Worker	Scenario 1	8.56E-03	1.73E-05	--
7950	637236.2	4169148.9	Worker	Scenario 1	9.12E-03	1.84E-05	--
7951	637336.2	4169148.9	Worker	Scenario 1	9.55E-03	1.93E-05	--
7952	637436.2	4169148.9	Worker	Scenario 1	9.79E-03	1.98E-05	--
7953	637536.2	4169148.9	Worker	Scenario 1	1.03E-02	2.07E-05	--
7954	637636.2	4169148.9	Worker	Scenario 1	1.07E-02	2.16E-05	--
7955	637736.2	4169148.9	Worker	Scenario 1	1.11E-02	2.25E-05	--
7956	637836.2	4169148.9	Worker	Scenario 1	1.16E-02	2.34E-05	--
7957	640136.2	4169148.9	Worker	Scenario 1	4.14E-02	8.36E-05	--
7958	640236.2	4169148.9	Worker	Scenario 1	4.43E-02	8.95E-05	--
7959	641636.2	4169148.9	Worker	Scenario 1	1.69E-01	3.41E-04	--
7960	641736.2	4169148.9	Worker	Scenario 1	1.54E-01	3.11E-04	--
7961	641836.2	4169148.9	Worker	Scenario 1	1.46E-01	2.94E-04	--
7962	641936.2	4169148.9	Worker	Scenario 1	1.41E-01	2.84E-04	--
7963	642036.2	4169148.9	Worker	Scenario 1	1.38E-01	2.78E-04	--
7964	642136.2	4169148.9	Worker	Scenario 1	1.35E-01	2.73E-04	--
7965	642236.2	4169148.9	Worker	Scenario 1	1.33E-01	2.69E-04	--
7966	642336.2	4169148.9	Worker	Scenario 1	1.32E-01	2.66E-04	--
7967	642436.2	4169148.9	Worker	Scenario 1	1.31E-01	2.64E-04	--
7968	642536.2	4169148.9	Worker	Scenario 1	1.30E-01	2.62E-04	--
7969	642636.2	4169148.9	Worker	Scenario 1	1.29E-01	2.60E-04	--
7970	642736.2	4169148.9	Worker	Scenario 1	1.27E-01	2.57E-04	--
7971	642836.2	4169148.9	Worker	Scenario 1	1.25E-01	2.52E-04	--
7972	642936.2	4169148.9	Worker	Scenario 1	1.21E-01	2.45E-04	--
7973	643036.2	4169148.9	Worker	Scenario 1	1.18E-01	2.39E-04	--
7974	643136.2	4169148.9	Worker	Scenario 1	1.16E-01	2.34E-04	--
7975	643236.2	4169148.9	Worker	Scenario 1	1.13E-01	2.28E-04	--
7976	643336.2	4169148.9	Worker	Scenario 1	1.10E-01	2.22E-04	--
7977	643436.2	4169148.9	Worker	Scenario 1	1.07E-01	2.15E-04	--
7978	643536.2	4169148.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
7979	643636.2	4169148.9	Worker	Scenario 1	9.88E-02	1.99E-04	--
7980	643736.2	4169148.9	Worker	Scenario 1	9.52E-02	1.92E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7981	643836.2	4169148.9	Worker	Scenario 1	9.30E-02	1.88E-04	--
7982	643936.2	4169148.9	Worker	Scenario 1	9.17E-02	1.85E-04	--
7983	644036.2	4169148.9	Worker	Scenario 1	9.08E-02	1.83E-04	--
7984	644136.2	4169148.9	Worker	Scenario 1	8.96E-02	1.81E-04	--
7985	644636.2	4169148.9	Worker	Scenario 1	7.93E-02	1.60E-04	--
7986	644736.2	4169148.9	Worker	Scenario 1	7.76E-02	1.57E-04	--
7987	644836.2	4169148.9	Worker	Scenario 1	7.59E-02	1.53E-04	--
7988	644936.2	4169148.9	Worker	Scenario 1	7.43E-02	1.50E-04	--
7989	645036.2	4169148.9	Worker	Scenario 1	7.26E-02	1.47E-04	--
7990	645136.2	4169148.9	Worker	Scenario 1	7.09E-02	1.43E-04	--
7991	645236.2	4169148.9	Worker	Scenario 1	6.93E-02	1.40E-04	--
7992	645336.2	4169148.9	Worker	Scenario 1	6.78E-02	1.37E-04	--
7993	645436.2	4169148.9	Worker	Scenario 1	6.65E-02	1.34E-04	--
7994	645536.2	4169148.9	Worker	Scenario 1	6.54E-02	1.32E-04	--
7995	645636.2	4169148.9	Worker	Scenario 1	6.45E-02	1.30E-04	--
7996	645736.2	4169148.9	Worker	Scenario 1	6.36E-02	1.29E-04	--
7997	645836.2	4169148.9	Worker	Scenario 1	6.29E-02	1.27E-04	--
7998	645936.2	4169148.9	Worker	Scenario 1	6.21E-02	1.26E-04	--
7999	646036.2	4169148.9	Worker	Scenario 1	6.14E-02	1.24E-04	--
8000	635636.2	4169248.9	Worker	Scenario 1	4.66E-03	9.42E-06	--
8001	635736.2	4169248.9	Worker	Scenario 1	5.00E-03	1.01E-05	--
8002	635836.2	4169248.9	Worker	Scenario 1	4.72E-03	9.53E-06	--
8003	635936.2	4169248.9	Worker	Scenario 1	4.60E-03	9.30E-06	--
8004	636036.2	4169248.9	Worker	Scenario 1	4.95E-03	9.99E-06	--
8005	636136.2	4169248.9	Worker	Scenario 1	5.24E-03	1.06E-05	--
8006	636236.2	4169248.9	Worker	Scenario 1	5.52E-03	1.12E-05	--
8007	636336.2	4169248.9	Worker	Scenario 1	5.91E-03	1.19E-05	--
8008	636436.2	4169248.9	Worker	Scenario 1	6.42E-03	1.30E-05	--
8009	636536.2	4169248.9	Worker	Scenario 1	6.93E-03	1.40E-05	--
8010	636636.2	4169248.9	Worker	Scenario 1	6.91E-03	1.40E-05	--
8011	636736.2	4169248.9	Worker	Scenario 1	7.22E-03	1.46E-05	--
8012	636836.2	4169248.9	Worker	Scenario 1	7.69E-03	1.55E-05	--
8013	636936.2	4169248.9	Worker	Scenario 1	8.04E-03	1.62E-05	--
8014	637036.2	4169248.9	Worker	Scenario 1	8.45E-03	1.71E-05	--
8015	637136.2	4169248.9	Worker	Scenario 1	8.82E-03	1.78E-05	--
8016	637236.2	4169248.9	Worker	Scenario 1	9.25E-03	1.87E-05	--
8017	637336.2	4169248.9	Worker	Scenario 1	9.82E-03	1.98E-05	--
8018	637436.2	4169248.9	Worker	Scenario 1	1.01E-02	2.05E-05	--
8019	637536.2	4169248.9	Worker	Scenario 1	1.06E-02	2.15E-05	--
8020	637636.2	4169248.9	Worker	Scenario 1	1.10E-02	2.23E-05	--
8021	637736.2	4169248.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
8022	637936.2	4169248.9	Worker	Scenario 1	1.24E-02	2.50E-05	--
8023	640036.2	4169248.9	Worker	Scenario 1	3.89E-02	7.86E-05	--
8024	640136.2	4169248.9	Worker	Scenario 1	4.14E-02	8.37E-05	--
8025	640236.2	4169248.9	Worker	Scenario 1	4.43E-02	8.94E-05	--
8026	641636.2	4169248.9	Worker	Scenario 1	1.64E-01	3.32E-04	--
8027	641736.2	4169248.9	Worker	Scenario 1	1.48E-01	3.00E-04	--
8028	641836.2	4169248.9	Worker	Scenario 1	1.40E-01	2.82E-04	--
8029	641936.2	4169248.9	Worker	Scenario 1	1.34E-01	2.70E-04	--
8030	642036.2	4169248.9	Worker	Scenario 1	1.30E-01	2.63E-04	--
8031	642136.2	4169248.9	Worker	Scenario 1	1.27E-01	2.57E-04	--
8032	642236.2	4169248.9	Worker	Scenario 1	1.25E-01	2.53E-04	--
8033	642336.2	4169248.9	Worker	Scenario 1	1.23E-01	2.49E-04	--
8034	642436.2	4169248.9	Worker	Scenario 1	1.22E-01	2.47E-04	--
8035	642536.2	4169248.9	Worker	Scenario 1	1.21E-01	2.45E-04	--
8036	642636.2	4169248.9	Worker	Scenario 1	1.20E-01	2.43E-04	--
8037	642736.2	4169248.9	Worker	Scenario 1	1.19E-01	2.40E-04	--
8038	642836.2	4169248.9	Worker	Scenario 1	1.16E-01	2.34E-04	--
8039	642936.2	4169248.9	Worker	Scenario 1	1.13E-01	2.28E-04	--
8040	643036.2	4169248.9	Worker	Scenario 1	1.10E-01	2.23E-04	--
8041	643136.2	4169248.9	Worker	Scenario 1	1.08E-01	2.18E-04	--
8042	643236.2	4169248.9	Worker	Scenario 1	1.06E-01	2.14E-04	--
8043	643336.2	4169248.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
8044	643436.2	4169248.9	Worker	Scenario 1	1.00E-01	2.03E-04	--
8045	643536.2	4169248.9	Worker	Scenario 1	9.70E-02	1.96E-04	--
8046	643636.2	4169248.9	Worker	Scenario 1	9.34E-02	1.89E-04	--
8047	643736.2	4169248.9	Worker	Scenario 1	9.00E-02	1.82E-04	--
8048	643836.2	4169248.9	Worker	Scenario 1	8.75E-02	1.77E-04	--
8049	643936.2	4169248.9	Worker	Scenario 1	8.61E-02	1.74E-04	--
8050	644036.2	4169248.9	Worker	Scenario 1	8.53E-02	1.72E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8051	644136.2	4169248.9	Worker	Scenario 1	8.43E-02	1.70E-04	--
8052	644236.2	4169248.9	Worker	Scenario 1	8.29E-02	1.68E-04	--
8053	644636.2	4169248.9	Worker	Scenario 1	7.53E-02	1.52E-04	--
8054	644736.2	4169248.9	Worker	Scenario 1	7.36E-02	1.49E-04	--
8055	644836.2	4169248.9	Worker	Scenario 1	7.21E-02	1.46E-04	--
8056	644936.2	4169248.9	Worker	Scenario 1	7.07E-02	1.43E-04	--
8057	645036.2	4169248.9	Worker	Scenario 1	6.92E-02	1.40E-04	--
8058	645136.2	4169248.9	Worker	Scenario 1	6.76E-02	1.37E-04	--
8059	645236.2	4169248.9	Worker	Scenario 1	6.61E-02	1.33E-04	--
8060	645336.2	4169248.9	Worker	Scenario 1	6.46E-02	1.30E-04	--
8061	645436.2	4169248.9	Worker	Scenario 1	6.32E-02	1.28E-04	--
8062	645536.2	4169248.9	Worker	Scenario 1	6.19E-02	1.25E-04	--
8063	645636.2	4169248.9	Worker	Scenario 1	6.09E-02	1.23E-04	--
8064	645736.2	4169248.9	Worker	Scenario 1	5.99E-02	1.21E-04	--
8065	645836.2	4169248.9	Worker	Scenario 1	5.91E-02	1.19E-04	--
8066	645936.2	4169248.9	Worker	Scenario 1	5.84E-02	1.18E-04	--
8067	646036.2	4169248.9	Worker	Scenario 1	5.77E-02	1.17E-04	--
8068	635636.2	4169348.9	Worker	Scenario 1	6.33E-03	1.28E-05	--
8069	635736.2	4169348.9	Worker	Scenario 1	5.43E-03	1.10E-05	--
8070	635836.2	4169348.9	Worker	Scenario 1	5.32E-03	1.07E-05	--
8071	635936.2	4169348.9	Worker	Scenario 1	5.32E-03	1.07E-05	--
8072	636036.2	4169348.9	Worker	Scenario 1	5.46E-03	1.10E-05	--
8073	636136.2	4169348.9	Worker	Scenario 1	5.58E-03	1.13E-05	--
8074	636236.2	4169348.9	Worker	Scenario 1	5.81E-03	1.17E-05	--
8075	636336.2	4169348.9	Worker	Scenario 1	6.19E-03	1.25E-05	--
8076	636436.2	4169348.9	Worker	Scenario 1	6.60E-03	1.33E-05	--
8077	636536.2	4169348.9	Worker	Scenario 1	6.94E-03	1.40E-05	--
8078	636636.2	4169348.9	Worker	Scenario 1	7.58E-03	1.53E-05	--
8079	636736.2	4169348.9	Worker	Scenario 1	7.62E-03	1.54E-05	--
8080	636836.2	4169348.9	Worker	Scenario 1	7.99E-03	1.61E-05	--
8081	636936.2	4169348.9	Worker	Scenario 1	8.54E-03	1.73E-05	--
8082	637036.2	4169348.9	Worker	Scenario 1	8.88E-03	1.79E-05	--
8083	637136.2	4169348.9	Worker	Scenario 1	9.38E-03	1.89E-05	--
8084	637236.2	4169348.9	Worker	Scenario 1	9.77E-03	1.97E-05	--
8085	637336.2	4169348.9	Worker	Scenario 1	1.01E-02	2.05E-05	--
8086	637436.2	4169348.9	Worker	Scenario 1	1.06E-02	2.13E-05	--
8087	637536.2	4169348.9	Worker	Scenario 1	1.10E-02	2.22E-05	--
8088	637636.2	4169348.9	Worker	Scenario 1	1.14E-02	2.30E-05	--
8089	637836.2	4169348.9	Worker	Scenario 1	1.22E-02	2.46E-05	--
8090	639736.2	4169348.9	Worker	Scenario 1	3.28E-02	6.62E-05	--
8091	639836.2	4169348.9	Worker	Scenario 1	3.47E-02	7.00E-05	--
8092	639936.2	4169348.9	Worker	Scenario 1	3.67E-02	7.42E-05	--
8093	640036.2	4169348.9	Worker	Scenario 1	3.90E-02	7.87E-05	--
8094	640136.2	4169348.9	Worker	Scenario 1	4.14E-02	8.36E-05	--
8095	640236.2	4169348.9	Worker	Scenario 1	4.41E-02	8.92E-05	--
8096	641636.2	4169348.9	Worker	Scenario 1	1.60E-01	3.22E-04	--
8097	641736.2	4169348.9	Worker	Scenario 1	1.43E-01	2.89E-04	--
8098	641836.2	4169348.9	Worker	Scenario 1	1.34E-01	2.70E-04	--
8099	641936.2	4169348.9	Worker	Scenario 1	1.28E-01	2.58E-04	--
8100	642036.2	4169348.9	Worker	Scenario 1	1.23E-01	2.49E-04	--
8101	642136.2	4169348.9	Worker	Scenario 1	1.20E-01	2.43E-04	--
8102	642236.2	4169348.9	Worker	Scenario 1	1.18E-01	2.38E-04	--
8103	642336.2	4169348.9	Worker	Scenario 1	1.16E-01	2.34E-04	--
8104	642436.2	4169348.9	Worker	Scenario 1	1.15E-01	2.32E-04	--
8105	642536.2	4169348.9	Worker	Scenario 1	1.14E-01	2.30E-04	--
8106	642636.2	4169348.9	Worker	Scenario 1	1.13E-01	2.28E-04	--
8107	642736.2	4169348.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
8108	642836.2	4169348.9	Worker	Scenario 1	1.08E-01	2.19E-04	--
8109	642936.2	4169348.9	Worker	Scenario 1	1.06E-01	2.13E-04	--
8110	643036.2	4169348.9	Worker	Scenario 1	1.03E-01	2.09E-04	--
8111	643136.2	4169348.9	Worker	Scenario 1	1.01E-01	2.05E-04	--
8112	643236.2	4169348.9	Worker	Scenario 1	9.92E-02	2.00E-04	--
8113	643336.2	4169348.9	Worker	Scenario 1	9.69E-02	1.96E-04	--
8114	643436.2	4169348.9	Worker	Scenario 1	9.45E-02	1.91E-04	--
8115	643536.2	4169348.9	Worker	Scenario 1	9.17E-02	1.85E-04	--
8116	643636.2	4169348.9	Worker	Scenario 1	8.84E-02	1.79E-04	--
8117	643736.2	4169348.9	Worker	Scenario 1	8.54E-02	1.72E-04	--
8118	643836.2	4169348.9	Worker	Scenario 1	8.27E-02	1.67E-04	--
8119	643936.2	4169348.9	Worker	Scenario 1	8.09E-02	1.63E-04	--
8120	644036.2	4169348.9	Worker	Scenario 1	8.00E-02	1.62E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8121	644136.2	4169348.9	Worker	Scenario 1	7.94E-02	1.60E-04	--
8122	644236.2	4169348.9	Worker	Scenario 1	7.85E-02	1.59E-04	--
8123	644336.2	4169348.9	Worker	Scenario 1	7.72E-02	1.56E-04	--
8124	644636.2	4169348.9	Worker	Scenario 1	7.18E-02	1.45E-04	--
8125	644736.2	4169348.9	Worker	Scenario 1	7.01E-02	1.42E-04	--
8126	644836.2	4169348.9	Worker	Scenario 1	6.87E-02	1.39E-04	--
8127	644936.2	4169348.9	Worker	Scenario 1	6.73E-02	1.36E-04	--
8128	645036.2	4169348.9	Worker	Scenario 1	6.60E-02	1.33E-04	--
8129	645136.2	4169348.9	Worker	Scenario 1	6.46E-02	1.31E-04	--
8130	645236.2	4169348.9	Worker	Scenario 1	6.32E-02	1.28E-04	--
8131	645336.2	4169348.9	Worker	Scenario 1	6.17E-02	1.25E-04	--
8132	645436.2	4169348.9	Worker	Scenario 1	6.03E-02	1.22E-04	--
8133	645536.2	4169348.9	Worker	Scenario 1	5.90E-02	1.19E-04	--
8134	645636.2	4169348.9	Worker	Scenario 1	5.79E-02	1.17E-04	--
8135	645736.2	4169348.9	Worker	Scenario 1	5.68E-02	1.15E-04	--
8136	645836.2	4169348.9	Worker	Scenario 1	5.59E-02	1.13E-04	--
8137	645936.2	4169348.9	Worker	Scenario 1	5.51E-02	1.11E-04	--
8138	635636.2	4169448.9	Worker	Scenario 1	6.65E-03	1.34E-05	--
8139	635736.2	4169448.9	Worker	Scenario 1	6.62E-03	1.34E-05	--
8140	635836.2	4169448.9	Worker	Scenario 1	6.08E-03	1.23E-05	--
8141	635936.2	4169448.9	Worker	Scenario 1	6.12E-03	1.24E-05	--
8142	636036.2	4169448.9	Worker	Scenario 1	6.10E-03	1.23E-05	--
8143	636136.2	4169448.9	Worker	Scenario 1	6.13E-03	1.24E-05	--
8144	636236.2	4169448.9	Worker	Scenario 1	6.23E-03	1.26E-05	--
8145	636336.2	4169448.9	Worker	Scenario 1	6.47E-03	1.31E-05	--
8146	636436.2	4169448.9	Worker	Scenario 1	6.81E-03	1.38E-05	--
8147	636536.2	4169448.9	Worker	Scenario 1	7.22E-03	1.46E-05	--
8148	636636.2	4169448.9	Worker	Scenario 1	7.67E-03	1.55E-05	--
8149	636736.2	4169448.9	Worker	Scenario 1	8.18E-03	1.65E-05	--
8150	636836.2	4169448.9	Worker	Scenario 1	8.43E-03	1.70E-05	--
8151	636936.2	4169448.9	Worker	Scenario 1	8.89E-03	1.80E-05	--
8152	637036.2	4169448.9	Worker	Scenario 1	9.12E-03	1.84E-05	--
8153	637136.2	4169448.9	Worker	Scenario 1	9.42E-03	1.90E-05	--
8154	637236.2	4169448.9	Worker	Scenario 1	9.82E-03	1.98E-05	--
8155	637336.2	4169448.9	Worker	Scenario 1	1.02E-02	2.07E-05	--
8156	637436.2	4169448.9	Worker	Scenario 1	1.07E-02	2.17E-05	--
8157	637736.2	4169448.9	Worker	Scenario 1	1.21E-02	2.44E-05	--
8158	637836.2	4169448.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
8159	639736.2	4169448.9	Worker	Scenario 1	3.29E-02	6.65E-05	--
8160	639836.2	4169448.9	Worker	Scenario 1	3.47E-02	7.02E-05	--
8161	639936.2	4169448.9	Worker	Scenario 1	3.67E-02	7.42E-05	--
8162	640036.2	4169448.9	Worker	Scenario 1	3.89E-02	7.85E-05	--
8163	640136.2	4169448.9	Worker	Scenario 1	4.13E-02	8.33E-05	--
8164	640236.2	4169448.9	Worker	Scenario 1	4.39E-02	8.87E-05	--
8165	641636.2	4169448.9	Worker	Scenario 1	1.55E-01	3.12E-04	--
8166	641736.2	4169448.9	Worker	Scenario 1	1.38E-01	2.78E-04	--
8167	641836.2	4169448.9	Worker	Scenario 1	1.28E-01	2.58E-04	--
8168	641936.2	4169448.9	Worker	Scenario 1	1.21E-01	2.45E-04	--
8169	642036.2	4169448.9	Worker	Scenario 1	1.17E-01	2.36E-04	--
8170	642136.2	4169448.9	Worker	Scenario 1	1.14E-01	2.29E-04	--
8171	642236.2	4169448.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
8172	642336.2	4169448.9	Worker	Scenario 1	1.09E-01	2.20E-04	--
8173	642436.2	4169448.9	Worker	Scenario 1	1.08E-01	2.18E-04	--
8174	642536.2	4169448.9	Worker	Scenario 1	1.07E-01	2.17E-04	--
8175	642636.2	4169448.9	Worker	Scenario 1	1.06E-01	2.14E-04	--
8176	642736.2	4169448.9	Worker	Scenario 1	1.04E-01	2.10E-04	--
8177	642836.2	4169448.9	Worker	Scenario 1	1.02E-01	2.05E-04	--
8178	642936.2	4169448.9	Worker	Scenario 1	9.91E-02	2.00E-04	--
8179	643036.2	4169448.9	Worker	Scenario 1	9.70E-02	1.96E-04	--
8180	643136.2	4169448.9	Worker	Scenario 1	9.52E-02	1.92E-04	--
8181	643236.2	4169448.9	Worker	Scenario 1	9.33E-02	1.88E-04	--
8182	643336.2	4169448.9	Worker	Scenario 1	9.13E-02	1.84E-04	--
8183	643436.2	4169448.9	Worker	Scenario 1	8.92E-02	1.80E-04	--
8184	643536.2	4169448.9	Worker	Scenario 1	8.68E-02	1.75E-04	--
8185	643636.2	4169448.9	Worker	Scenario 1	8.38E-02	1.69E-04	--
8186	643736.2	4169448.9	Worker	Scenario 1	8.09E-02	1.63E-04	--
8187	643836.2	4169448.9	Worker	Scenario 1	7.82E-02	1.58E-04	--
8188	643936.2	4169448.9	Worker	Scenario 1	7.64E-02	1.54E-04	--
8189	644036.2	4169448.9	Worker	Scenario 1	7.54E-02	1.52E-04	--
8190	644136.2	4169448.9	Worker	Scenario 1	7.49E-02	1.51E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8191	644236.2	4169448.9	Worker	Scenario 1	7.43E-02	1.50E-04	--
8192	644336.2	4169448.9	Worker	Scenario 1	7.33E-02	1.48E-04	--
8193	644636.2	4169448.9	Worker	Scenario 1	6.86E-02	1.39E-04	--
8194	644736.2	4169448.9	Worker	Scenario 1	6.70E-02	1.35E-04	--
8195	644836.2	4169448.9	Worker	Scenario 1	6.54E-02	1.32E-04	--
8196	644936.2	4169448.9	Worker	Scenario 1	6.42E-02	1.30E-04	--
8197	645036.2	4169448.9	Worker	Scenario 1	6.29E-02	1.27E-04	--
8198	645136.2	4169448.9	Worker	Scenario 1	6.17E-02	1.25E-04	--
8199	645236.2	4169448.9	Worker	Scenario 1	6.04E-02	1.22E-04	--
8200	645336.2	4169448.9	Worker	Scenario 1	5.91E-02	1.19E-04	--
8201	645436.2	4169448.9	Worker	Scenario 1	5.78E-02	1.17E-04	--
8202	645536.2	4169448.9	Worker	Scenario 1	5.65E-02	1.14E-04	--
8203	645636.2	4169448.9	Worker	Scenario 1	5.52E-02	1.12E-04	--
8204	645736.2	4169448.9	Worker	Scenario 1	5.41E-02	1.09E-04	--
8205	635636.2	4169548.9	Worker	Scenario 1	6.78E-03	1.37E-05	--
8206	635736.2	4169548.9	Worker	Scenario 1	6.94E-03	1.40E-05	--
8207	635836.2	4169548.9	Worker	Scenario 1	7.03E-03	1.42E-05	--
8208	635936.2	4169548.9	Worker	Scenario 1	6.96E-03	1.41E-05	--
8209	636036.2	4169548.9	Worker	Scenario 1	6.42E-03	1.30E-05	--
8210	636136.2	4169548.9	Worker	Scenario 1	6.59E-03	1.33E-05	--
8211	636236.2	4169548.9	Worker	Scenario 1	6.77E-03	1.37E-05	--
8212	636336.2	4169548.9	Worker	Scenario 1	6.90E-03	1.39E-05	--
8213	636436.2	4169548.9	Worker	Scenario 1	7.14E-03	1.44E-05	--
8214	636536.2	4169548.9	Worker	Scenario 1	7.51E-03	1.52E-05	--
8215	636636.2	4169548.9	Worker	Scenario 1	7.93E-03	1.60E-05	--
8216	636736.2	4169548.9	Worker	Scenario 1	8.26E-03	1.67E-05	--
8217	636836.2	4169548.9	Worker	Scenario 1	8.55E-03	1.73E-05	--
8218	636936.2	4169548.9	Worker	Scenario 1	8.86E-03	1.79E-05	--
8219	637036.2	4169548.9	Worker	Scenario 1	9.23E-03	1.87E-05	--
8220	637136.2	4169548.9	Worker	Scenario 1	9.64E-03	1.95E-05	--
8221	637236.2	4169548.9	Worker	Scenario 1	1.00E-02	2.02E-05	--
8222	637336.2	4169548.9	Worker	Scenario 1	1.05E-02	2.11E-05	--
8223	637536.2	4169548.9	Worker	Scenario 1	1.15E-02	2.33E-05	--
8224	637636.2	4169548.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
8225	637736.2	4169548.9	Worker	Scenario 1	1.24E-02	2.50E-05	--
8226	639636.2	4169548.9	Worker	Scenario 1	3.13E-02	6.33E-05	--
8227	639736.2	4169548.9	Worker	Scenario 1	3.30E-02	6.66E-05	--
8228	639836.2	4169548.9	Worker	Scenario 1	3.47E-02	7.01E-05	--
8229	639936.2	4169548.9	Worker	Scenario 1	3.66E-02	7.40E-05	--
8230	640036.2	4169548.9	Worker	Scenario 1	3.87E-02	7.82E-05	--
8231	640136.2	4169548.9	Worker	Scenario 1	4.10E-02	8.29E-05	--
8232	640236.2	4169548.9	Worker	Scenario 1	4.35E-02	8.79E-05	--
8233	641536.2	4169548.9	Worker	Scenario 1	1.82E-01	3.68E-04	--
8234	641636.2	4169548.9	Worker	Scenario 1	1.49E-01	3.02E-04	--
8235	641736.2	4169548.9	Worker	Scenario 1	1.32E-01	2.67E-04	--
8236	641836.2	4169548.9	Worker	Scenario 1	1.22E-01	2.47E-04	--
8237	641936.2	4169548.9	Worker	Scenario 1	1.16E-01	2.33E-04	--
8238	642036.2	4169548.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
8239	642136.2	4169548.9	Worker	Scenario 1	1.07E-01	2.17E-04	--
8240	642236.2	4169548.9	Worker	Scenario 1	1.05E-01	2.11E-04	--
8241	642336.2	4169548.9	Worker	Scenario 1	1.03E-01	2.08E-04	--
8242	642436.2	4169548.9	Worker	Scenario 1	1.02E-01	2.06E-04	--
8243	642536.2	4169548.9	Worker	Scenario 1	1.01E-01	2.04E-04	--
8244	642636.2	4169548.9	Worker	Scenario 1	9.98E-02	2.02E-04	--
8245	642736.2	4169548.9	Worker	Scenario 1	9.78E-02	1.98E-04	--
8246	642836.2	4169548.9	Worker	Scenario 1	9.55E-02	1.93E-04	--
8247	642936.2	4169548.9	Worker	Scenario 1	9.31E-02	1.88E-04	--
8248	643036.2	4169548.9	Worker	Scenario 1	9.12E-02	1.84E-04	--
8249	643136.2	4169548.9	Worker	Scenario 1	8.95E-02	1.81E-04	--
8250	643236.2	4169548.9	Worker	Scenario 1	8.79E-02	1.78E-04	--
8251	643336.2	4169548.9	Worker	Scenario 1	8.60E-02	1.74E-04	--
8252	643436.2	4169548.9	Worker	Scenario 1	8.41E-02	1.70E-04	--
8253	643536.2	4169548.9	Worker	Scenario 1	8.20E-02	1.66E-04	--
8254	643636.2	4169548.9	Worker	Scenario 1	7.96E-02	1.61E-04	--
8255	643736.2	4169548.9	Worker	Scenario 1	7.70E-02	1.55E-04	--
8256	643836.2	4169548.9	Worker	Scenario 1	7.44E-02	1.50E-04	--
8257	643936.2	4169548.9	Worker	Scenario 1	7.24E-02	1.46E-04	--
8258	644036.2	4169548.9	Worker	Scenario 1	7.12E-02	1.44E-04	--
8259	644136.2	4169548.9	Worker	Scenario 1	7.06E-02	1.43E-04	--
8260	644236.2	4169548.9	Worker	Scenario 1	7.02E-02	1.42E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8261	644336.2	4169548.9	Worker	Scenario 1	6.95E-02	1.40E-04	--
8262	644436.2	4169548.9	Worker	Scenario 1	6.86E-02	1.39E-04	--
8263	644636.2	4169548.9	Worker	Scenario 1	6.57E-02	1.33E-04	--
8264	644736.2	4169548.9	Worker	Scenario 1	6.41E-02	1.29E-04	--
8265	644836.2	4169548.9	Worker	Scenario 1	6.26E-02	1.26E-04	--
8266	644936.2	4169548.9	Worker	Scenario 1	6.13E-02	1.24E-04	--
8267	645036.2	4169548.9	Worker	Scenario 1	6.01E-02	1.21E-04	--
8268	645136.2	4169548.9	Worker	Scenario 1	5.90E-02	1.19E-04	--
8269	645236.2	4169548.9	Worker	Scenario 1	5.79E-02	1.17E-04	--
8270	645336.2	4169548.9	Worker	Scenario 1	5.68E-02	1.15E-04	--
8271	645436.2	4169548.9	Worker	Scenario 1	5.55E-02	1.12E-04	--
8272	645536.2	4169548.9	Worker	Scenario 1	5.43E-02	1.10E-04	--
8273	635636.2	4169648.9	Worker	Scenario 1	6.86E-03	1.38E-05	--
8274	635736.2	4169648.9	Worker	Scenario 1	7.00E-03	1.41E-05	--
8275	635836.2	4169648.9	Worker	Scenario 1	7.19E-03	1.45E-05	--
8276	635936.2	4169648.9	Worker	Scenario 1	7.27E-03	1.47E-05	--
8277	636036.2	4169648.9	Worker	Scenario 1	7.37E-03	1.49E-05	--
8278	636136.2	4169648.9	Worker	Scenario 1	7.39E-03	1.49E-05	--
8279	636236.2	4169648.9	Worker	Scenario 1	7.26E-03	1.47E-05	--
8280	636336.2	4169648.9	Worker	Scenario 1	7.35E-03	1.48E-05	--
8281	636436.2	4169648.9	Worker	Scenario 1	7.45E-03	1.50E-05	--
8282	636536.2	4169648.9	Worker	Scenario 1	7.72E-03	1.56E-05	--
8283	636636.2	4169648.9	Worker	Scenario 1	8.03E-03	1.62E-05	--
8284	636736.2	4169648.9	Worker	Scenario 1	8.39E-03	1.69E-05	--
8285	636836.2	4169648.9	Worker	Scenario 1	8.73E-03	1.76E-05	--
8286	636936.2	4169648.9	Worker	Scenario 1	9.11E-03	1.84E-05	--
8287	637036.2	4169648.9	Worker	Scenario 1	9.48E-03	1.92E-05	--
8288	637136.2	4169648.9	Worker	Scenario 1	9.86E-03	1.99E-05	--
8289	637436.2	4169648.9	Worker	Scenario 1	1.16E-02	2.34E-05	--
8290	637536.2	4169648.9	Worker	Scenario 1	1.19E-02	2.41E-05	--
8291	637636.2	4169648.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
8292	637736.2	4169648.9	Worker	Scenario 1	1.26E-02	2.55E-05	--
8293	639536.2	4169648.9	Worker	Scenario 1	2.99E-02	6.03E-05	--
8294	639636.2	4169648.9	Worker	Scenario 1	3.13E-02	6.33E-05	--
8295	639736.2	4169648.9	Worker	Scenario 1	3.29E-02	6.65E-05	--
8296	639836.2	4169648.9	Worker	Scenario 1	3.46E-02	6.99E-05	--
8297	639936.2	4169648.9	Worker	Scenario 1	3.65E-02	7.36E-05	--
8298	640036.2	4169648.9	Worker	Scenario 1	3.84E-02	7.76E-05	--
8299	640136.2	4169648.9	Worker	Scenario 1	4.07E-02	8.22E-05	--
8300	640236.2	4169648.9	Worker	Scenario 1	4.32E-02	8.72E-05	--
8301	640336.2	4169648.9	Worker	Scenario 1	4.60E-02	9.29E-05	--
8302	640836.2	4169648.9	Worker	Scenario 1	6.84E-02	1.38E-04	--
8303	640936.2	4169648.9	Worker	Scenario 1	7.67E-02	1.55E-04	--
8304	641036.2	4169648.9	Worker	Scenario 1	8.88E-02	1.79E-04	--
8305	641136.2	4169648.9	Worker	Scenario 1	1.11E-01	2.24E-04	--
8306	641236.2	4169648.9	Worker	Scenario 1	1.70E-01	3.44E-04	--
8307	641336.2	4169648.9	Worker	Scenario 1	7.54E-01	1.52E-03	--
8308	641436.2	4169648.9	Worker	Scenario 1	2.58E-01	5.22E-04	--
8309	641536.2	4169648.9	Worker	Scenario 1	1.76E-01	3.56E-04	--
8310	641636.2	4169648.9	Worker	Scenario 1	1.43E-01	2.90E-04	--
8311	641736.2	4169648.9	Worker	Scenario 1	1.26E-01	2.55E-04	--
8312	641836.2	4169648.9	Worker	Scenario 1	1.16E-01	2.35E-04	--
8313	641936.2	4169648.9	Worker	Scenario 1	1.10E-01	2.22E-04	--
8314	642036.2	4169648.9	Worker	Scenario 1	1.05E-01	2.12E-04	--
8315	642136.2	4169648.9	Worker	Scenario 1	1.02E-01	2.05E-04	--
8316	642236.2	4169648.9	Worker	Scenario 1	9.88E-02	2.00E-04	--
8317	642336.2	4169648.9	Worker	Scenario 1	9.71E-02	1.96E-04	--
8318	642436.2	4169648.9	Worker	Scenario 1	9.60E-02	1.94E-04	--
8319	642536.2	4169648.9	Worker	Scenario 1	9.51E-02	1.92E-04	--
8320	642636.2	4169648.9	Worker	Scenario 1	9.39E-02	1.90E-04	--
8321	642736.2	4169648.9	Worker	Scenario 1	9.20E-02	1.86E-04	--
8322	642836.2	4169648.9	Worker	Scenario 1	8.98E-02	1.81E-04	--
8323	642936.2	4169648.9	Worker	Scenario 1	8.76E-02	1.77E-04	--
8324	643036.2	4169648.9	Worker	Scenario 1	8.57E-02	1.73E-04	--
8325	643136.2	4169648.9	Worker	Scenario 1	8.43E-02	1.70E-04	--
8326	643236.2	4169648.9	Worker	Scenario 1	8.28E-02	1.67E-04	--
8327	643336.2	4169648.9	Worker	Scenario 1	8.12E-02	1.64E-04	--
8328	643436.2	4169648.9	Worker	Scenario 1	7.95E-02	1.61E-04	--
8329	643536.2	4169648.9	Worker	Scenario 1	7.78E-02	1.57E-04	--
8330	643636.2	4169648.9	Worker	Scenario 1	7.57E-02	1.53E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8331	643736.2	4169648.9	Worker	Scenario 1	7.33E-02	1.48E-04	--
8332	643836.2	4169648.9	Worker	Scenario 1	7.09E-02	1.43E-04	--
8333	643936.2	4169648.9	Worker	Scenario 1	6.88E-02	1.39E-04	--
8334	644036.2	4169648.9	Worker	Scenario 1	6.74E-02	1.36E-04	--
8335	644136.2	4169648.9	Worker	Scenario 1	6.67E-02	1.35E-04	--
8336	644236.2	4169648.9	Worker	Scenario 1	6.63E-02	1.34E-04	--
8337	644336.2	4169648.9	Worker	Scenario 1	6.59E-02	1.33E-04	--
8338	644436.2	4169648.9	Worker	Scenario 1	6.53E-02	1.32E-04	--
8339	644636.2	4169648.9	Worker	Scenario 1	6.30E-02	1.27E-04	--
8340	644736.2	4169648.9	Worker	Scenario 1	6.15E-02	1.24E-04	--
8341	644836.2	4169648.9	Worker	Scenario 1	6.00E-02	1.21E-04	--
8342	644936.2	4169648.9	Worker	Scenario 1	5.87E-02	1.19E-04	--
8343	645036.2	4169648.9	Worker	Scenario 1	5.75E-02	1.16E-04	--
8344	645136.2	4169648.9	Worker	Scenario 1	5.65E-02	1.14E-04	--
8345	645236.2	4169648.9	Worker	Scenario 1	5.55E-02	1.12E-04	--
8346	635636.2	4169748.9	Worker	Scenario 1	7.07E-03	1.43E-05	--
8347	635736.2	4169748.9	Worker	Scenario 1	7.26E-03	1.47E-05	--
8348	635836.2	4169748.9	Worker	Scenario 1	7.40E-03	1.49E-05	--
8349	635936.2	4169748.9	Worker	Scenario 1	7.46E-03	1.51E-05	--
8350	636036.2	4169748.9	Worker	Scenario 1	7.63E-03	1.54E-05	--
8351	636136.2	4169748.9	Worker	Scenario 1	7.75E-03	1.57E-05	--
8352	636236.2	4169748.9	Worker	Scenario 1	7.82E-03	1.58E-05	--
8353	636336.2	4169748.9	Worker	Scenario 1	7.60E-03	1.54E-05	--
8354	636436.2	4169748.9	Worker	Scenario 1	7.88E-03	1.59E-05	--
8355	636536.2	4169748.9	Worker	Scenario 1	8.10E-03	1.64E-05	--
8356	636636.2	4169748.9	Worker	Scenario 1	8.30E-03	1.68E-05	--
8357	636736.2	4169748.9	Worker	Scenario 1	8.61E-03	1.74E-05	--
8358	636836.2	4169748.9	Worker	Scenario 1	8.97E-03	1.81E-05	--
8359	636936.2	4169748.9	Worker	Scenario 1	9.34E-03	1.89E-05	--
8360	637036.2	4169748.9	Worker	Scenario 1	9.70E-03	1.96E-05	--
8361	637236.2	4169748.9	Worker	Scenario 1	1.05E-02	2.13E-05	--
8362	637336.2	4169748.9	Worker	Scenario 1	1.19E-02	2.41E-05	--
8363	637436.2	4169748.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
8364	637536.2	4169748.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
8365	637636.2	4169748.9	Worker	Scenario 1	1.26E-02	2.55E-05	--
8366	637836.2	4169748.9	Worker	Scenario 1	1.35E-02	2.72E-05	--
8367	639336.2	4169748.9	Worker	Scenario 1	2.72E-02	5.50E-05	--
8368	639436.2	4169748.9	Worker	Scenario 1	2.85E-02	5.75E-05	--
8369	639536.2	4169748.9	Worker	Scenario 1	2.98E-02	6.02E-05	--
8370	639636.2	4169748.9	Worker	Scenario 1	3.13E-02	6.31E-05	--
8371	639736.2	4169748.9	Worker	Scenario 1	3.28E-02	6.63E-05	--
8372	639836.2	4169748.9	Worker	Scenario 1	3.44E-02	6.96E-05	--
8373	639936.2	4169748.9	Worker	Scenario 1	3.62E-02	7.31E-05	--
8374	640036.2	4169748.9	Worker	Scenario 1	3.82E-02	7.71E-05	--
8375	640136.2	4169748.9	Worker	Scenario 1	4.03E-02	8.15E-05	--
8376	640236.2	4169748.9	Worker	Scenario 1	4.28E-02	8.64E-05	--
8377	640336.2	4169748.9	Worker	Scenario 1	4.55E-02	9.19E-05	--
8378	640436.2	4169748.9	Worker	Scenario 1	4.85E-02	9.81E-05	--
8379	640536.2	4169748.9	Worker	Scenario 1	5.21E-02	1.05E-04	--
8380	640636.2	4169748.9	Worker	Scenario 1	5.61E-02	1.13E-04	--
8381	640736.2	4169748.9	Worker	Scenario 1	6.09E-02	1.23E-04	--
8382	640836.2	4169748.9	Worker	Scenario 1	6.69E-02	1.35E-04	--
8383	640936.2	4169748.9	Worker	Scenario 1	7.48E-02	1.51E-04	--
8384	641036.2	4169748.9	Worker	Scenario 1	8.67E-02	1.75E-04	--
8385	641136.2	4169748.9	Worker	Scenario 1	1.08E-01	2.19E-04	--
8386	641236.2	4169748.9	Worker	Scenario 1	1.69E-01	3.42E-04	--
8387	641336.2	4169748.9	Worker	Scenario 1	7.17E-01	1.45E-03	--
8388	641436.2	4169748.9	Worker	Scenario 1	2.50E-01	5.05E-04	--
8389	641536.2	4169748.9	Worker	Scenario 1	1.69E-01	3.42E-04	--
8390	641636.2	4169748.9	Worker	Scenario 1	1.37E-01	2.77E-04	--
8391	641736.2	4169748.9	Worker	Scenario 1	1.20E-01	2.43E-04	--
8392	641836.2	4169748.9	Worker	Scenario 1	1.10E-01	2.23E-04	--
8393	641936.2	4169748.9	Worker	Scenario 1	1.04E-01	2.10E-04	--
8394	642036.2	4169748.9	Worker	Scenario 1	9.92E-02	2.00E-04	--
8395	642136.2	4169748.9	Worker	Scenario 1	9.58E-02	1.93E-04	--
8396	642236.2	4169748.9	Worker	Scenario 1	9.33E-02	1.88E-04	--
8397	642336.2	4169748.9	Worker	Scenario 1	9.19E-02	1.86E-04	--
8398	642436.2	4169748.9	Worker	Scenario 1	9.07E-02	1.83E-04	--
8399	642536.2	4169748.9	Worker	Scenario 1	8.97E-02	1.81E-04	--
8400	642636.2	4169748.9	Worker	Scenario 1	8.84E-02	1.79E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8401	642736.2	4169748.9	Worker	Scenario 1	8.65E-02	1.75E-04	--
8402	642836.2	4169748.9	Worker	Scenario 1	8.43E-02	1.70E-04	--
8403	642936.2	4169748.9	Worker	Scenario 1	8.24E-02	1.66E-04	--
8404	643036.2	4169748.9	Worker	Scenario 1	8.09E-02	1.63E-04	--
8405	643136.2	4169748.9	Worker	Scenario 1	7.95E-02	1.61E-04	--
8406	643236.2	4169748.9	Worker	Scenario 1	7.82E-02	1.58E-04	--
8407	643336.2	4169748.9	Worker	Scenario 1	7.67E-02	1.55E-04	--
8408	643436.2	4169748.9	Worker	Scenario 1	7.53E-02	1.52E-04	--
8409	643536.2	4169748.9	Worker	Scenario 1	7.37E-02	1.49E-04	--
8410	643636.2	4169748.9	Worker	Scenario 1	7.19E-02	1.45E-04	--
8411	643736.2	4169748.9	Worker	Scenario 1	6.98E-02	1.41E-04	--
8412	643836.2	4169748.9	Worker	Scenario 1	6.76E-02	1.36E-04	--
8413	643936.2	4169748.9	Worker	Scenario 1	6.55E-02	1.32E-04	--
8414	644036.2	4169748.9	Worker	Scenario 1	6.40E-02	1.29E-04	--
8415	644136.2	4169748.9	Worker	Scenario 1	6.31E-02	1.28E-04	--
8416	644236.2	4169748.9	Worker	Scenario 1	6.27E-02	1.27E-04	--
8417	644336.2	4169748.9	Worker	Scenario 1	6.24E-02	1.26E-04	--
8418	644436.2	4169748.9	Worker	Scenario 1	6.20E-02	1.25E-04	--
8419	644636.2	4169748.9	Worker	Scenario 1	6.03E-02	1.22E-04	--
8420	644736.2	4169748.9	Worker	Scenario 1	5.90E-02	1.19E-04	--
8421	644836.2	4169748.9	Worker	Scenario 1	5.77E-02	1.16E-04	--
8422	644936.2	4169748.9	Worker	Scenario 1	5.64E-02	1.14E-04	--
8423	635636.2	4169848.9	Worker	Scenario 1	7.16E-03	1.45E-05	--
8424	635736.2	4169848.9	Worker	Scenario 1	7.34E-03	1.48E-05	--
8425	635836.2	4169848.9	Worker	Scenario 1	7.55E-03	1.53E-05	--
8426	635936.2	4169848.9	Worker	Scenario 1	7.79E-03	1.57E-05	--
8427	636036.2	4169848.9	Worker	Scenario 1	7.84E-03	1.58E-05	--
8428	636136.2	4169848.9	Worker	Scenario 1	7.99E-03	1.61E-05	--
8429	636236.2	4169848.9	Worker	Scenario 1	8.16E-03	1.65E-05	--
8430	636336.2	4169848.9	Worker	Scenario 1	8.24E-03	1.66E-05	--
8431	636436.2	4169848.9	Worker	Scenario 1	8.06E-03	1.63E-05	--
8432	636536.2	4169848.9	Worker	Scenario 1	8.36E-03	1.69E-05	--
8433	636636.2	4169848.9	Worker	Scenario 1	8.54E-03	1.73E-05	--
8434	636736.2	4169848.9	Worker	Scenario 1	8.84E-03	1.79E-05	--
8435	636836.2	4169848.9	Worker	Scenario 1	9.17E-03	1.85E-05	--
8436	636936.2	4169848.9	Worker	Scenario 1	9.52E-03	1.92E-05	--
8437	637136.2	4169848.9	Worker	Scenario 1	1.03E-02	2.08E-05	--
8438	637236.2	4169848.9	Worker	Scenario 1	1.07E-02	2.16E-05	--
8439	637336.2	4169848.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
8440	637436.2	4169848.9	Worker	Scenario 1	1.26E-02	2.55E-05	--
8441	637536.2	4169848.9	Worker	Scenario 1	1.26E-02	2.54E-05	--
8442	637836.2	4169848.9	Worker	Scenario 1	1.38E-02	2.78E-05	--
8443	639236.2	4169848.9	Worker	Scenario 1	2.61E-02	5.28E-05	--
8444	639336.2	4169848.9	Worker	Scenario 1	2.72E-02	5.50E-05	--
8445	639436.2	4169848.9	Worker	Scenario 1	2.84E-02	5.74E-05	--
8446	639536.2	4169848.9	Worker	Scenario 1	2.97E-02	6.00E-05	--
8447	639636.2	4169848.9	Worker	Scenario 1	3.11E-02	6.29E-05	--
8448	639736.2	4169848.9	Worker	Scenario 1	3.28E-02	6.62E-05	--
8449	639836.2	4169848.9	Worker	Scenario 1	3.42E-02	6.91E-05	--
8450	639936.2	4169848.9	Worker	Scenario 1	3.60E-02	7.26E-05	--
8451	640036.2	4169848.9	Worker	Scenario 1	3.79E-02	7.65E-05	--
8452	640136.2	4169848.9	Worker	Scenario 1	4.00E-02	8.07E-05	--
8453	640236.2	4169848.9	Worker	Scenario 1	4.23E-02	8.55E-05	--
8454	640336.2	4169848.9	Worker	Scenario 1	4.49E-02	9.07E-05	--
8455	640436.2	4169848.9	Worker	Scenario 1	4.78E-02	9.66E-05	--
8456	640536.2	4169848.9	Worker	Scenario 1	5.11E-02	1.03E-04	--
8457	640636.2	4169848.9	Worker	Scenario 1	5.50E-02	1.11E-04	--
8458	640736.2	4169848.9	Worker	Scenario 1	5.95E-02	1.20E-04	--
8459	640836.2	4169848.9	Worker	Scenario 1	6.51E-02	1.32E-04	--
8460	640936.2	4169848.9	Worker	Scenario 1	7.27E-02	1.47E-04	--
8461	641036.2	4169848.9	Worker	Scenario 1	8.41E-02	1.70E-04	--
8462	641136.2	4169848.9	Worker	Scenario 1	1.05E-01	2.13E-04	--
8463	641236.2	4169848.9	Worker	Scenario 1	1.67E-01	3.38E-04	--
8464	641336.2	4169848.9	Worker	Scenario 1	6.79E-01	1.37E-03	--
8465	641436.2	4169848.9	Worker	Scenario 1	2.40E-01	4.84E-04	--
8466	641536.2	4169848.9	Worker	Scenario 1	1.61E-01	3.25E-04	--
8467	641636.2	4169848.9	Worker	Scenario 1	1.29E-01	2.61E-04	--
8468	641736.2	4169848.9	Worker	Scenario 1	1.13E-01	2.29E-04	--
8469	641836.2	4169848.9	Worker	Scenario 1	1.04E-01	2.10E-04	--
8470	641936.2	4169848.9	Worker	Scenario 1	9.75E-02	1.97E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8471	642036.2	4169848.9	Worker	Scenario 1	9.31E-02	1.88E-04	--
8472	642136.2	4169848.9	Worker	Scenario 1	9.00E-02	1.82E-04	--
8473	642236.2	4169848.9	Worker	Scenario 1	8.78E-02	1.77E-04	--
8474	642336.2	4169848.9	Worker	Scenario 1	8.64E-02	1.75E-04	--
8475	642436.2	4169848.9	Worker	Scenario 1	8.56E-02	1.73E-04	--
8476	642536.2	4169848.9	Worker	Scenario 1	8.44E-02	1.70E-04	--
8477	642636.2	4169848.9	Worker	Scenario 1	8.29E-02	1.67E-04	--
8478	642736.2	4169848.9	Worker	Scenario 1	8.12E-02	1.64E-04	--
8479	642836.2	4169848.9	Worker	Scenario 1	7.93E-02	1.60E-04	--
8480	642936.2	4169848.9	Worker	Scenario 1	7.76E-02	1.57E-04	--
8481	643036.2	4169848.9	Worker	Scenario 1	7.63E-02	1.54E-04	--
8482	643136.2	4169848.9	Worker	Scenario 1	7.50E-02	1.52E-04	--
8483	643236.2	4169848.9	Worker	Scenario 1	7.38E-02	1.49E-04	--
8484	643336.2	4169848.9	Worker	Scenario 1	7.25E-02	1.46E-04	--
8485	643436.2	4169848.9	Worker	Scenario 1	7.12E-02	1.44E-04	--
8486	643536.2	4169848.9	Worker	Scenario 1	6.99E-02	1.41E-04	--
8487	643636.2	4169848.9	Worker	Scenario 1	6.83E-02	1.38E-04	--
8488	643736.2	4169848.9	Worker	Scenario 1	6.65E-02	1.34E-04	--
8489	643836.2	4169848.9	Worker	Scenario 1	6.45E-02	1.30E-04	--
8490	643936.2	4169848.9	Worker	Scenario 1	6.25E-02	1.26E-04	--
8491	644036.2	4169848.9	Worker	Scenario 1	6.10E-02	1.23E-04	--
8492	644136.2	4169848.9	Worker	Scenario 1	5.99E-02	1.21E-04	--
8493	644236.2	4169848.9	Worker	Scenario 1	5.94E-02	1.20E-04	--
8494	644336.2	4169848.9	Worker	Scenario 1	5.91E-02	1.19E-04	--
8495	644436.2	4169848.9	Worker	Scenario 1	5.89E-02	1.19E-04	--
8496	635636.2	4169948.9	Worker	Scenario 1	7.31E-03	1.48E-05	--
8497	635736.2	4169948.9	Worker	Scenario 1	7.52E-03	1.52E-05	--
8498	635836.2	4169948.9	Worker	Scenario 1	7.59E-03	1.53E-05	--
8499	635936.2	4169948.9	Worker	Scenario 1	7.87E-03	1.59E-05	--
8500	636036.2	4169948.9	Worker	Scenario 1	8.05E-03	1.63E-05	--
8501	636136.2	4169948.9	Worker	Scenario 1	8.17E-03	1.65E-05	--
8502	636236.2	4169948.9	Worker	Scenario 1	8.33E-03	1.68E-05	--
8503	636336.2	4169948.9	Worker	Scenario 1	8.50E-03	1.72E-05	--
8504	636436.2	4169948.9	Worker	Scenario 1	8.61E-03	1.74E-05	--
8505	636536.2	4169948.9	Worker	Scenario 1	8.49E-03	1.72E-05	--
8506	636636.2	4169948.9	Worker	Scenario 1	8.76E-03	1.77E-05	--
8507	636736.2	4169948.9	Worker	Scenario 1	9.01E-03	1.82E-05	--
8508	637036.2	4169948.9	Worker	Scenario 1	1.01E-02	2.03E-05	--
8509	637136.2	4169948.9	Worker	Scenario 1	1.04E-02	2.11E-05	--
8510	637236.2	4169948.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
8511	637336.2	4169948.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
8512	637436.2	4169948.9	Worker	Scenario 1	1.26E-02	2.54E-05	--
8513	637536.2	4169948.9	Worker	Scenario 1	1.24E-02	2.50E-05	--
8514	637736.2	4169948.9	Worker	Scenario 1	1.35E-02	2.74E-05	--
8515	637836.2	4169948.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
8516	639136.2	4169948.9	Worker	Scenario 1	2.51E-02	5.07E-05	--
8517	639236.2	4169948.9	Worker	Scenario 1	2.61E-02	5.27E-05	--
8518	639336.2	4169948.9	Worker	Scenario 1	2.72E-02	5.49E-05	--
8519	639436.2	4169948.9	Worker	Scenario 1	2.83E-02	5.72E-05	--
8520	639536.2	4169948.9	Worker	Scenario 1	2.96E-02	5.98E-05	--
8521	639736.2	4169948.9	Worker	Scenario 1	3.24E-02	6.55E-05	--
8522	639836.2	4169948.9	Worker	Scenario 1	3.40E-02	6.86E-05	--
8523	639936.2	4169948.9	Worker	Scenario 1	3.57E-02	7.21E-05	--
8524	640036.2	4169948.9	Worker	Scenario 1	3.75E-02	7.58E-05	--
8525	640136.2	4169948.9	Worker	Scenario 1	3.96E-02	8.00E-05	--
8526	640236.2	4169948.9	Worker	Scenario 1	4.18E-02	8.45E-05	--
8527	640336.2	4169948.9	Worker	Scenario 1	4.43E-02	8.94E-05	--
8528	640436.2	4169948.9	Worker	Scenario 1	4.70E-02	9.50E-05	--
8529	640536.2	4169948.9	Worker	Scenario 1	5.01E-02	1.01E-04	--
8530	640636.2	4169948.9	Worker	Scenario 1	5.37E-02	1.08E-04	--
8531	640736.2	4169948.9	Worker	Scenario 1	5.79E-02	1.17E-04	--
8532	640836.2	4169948.9	Worker	Scenario 1	6.31E-02	1.28E-04	--
8533	640936.2	4169948.9	Worker	Scenario 1	7.02E-02	1.42E-04	--
8534	641036.2	4169948.9	Worker	Scenario 1	8.08E-02	1.63E-04	--
8535	641136.2	4169948.9	Worker	Scenario 1	1.01E-01	2.04E-04	--
8536	641236.2	4169948.9	Worker	Scenario 1	1.63E-01	3.29E-04	--
8537	641336.2	4169948.9	Worker	Scenario 1	6.41E-01	1.29E-03	--
8538	641436.2	4169948.9	Worker	Scenario 1	2.23E-01	4.51E-04	--
8539	641536.2	4169948.9	Worker	Scenario 1	1.48E-01	3.00E-04	--
8540	641636.2	4169948.9	Worker	Scenario 1	1.20E-01	2.41E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8541	641736.2	4169948.9	Worker	Scenario 1	1.05E-01	2.12E-04	--
8542	641836.2	4169948.9	Worker	Scenario 1	9.61E-02	1.94E-04	--
8543	641936.2	4169948.9	Worker	Scenario 1	9.05E-02	1.83E-04	--
8544	642036.2	4169948.9	Worker	Scenario 1	8.69E-02	1.75E-04	--
8545	642136.2	4169948.9	Worker	Scenario 1	8.40E-02	1.70E-04	--
8546	642236.2	4169948.9	Worker	Scenario 1	8.23E-02	1.66E-04	--
8547	643236.2	4169948.9	Worker	Scenario 1	6.98E-02	1.41E-04	--
8548	643336.2	4169948.9	Worker	Scenario 1	6.86E-02	1.39E-04	--
8549	643436.2	4169948.9	Worker	Scenario 1	6.75E-02	1.36E-04	--
8550	643536.2	4169948.9	Worker	Scenario 1	6.63E-02	1.34E-04	--
8551	643636.2	4169948.9	Worker	Scenario 1	6.50E-02	1.31E-04	--
8552	643736.2	4169948.9	Worker	Scenario 1	6.34E-02	1.28E-04	--
8553	643836.2	4169948.9	Worker	Scenario 1	6.16E-02	1.24E-04	--
8554	643936.2	4169948.9	Worker	Scenario 1	5.97E-02	1.21E-04	--
8555	644036.2	4169948.9	Worker	Scenario 1	5.82E-02	1.17E-04	--
8556	644236.2	4169948.9	Worker	Scenario 1	5.64E-02	1.14E-04	--
8557	635636.2	4170048.9	Worker	Scenario 1	7.40E-03	1.49E-05	--
8558	635736.2	4170048.9	Worker	Scenario 1	7.13E-03	1.44E-05	--
8559	635836.2	4170048.9	Worker	Scenario 1	7.38E-03	1.49E-05	--
8560	635936.2	4170048.9	Worker	Scenario 1	7.83E-03	1.58E-05	--
8561	636036.2	4170048.9	Worker	Scenario 1	8.15E-03	1.65E-05	--
8562	636136.2	4170048.9	Worker	Scenario 1	8.37E-03	1.69E-05	--
8563	636236.2	4170048.9	Worker	Scenario 1	8.51E-03	1.72E-05	--
8564	636336.2	4170048.9	Worker	Scenario 1	8.71E-03	1.76E-05	--
8565	636436.2	4170048.9	Worker	Scenario 1	8.98E-03	1.81E-05	--
8566	636536.2	4170048.9	Worker	Scenario 1	9.10E-03	1.84E-05	--
8567	636636.2	4170048.9	Worker	Scenario 1	9.00E-03	1.82E-05	--
8568	636936.2	4170048.9	Worker	Scenario 1	1.06E-02	2.14E-05	--
8569	637036.2	4170048.9	Worker	Scenario 1	1.10E-02	2.21E-05	--
8570	637136.2	4170048.9	Worker	Scenario 1	1.13E-02	2.29E-05	--
8571	637236.2	4170048.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
8572	637336.2	4170048.9	Worker	Scenario 1	1.21E-02	2.44E-05	--
8573	637436.2	4170048.9	Worker	Scenario 1	1.23E-02	2.49E-05	--
8574	637636.2	4170048.9	Worker	Scenario 1	1.37E-02	2.77E-05	--
8575	637736.2	4170048.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
8576	637836.2	4170048.9	Worker	Scenario 1	1.49E-02	3.00E-05	--
8577	639036.2	4170048.9	Worker	Scenario 1	2.41E-02	4.88E-05	--
8578	639136.2	4170048.9	Worker	Scenario 1	2.51E-02	5.07E-05	--
8579	639236.2	4170048.9	Worker	Scenario 1	2.61E-02	5.26E-05	--
8580	639336.2	4170048.9	Worker	Scenario 1	2.71E-02	5.48E-05	--
8581	639436.2	4170048.9	Worker	Scenario 1	2.82E-02	5.70E-05	--
8582	639536.2	4170048.9	Worker	Scenario 1	2.95E-02	5.95E-05	--
8583	639636.2	4170048.9	Worker	Scenario 1	3.08E-02	6.22E-05	--
8584	639736.2	4170048.9	Worker	Scenario 1	3.22E-02	6.50E-05	--
8585	639836.2	4170048.9	Worker	Scenario 1	3.37E-02	6.81E-05	--
8586	639936.2	4170048.9	Worker	Scenario 1	3.54E-02	7.15E-05	--
8587	640036.2	4170048.9	Worker	Scenario 1	3.72E-02	7.51E-05	--
8588	640136.2	4170048.9	Worker	Scenario 1	3.91E-02	7.90E-05	--
8589	640236.2	4170048.9	Worker	Scenario 1	4.12E-02	8.33E-05	--
8590	640336.2	4170048.9	Worker	Scenario 1	4.36E-02	8.80E-05	--
8591	640436.2	4170048.9	Worker	Scenario 1	4.61E-02	9.32E-05	--
8592	640536.2	4170048.9	Worker	Scenario 1	4.90E-02	9.90E-05	--
8593	640636.2	4170048.9	Worker	Scenario 1	5.23E-02	1.06E-04	--
8594	640736.2	4170048.9	Worker	Scenario 1	5.62E-02	1.13E-04	--
8595	640836.2	4170048.9	Worker	Scenario 1	6.10E-02	1.23E-04	--
8596	640936.2	4170048.9	Worker	Scenario 1	6.73E-02	1.36E-04	--
8597	641036.2	4170048.9	Worker	Scenario 1	7.67E-02	1.55E-04	--
8598	641136.2	4170048.9	Worker	Scenario 1	9.41E-02	1.90E-04	--
8599	641236.2	4170048.9	Worker	Scenario 1	1.49E-01	3.01E-04	--
8600	641336.2	4170048.9	Worker	Scenario 1	5.71E-01	1.15E-03	--
8601	641436.2	4170048.9	Worker	Scenario 1	1.86E-01	3.76E-04	--
8602	641536.2	4170048.9	Worker	Scenario 1	1.26E-01	2.55E-04	--
8603	641636.2	4170048.9	Worker	Scenario 1	1.04E-01	2.11E-04	--
8604	641736.2	4170048.9	Worker	Scenario 1	9.35E-02	1.89E-04	--
8605	641836.2	4170048.9	Worker	Scenario 1	8.69E-02	1.76E-04	--
8606	641936.2	4170048.9	Worker	Scenario 1	8.27E-02	1.67E-04	--
8607	642036.2	4170048.9	Worker	Scenario 1	7.98E-02	1.61E-04	--
8608	642136.2	4170048.9	Worker	Scenario 1	7.79E-02	1.57E-04	--
8609	635736.2	4170148.9	Worker	Scenario 1	7.25E-03	1.47E-05	--
8610	635836.2	4170148.9	Worker	Scenario 1	7.03E-03	1.42E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8611	635936.2	4170148.9	Worker	Scenario 1	7.51E-03	1.52E-05	--
8612	636036.2	4170148.9	Worker	Scenario 1	8.09E-03	1.63E-05	--
8613	636136.2	4170148.9	Worker	Scenario 1	8.49E-03	1.72E-05	--
8614	636236.2	4170148.9	Worker	Scenario 1	8.63E-03	1.74E-05	--
8615	636336.2	4170148.9	Worker	Scenario 1	8.92E-03	1.80E-05	--
8616	636436.2	4170148.9	Worker	Scenario 1	9.18E-03	1.85E-05	--
8617	636536.2	4170148.9	Worker	Scenario 1	9.43E-03	1.90E-05	--
8618	636736.2	4170148.9	Worker	Scenario 1	9.58E-03	1.93E-05	--
8619	636836.2	4170148.9	Worker	Scenario 1	1.07E-02	2.16E-05	--
8620	636936.2	4170148.9	Worker	Scenario 1	1.11E-02	2.24E-05	--
8621	637036.2	4170148.9	Worker	Scenario 1	1.14E-02	2.31E-05	--
8622	637136.2	4170148.9	Worker	Scenario 1	1.19E-02	2.40E-05	--
8623	637236.2	4170148.9	Worker	Scenario 1	1.23E-02	2.49E-05	--
8624	637336.2	4170148.9	Worker	Scenario 1	1.23E-02	2.49E-05	--
8625	637636.2	4170148.9	Worker	Scenario 1	1.46E-02	2.94E-05	--
8626	637736.2	4170148.9	Worker	Scenario 1	1.50E-02	3.02E-05	--
8627	637836.2	4170148.9	Worker	Scenario 1	1.53E-02	3.08E-05	--
8628	639036.2	4170148.9	Worker	Scenario 1	2.41E-02	4.87E-05	--
8629	639136.2	4170148.9	Worker	Scenario 1	2.50E-02	5.05E-05	--
8630	639236.2	4170148.9	Worker	Scenario 1	2.60E-02	5.25E-05	--
8631	639336.2	4170148.9	Worker	Scenario 1	2.70E-02	5.46E-05	--
8632	639436.2	4170148.9	Worker	Scenario 1	2.81E-02	5.68E-05	--
8633	639536.2	4170148.9	Worker	Scenario 1	2.93E-02	5.91E-05	--
8634	639636.2	4170148.9	Worker	Scenario 1	3.05E-02	6.17E-05	--
8635	639736.2	4170148.9	Worker	Scenario 1	3.19E-02	6.45E-05	--
8636	639836.2	4170148.9	Worker	Scenario 1	3.34E-02	6.75E-05	--
8637	639936.2	4170148.9	Worker	Scenario 1	3.50E-02	7.08E-05	--
8638	640036.2	4170148.9	Worker	Scenario 1	3.68E-02	7.43E-05	--
8639	640136.2	4170148.9	Worker	Scenario 1	3.86E-02	7.80E-05	--
8640	640236.2	4170148.9	Worker	Scenario 1	4.06E-02	8.21E-05	--
8641	640336.2	4170148.9	Worker	Scenario 1	4.28E-02	8.65E-05	--
8642	640436.2	4170148.9	Worker	Scenario 1	4.52E-02	9.13E-05	--
8643	640536.2	4170148.9	Worker	Scenario 1	4.78E-02	9.66E-05	--
8644	640636.2	4170148.9	Worker	Scenario 1	5.08E-02	1.03E-04	--
8645	640736.2	4170148.9	Worker	Scenario 1	5.43E-02	1.10E-04	--
8646	640836.2	4170148.9	Worker	Scenario 1	5.85E-02	1.18E-04	--
8647	640936.2	4170148.9	Worker	Scenario 1	6.40E-02	1.29E-04	--
8648	641036.2	4170148.9	Worker	Scenario 1	7.17E-02	1.45E-04	--
8649	641136.2	4170148.9	Worker	Scenario 1	8.47E-02	1.71E-04	--
8650	641236.2	4170148.9	Worker	Scenario 1	1.13E-01	2.29E-04	--
8651	641336.2	4170148.9	Worker	Scenario 1	1.32E-01	2.67E-04	--
8652	641436.2	4170148.9	Worker	Scenario 1	1.08E-01	2.18E-04	--
8653	641536.2	4170148.9	Worker	Scenario 1	9.44E-02	1.91E-04	--
8654	641636.2	4170148.9	Worker	Scenario 1	8.62E-02	1.74E-04	--
8655	641736.2	4170148.9	Worker	Scenario 1	8.10E-02	1.64E-04	--
8656	641836.2	4170148.9	Worker	Scenario 1	7.74E-02	1.56E-04	--
8657	641936.2	4170148.9	Worker	Scenario 1	7.48E-02	1.51E-04	--
8658	642036.2	4170148.9	Worker	Scenario 1	7.29E-02	1.47E-04	--
8659	642436.2	4170148.9	Worker	Scenario 1	7.04E-02	1.42E-04	--
8660	642536.2	4170148.9	Worker	Scenario 1	6.97E-02	1.41E-04	--
8661	642636.2	4170148.9	Worker	Scenario 1	6.85E-02	1.38E-04	--
8662	642736.2	4170148.9	Worker	Scenario 1	6.72E-02	1.36E-04	--
8663	642836.2	4170148.9	Worker	Scenario 1	6.58E-02	1.33E-04	--
8664	642936.2	4170148.9	Worker	Scenario 1	6.49E-02	1.31E-04	--
8665	643036.2	4170148.9	Worker	Scenario 1	6.40E-02	1.29E-04	--
8666	643136.2	4170148.9	Worker	Scenario 1	6.32E-02	1.28E-04	--
8667	643236.2	4170148.9	Worker	Scenario 1	6.24E-02	1.26E-04	--
8668	643336.2	4170148.9	Worker	Scenario 1	6.15E-02	1.24E-04	--
8669	635836.2	4170248.9	Worker	Scenario 1	7.21E-03	1.46E-05	--
8670	635936.2	4170248.9	Worker	Scenario 1	7.18E-03	1.45E-05	--
8671	636036.2	4170248.9	Worker	Scenario 1	7.66E-03	1.55E-05	--
8672	636136.2	4170248.9	Worker	Scenario 1	8.25E-03	1.67E-05	--
8673	636236.2	4170248.9	Worker	Scenario 1	9.13E-03	1.84E-05	--
8674	636336.2	4170248.9	Worker	Scenario 1	9.09E-03	1.84E-05	--
8675	636636.2	4170248.9	Worker	Scenario 1	9.56E-03	1.93E-05	--
8676	636736.2	4170248.9	Worker	Scenario 1	1.03E-02	2.07E-05	--
8677	636836.2	4170248.9	Worker	Scenario 1	1.09E-02	2.20E-05	--
8678	636936.2	4170248.9	Worker	Scenario 1	1.15E-02	2.33E-05	--
8679	637036.2	4170248.9	Worker	Scenario 1	1.18E-02	2.39E-05	--
8680	637136.2	4170248.9	Worker	Scenario 1	1.22E-02	2.47E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8681	637236.2	4170248.9	Worker	Scenario 1	1.22E-02	2.47E-05	--
8682	637536.2	4170248.9	Worker	Scenario 1	1.42E-02	2.87E-05	--
8683	637636.2	4170248.9	Worker	Scenario 1	1.48E-02	3.00E-05	--
8684	637736.2	4170248.9	Worker	Scenario 1	1.50E-02	3.02E-05	--
8685	637836.2	4170248.9	Worker	Scenario 1	1.51E-02	3.04E-05	--
8686	637936.2	4170248.9	Worker	Scenario 1	1.58E-02	3.20E-05	--
8687	638036.2	4170248.9	Worker	Scenario 1	1.61E-02	3.24E-05	--
8688	638936.2	4170248.9	Worker	Scenario 1	2.32E-02	4.69E-05	--
8689	639036.2	4170248.9	Worker	Scenario 1	2.40E-02	4.86E-05	--
8690	639136.2	4170248.9	Worker	Scenario 1	2.49E-02	5.04E-05	--
8691	639236.2	4170248.9	Worker	Scenario 1	2.59E-02	5.23E-05	--
8692	639336.2	4170248.9	Worker	Scenario 1	2.69E-02	5.43E-05	--
8693	639436.2	4170248.9	Worker	Scenario 1	2.75E-02	5.55E-05	--
8694	639536.2	4170248.9	Worker	Scenario 1	2.91E-02	5.88E-05	--
8695	639636.2	4170248.9	Worker	Scenario 1	3.04E-02	6.13E-05	--
8696	639736.2	4170248.9	Worker	Scenario 1	3.17E-02	6.40E-05	--
8697	639836.2	4170248.9	Worker	Scenario 1	3.31E-02	6.70E-05	--
8698	639936.2	4170248.9	Worker	Scenario 1	3.47E-02	7.01E-05	--
8699	640036.2	4170248.9	Worker	Scenario 1	3.63E-02	7.34E-05	--
8700	640136.2	4170248.9	Worker	Scenario 1	3.81E-02	7.69E-05	--
8701	640236.2	4170248.9	Worker	Scenario 1	4.00E-02	8.08E-05	--
8702	640336.2	4170248.9	Worker	Scenario 1	4.20E-02	8.49E-05	--
8703	640436.2	4170248.9	Worker	Scenario 1	4.42E-02	8.94E-05	--
8704	640536.2	4170248.9	Worker	Scenario 1	4.67E-02	9.42E-05	--
8705	640636.2	4170248.9	Worker	Scenario 1	4.94E-02	9.97E-05	--
8706	640736.2	4170248.9	Worker	Scenario 1	5.25E-02	1.06E-04	--
8707	640836.2	4170248.9	Worker	Scenario 1	5.62E-02	1.13E-04	--
8708	640936.2	4170248.9	Worker	Scenario 1	6.07E-02	1.23E-04	--
8709	641036.2	4170248.9	Worker	Scenario 1	6.65E-02	1.34E-04	--
8710	641136.2	4170248.9	Worker	Scenario 1	7.41E-02	1.50E-04	--
8711	641236.2	4170248.9	Worker	Scenario 1	8.18E-02	1.65E-04	--
8712	641336.2	4170248.9	Worker	Scenario 1	8.30E-02	1.68E-04	--
8713	641436.2	4170248.9	Worker	Scenario 1	7.93E-02	1.60E-04	--
8714	641536.2	4170248.9	Worker	Scenario 1	7.58E-02	1.53E-04	--
8715	641636.2	4170248.9	Worker	Scenario 1	7.30E-02	1.48E-04	--
8716	641736.2	4170248.9	Worker	Scenario 1	7.09E-02	1.43E-04	--
8717	641836.2	4170248.9	Worker	Scenario 1	6.92E-02	1.40E-04	--
8718	641936.2	4170248.9	Worker	Scenario 1	6.79E-02	1.37E-04	--
8719	642036.2	4170248.9	Worker	Scenario 1	6.69E-02	1.35E-04	--
8720	642136.2	4170248.9	Worker	Scenario 1	6.64E-02	1.34E-04	--
8721	642236.2	4170248.9	Worker	Scenario 1	6.63E-02	1.34E-04	--
8722	642336.2	4170248.9	Worker	Scenario 1	6.63E-02	1.34E-04	--
8723	642436.2	4170248.9	Worker	Scenario 1	6.60E-02	1.33E-04	--
8724	642536.2	4170248.9	Worker	Scenario 1	6.54E-02	1.32E-04	--
8725	642636.2	4170248.9	Worker	Scenario 1	6.44E-02	1.30E-04	--
8726	642736.2	4170248.9	Worker	Scenario 1	6.32E-02	1.28E-04	--
8727	642836.2	4170248.9	Worker	Scenario 1	6.20E-02	1.25E-04	--
8728	642936.2	4170248.9	Worker	Scenario 1	6.12E-02	1.24E-04	--
8729	643036.2	4170248.9	Worker	Scenario 1	6.05E-02	1.22E-04	--
8730	643136.2	4170248.9	Worker	Scenario 1	5.99E-02	1.21E-04	--
8731	643236.2	4170248.9	Worker	Scenario 1	5.91E-02	1.19E-04	--
8732	643336.2	4170248.9	Worker	Scenario 1	5.83E-02	1.18E-04	--
8733	635636.2	4170348.9	Worker	Scenario 1	7.13E-03	1.44E-05	--
8734	635936.2	4170348.9	Worker	Scenario 1	7.52E-03	1.52E-05	--
8735	636036.2	4170348.9	Worker	Scenario 1	7.42E-03	1.50E-05	--
8736	636136.2	4170348.9	Worker	Scenario 1	8.06E-03	1.63E-05	--
8737	636236.2	4170348.9	Worker	Scenario 1	8.83E-03	1.78E-05	--
8738	636536.2	4170348.9	Worker	Scenario 1	9.65E-03	1.95E-05	--
8739	636636.2	4170348.9	Worker	Scenario 1	9.96E-03	2.01E-05	--
8740	636736.2	4170348.9	Worker	Scenario 1	1.04E-02	2.10E-05	--
8741	636836.2	4170348.9	Worker	Scenario 1	1.08E-02	2.19E-05	--
8742	636936.2	4170348.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
8743	637036.2	4170348.9	Worker	Scenario 1	1.20E-02	2.43E-05	--
8744	637136.2	4170348.9	Worker	Scenario 1	1.22E-02	2.46E-05	--
8745	637236.2	4170348.9	Worker	Scenario 1	1.22E-02	2.46E-05	--
8746	637436.2	4170348.9	Worker	Scenario 1	1.27E-02	2.57E-05	--
8747	637536.2	4170348.9	Worker	Scenario 1	1.43E-02	2.89E-05	--
8748	637636.2	4170348.9	Worker	Scenario 1	1.46E-02	2.95E-05	--
8749	637736.2	4170348.9	Worker	Scenario 1	1.49E-02	3.02E-05	--
8750	637836.2	4170348.9	Worker	Scenario 1	1.55E-02	3.13E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8751	637936.2	4170348.9	Worker	Scenario 1	1.59E-02	3.22E-05	--
8752	638036.2	4170348.9	Worker	Scenario 1	1.63E-02	3.30E-05	--
8753	638136.2	4170348.9	Worker	Scenario 1	1.76E-02	3.55E-05	--
8754	638236.2	4170348.9	Worker	Scenario 1	1.77E-02	3.58E-05	--
8755	638336.2	4170348.9	Worker	Scenario 1	1.86E-02	3.76E-05	--
8756	638436.2	4170348.9	Worker	Scenario 1	1.92E-02	3.89E-05	--
8757	638736.2	4170348.9	Worker	Scenario 1	2.16E-02	4.37E-05	--
8758	638836.2	4170348.9	Worker	Scenario 1	2.24E-02	4.52E-05	--
8759	638936.2	4170348.9	Worker	Scenario 1	2.32E-02	4.68E-05	--
8760	639036.2	4170348.9	Worker	Scenario 1	2.39E-02	4.84E-05	--
8761	639136.2	4170348.9	Worker	Scenario 1	2.48E-02	5.01E-05	--
8762	639236.2	4170348.9	Worker	Scenario 1	2.53E-02	5.11E-05	--
8763	639336.2	4170348.9	Worker	Scenario 1	2.62E-02	5.29E-05	--
8764	639436.2	4170348.9	Worker	Scenario 1	2.72E-02	5.49E-05	--
8765	639536.2	4170348.9	Worker	Scenario 1	2.89E-02	5.85E-05	--
8766	639636.2	4170348.9	Worker	Scenario 1	3.02E-02	6.09E-05	--
8767	639736.2	4170348.9	Worker	Scenario 1	3.15E-02	6.35E-05	--
8768	639836.2	4170348.9	Worker	Scenario 1	3.29E-02	6.64E-05	--
8769	639936.2	4170348.9	Worker	Scenario 1	3.43E-02	6.93E-05	--
8770	640036.2	4170348.9	Worker	Scenario 1	3.59E-02	7.24E-05	--
8771	640136.2	4170348.9	Worker	Scenario 1	3.75E-02	7.58E-05	--
8772	640236.2	4170348.9	Worker	Scenario 1	3.93E-02	7.93E-05	--
8773	640336.2	4170348.9	Worker	Scenario 1	4.12E-02	8.32E-05	--
8774	640436.2	4170348.9	Worker	Scenario 1	4.32E-02	8.73E-05	--
8775	640536.2	4170348.9	Worker	Scenario 1	4.54E-02	9.17E-05	--
8776	640636.2	4170348.9	Worker	Scenario 1	4.79E-02	9.67E-05	--
8777	640736.2	4170348.9	Worker	Scenario 1	5.06E-02	1.02E-04	--
8778	640836.2	4170348.9	Worker	Scenario 1	5.37E-02	1.08E-04	--
8779	640936.2	4170348.9	Worker	Scenario 1	5.72E-02	1.16E-04	--
8780	641036.2	4170348.9	Worker	Scenario 1	6.11E-02	1.23E-04	--
8781	641136.2	4170348.9	Worker	Scenario 1	6.50E-02	1.31E-04	--
8782	641236.2	4170348.9	Worker	Scenario 1	6.78E-02	1.37E-04	--
8783	641336.2	4170348.9	Worker	Scenario 1	6.85E-02	1.38E-04	--
8784	641436.2	4170348.9	Worker	Scenario 1	6.76E-02	1.37E-04	--
8785	641536.2	4170348.9	Worker	Scenario 1	6.65E-02	1.34E-04	--
8786	641636.2	4170348.9	Worker	Scenario 1	6.52E-02	1.32E-04	--
8787	641736.2	4170348.9	Worker	Scenario 1	6.41E-02	1.30E-04	--
8788	641836.2	4170348.9	Worker	Scenario 1	6.32E-02	1.28E-04	--
8789	641936.2	4170348.9	Worker	Scenario 1	6.26E-02	1.26E-04	--
8790	642036.2	4170348.9	Worker	Scenario 1	6.21E-02	1.25E-04	--
8791	642136.2	4170348.9	Worker	Scenario 1	6.20E-02	1.25E-04	--
8792	642236.2	4170348.9	Worker	Scenario 1	6.22E-02	1.26E-04	--
8793	642336.2	4170348.9	Worker	Scenario 1	6.23E-02	1.26E-04	--
8794	642436.2	4170348.9	Worker	Scenario 1	6.22E-02	1.26E-04	--
8795	642536.2	4170348.9	Worker	Scenario 1	6.16E-02	1.24E-04	--
8796	642636.2	4170348.9	Worker	Scenario 1	6.07E-02	1.23E-04	--
8797	642736.2	4170348.9	Worker	Scenario 1	5.97E-02	1.21E-04	--
8798	642836.2	4170348.9	Worker	Scenario 1	5.86E-02	1.18E-04	--
8799	642936.2	4170348.9	Worker	Scenario 1	5.79E-02	1.17E-04	--
8800	643036.2	4170348.9	Worker	Scenario 1	5.72E-02	1.16E-04	--
8801	643136.2	4170348.9	Worker	Scenario 1	5.67E-02	1.15E-04	--
8802	643236.2	4170348.9	Worker	Scenario 1	5.61E-02	1.13E-04	--
8803	643336.2	4170348.9	Worker	Scenario 1	5.54E-02	1.12E-04	--
8804	643436.2	4170348.9	Worker	Scenario 1	5.48E-02	1.11E-04	--
8805	643536.2	4170348.9	Worker	Scenario 1	5.40E-02	1.09E-04	--
8806	643636.2	4170348.9	Worker	Scenario 1	5.33E-02	1.08E-04	--
8807	635636.2	4170448.9	Worker	Scenario 1	7.23E-03	1.46E-05	--
8808	635836.2	4170448.9	Worker	Scenario 1	7.60E-03	1.54E-05	--
8809	636036.2	4170448.9	Worker	Scenario 1	8.00E-03	1.62E-05	--
8810	636336.2	4170448.9	Worker	Scenario 1	9.11E-03	1.84E-05	--
8811	636436.2	4170448.9	Worker	Scenario 1	9.62E-03	1.94E-05	--
8812	636536.2	4170448.9	Worker	Scenario 1	9.89E-03	2.00E-05	--
8813	636636.2	4170448.9	Worker	Scenario 1	1.01E-02	2.04E-05	--
8814	636736.2	4170448.9	Worker	Scenario 1	1.05E-02	2.11E-05	--
8815	636836.2	4170448.9	Worker	Scenario 1	1.09E-02	2.21E-05	--
8816	636936.2	4170448.9	Worker	Scenario 1	1.14E-02	2.30E-05	--
8817	637036.2	4170448.9	Worker	Scenario 1	1.19E-02	2.40E-05	--
8818	637136.2	4170448.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
8819	637436.2	4170448.9	Worker	Scenario 1	1.40E-02	2.82E-05	--
8820	637536.2	4170448.9	Worker	Scenario 1	1.42E-02	2.88E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8821	637636.2	4170448.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
8822	637736.2	4170448.9	Worker	Scenario 1	1.51E-02	3.05E-05	--
8823	637836.2	4170448.9	Worker	Scenario 1	1.57E-02	3.17E-05	--
8824	637936.2	4170448.9	Worker	Scenario 1	1.61E-02	3.26E-05	--
8825	638036.2	4170448.9	Worker	Scenario 1	1.65E-02	3.33E-05	--
8826	638136.2	4170448.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
8827	638236.2	4170448.9	Worker	Scenario 1	1.72E-02	3.47E-05	--
8828	638336.2	4170448.9	Worker	Scenario 1	1.85E-02	3.74E-05	--
8829	638636.2	4170448.9	Worker	Scenario 1	2.09E-02	4.22E-05	--
8830	638736.2	4170448.9	Worker	Scenario 1	2.10E-02	4.24E-05	--
8831	638836.2	4170448.9	Worker	Scenario 1	2.17E-02	4.37E-05	--
8832	638936.2	4170448.9	Worker	Scenario 1	2.17E-02	4.38E-05	--
8833	639036.2	4170448.9	Worker	Scenario 1	2.25E-02	4.54E-05	--
8834	639136.2	4170448.9	Worker	Scenario 1	2.33E-02	4.71E-05	--
8835	639236.2	4170448.9	Worker	Scenario 1	2.43E-02	4.92E-05	--
8836	639336.2	4170448.9	Worker	Scenario 1	2.50E-02	5.04E-05	--
8837	639436.2	4170448.9	Worker	Scenario 1	2.65E-02	5.35E-05	--
8838	639536.2	4170448.9	Worker	Scenario 1	2.88E-02	5.81E-05	--
8839	639636.2	4170448.9	Worker	Scenario 1	3.00E-02	6.05E-05	--
8840	639736.2	4170448.9	Worker	Scenario 1	3.12E-02	6.30E-05	--
8841	639836.2	4170448.9	Worker	Scenario 1	3.25E-02	6.57E-05	--
8842	639936.2	4170448.9	Worker	Scenario 1	3.39E-02	6.85E-05	--
8843	640036.2	4170448.9	Worker	Scenario 1	3.54E-02	7.14E-05	--
8844	640136.2	4170448.9	Worker	Scenario 1	3.69E-02	7.45E-05	--
8845	640236.2	4170448.9	Worker	Scenario 1	3.85E-02	7.78E-05	--
8846	640336.2	4170448.9	Worker	Scenario 1	4.03E-02	8.13E-05	--
8847	640436.2	4170448.9	Worker	Scenario 1	4.21E-02	8.51E-05	--
8848	640536.2	4170448.9	Worker	Scenario 1	4.41E-02	8.91E-05	--
8849	640636.2	4170448.9	Worker	Scenario 1	4.63E-02	9.35E-05	--
8850	640736.2	4170448.9	Worker	Scenario 1	4.86E-02	9.82E-05	--
8851	640836.2	4170448.9	Worker	Scenario 1	5.11E-02	1.03E-04	--
8852	640936.2	4170448.9	Worker	Scenario 1	5.37E-02	1.09E-04	--
8853	641036.2	4170448.9	Worker	Scenario 1	5.63E-02	1.14E-04	--
8854	641136.2	4170448.9	Worker	Scenario 1	5.85E-02	1.18E-04	--
8855	641236.2	4170448.9	Worker	Scenario 1	5.99E-02	1.21E-04	--
8856	641336.2	4170448.9	Worker	Scenario 1	6.06E-02	1.22E-04	--
8857	641436.2	4170448.9	Worker	Scenario 1	6.07E-02	1.23E-04	--
8858	641536.2	4170448.9	Worker	Scenario 1	6.02E-02	1.22E-04	--
8859	641636.2	4170448.9	Worker	Scenario 1	5.97E-02	1.21E-04	--
8860	641736.2	4170448.9	Worker	Scenario 1	5.91E-02	1.19E-04	--
8861	641836.2	4170448.9	Worker	Scenario 1	5.86E-02	1.18E-04	--
8862	641936.2	4170448.9	Worker	Scenario 1	5.82E-02	1.18E-04	--
8863	642036.2	4170448.9	Worker	Scenario 1	5.82E-02	1.17E-04	--
8864	642136.2	4170448.9	Worker	Scenario 1	5.83E-02	1.18E-04	--
8865	642236.2	4170448.9	Worker	Scenario 1	5.86E-02	1.18E-04	--
8866	642336.2	4170448.9	Worker	Scenario 1	5.88E-02	1.19E-04	--
8867	642436.2	4170448.9	Worker	Scenario 1	5.87E-02	1.19E-04	--
8868	642536.2	4170448.9	Worker	Scenario 1	5.82E-02	1.18E-04	--
8869	642636.2	4170448.9	Worker	Scenario 1	5.74E-02	1.16E-04	--
8870	642736.2	4170448.9	Worker	Scenario 1	5.65E-02	1.14E-04	--
8871	642836.2	4170448.9	Worker	Scenario 1	5.56E-02	1.12E-04	--
8872	642936.2	4170448.9	Worker	Scenario 1	5.48E-02	1.11E-04	--
8873	643036.2	4170448.9	Worker	Scenario 1	5.43E-02	1.10E-04	--
8874	643136.2	4170448.9	Worker	Scenario 1	5.39E-02	1.09E-04	--
8875	643236.2	4170448.9	Worker	Scenario 1	5.34E-02	1.08E-04	--
8876	643336.2	4170448.9	Worker	Scenario 1	5.28E-02	1.07E-04	--
8877	643436.2	4170448.9	Worker	Scenario 1	5.22E-02	1.05E-04	--
8878	643536.2	4170448.9	Worker	Scenario 1	5.15E-02	1.04E-04	--
8879	635836.2	4170548.9	Worker	Scenario 1	7.69E-03	1.55E-05	--
8880	635936.2	4170548.9	Worker	Scenario 1	7.91E-03	1.60E-05	--
8881	636236.2	4170548.9	Worker	Scenario 1	8.88E-03	1.79E-05	--
8882	636336.2	4170548.9	Worker	Scenario 1	9.23E-03	1.86E-05	--
8883	636436.2	4170548.9	Worker	Scenario 1	9.43E-03	1.90E-05	--
8884	636536.2	4170548.9	Worker	Scenario 1	9.90E-03	2.00E-05	--
8885	636636.2	4170548.9	Worker	Scenario 1	1.03E-02	2.07E-05	--
8886	636736.2	4170548.9	Worker	Scenario 1	1.05E-02	2.11E-05	--
8887	636836.2	4170548.9	Worker	Scenario 1	1.11E-02	2.23E-05	--
8888	636936.2	4170548.9	Worker	Scenario 1	1.15E-02	2.33E-05	--
8889	637036.2	4170548.9	Worker	Scenario 1	1.21E-02	2.44E-05	--
8890	637136.2	4170548.9	Worker	Scenario 1	1.21E-02	2.44E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8891	637336.2	4170548.9	Worker	Scenario 1	1.27E-02	2.56E-05	--
8892	637436.2	4170548.9	Worker	Scenario 1	1.40E-02	2.82E-05	--
8893	637536.2	4170548.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
8894	637636.2	4170548.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
8895	637736.2	4170548.9	Worker	Scenario 1	1.51E-02	3.05E-05	--
8896	637836.2	4170548.9	Worker	Scenario 1	1.56E-02	3.15E-05	--
8897	637936.2	4170548.9	Worker	Scenario 1	1.61E-02	3.24E-05	--
8898	638036.2	4170548.9	Worker	Scenario 1	1.65E-02	3.33E-05	--
8899	638136.2	4170548.9	Worker	Scenario 1	1.69E-02	3.41E-05	--
8900	638236.2	4170548.9	Worker	Scenario 1	1.72E-02	3.48E-05	--
8901	638336.2	4170548.9	Worker	Scenario 1	1.85E-02	3.74E-05	--
8902	638536.2	4170548.9	Worker	Scenario 1	1.99E-02	4.02E-05	--
8903	638636.2	4170548.9	Worker	Scenario 1	2.03E-02	4.10E-05	--
8904	638736.2	4170548.9	Worker	Scenario 1	2.09E-02	4.21E-05	--
8905	638836.2	4170548.9	Worker	Scenario 1	2.16E-02	4.37E-05	--
8906	638936.2	4170548.9	Worker	Scenario 1	2.16E-02	4.36E-05	--
8907	639036.2	4170548.9	Worker	Scenario 1	2.24E-02	4.53E-05	--
8908	639136.2	4170548.9	Worker	Scenario 1	2.33E-02	4.70E-05	--
8909	639236.2	4170548.9	Worker	Scenario 1	2.37E-02	4.79E-05	--
8910	639336.2	4170548.9	Worker	Scenario 1	2.50E-02	5.04E-05	--
8911	639436.2	4170548.9	Worker	Scenario 1	2.75E-02	5.55E-05	--
8912	639536.2	4170548.9	Worker	Scenario 1	2.86E-02	5.77E-05	--
8913	639636.2	4170548.9	Worker	Scenario 1	2.97E-02	6.00E-05	--
8914	639736.2	4170548.9	Worker	Scenario 1	3.09E-02	6.24E-05	--
8915	639836.2	4170548.9	Worker	Scenario 1	3.22E-02	6.50E-05	--
8916	639936.2	4170548.9	Worker	Scenario 1	3.35E-02	6.76E-05	--
8917	640036.2	4170548.9	Worker	Scenario 1	3.49E-02	7.04E-05	--
8918	640136.2	4170548.9	Worker	Scenario 1	3.63E-02	7.33E-05	--
8919	640236.2	4170548.9	Worker	Scenario 1	3.77E-02	7.62E-05	--
8920	640336.2	4170548.9	Worker	Scenario 1	3.93E-02	7.94E-05	--
8921	640436.2	4170548.9	Worker	Scenario 1	4.10E-02	8.28E-05	--
8922	640536.2	4170548.9	Worker	Scenario 1	4.28E-02	8.64E-05	--
8923	640636.2	4170548.9	Worker	Scenario 1	4.46E-02	9.02E-05	--
8924	640736.2	4170548.9	Worker	Scenario 1	4.66E-02	9.42E-05	--
8925	640836.2	4170548.9	Worker	Scenario 1	4.86E-02	9.81E-05	--
8926	640936.2	4170548.9	Worker	Scenario 1	5.05E-02	1.02E-04	--
8927	641036.2	4170548.9	Worker	Scenario 1	5.23E-02	1.06E-04	--
8928	641136.2	4170548.9	Worker	Scenario 1	5.37E-02	1.09E-04	--
8929	641236.2	4170548.9	Worker	Scenario 1	5.46E-02	1.10E-04	--
8930	641336.2	4170548.9	Worker	Scenario 1	5.54E-02	1.12E-04	--
8931	641436.2	4170548.9	Worker	Scenario 1	5.57E-02	1.13E-04	--
8932	641536.2	4170548.9	Worker	Scenario 1	5.55E-02	1.12E-04	--
8933	641636.2	4170548.9	Worker	Scenario 1	5.54E-02	1.12E-04	--
8934	641736.2	4170548.9	Worker	Scenario 1	5.51E-02	1.11E-04	--
8935	641836.2	4170548.9	Worker	Scenario 1	5.49E-02	1.11E-04	--
8936	641936.2	4170548.9	Worker	Scenario 1	5.47E-02	1.11E-04	--
8937	642036.2	4170548.9	Worker	Scenario 1	5.49E-02	1.11E-04	--
8938	642136.2	4170548.9	Worker	Scenario 1	5.52E-02	1.11E-04	--
8939	642236.2	4170548.9	Worker	Scenario 1	5.56E-02	1.12E-04	--
8940	642336.2	4170548.9	Worker	Scenario 1	5.58E-02	1.13E-04	--
8941	642436.2	4170548.9	Worker	Scenario 1	5.56E-02	1.12E-04	--
8942	642536.2	4170548.9	Worker	Scenario 1	5.51E-02	1.11E-04	--
8943	642636.2	4170548.9	Worker	Scenario 1	5.44E-02	1.10E-04	--
8944	642736.2	4170548.9	Worker	Scenario 1	5.36E-02	1.08E-04	--
8945	642836.2	4170548.9	Worker	Scenario 1	5.28E-02	1.07E-04	--
8946	642936.2	4170548.9	Worker	Scenario 1	5.21E-02	1.05E-04	--
8947	643036.2	4170548.9	Worker	Scenario 1	5.16E-02	1.04E-04	--
8948	643136.2	4170548.9	Worker	Scenario 1	5.12E-02	1.03E-04	--
8949	643236.2	4170548.9	Worker	Scenario 1	5.08E-02	1.03E-04	--
8950	643336.2	4170548.9	Worker	Scenario 1	5.03E-02	1.02E-04	--
8951	643436.2	4170548.9	Worker	Scenario 1	4.98E-02	1.00E-04	--
8952	643536.2	4170548.9	Worker	Scenario 1	4.92E-02	9.94E-05	--
8953	635736.2	4170648.9	Worker	Scenario 1	7.60E-03	1.54E-05	--
8954	635836.2	4170648.9	Worker	Scenario 1	7.80E-03	1.58E-05	--
8955	636236.2	4170648.9	Worker	Scenario 1	8.91E-03	1.80E-05	--
8956	636336.2	4170648.9	Worker	Scenario 1	9.23E-03	1.86E-05	--
8957	636436.2	4170648.9	Worker	Scenario 1	9.53E-03	1.93E-05	--
8958	636536.2	4170648.9	Worker	Scenario 1	1.07E-02	2.17E-05	--
8959	636636.2	4170648.9	Worker	Scenario 1	1.09E-02	2.21E-05	--
8960	636736.2	4170648.9	Worker	Scenario 1	1.06E-02	2.14E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8961	636836.2	4170648.9	Worker	Scenario 1	1.12E-02	2.26E-05	--
8962	636936.2	4170648.9	Worker	Scenario 1	1.14E-02	2.29E-05	--
8963	637036.2	4170648.9	Worker	Scenario 1	1.19E-02	2.41E-05	--
8964	637336.2	4170648.9	Worker	Scenario 1	1.36E-02	2.75E-05	--
8965	637436.2	4170648.9	Worker	Scenario 1	1.39E-02	2.81E-05	--
8966	637536.2	4170648.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
8967	637636.2	4170648.9	Worker	Scenario 1	1.45E-02	2.92E-05	--
8968	637736.2	4170648.9	Worker	Scenario 1	1.51E-02	3.04E-05	--
8969	637836.2	4170648.9	Worker	Scenario 1	1.55E-02	3.14E-05	--
8970	637936.2	4170648.9	Worker	Scenario 1	1.60E-02	3.24E-05	--
8971	638036.2	4170648.9	Worker	Scenario 1	1.65E-02	3.33E-05	--
8972	638136.2	4170648.9	Worker	Scenario 1	1.71E-02	3.46E-05	--
8973	638236.2	4170648.9	Worker	Scenario 1	1.76E-02	3.55E-05	--
8974	638336.2	4170648.9	Worker	Scenario 1	1.85E-02	3.73E-05	--
8975	638536.2	4170648.9	Worker	Scenario 1	1.99E-02	4.02E-05	--
8976	638636.2	4170648.9	Worker	Scenario 1	2.04E-02	4.12E-05	--
8977	638736.2	4170648.9	Worker	Scenario 1	2.10E-02	4.24E-05	--
8978	638836.2	4170648.9	Worker	Scenario 1	2.17E-02	4.38E-05	--
8979	638936.2	4170648.9	Worker	Scenario 1	2.15E-02	4.35E-05	--
8980	639036.2	4170648.9	Worker	Scenario 1	2.24E-02	4.52E-05	--
8981	639136.2	4170648.9	Worker	Scenario 1	2.32E-02	4.70E-05	--
8982	639236.2	4170648.9	Worker	Scenario 1	2.34E-02	4.72E-05	--
8983	639336.2	4170648.9	Worker	Scenario 1	2.56E-02	5.18E-05	--
8984	639436.2	4170648.9	Worker	Scenario 1	2.73E-02	5.51E-05	--
8985	639536.2	4170648.9	Worker	Scenario 1	2.83E-02	5.72E-05	--
8986	639636.2	4170648.9	Worker	Scenario 1	2.94E-02	5.95E-05	--
8987	639736.2	4170648.9	Worker	Scenario 1	3.05E-02	6.17E-05	--
8988	639836.2	4170648.9	Worker	Scenario 1	3.17E-02	6.41E-05	--
8989	639936.2	4170648.9	Worker	Scenario 1	3.30E-02	6.66E-05	--
8990	640036.2	4170648.9	Worker	Scenario 1	3.43E-02	6.92E-05	--
8991	640136.2	4170648.9	Worker	Scenario 1	3.56E-02	7.18E-05	--
8992	640236.2	4170648.9	Worker	Scenario 1	3.69E-02	7.46E-05	--
8993	640336.2	4170648.9	Worker	Scenario 1	3.84E-02	7.75E-05	--
8994	640436.2	4170648.9	Worker	Scenario 1	3.99E-02	8.06E-05	--
8995	640536.2	4170648.9	Worker	Scenario 1	4.14E-02	8.37E-05	--
8996	640636.2	4170648.9	Worker	Scenario 1	4.31E-02	8.70E-05	--
8997	640736.2	4170648.9	Worker	Scenario 1	4.47E-02	9.02E-05	--
8998	640836.2	4170648.9	Worker	Scenario 1	4.62E-02	9.33E-05	--
8999	640936.2	4170648.9	Worker	Scenario 1	4.77E-02	9.63E-05	--
9000	641036.2	4170648.9	Worker	Scenario 1	4.90E-02	9.89E-05	--
9001	641136.2	4170648.9	Worker	Scenario 1	5.00E-02	1.01E-04	--
9002	641236.2	4170648.9	Worker	Scenario 1	5.07E-02	1.02E-04	--
9003	641336.2	4170648.9	Worker	Scenario 1	5.13E-02	1.04E-04	--
9004	641436.2	4170648.9	Worker	Scenario 1	5.18E-02	1.05E-04	--
9005	641536.2	4170648.9	Worker	Scenario 1	5.18E-02	1.05E-04	--
9006	641636.2	4170648.9	Worker	Scenario 1	5.17E-02	1.04E-04	--
9007	641736.2	4170648.9	Worker	Scenario 1	5.17E-02	1.04E-04	--
9008	641836.2	4170648.9	Worker	Scenario 1	5.17E-02	1.04E-04	--
9009	641936.2	4170648.9	Worker	Scenario 1	5.18E-02	1.05E-04	--
9010	642036.2	4170648.9	Worker	Scenario 1	5.21E-02	1.05E-04	--
9011	642136.2	4170648.9	Worker	Scenario 1	5.25E-02	1.06E-04	--
9012	642236.2	4170648.9	Worker	Scenario 1	5.29E-02	1.07E-04	--
9013	642336.2	4170648.9	Worker	Scenario 1	5.30E-02	1.07E-04	--
9014	642436.2	4170648.9	Worker	Scenario 1	5.29E-02	1.07E-04	--
9015	642536.2	4170648.9	Worker	Scenario 1	5.24E-02	1.06E-04	--
9016	642636.2	4170648.9	Worker	Scenario 1	5.17E-02	1.04E-04	--
9017	642736.2	4170648.9	Worker	Scenario 1	5.09E-02	1.03E-04	--
9018	642836.2	4170648.9	Worker	Scenario 1	5.02E-02	1.01E-04	--
9019	642936.2	4170648.9	Worker	Scenario 1	4.96E-02	1.00E-04	--
9020	643036.2	4170648.9	Worker	Scenario 1	4.92E-02	9.93E-05	--
9021	643136.2	4170648.9	Worker	Scenario 1	4.88E-02	9.86E-05	--
9022	643236.2	4170648.9	Worker	Scenario 1	4.84E-02	9.78E-05	--
9023	643336.2	4170648.9	Worker	Scenario 1	4.80E-02	9.69E-05	--
9024	643436.2	4170648.9	Worker	Scenario 1	4.75E-02	9.60E-05	--
9025	635736.2	4170748.9	Worker	Scenario 1	7.70E-03	1.56E-05	--
9026	636336.2	4170748.9	Worker	Scenario 1	9.30E-03	1.88E-05	--
9027	636436.2	4170748.9	Worker	Scenario 1	9.65E-03	1.95E-05	--
9028	636536.2	4170748.9	Worker	Scenario 1	1.07E-02	2.15E-05	--
9029	636636.2	4170748.9	Worker	Scenario 1	1.11E-02	2.24E-05	--
9030	636736.2	4170748.9	Worker	Scenario 1	1.16E-02	2.34E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9031	636836.2	4170748.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
9032	636936.2	4170748.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
9033	637236.2	4170748.9	Worker	Scenario 1	1.27E-02	2.56E-05	--
9034	637336.2	4170748.9	Worker	Scenario 1	1.36E-02	2.75E-05	--
9035	637436.2	4170748.9	Worker	Scenario 1	1.40E-02	2.84E-05	--
9036	637536.2	4170748.9	Worker	Scenario 1	1.44E-02	2.91E-05	--
9037	637636.2	4170748.9	Worker	Scenario 1	1.50E-02	3.04E-05	--
9038	637736.2	4170748.9	Worker	Scenario 1	1.51E-02	3.04E-05	--
9039	637836.2	4170748.9	Worker	Scenario 1	1.55E-02	3.14E-05	--
9040	637936.2	4170748.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
9041	638036.2	4170748.9	Worker	Scenario 1	1.63E-02	3.29E-05	--
9042	638136.2	4170748.9	Worker	Scenario 1	1.77E-02	3.58E-05	--
9043	638236.2	4170748.9	Worker	Scenario 1	1.77E-02	3.58E-05	--
9044	638336.2	4170748.9	Worker	Scenario 1	1.85E-02	3.73E-05	--
9045	638636.2	4170748.9	Worker	Scenario 1	2.04E-02	4.13E-05	--
9046	638736.2	4170748.9	Worker	Scenario 1	2.11E-02	4.27E-05	--
9047	638836.2	4170748.9	Worker	Scenario 1	2.21E-02	4.46E-05	--
9048	638936.2	4170748.9	Worker	Scenario 1	2.14E-02	4.33E-05	--
9049	639036.2	4170748.9	Worker	Scenario 1	2.23E-02	4.50E-05	--
9050	639136.2	4170748.9	Worker	Scenario 1	2.32E-02	4.69E-05	--
9051	639236.2	4170748.9	Worker	Scenario 1	2.33E-02	4.71E-05	--
9052	639336.2	4170748.9	Worker	Scenario 1	2.54E-02	5.13E-05	--
9053	639436.2	4170748.9	Worker	Scenario 1	2.70E-02	5.46E-05	--
9054	639536.2	4170748.9	Worker	Scenario 1	2.81E-02	5.67E-05	--
9055	639636.2	4170748.9	Worker	Scenario 1	2.91E-02	5.89E-05	--
9056	639736.2	4170748.9	Worker	Scenario 1	3.02E-02	6.09E-05	--
9057	639836.2	4170748.9	Worker	Scenario 1	3.13E-02	6.32E-05	--
9058	639936.2	4170748.9	Worker	Scenario 1	3.24E-02	6.55E-05	--
9059	640036.2	4170748.9	Worker	Scenario 1	3.36E-02	6.79E-05	--
9060	640136.2	4170748.9	Worker	Scenario 1	3.48E-02	7.03E-05	--
9061	640236.2	4170748.9	Worker	Scenario 1	3.61E-02	7.29E-05	--
9062	640336.2	4170748.9	Worker	Scenario 1	3.74E-02	7.56E-05	--
9063	640436.2	4170748.9	Worker	Scenario 1	3.88E-02	7.83E-05	--
9064	640536.2	4170748.9	Worker	Scenario 1	4.01E-02	8.10E-05	--
9065	640636.2	4170748.9	Worker	Scenario 1	4.15E-02	8.38E-05	--
9066	640736.2	4170748.9	Worker	Scenario 1	4.28E-02	8.64E-05	--
9067	640836.2	4170748.9	Worker	Scenario 1	4.40E-02	8.89E-05	--
9068	640936.2	4170748.9	Worker	Scenario 1	4.52E-02	9.12E-05	--
9069	641036.2	4170748.9	Worker	Scenario 1	4.62E-02	9.33E-05	--
9070	641136.2	4170748.9	Worker	Scenario 1	4.70E-02	9.50E-05	--
9071	641236.2	4170748.9	Worker	Scenario 1	4.75E-02	9.60E-05	--
9072	641336.2	4170748.9	Worker	Scenario 1	4.81E-02	9.72E-05	--
9073	641436.2	4170748.9	Worker	Scenario 1	4.86E-02	9.81E-05	--
9074	641536.2	4170748.9	Worker	Scenario 1	4.87E-02	9.84E-05	--
9075	641636.2	4170748.9	Worker	Scenario 1	4.86E-02	9.82E-05	--
9076	641736.2	4170748.9	Worker	Scenario 1	4.87E-02	9.84E-05	--
9077	641836.2	4170748.9	Worker	Scenario 1	4.89E-02	9.88E-05	--
9078	641936.2	4170748.9	Worker	Scenario 1	4.92E-02	9.94E-05	--
9079	642036.2	4170748.9	Worker	Scenario 1	4.96E-02	1.00E-04	--
9080	642136.2	4170748.9	Worker	Scenario 1	5.01E-02	1.01E-04	--
9081	642236.2	4170748.9	Worker	Scenario 1	5.05E-02	1.02E-04	--
9082	642336.2	4170748.9	Worker	Scenario 1	5.06E-02	1.02E-04	--
9083	642436.2	4170748.9	Worker	Scenario 1	5.04E-02	1.02E-04	--
9084	642536.2	4170748.9	Worker	Scenario 1	4.99E-02	1.01E-04	--
9085	642636.2	4170748.9	Worker	Scenario 1	4.93E-02	9.95E-05	--
9086	642736.2	4170748.9	Worker	Scenario 1	4.86E-02	9.81E-05	--
9087	642836.2	4170748.9	Worker	Scenario 1	4.79E-02	9.68E-05	--
9088	642936.2	4170748.9	Worker	Scenario 1	4.73E-02	9.56E-05	--
9089	643036.2	4170748.9	Worker	Scenario 1	4.70E-02	9.48E-05	--
9090	643136.2	4170748.9	Worker	Scenario 1	4.66E-02	9.41E-05	--
9091	643236.2	4170748.9	Worker	Scenario 1	4.62E-02	9.34E-05	--
9092	643336.2	4170748.9	Worker	Scenario 1	4.59E-02	9.27E-05	--
9093	636436.2	4170848.9	Worker	Scenario 1	9.76E-03	1.97E-05	--
9094	636536.2	4170848.9	Worker	Scenario 1	1.01E-02	2.04E-05	--
9095	636936.2	4170848.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
9096	637336.2	4170848.9	Worker	Scenario 1	1.33E-02	2.68E-05	--
9097	637436.2	4170848.9	Worker	Scenario 1	1.38E-02	2.79E-05	--
9098	637536.2	4170848.9	Worker	Scenario 1	1.43E-02	2.89E-05	--
9099	637636.2	4170848.9	Worker	Scenario 1	1.52E-02	3.07E-05	--
9100	637736.2	4170848.9	Worker	Scenario 1	1.57E-02	3.17E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9101	637836.2	4170848.9	Worker	Scenario 1	1.62E-02	3.27E-05	--
9102	637936.2	4170848.9	Worker	Scenario 1	1.67E-02	3.37E-05	--
9103	638036.2	4170848.9	Worker	Scenario 1	1.64E-02	3.31E-05	--
9104	638136.2	4170848.9	Worker	Scenario 1	1.71E-02	3.46E-05	--
9105	638236.2	4170848.9	Worker	Scenario 1	1.78E-02	3.59E-05	--
9106	638336.2	4170848.9	Worker	Scenario 1	1.84E-02	3.73E-05	--
9107	638536.2	4170848.9	Worker	Scenario 1	2.00E-02	4.03E-05	--
9108	638636.2	4170848.9	Worker	Scenario 1	2.06E-02	4.16E-05	--
9109	638736.2	4170848.9	Worker	Scenario 1	2.13E-02	4.30E-05	--
9110	638836.2	4170848.9	Worker	Scenario 1	2.17E-02	4.39E-05	--
9111	638936.2	4170848.9	Worker	Scenario 1	2.14E-02	4.31E-05	--
9112	639036.2	4170848.9	Worker	Scenario 1	2.22E-02	4.48E-05	--
9113	639136.2	4170848.9	Worker	Scenario 1	2.30E-02	4.65E-05	--
9114	639236.2	4170848.9	Worker	Scenario 1	2.32E-02	4.69E-05	--
9115	639336.2	4170848.9	Worker	Scenario 1	2.52E-02	5.08E-05	--
9116	639436.2	4170848.9	Worker	Scenario 1	2.66E-02	5.37E-05	--
9117	639536.2	4170848.9	Worker	Scenario 1	2.75E-02	5.56E-05	--
9118	639636.2	4170848.9	Worker	Scenario 1	2.87E-02	5.80E-05	--
9119	639736.2	4170848.9	Worker	Scenario 1	2.97E-02	6.01E-05	--
9120	639836.2	4170848.9	Worker	Scenario 1	3.08E-02	6.22E-05	--
9121	639936.2	4170848.9	Worker	Scenario 1	3.18E-02	6.43E-05	--
9122	640036.2	4170848.9	Worker	Scenario 1	3.29E-02	6.65E-05	--
9123	640136.2	4170848.9	Worker	Scenario 1	3.41E-02	6.88E-05	--
9124	640236.2	4170848.9	Worker	Scenario 1	3.52E-02	7.12E-05	--
9125	640336.2	4170848.9	Worker	Scenario 1	3.64E-02	7.36E-05	--
9126	640436.2	4170848.9	Worker	Scenario 1	3.76E-02	7.60E-05	--
9127	640536.2	4170848.9	Worker	Scenario 1	3.88E-02	7.83E-05	--
9128	640636.2	4170848.9	Worker	Scenario 1	3.99E-02	8.07E-05	--
9129	640736.2	4170848.9	Worker	Scenario 1	4.10E-02	8.29E-05	--
9130	640836.2	4170848.9	Worker	Scenario 1	4.20E-02	8.49E-05	--
9131	640936.2	4170848.9	Worker	Scenario 1	4.30E-02	8.68E-05	--
9132	641036.2	4170848.9	Worker	Scenario 1	4.38E-02	8.85E-05	--
9133	641136.2	4170848.9	Worker	Scenario 1	4.45E-02	8.98E-05	--
9134	641236.2	4170848.9	Worker	Scenario 1	4.49E-02	9.07E-05	--
9135	641336.2	4170848.9	Worker	Scenario 1	4.55E-02	9.18E-05	--
9136	641436.2	4170848.9	Worker	Scenario 1	4.58E-02	9.26E-05	--
9137	641536.2	4170848.9	Worker	Scenario 1	4.59E-02	9.28E-05	--
9138	641636.2	4170848.9	Worker	Scenario 1	4.60E-02	9.30E-05	--
9139	641736.2	4170848.9	Worker	Scenario 1	4.62E-02	9.32E-05	--
9140	641836.2	4170848.9	Worker	Scenario 1	4.65E-02	9.39E-05	--
9141	641936.2	4170848.9	Worker	Scenario 1	4.69E-02	9.47E-05	--
9142	642036.2	4170848.9	Worker	Scenario 1	4.74E-02	9.58E-05	--
9143	642136.2	4170848.9	Worker	Scenario 1	4.78E-02	9.66E-05	--
9144	642236.2	4170848.9	Worker	Scenario 1	4.82E-02	9.74E-05	--
9145	642336.2	4170848.9	Worker	Scenario 1	4.83E-02	9.76E-05	--
9146	642436.2	4170848.9	Worker	Scenario 1	4.81E-02	9.72E-05	--
9147	642536.2	4170848.9	Worker	Scenario 1	4.77E-02	9.63E-05	--
9148	642636.2	4170848.9	Worker	Scenario 1	4.71E-02	9.50E-05	--
9149	642736.2	4170848.9	Worker	Scenario 1	4.64E-02	9.37E-05	--
9150	642836.2	4170848.9	Worker	Scenario 1	4.58E-02	9.25E-05	--
9151	642936.2	4170848.9	Worker	Scenario 1	4.53E-02	9.15E-05	--
9152	643036.2	4170848.9	Worker	Scenario 1	4.49E-02	9.08E-05	--
9153	643136.2	4170848.9	Worker	Scenario 1	4.46E-02	9.01E-05	--
9154	643236.2	4170848.9	Worker	Scenario 1	4.42E-02	8.94E-05	--
9155	643336.2	4170848.9	Worker	Scenario 1	4.38E-02	8.85E-05	--
9156	637336.2	4170948.9	Worker	Scenario 1	1.34E-02	2.70E-05	--
9157	637436.2	4170948.9	Worker	Scenario 1	1.38E-02	2.78E-05	--
9158	637536.2	4170948.9	Worker	Scenario 1	1.49E-02	3.01E-05	--
9159	637636.2	4170948.9	Worker	Scenario 1	1.47E-02	2.97E-05	--
9160	637736.2	4170948.9	Worker	Scenario 1	1.51E-02	3.04E-05	--
9161	637836.2	4170948.9	Worker	Scenario 1	1.56E-02	3.16E-05	--
9162	637936.2	4170948.9	Worker	Scenario 1	1.64E-02	3.31E-05	--
9163	638036.2	4170948.9	Worker	Scenario 1	1.64E-02	3.32E-05	--
9164	638136.2	4170948.9	Worker	Scenario 1	1.71E-02	3.46E-05	--
9165	638236.2	4170948.9	Worker	Scenario 1	1.77E-02	3.58E-05	--
9166	638536.2	4170948.9	Worker	Scenario 1	1.98E-02	4.01E-05	--
9167	638636.2	4170948.9	Worker	Scenario 1	2.05E-02	4.14E-05	--
9168	638736.2	4170948.9	Worker	Scenario 1	2.11E-02	4.27E-05	--
9169	638836.2	4170948.9	Worker	Scenario 1	2.09E-02	4.22E-05	--
9170	638936.2	4170948.9	Worker	Scenario 1	2.12E-02	4.29E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million) Receptor Risk	Chronic Hazard Index Receptor Risk	Acute Hazard Index Receptor Risk
9171	639036.2	4170948.9	Worker	Scenario 1	2.20E-02	4.45E-05	--
9172	639136.2	4170948.9	Worker	Scenario 1	2.20E-02	4.45E-05	--
9173	639236.2	4170948.9	Worker	Scenario 1	2.28E-02	4.60E-05	--
9174	639336.2	4170948.9	Worker	Scenario 1	2.50E-02	5.06E-05	--
9175	639436.2	4170948.9	Worker	Scenario 1	2.62E-02	5.30E-05	--
9176	639536.2	4170948.9	Worker	Scenario 1	2.72E-02	5.50E-05	--
9177	639636.2	4170948.9	Worker	Scenario 1	2.82E-02	5.70E-05	--
9178	639736.2	4170948.9	Worker	Scenario 1	2.93E-02	5.92E-05	--
9179	639836.2	4170948.9	Worker	Scenario 1	3.03E-02	6.11E-05	--
9180	639936.2	4170948.9	Worker	Scenario 1	3.12E-02	6.31E-05	--
9181	640036.2	4170948.9	Worker	Scenario 1	3.23E-02	6.51E-05	--
9182	640136.2	4170948.9	Worker	Scenario 1	3.33E-02	6.72E-05	--
9183	640236.2	4170948.9	Worker	Scenario 1	3.44E-02	6.94E-05	--
9184	640336.2	4170948.9	Worker	Scenario 1	3.54E-02	7.16E-05	--
9185	640436.2	4170948.9	Worker	Scenario 1	3.65E-02	7.37E-05	--
9186	640536.2	4170948.9	Worker	Scenario 1	3.75E-02	7.58E-05	--
9187	640636.2	4170948.9	Worker	Scenario 1	3.85E-02	7.77E-05	--
9188	640736.2	4170948.9	Worker	Scenario 1	3.94E-02	7.96E-05	--
9189	640836.2	4170948.9	Worker	Scenario 1	4.03E-02	8.13E-05	--
9190	640936.2	4170948.9	Worker	Scenario 1	4.10E-02	8.29E-05	--
9191	641036.2	4170948.9	Worker	Scenario 1	4.17E-02	8.43E-05	--
9192	641136.2	4170948.9	Worker	Scenario 1	4.22E-02	8.53E-05	--
9193	641236.2	4170948.9	Worker	Scenario 1	4.26E-02	8.61E-05	--
9194	641336.2	4170948.9	Worker	Scenario 1	4.30E-02	8.68E-05	--
9195	641436.2	4170948.9	Worker	Scenario 1	4.33E-02	8.76E-05	--
9196	641536.2	4170948.9	Worker	Scenario 1	4.36E-02	8.80E-05	--
9197	641636.2	4170948.9	Worker	Scenario 1	4.37E-02	8.82E-05	--
9198	641736.2	4170948.9	Worker	Scenario 1	4.39E-02	8.86E-05	--
9199	641836.2	4170948.9	Worker	Scenario 1	4.42E-02	8.93E-05	--
9200	641936.2	4170948.9	Worker	Scenario 1	4.48E-02	9.04E-05	--
9201	642036.2	4170948.9	Worker	Scenario 1	4.54E-02	9.16E-05	--
9202	642136.2	4170948.9	Worker	Scenario 1	4.58E-02	9.25E-05	--
9203	642236.2	4170948.9	Worker	Scenario 1	4.61E-02	9.32E-05	--
9204	642336.2	4170948.9	Worker	Scenario 1	4.62E-02	9.34E-05	--
9205	642436.2	4170948.9	Worker	Scenario 1	4.60E-02	9.29E-05	--
9206	642536.2	4170948.9	Worker	Scenario 1	4.56E-02	9.20E-05	--
9207	642636.2	4170948.9	Worker	Scenario 1	4.50E-02	9.08E-05	--
9208	642736.2	4170948.9	Worker	Scenario 1	4.44E-02	8.96E-05	--
9209	642836.2	4170948.9	Worker	Scenario 1	4.38E-02	8.85E-05	--
9210	642936.2	4170948.9	Worker	Scenario 1	4.34E-02	8.77E-05	--
9211	643036.2	4170948.9	Worker	Scenario 1	4.31E-02	8.70E-05	--
9212	643136.2	4170948.9	Worker	Scenario 1	4.28E-02	8.64E-05	--
9213	643236.2	4170948.9	Worker	Scenario 1	4.25E-02	8.58E-05	--
9214	636836.2	4171048.9	Worker	Scenario 1	1.14E-02	2.30E-05	--
9215	637036.2	4171048.9	Worker	Scenario 1	1.22E-02	2.46E-05	--
9216	637136.2	4171048.9	Worker	Scenario 1	1.32E-02	2.66E-05	--
9217	637236.2	4171048.9	Worker	Scenario 1	1.37E-02	2.76E-05	--
9218	637336.2	4171048.9	Worker	Scenario 1	1.36E-02	2.74E-05	--
9219	637436.2	4171048.9	Worker	Scenario 1	1.43E-02	2.88E-05	--
9220	637536.2	4171048.9	Worker	Scenario 1	1.43E-02	2.88E-05	--
9221	637636.2	4171048.9	Worker	Scenario 1	1.48E-02	2.99E-05	--
9222	637736.2	4171048.9	Worker	Scenario 1	1.51E-02	3.04E-05	--
9223	637836.2	4171048.9	Worker	Scenario 1	1.55E-02	3.13E-05	--
9224	637936.2	4171048.9	Worker	Scenario 1	1.61E-02	3.26E-05	--
9225	638036.2	4171048.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
9226	638136.2	4171048.9	Worker	Scenario 1	1.71E-02	3.46E-05	--
9227	638236.2	4171048.9	Worker	Scenario 1	1.77E-02	3.57E-05	--
9228	638436.2	4171048.9	Worker	Scenario 1	1.91E-02	3.86E-05	--
9229	638536.2	4171048.9	Worker	Scenario 1	1.98E-02	4.00E-05	--
9230	638636.2	4171048.9	Worker	Scenario 1	2.00E-02	4.04E-05	--
9231	638736.2	4171048.9	Worker	Scenario 1	2.11E-02	4.26E-05	--
9232	638836.2	4171048.9	Worker	Scenario 1	2.05E-02	4.14E-05	--
9233	638936.2	4171048.9	Worker	Scenario 1	2.11E-02	4.26E-05	--
9234	639036.2	4171048.9	Worker	Scenario 1	2.21E-02	4.46E-05	--
9235	639136.2	4171048.9	Worker	Scenario 1	2.28E-02	4.60E-05	--
9236	639236.2	4171048.9	Worker	Scenario 1	2.34E-02	4.73E-05	--
9237	639336.2	4171048.9	Worker	Scenario 1	2.50E-02	5.04E-05	--
9238	639436.2	4171048.9	Worker	Scenario 1	2.53E-02	5.12E-05	--
9239	639536.2	4171048.9	Worker	Scenario 1	2.62E-02	5.30E-05	--
9240	639636.2	4171048.9	Worker	Scenario 1	2.78E-02	5.61E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9241	639736.2	4171048.9	Worker	Scenario 1	2.88E-02	5.82E-05	--
9242	639836.2	4171048.9	Worker	Scenario 1	2.97E-02	6.00E-05	--
9243	639936.2	4171048.9	Worker	Scenario 1	3.06E-02	6.19E-05	--
9244	640036.2	4171048.9	Worker	Scenario 1	3.16E-02	6.37E-05	--
9245	640136.2	4171048.9	Worker	Scenario 1	3.25E-02	6.57E-05	--
9246	640236.2	4171048.9	Worker	Scenario 1	3.35E-02	6.76E-05	--
9247	640336.2	4171048.9	Worker	Scenario 1	3.44E-02	6.95E-05	--
9248	640436.2	4171048.9	Worker	Scenario 1	3.53E-02	7.14E-05	--
9249	640536.2	4171048.9	Worker	Scenario 1	3.62E-02	7.32E-05	--
9250	640636.2	4171048.9	Worker	Scenario 1	3.71E-02	7.49E-05	--
9251	640736.2	4171048.9	Worker	Scenario 1	3.79E-02	7.65E-05	--
9252	640836.2	4171048.9	Worker	Scenario 1	3.86E-02	7.80E-05	--
9253	640936.2	4171048.9	Worker	Scenario 1	3.93E-02	7.93E-05	--
9254	641036.2	4171048.9	Worker	Scenario 1	3.99E-02	8.05E-05	--
9255	641136.2	4171048.9	Worker	Scenario 1	4.03E-02	8.14E-05	--
9256	641236.2	4171048.9	Worker	Scenario 1	4.07E-02	8.21E-05	--
9257	641336.2	4171048.9	Worker	Scenario 1	4.10E-02	8.29E-05	--
9258	641436.2	4171048.9	Worker	Scenario 1	4.13E-02	8.33E-05	--
9259	641536.2	4171048.9	Worker	Scenario 1	4.15E-02	8.38E-05	--
9260	641636.2	4171048.9	Worker	Scenario 1	4.17E-02	8.42E-05	--
9261	641736.2	4171048.9	Worker	Scenario 1	4.19E-02	8.47E-05	--
9262	641836.2	4171048.9	Worker	Scenario 1	4.23E-02	8.54E-05	--
9263	641936.2	4171048.9	Worker	Scenario 1	4.29E-02	8.66E-05	--
9264	642036.2	4171048.9	Worker	Scenario 1	4.35E-02	8.78E-05	--
9265	642136.2	4171048.9	Worker	Scenario 1	4.39E-02	8.87E-05	--
9266	642236.2	4171048.9	Worker	Scenario 1	4.42E-02	8.93E-05	--
9267	642336.2	4171048.9	Worker	Scenario 1	4.43E-02	8.94E-05	--
9268	642436.2	4171048.9	Worker	Scenario 1	4.40E-02	8.89E-05	--
9269	642536.2	4171048.9	Worker	Scenario 1	4.36E-02	8.81E-05	--
9270	642636.2	4171048.9	Worker	Scenario 1	4.30E-02	8.69E-05	--
9271	642736.2	4171048.9	Worker	Scenario 1	4.25E-02	8.58E-05	--
9272	642836.2	4171048.9	Worker	Scenario 1	4.20E-02	8.48E-05	--
9273	642936.2	4171048.9	Worker	Scenario 1	4.17E-02	8.41E-05	--
9274	643036.2	4171048.9	Worker	Scenario 1	4.13E-02	8.35E-05	--
9275	643136.2	4171048.9	Worker	Scenario 1	4.10E-02	8.29E-05	--
9276	636936.2	4171148.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
9277	637036.2	4171148.9	Worker	Scenario 1	1.28E-02	2.58E-05	--
9278	637136.2	4171148.9	Worker	Scenario 1	1.31E-02	2.64E-05	--
9279	637236.2	4171148.9	Worker	Scenario 1	1.34E-02	2.71E-05	--
9280	637336.2	4171148.9	Worker	Scenario 1	1.33E-02	2.68E-05	--
9281	637436.2	4171148.9	Worker	Scenario 1	1.36E-02	2.75E-05	--
9282	637536.2	4171148.9	Worker	Scenario 1	1.40E-02	2.84E-05	--
9283	637636.2	4171148.9	Worker	Scenario 1	1.46E-02	2.95E-05	--
9284	637736.2	4171148.9	Worker	Scenario 1	1.52E-02	3.07E-05	--
9285	637836.2	4171148.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
9286	637936.2	4171148.9	Worker	Scenario 1	1.57E-02	3.17E-05	--
9287	638036.2	4171148.9	Worker	Scenario 1	1.66E-02	3.35E-05	--
9288	638136.2	4171148.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
9289	638436.2	4171148.9	Worker	Scenario 1	1.89E-02	3.82E-05	--
9290	638536.2	4171148.9	Worker	Scenario 1	1.93E-02	3.90E-05	--
9291	638636.2	4171148.9	Worker	Scenario 1	1.99E-02	4.02E-05	--
9292	638736.2	4171148.9	Worker	Scenario 1	2.07E-02	4.18E-05	--
9293	638836.2	4171148.9	Worker	Scenario 1	2.03E-02	4.09E-05	--
9294	638936.2	4171148.9	Worker	Scenario 1	2.11E-02	4.26E-05	--
9295	639036.2	4171148.9	Worker	Scenario 1	2.18E-02	4.40E-05	--
9296	639136.2	4171148.9	Worker	Scenario 1	2.23E-02	4.50E-05	--
9297	639236.2	4171148.9	Worker	Scenario 1	2.30E-02	4.64E-05	--
9298	639336.2	4171148.9	Worker	Scenario 1	2.51E-02	5.06E-05	--
9299	639436.2	4171148.9	Worker	Scenario 1	2.51E-02	5.07E-05	--
9300	639536.2	4171148.9	Worker	Scenario 1	2.58E-02	5.22E-05	--
9301	639636.2	4171148.9	Worker	Scenario 1	2.73E-02	5.52E-05	--
9302	639736.2	4171148.9	Worker	Scenario 1	2.83E-02	5.72E-05	--
9303	639836.2	4171148.9	Worker	Scenario 1	2.92E-02	5.89E-05	--
9304	639936.2	4171148.9	Worker	Scenario 1	3.00E-02	6.06E-05	--
9305	640036.2	4171148.9	Worker	Scenario 1	3.09E-02	6.23E-05	--
9306	640136.2	4171148.9	Worker	Scenario 1	3.17E-02	6.41E-05	--
9307	640236.2	4171148.9	Worker	Scenario 1	3.26E-02	6.58E-05	--
9308	640336.2	4171148.9	Worker	Scenario 1	3.34E-02	6.75E-05	--
9309	640436.2	4171148.9	Worker	Scenario 1	3.42E-02	6.91E-05	--
9310	640536.2	4171148.9	Worker	Scenario 1	3.50E-02	7.07E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9311	640636.2	4171148.9	Worker	Scenario 1	3.57E-02	7.21E-05	--
9312	640736.2	4171148.9	Worker	Scenario 1	3.64E-02	7.36E-05	--
9313	640836.2	4171148.9	Worker	Scenario 1	3.71E-02	7.48E-05	--
9314	640936.2	4171148.9	Worker	Scenario 1	3.77E-02	7.61E-05	--
9315	641036.2	4171148.9	Worker	Scenario 1	3.82E-02	7.72E-05	--
9316	641136.2	4171148.9	Worker	Scenario 1	3.86E-02	7.79E-05	--
9317	641236.2	4171148.9	Worker	Scenario 1	3.89E-02	7.85E-05	--
9318	641336.2	4171148.9	Worker	Scenario 1	3.92E-02	7.92E-05	--
9319	641436.2	4171148.9	Worker	Scenario 1	3.96E-02	7.99E-05	--
9320	641536.2	4171148.9	Worker	Scenario 1	3.96E-02	8.01E-05	--
9321	641636.2	4171148.9	Worker	Scenario 1	3.99E-02	8.06E-05	--
9322	641736.2	4171148.9	Worker	Scenario 1	4.02E-02	8.12E-05	--
9323	641836.2	4171148.9	Worker	Scenario 1	4.06E-02	8.20E-05	--
9324	641936.2	4171148.9	Worker	Scenario 1	4.12E-02	8.31E-05	--
9325	642036.2	4171148.9	Worker	Scenario 1	4.18E-02	8.43E-05	--
9326	642136.2	4171148.9	Worker	Scenario 1	4.22E-02	8.52E-05	--
9327	642236.2	4171148.9	Worker	Scenario 1	4.24E-02	8.57E-05	--
9328	642336.2	4171148.9	Worker	Scenario 1	4.24E-02	8.57E-05	--
9329	642436.2	4171148.9	Worker	Scenario 1	4.22E-02	8.52E-05	--
9330	642536.2	4171148.9	Worker	Scenario 1	4.18E-02	8.44E-05	--
9331	642636.2	4171148.9	Worker	Scenario 1	4.13E-02	8.34E-05	--
9332	642736.2	4171148.9	Worker	Scenario 1	4.08E-02	8.23E-05	--
9333	642836.2	4171148.9	Worker	Scenario 1	4.03E-02	8.14E-05	--
9334	642936.2	4171148.9	Worker	Scenario 1	4.00E-02	8.09E-05	--
9335	643036.2	4171148.9	Worker	Scenario 1	3.97E-02	8.01E-05	--
9336	636836.2	4171248.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
9337	636936.2	4171248.9	Worker	Scenario 1	1.24E-02	2.51E-05	--
9338	637036.2	4171248.9	Worker	Scenario 1	1.27E-02	2.56E-05	--
9339	637136.2	4171248.9	Worker	Scenario 1	1.30E-02	2.62E-05	--
9340	637236.2	4171248.9	Worker	Scenario 1	1.34E-02	2.70E-05	--
9341	637336.2	4171248.9	Worker	Scenario 1	1.31E-02	2.66E-05	--
9342	637436.2	4171248.9	Worker	Scenario 1	1.35E-02	2.72E-05	--
9343	637536.2	4171248.9	Worker	Scenario 1	1.38E-02	2.79E-05	--
9344	637636.2	4171248.9	Worker	Scenario 1	1.46E-02	2.96E-05	--
9345	637736.2	4171248.9	Worker	Scenario 1	1.49E-02	3.02E-05	--
9346	637836.2	4171248.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
9347	637936.2	4171248.9	Worker	Scenario 1	1.61E-02	3.26E-05	--
9348	638336.2	4171248.9	Worker	Scenario 1	1.82E-02	3.67E-05	--
9349	638436.2	4171248.9	Worker	Scenario 1	1.87E-02	3.78E-05	--
9350	638536.2	4171248.9	Worker	Scenario 1	1.92E-02	3.87E-05	--
9351	638636.2	4171248.9	Worker	Scenario 1	1.97E-02	3.97E-05	--
9352	638736.2	4171248.9	Worker	Scenario 1	2.09E-02	4.22E-05	--
9353	638836.2	4171248.9	Worker	Scenario 1	2.02E-02	4.08E-05	--
9354	638936.2	4171248.9	Worker	Scenario 1	2.16E-02	4.36E-05	--
9355	639036.2	4171248.9	Worker	Scenario 1	2.15E-02	4.34E-05	--
9356	639136.2	4171248.9	Worker	Scenario 1	2.21E-02	4.46E-05	--
9357	639236.2	4171248.9	Worker	Scenario 1	2.27E-02	4.59E-05	--
9358	639336.2	4171248.9	Worker	Scenario 1	2.49E-02	5.03E-05	--
9359	639436.2	4171248.9	Worker	Scenario 1	2.47E-02	5.00E-05	--
9360	639536.2	4171248.9	Worker	Scenario 1	2.55E-02	5.15E-05	--
9361	639636.2	4171248.9	Worker	Scenario 1	2.69E-02	5.43E-05	--
9362	639736.2	4171248.9	Worker	Scenario 1	2.78E-02	5.62E-05	--
9363	639836.2	4171248.9	Worker	Scenario 1	2.86E-02	5.77E-05	--
9364	639936.2	4171248.9	Worker	Scenario 1	2.94E-02	5.93E-05	--
9365	640036.2	4171248.9	Worker	Scenario 1	3.01E-02	6.09E-05	--
9366	640136.2	4171248.9	Worker	Scenario 1	3.09E-02	6.24E-05	--
9367	640236.2	4171248.9	Worker	Scenario 1	3.17E-02	6.40E-05	--
9368	640336.2	4171248.9	Worker	Scenario 1	3.24E-02	6.55E-05	--
9369	640436.2	4171248.9	Worker	Scenario 1	3.31E-02	6.69E-05	--
9370	640536.2	4171248.9	Worker	Scenario 1	3.38E-02	6.83E-05	--
9371	640636.2	4171248.9	Worker	Scenario 1	3.44E-02	6.96E-05	--
9372	640736.2	4171248.9	Worker	Scenario 1	3.51E-02	7.08E-05	--
9373	640836.2	4171248.9	Worker	Scenario 1	3.57E-02	7.20E-05	--
9374	640936.2	4171248.9	Worker	Scenario 1	3.62E-02	7.31E-05	--
9375	641036.2	4171248.9	Worker	Scenario 1	3.67E-02	7.41E-05	--
9376	641136.2	4171248.9	Worker	Scenario 1	3.70E-02	7.47E-05	--
9377	641236.2	4171248.9	Worker	Scenario 1	3.73E-02	7.53E-05	--
9378	641336.2	4171248.9	Worker	Scenario 1	3.76E-02	7.59E-05	--
9379	641436.2	4171248.9	Worker	Scenario 1	3.79E-02	7.65E-05	--
9380	641536.2	4171248.9	Worker	Scenario 1	3.80E-02	7.67E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9381	641636.2	4171248.9	Worker	Scenario 1	3.83E-02	7.73E-05	--
9382	641736.2	4171248.9	Worker	Scenario 1	3.86E-02	7.80E-05	--
9383	641836.2	4171248.9	Worker	Scenario 1	3.91E-02	7.89E-05	--
9384	641936.2	4171248.9	Worker	Scenario 1	3.96E-02	8.00E-05	--
9385	642036.2	4171248.9	Worker	Scenario 1	4.02E-02	8.11E-05	--
9386	642136.2	4171248.9	Worker	Scenario 1	4.05E-02	8.19E-05	--
9387	642236.2	4171248.9	Worker	Scenario 1	4.07E-02	8.23E-05	--
9388	642336.2	4171248.9	Worker	Scenario 1	4.07E-02	8.22E-05	--
9389	642436.2	4171248.9	Worker	Scenario 1	4.05E-02	8.17E-05	--
9390	642536.2	4171248.9	Worker	Scenario 1	4.01E-02	8.10E-05	--
9391	642636.2	4171248.9	Worker	Scenario 1	3.96E-02	8.00E-05	--
9392	642736.2	4171248.9	Worker	Scenario 1	3.91E-02	7.91E-05	--
9393	642836.2	4171248.9	Worker	Scenario 1	3.87E-02	7.83E-05	--
9394	642936.2	4171248.9	Worker	Scenario 1	3.84E-02	7.75E-05	--
9395	636736.2	4171348.9	Worker	Scenario 1	1.12E-02	2.27E-05	--
9396	636836.2	4171348.9	Worker	Scenario 1	1.24E-02	2.51E-05	--
9397	636936.2	4171348.9	Worker	Scenario 1	1.24E-02	2.50E-05	--
9398	637036.2	4171348.9	Worker	Scenario 1	1.26E-02	2.54E-05	--
9399	637136.2	4171348.9	Worker	Scenario 1	1.29E-02	2.61E-05	--
9400	637236.2	4171348.9	Worker	Scenario 1	1.32E-02	2.66E-05	--
9401	637336.2	4171348.9	Worker	Scenario 1	1.31E-02	2.64E-05	--
9402	637436.2	4171348.9	Worker	Scenario 1	1.34E-02	2.71E-05	--
9403	637536.2	4171348.9	Worker	Scenario 1	1.44E-02	2.91E-05	--
9404	637636.2	4171348.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
9405	637736.2	4171348.9	Worker	Scenario 1	1.55E-02	3.14E-05	--
9406	637836.2	4171348.9	Worker	Scenario 1	1.58E-02	3.20E-05	--
9407	638136.2	4171348.9	Worker	Scenario 1	1.70E-02	3.43E-05	--
9408	638236.2	4171348.9	Worker	Scenario 1	1.75E-02	3.54E-05	--
9409	638336.2	4171348.9	Worker	Scenario 1	1.83E-02	3.70E-05	--
9410	638436.2	4171348.9	Worker	Scenario 1	1.89E-02	3.82E-05	--
9411	638536.2	4171348.9	Worker	Scenario 1	1.90E-02	3.84E-05	--
9412	638636.2	4171348.9	Worker	Scenario 1	1.99E-02	4.03E-05	--
9413	638736.2	4171348.9	Worker	Scenario 1	2.06E-02	4.16E-05	--
9414	638836.2	4171348.9	Worker	Scenario 1	2.13E-02	4.31E-05	--
9415	638936.2	4171348.9	Worker	Scenario 1	2.15E-02	4.34E-05	--
9416	639036.2	4171348.9	Worker	Scenario 1	2.13E-02	4.30E-05	--
9417	639136.2	4171348.9	Worker	Scenario 1	2.19E-02	4.41E-05	--
9418	639236.2	4171348.9	Worker	Scenario 1	2.26E-02	4.56E-05	--
9419	639336.2	4171348.9	Worker	Scenario 1	2.46E-02	4.96E-05	--
9420	639436.2	4171348.9	Worker	Scenario 1	2.43E-02	4.90E-05	--
9421	639536.2	4171348.9	Worker	Scenario 1	2.50E-02	5.06E-05	--
9422	639636.2	4171348.9	Worker	Scenario 1	2.64E-02	5.34E-05	--
9423	639736.2	4171348.9	Worker	Scenario 1	2.73E-02	5.51E-05	--
9424	639836.2	4171348.9	Worker	Scenario 1	2.80E-02	5.66E-05	--
9425	639936.2	4171348.9	Worker	Scenario 1	2.87E-02	5.80E-05	--
9426	640036.2	4171348.9	Worker	Scenario 1	2.94E-02	5.95E-05	--
9427	640136.2	4171348.9	Worker	Scenario 1	3.02E-02	6.09E-05	--
9428	640236.2	4171348.9	Worker	Scenario 1	3.08E-02	6.23E-05	--
9429	640336.2	4171348.9	Worker	Scenario 1	3.15E-02	6.36E-05	--
9430	640436.2	4171348.9	Worker	Scenario 1	3.21E-02	6.48E-05	--
9431	640536.2	4171348.9	Worker	Scenario 1	3.27E-02	6.60E-05	--
9432	640636.2	4171348.9	Worker	Scenario 1	3.33E-02	6.72E-05	--
9433	640736.2	4171348.9	Worker	Scenario 1	3.38E-02	6.83E-05	--
9434	640836.2	4171348.9	Worker	Scenario 1	3.44E-02	6.94E-05	--
9435	640936.2	4171348.9	Worker	Scenario 1	3.49E-02	7.04E-05	--
9436	641036.2	4171348.9	Worker	Scenario 1	3.52E-02	7.12E-05	--
9437	641136.2	4171348.9	Worker	Scenario 1	3.55E-02	7.17E-05	--
9438	641236.2	4171348.9	Worker	Scenario 1	3.58E-02	7.22E-05	--
9439	641336.2	4171348.9	Worker	Scenario 1	3.60E-02	7.28E-05	--
9440	641436.2	4171348.9	Worker	Scenario 1	3.63E-02	7.34E-05	--
9441	641536.2	4171348.9	Worker	Scenario 1	3.65E-02	7.38E-05	--
9442	641636.2	4171348.9	Worker	Scenario 1	3.69E-02	7.45E-05	--
9443	641736.2	4171348.9	Worker	Scenario 1	3.73E-02	7.53E-05	--
9444	641836.2	4171348.9	Worker	Scenario 1	3.78E-02	7.63E-05	--
9445	641936.2	4171348.9	Worker	Scenario 1	3.83E-02	7.73E-05	--
9446	642036.2	4171348.9	Worker	Scenario 1	3.88E-02	7.83E-05	--
9447	642136.2	4171348.9	Worker	Scenario 1	3.90E-02	7.88E-05	--
9448	642236.2	4171348.9	Worker	Scenario 1	3.92E-02	7.91E-05	--
9449	642336.2	4171348.9	Worker	Scenario 1	3.91E-02	7.90E-05	--
9450	642436.2	4171348.9	Worker	Scenario 1	3.89E-02	7.85E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9451	642536.2	4171348.9	Worker	Scenario 1	3.85E-02	7.77E-05	--
9452	642636.2	4171348.9	Worker	Scenario 1	3.80E-02	7.68E-05	--
9453	642736.2	4171348.9	Worker	Scenario 1	3.76E-02	7.60E-05	--
9454	642836.2	4171348.9	Worker	Scenario 1	3.73E-02	7.53E-05	--
9455	636236.2	4171448.9	Worker	Scenario 1	9.85E-03	1.99E-05	--
9456	636636.2	4171448.9	Worker	Scenario 1	1.15E-02	2.33E-05	--
9457	636736.2	4171448.9	Worker	Scenario 1	1.22E-02	2.46E-05	--
9458	636836.2	4171448.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
9459	636936.2	4171448.9	Worker	Scenario 1	1.24E-02	2.51E-05	--
9460	637036.2	4171448.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
9461	637136.2	4171448.9	Worker	Scenario 1	1.30E-02	2.62E-05	--
9462	637236.2	4171448.9	Worker	Scenario 1	1.34E-02	2.71E-05	--
9463	637336.2	4171448.9	Worker	Scenario 1	1.34E-02	2.70E-05	--
9464	638036.2	4171448.9	Worker	Scenario 1	1.64E-02	3.31E-05	--
9465	638136.2	4171448.9	Worker	Scenario 1	1.68E-02	3.39E-05	--
9466	638236.2	4171448.9	Worker	Scenario 1	1.77E-02	3.58E-05	--
9467	638336.2	4171448.9	Worker	Scenario 1	1.82E-02	3.68E-05	--
9468	638436.2	4171448.9	Worker	Scenario 1	1.89E-02	3.81E-05	--
9469	638536.2	4171448.9	Worker	Scenario 1	1.94E-02	3.92E-05	--
9470	638636.2	4171448.9	Worker	Scenario 1	2.00E-02	4.04E-05	--
9471	638736.2	4171448.9	Worker	Scenario 1	2.06E-02	4.15E-05	--
9472	638836.2	4171448.9	Worker	Scenario 1	2.12E-02	4.29E-05	--
9473	638936.2	4171448.9	Worker	Scenario 1	2.18E-02	4.39E-05	--
9474	639036.2	4171448.9	Worker	Scenario 1	2.23E-02	4.49E-05	--
9475	639136.2	4171448.9	Worker	Scenario 1	2.28E-02	4.61E-05	--
9476	639236.2	4171448.9	Worker	Scenario 1	2.35E-02	4.75E-05	--
9477	639336.2	4171448.9	Worker	Scenario 1	2.42E-02	4.90E-05	--
9478	639436.2	4171448.9	Worker	Scenario 1	2.48E-02	5.01E-05	--
9479	639536.2	4171448.9	Worker	Scenario 1	2.53E-02	5.11E-05	--
9480	639636.2	4171448.9	Worker	Scenario 1	2.62E-02	5.30E-05	--
9481	639736.2	4171448.9	Worker	Scenario 1	2.68E-02	5.41E-05	--
9482	639836.2	4171448.9	Worker	Scenario 1	2.75E-02	5.55E-05	--
9483	639936.2	4171448.9	Worker	Scenario 1	2.81E-02	5.68E-05	--
9484	640036.2	4171448.9	Worker	Scenario 1	2.88E-02	5.81E-05	--
9485	640136.2	4171448.9	Worker	Scenario 1	2.94E-02	5.94E-05	--
9486	640236.2	4171448.9	Worker	Scenario 1	3.00E-02	6.06E-05	--
9487	640336.2	4171448.9	Worker	Scenario 1	3.06E-02	6.18E-05	--
9488	640436.2	4171448.9	Worker	Scenario 1	3.11E-02	6.29E-05	--
9489	640536.2	4171448.9	Worker	Scenario 1	3.17E-02	6.39E-05	--
9490	640636.2	4171448.9	Worker	Scenario 1	3.22E-02	6.50E-05	--
9491	640736.2	4171448.9	Worker	Scenario 1	3.27E-02	6.60E-05	--
9492	640836.2	4171448.9	Worker	Scenario 1	3.32E-02	6.70E-05	--
9493	640936.2	4171448.9	Worker	Scenario 1	3.36E-02	6.79E-05	--
9494	641036.2	4171448.9	Worker	Scenario 1	3.39E-02	6.85E-05	--
9495	641136.2	4171448.9	Worker	Scenario 1	3.41E-02	6.90E-05	--
9496	641236.2	4171448.9	Worker	Scenario 1	3.44E-02	6.95E-05	--
9497	641336.2	4171448.9	Worker	Scenario 1	3.46E-02	6.99E-05	--
9498	641436.2	4171448.9	Worker	Scenario 1	3.49E-02	7.05E-05	--
9499	641536.2	4171448.9	Worker	Scenario 1	3.52E-02	7.10E-05	--
9500	641636.2	4171448.9	Worker	Scenario 1	3.55E-02	7.18E-05	--
9501	641736.2	4171448.9	Worker	Scenario 1	3.60E-02	7.27E-05	--
9502	641836.2	4171448.9	Worker	Scenario 1	3.65E-02	7.37E-05	--
9503	641936.2	4171448.9	Worker	Scenario 1	3.70E-02	7.47E-05	--
9504	642036.2	4171448.9	Worker	Scenario 1	3.74E-02	7.56E-05	--
9505	642136.2	4171448.9	Worker	Scenario 1	3.78E-02	7.63E-05	--
9506	642236.2	4171448.9	Worker	Scenario 1	3.78E-02	7.64E-05	--
9507	642336.2	4171448.9	Worker	Scenario 1	3.77E-02	7.62E-05	--
9508	642436.2	4171448.9	Worker	Scenario 1	3.74E-02	7.55E-05	--
9509	642536.2	4171448.9	Worker	Scenario 1	3.70E-02	7.47E-05	--
9510	642636.2	4171448.9	Worker	Scenario 1	3.66E-02	7.39E-05	--
9511	636536.2	4171548.9	Worker	Scenario 1	1.16E-02	2.35E-05	--
9512	636636.2	4171548.9	Worker	Scenario 1	1.19E-02	2.41E-05	--
9513	636736.2	4171548.9	Worker	Scenario 1	1.22E-02	2.46E-05	--
9514	636836.2	4171548.9	Worker	Scenario 1	1.24E-02	2.51E-05	--
9515	636936.2	4171548.9	Worker	Scenario 1	1.25E-02	2.52E-05	--
9516	637036.2	4171548.9	Worker	Scenario 1	1.29E-02	2.61E-05	--
9517	637136.2	4171548.9	Worker	Scenario 1	1.29E-02	2.61E-05	--
9518	637236.2	4171548.9	Worker	Scenario 1	1.30E-02	2.63E-05	--
9519	637936.2	4171548.9	Worker	Scenario 1	1.59E-02	3.22E-05	--
9520	638036.2	4171548.9	Worker	Scenario 1	1.65E-02	3.33E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9521	638136.2	4171548.9	Worker	Scenario 1	1.65E-02	3.33E-05	--
9522	638236.2	4171548.9	Worker	Scenario 1	1.77E-02	3.57E-05	--
9523	638336.2	4171548.9	Worker	Scenario 1	1.82E-02	3.68E-05	--
9524	638436.2	4171548.9	Worker	Scenario 1	1.88E-02	3.79E-05	--
9525	638536.2	4171548.9	Worker	Scenario 1	1.80E-02	3.64E-05	--
9526	638636.2	4171548.9	Worker	Scenario 1	1.97E-02	3.97E-05	--
9527	638736.2	4171548.9	Worker	Scenario 1	2.04E-02	4.13E-05	--
9528	638836.2	4171548.9	Worker	Scenario 1	2.09E-02	4.23E-05	--
9529	638936.2	4171548.9	Worker	Scenario 1	2.15E-02	4.34E-05	--
9530	639036.2	4171548.9	Worker	Scenario 1	2.19E-02	4.43E-05	--
9531	639136.2	4171548.9	Worker	Scenario 1	2.25E-02	4.55E-05	--
9532	639236.2	4171548.9	Worker	Scenario 1	2.30E-02	4.64E-05	--
9533	639336.2	4171548.9	Worker	Scenario 1	2.39E-02	4.82E-05	--
9534	639436.2	4171548.9	Worker	Scenario 1	2.45E-02	4.94E-05	--
9535	639536.2	4171548.9	Worker	Scenario 1	2.50E-02	5.06E-05	--
9536	639636.2	4171548.9	Worker	Scenario 1	2.57E-02	5.19E-05	--
9537	639736.2	4171548.9	Worker	Scenario 1	2.63E-02	5.31E-05	--
9538	639836.2	4171548.9	Worker	Scenario 1	2.69E-02	5.43E-05	--
9539	639936.2	4171548.9	Worker	Scenario 1	2.75E-02	5.55E-05	--
9540	640036.2	4171548.9	Worker	Scenario 1	2.81E-02	5.67E-05	--
9541	640136.2	4171548.9	Worker	Scenario 1	2.86E-02	5.79E-05	--
9542	640236.2	4171548.9	Worker	Scenario 1	2.92E-02	5.90E-05	--
9543	640336.2	4171548.9	Worker	Scenario 1	2.97E-02	6.00E-05	--
9544	640436.2	4171548.9	Worker	Scenario 1	3.02E-02	6.10E-05	--
9545	640536.2	4171548.9	Worker	Scenario 1	3.07E-02	6.20E-05	--
9546	640636.2	4171548.9	Worker	Scenario 1	3.12E-02	6.30E-05	--
9547	640736.2	4171548.9	Worker	Scenario 1	3.16E-02	6.39E-05	--
9548	640836.2	4171548.9	Worker	Scenario 1	3.21E-02	6.48E-05	--
9549	640936.2	4171548.9	Worker	Scenario 1	3.24E-02	6.55E-05	--
9550	641036.2	4171548.9	Worker	Scenario 1	3.27E-02	6.60E-05	--
9551	641136.2	4171548.9	Worker	Scenario 1	3.29E-02	6.64E-05	--
9552	641236.2	4171548.9	Worker	Scenario 1	3.31E-02	6.69E-05	--
9553	641336.2	4171548.9	Worker	Scenario 1	3.33E-02	6.73E-05	--
9554	641436.2	4171548.9	Worker	Scenario 1	3.36E-02	6.79E-05	--
9555	641536.2	4171548.9	Worker	Scenario 1	3.39E-02	6.85E-05	--
9556	641636.2	4171548.9	Worker	Scenario 1	3.43E-02	6.93E-05	--
9557	641736.2	4171548.9	Worker	Scenario 1	3.48E-02	7.03E-05	--
9558	641836.2	4171548.9	Worker	Scenario 1	3.53E-02	7.13E-05	--
9559	641936.2	4171548.9	Worker	Scenario 1	3.58E-02	7.23E-05	--
9560	642036.2	4171548.9	Worker	Scenario 1	3.62E-02	7.31E-05	--
9561	642136.2	4171548.9	Worker	Scenario 1	3.64E-02	7.35E-05	--
9562	642236.2	4171548.9	Worker	Scenario 1	3.65E-02	7.37E-05	--
9563	642336.2	4171548.9	Worker	Scenario 1	3.64E-02	7.35E-05	--
9564	642436.2	4171548.9	Worker	Scenario 1	3.61E-02	7.30E-05	--
9565	642536.2	4171548.9	Worker	Scenario 1	3.58E-02	7.23E-05	--
9566	636336.2	4171648.9	Worker	Scenario 1	1.03E-02	2.08E-05	--
9567	636536.2	4171648.9	Worker	Scenario 1	1.16E-02	2.34E-05	--
9568	636636.2	4171648.9	Worker	Scenario 1	1.18E-02	2.39E-05	--
9569	636736.2	4171648.9	Worker	Scenario 1	1.20E-02	2.43E-05	--
9570	636836.2	4171648.9	Worker	Scenario 1	1.24E-02	2.50E-05	--
9571	636936.2	4171648.9	Worker	Scenario 1	1.26E-02	2.54E-05	--
9572	637036.2	4171648.9	Worker	Scenario 1	1.26E-02	2.55E-05	--
9573	637136.2	4171648.9	Worker	Scenario 1	1.29E-02	2.61E-05	--
9574	637236.2	4171648.9	Worker	Scenario 1	1.30E-02	2.62E-05	--
9575	637536.2	4171648.9	Worker	Scenario 1	1.40E-02	2.83E-05	--
9576	637636.2	4171648.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
9577	637736.2	4171648.9	Worker	Scenario 1	1.50E-02	3.02E-05	--
9578	637836.2	4171648.9	Worker	Scenario 1	1.55E-02	3.12E-05	--
9579	637936.2	4171648.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
9580	638036.2	4171648.9	Worker	Scenario 1	1.65E-02	3.33E-05	--
9581	638136.2	4171648.9	Worker	Scenario 1	1.62E-02	3.27E-05	--
9582	638236.2	4171648.9	Worker	Scenario 1	1.67E-02	3.37E-05	--
9583	638336.2	4171648.9	Worker	Scenario 1	1.80E-02	3.64E-05	--
9584	638436.2	4171648.9	Worker	Scenario 1	1.85E-02	3.73E-05	--
9585	638536.2	4171648.9	Worker	Scenario 1	1.79E-02	3.62E-05	--
9586	638636.2	4171648.9	Worker	Scenario 1	1.87E-02	3.78E-05	--
9587	638736.2	4171648.9	Worker	Scenario 1	1.91E-02	3.85E-05	--
9588	638836.2	4171648.9	Worker	Scenario 1	2.06E-02	4.17E-05	--
9589	638936.2	4171648.9	Worker	Scenario 1	2.11E-02	4.27E-05	--
9590	639036.2	4171648.9	Worker	Scenario 1	2.17E-02	4.39E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9591	639136.2	4171648.9	Worker	Scenario 1	2.24E-02	4.52E-05	--
9592	639236.2	4171648.9	Worker	Scenario 1	2.30E-02	4.64E-05	--
9593	639336.2	4171648.9	Worker	Scenario 1	2.35E-02	4.74E-05	--
9594	639436.2	4171648.9	Worker	Scenario 1	2.40E-02	4.86E-05	--
9595	639536.2	4171648.9	Worker	Scenario 1	2.46E-02	4.97E-05	--
9596	639636.2	4171648.9	Worker	Scenario 1	2.52E-02	5.09E-05	--
9597	639736.2	4171648.9	Worker	Scenario 1	2.58E-02	5.21E-05	--
9598	639836.2	4171648.9	Worker	Scenario 1	2.63E-02	5.31E-05	--
9599	639936.2	4171648.9	Worker	Scenario 1	2.69E-02	5.43E-05	--
9600	640036.2	4171648.9	Worker	Scenario 1	2.74E-02	5.53E-05	--
9601	640136.2	4171648.9	Worker	Scenario 1	2.79E-02	5.64E-05	--
9602	640236.2	4171648.9	Worker	Scenario 1	2.84E-02	5.73E-05	--
9603	640336.2	4171648.9	Worker	Scenario 1	2.89E-02	5.83E-05	--
9604	640436.2	4171648.9	Worker	Scenario 1	2.93E-02	5.92E-05	--
9605	640536.2	4171648.9	Worker	Scenario 1	2.98E-02	6.01E-05	--
9606	640636.2	4171648.9	Worker	Scenario 1	3.02E-02	6.10E-05	--
9607	640736.2	4171648.9	Worker	Scenario 1	3.06E-02	6.19E-05	--
9608	640836.2	4171648.9	Worker	Scenario 1	3.10E-02	6.26E-05	--
9609	640936.2	4171648.9	Worker	Scenario 1	3.13E-02	6.33E-05	--
9610	641036.2	4171648.9	Worker	Scenario 1	3.15E-02	6.37E-05	--
9611	641136.2	4171648.9	Worker	Scenario 1	3.17E-02	6.40E-05	--
9612	641236.2	4171648.9	Worker	Scenario 1	3.19E-02	6.45E-05	--
9613	641336.2	4171648.9	Worker	Scenario 1	3.22E-02	6.50E-05	--
9614	641436.2	4171648.9	Worker	Scenario 1	3.25E-02	6.56E-05	--
9615	641536.2	4171648.9	Worker	Scenario 1	3.27E-02	6.61E-05	--
9616	641636.2	4171648.9	Worker	Scenario 1	3.32E-02	6.70E-05	--
9617	641736.2	4171648.9	Worker	Scenario 1	3.37E-02	6.80E-05	--
9618	641836.2	4171648.9	Worker	Scenario 1	3.42E-02	6.91E-05	--
9619	641936.2	4171648.9	Worker	Scenario 1	3.47E-02	7.00E-05	--
9620	642036.2	4171648.9	Worker	Scenario 1	3.50E-02	7.07E-05	--
9621	642136.2	4171648.9	Worker	Scenario 1	3.52E-02	7.11E-05	--
9622	642236.2	4171648.9	Worker	Scenario 1	3.52E-02	7.12E-05	--
9623	642336.2	4171648.9	Worker	Scenario 1	3.51E-02	7.10E-05	--
9624	636336.2	4171748.9	Worker	Scenario 1	1.04E-02	2.09E-05	--
9625	636536.2	4171748.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
9626	636636.2	4171748.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
9627	636736.2	4171748.9	Worker	Scenario 1	1.20E-02	2.42E-05	--
9628	636836.2	4171748.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
9629	636936.2	4171748.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
9630	637036.2	4171748.9	Worker	Scenario 1	1.27E-02	2.57E-05	--
9631	637136.2	4171748.9	Worker	Scenario 1	1.28E-02	2.59E-05	--
9632	637336.2	4171748.9	Worker	Scenario 1	1.34E-02	2.70E-05	--
9633	637436.2	4171748.9	Worker	Scenario 1	1.36E-02	2.75E-05	--
9634	637536.2	4171748.9	Worker	Scenario 1	1.41E-02	2.85E-05	--
9635	637636.2	4171748.9	Worker	Scenario 1	1.45E-02	2.93E-05	--
9636	637736.2	4171748.9	Worker	Scenario 1	1.49E-02	3.01E-05	--
9637	637836.2	4171748.9	Worker	Scenario 1	1.54E-02	3.12E-05	--
9638	637936.2	4171748.9	Worker	Scenario 1	1.60E-02	3.24E-05	--
9639	638036.2	4171748.9	Worker	Scenario 1	1.66E-02	3.35E-05	--
9640	638136.2	4171748.9	Worker	Scenario 1	1.61E-02	3.25E-05	--
9641	638236.2	4171748.9	Worker	Scenario 1	1.66E-02	3.35E-05	--
9642	638336.2	4171748.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
9643	638436.2	4171748.9	Worker	Scenario 1	1.83E-02	3.71E-05	--
9644	638536.2	4171748.9	Worker	Scenario 1	1.84E-02	3.71E-05	--
9645	638636.2	4171748.9	Worker	Scenario 1	1.85E-02	3.75E-05	--
9646	638736.2	4171748.9	Worker	Scenario 1	1.90E-02	3.83E-05	--
9647	638836.2	4171748.9	Worker	Scenario 1	2.05E-02	4.13E-05	--
9648	638936.2	4171748.9	Worker	Scenario 1	2.05E-02	4.15E-05	--
9649	639036.2	4171748.9	Worker	Scenario 1	2.07E-02	4.19E-05	--
9650	639136.2	4171748.9	Worker	Scenario 1	2.15E-02	4.33E-05	--
9651	639236.2	4171748.9	Worker	Scenario 1	2.16E-02	4.36E-05	--
9652	639336.2	4171748.9	Worker	Scenario 1	2.30E-02	4.65E-05	--
9653	639436.2	4171748.9	Worker	Scenario 1	2.35E-02	4.74E-05	--
9654	639536.2	4171748.9	Worker	Scenario 1	2.40E-02	4.84E-05	--
9655	639636.2	4171748.9	Worker	Scenario 1	2.47E-02	4.98E-05	--
9656	639736.2	4171748.9	Worker	Scenario 1	2.52E-02	5.08E-05	--
9657	639836.2	4171748.9	Worker	Scenario 1	2.55E-02	5.15E-05	--
9658	639936.2	4171748.9	Worker	Scenario 1	2.61E-02	5.26E-05	--
9659	640036.2	4171748.9	Worker	Scenario 1	2.65E-02	5.35E-05	--
9660	640136.2	4171748.9	Worker	Scenario 1	2.68E-02	5.42E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9661	640236.2	4171748.9	Worker	Scenario 1	2.71E-02	5.48E-05	--
9662	640336.2	4171748.9	Worker	Scenario 1	2.76E-02	5.57E-05	--
9663	640436.2	4171748.9	Worker	Scenario 1	2.85E-02	5.75E-05	--
9664	640536.2	4171748.9	Worker	Scenario 1	2.88E-02	5.83E-05	--
9665	640636.2	4171748.9	Worker	Scenario 1	2.93E-02	5.91E-05	--
9666	640736.2	4171748.9	Worker	Scenario 1	2.97E-02	5.99E-05	--
9667	640836.2	4171748.9	Worker	Scenario 1	3.00E-02	6.06E-05	--
9668	640936.2	4171748.9	Worker	Scenario 1	3.02E-02	6.11E-05	--
9669	641036.2	4171748.9	Worker	Scenario 1	3.04E-02	6.14E-05	--
9670	641136.2	4171748.9	Worker	Scenario 1	3.06E-02	6.17E-05	--
9671	641236.2	4171748.9	Worker	Scenario 1	3.08E-02	6.22E-05	--
9672	641336.2	4171748.9	Worker	Scenario 1	3.10E-02	6.27E-05	--
9673	641436.2	4171748.9	Worker	Scenario 1	3.13E-02	6.33E-05	--
9674	641536.2	4171748.9	Worker	Scenario 1	3.17E-02	6.40E-05	--
9675	641636.2	4171748.9	Worker	Scenario 1	3.22E-02	6.49E-05	--
9676	641736.2	4171748.9	Worker	Scenario 1	3.27E-02	6.60E-05	--
9677	641836.2	4171748.9	Worker	Scenario 1	3.32E-02	6.70E-05	--
9678	641936.2	4171748.9	Worker	Scenario 1	3.36E-02	6.78E-05	--
9679	642036.2	4171748.9	Worker	Scenario 1	3.39E-02	6.84E-05	--
9680	636536.2	4171848.9	Worker	Scenario 1	1.15E-02	2.32E-05	--
9681	636636.2	4171848.9	Worker	Scenario 1	1.17E-02	2.37E-05	--
9682	636736.2	4171848.9	Worker	Scenario 1	1.18E-02	2.39E-05	--
9683	636836.2	4171848.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
9684	636936.2	4171848.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
9685	637036.2	4171848.9	Worker	Scenario 1	1.24E-02	2.49E-05	--
9686	637236.2	4171848.9	Worker	Scenario 1	1.30E-02	2.63E-05	--
9687	637336.2	4171848.9	Worker	Scenario 1	1.34E-02	2.70E-05	--
9688	637436.2	4171848.9	Worker	Scenario 1	1.38E-02	2.79E-05	--
9689	637536.2	4171848.9	Worker	Scenario 1	1.41E-02	2.86E-05	--
9690	637636.2	4171848.9	Worker	Scenario 1	1.45E-02	2.94E-05	--
9691	637736.2	4171848.9	Worker	Scenario 1	1.50E-02	3.04E-05	--
9692	637836.2	4171848.9	Worker	Scenario 1	1.57E-02	3.16E-05	--
9693	637936.2	4171848.9	Worker	Scenario 1	1.61E-02	3.25E-05	--
9694	638036.2	4171848.9	Worker	Scenario 1	1.65E-02	3.34E-05	--
9695	638136.2	4171848.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
9696	638236.2	4171848.9	Worker	Scenario 1	1.66E-02	3.34E-05	--
9697	638336.2	4171848.9	Worker	Scenario 1	1.71E-02	3.46E-05	--
9698	638436.2	4171848.9	Worker	Scenario 1	1.75E-02	3.54E-05	--
9699	638536.2	4171848.9	Worker	Scenario 1	1.86E-02	3.76E-05	--
9700	638636.2	4171848.9	Worker	Scenario 1	1.87E-02	3.77E-05	--
9701	638736.2	4171848.9	Worker	Scenario 1	1.89E-02	3.83E-05	--
9702	638836.2	4171848.9	Worker	Scenario 1	2.03E-02	4.09E-05	--
9703	638936.2	4171848.9	Worker	Scenario 1	2.05E-02	4.13E-05	--
9704	639036.2	4171848.9	Worker	Scenario 1	2.07E-02	4.19E-05	--
9705	639136.2	4171848.9	Worker	Scenario 1	2.11E-02	4.26E-05	--
9706	639236.2	4171848.9	Worker	Scenario 1	2.14E-02	4.32E-05	--
9707	639336.2	4171848.9	Worker	Scenario 1	2.24E-02	4.52E-05	--
9708	639436.2	4171848.9	Worker	Scenario 1	2.29E-02	4.63E-05	--
9709	639536.2	4171848.9	Worker	Scenario 1	2.35E-02	4.74E-05	--
9710	639636.2	4171848.9	Worker	Scenario 1	2.42E-02	4.89E-05	--
9711	639736.2	4171848.9	Worker	Scenario 1	2.47E-02	4.98E-05	--
9712	639836.2	4171848.9	Worker	Scenario 1	2.42E-02	4.89E-05	--
9713	639936.2	4171848.9	Worker	Scenario 1	2.47E-02	4.99E-05	--
9714	640036.2	4171848.9	Worker	Scenario 1	2.51E-02	5.08E-05	--
9715	640136.2	4171848.9	Worker	Scenario 1	2.56E-02	5.16E-05	--
9716	640236.2	4171848.9	Worker	Scenario 1	2.60E-02	5.25E-05	--
9717	640336.2	4171848.9	Worker	Scenario 1	2.64E-02	5.33E-05	--
9718	640436.2	4171848.9	Worker	Scenario 1	2.77E-02	5.59E-05	--
9719	640536.2	4171848.9	Worker	Scenario 1	2.80E-02	5.66E-05	--
9720	640636.2	4171848.9	Worker	Scenario 1	2.84E-02	5.74E-05	--
9721	640736.2	4171848.9	Worker	Scenario 1	2.88E-02	5.81E-05	--
9722	640836.2	4171848.9	Worker	Scenario 1	2.91E-02	5.87E-05	--
9723	640936.2	4171848.9	Worker	Scenario 1	2.92E-02	5.91E-05	--
9724	641036.2	4171848.9	Worker	Scenario 1	2.94E-02	5.94E-05	--
9725	641136.2	4171848.9	Worker	Scenario 1	2.95E-02	5.96E-05	--
9726	641236.2	4171848.9	Worker	Scenario 1	2.98E-02	6.01E-05	--
9727	641336.2	4171848.9	Worker	Scenario 1	3.00E-02	6.06E-05	--
9728	641436.2	4171848.9	Worker	Scenario 1	3.03E-02	6.12E-05	--
9729	641536.2	4171848.9	Worker	Scenario 1	3.07E-02	6.20E-05	--
9730	641636.2	4171848.9	Worker	Scenario 1	3.12E-02	6.29E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9731	636536.2	4171948.9	Worker	Scenario 1	1.14E-02	2.31E-05	--
9732	636636.2	4171948.9	Worker	Scenario 1	1.16E-02	2.34E-05	--
9733	636736.2	4171948.9	Worker	Scenario 1	1.18E-02	2.38E-05	--
9734	636836.2	4171948.9	Worker	Scenario 1	1.21E-02	2.45E-05	--
9735	636936.2	4171948.9	Worker	Scenario 1	1.20E-02	2.43E-05	--
9736	637236.2	4171948.9	Worker	Scenario 1	1.31E-02	2.65E-05	--
9737	637336.2	4171948.9	Worker	Scenario 1	1.34E-02	2.71E-05	--
9738	637436.2	4171948.9	Worker	Scenario 1	1.38E-02	2.79E-05	--
9739	637536.2	4171948.9	Worker	Scenario 1	1.42E-02	2.87E-05	--
9740	637636.2	4171948.9	Worker	Scenario 1	1.46E-02	2.96E-05	--
9741	637736.2	4171948.9	Worker	Scenario 1	1.51E-02	3.06E-05	--
9742	637836.2	4171948.9	Worker	Scenario 1	1.56E-02	3.14E-05	--
9743	637936.2	4171948.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
9744	638136.2	4171948.9	Worker	Scenario 1	1.59E-02	3.22E-05	--
9745	638236.2	4171948.9	Worker	Scenario 1	1.64E-02	3.32E-05	--
9746	638336.2	4171948.9	Worker	Scenario 1	1.70E-02	3.44E-05	--
9747	638436.2	4171948.9	Worker	Scenario 1	1.75E-02	3.54E-05	--
9748	638536.2	4171948.9	Worker	Scenario 1	1.78E-02	3.60E-05	--
9749	638636.2	4171948.9	Worker	Scenario 1	1.86E-02	3.76E-05	--
9750	638736.2	4171948.9	Worker	Scenario 1	1.91E-02	3.86E-05	--
9751	638836.2	4171948.9	Worker	Scenario 1	1.99E-02	4.03E-05	--
9752	638936.2	4171948.9	Worker	Scenario 1	1.98E-02	4.00E-05	--
9753	639036.2	4171948.9	Worker	Scenario 1	1.99E-02	4.01E-05	--
9754	639136.2	4171948.9	Worker	Scenario 1	2.03E-02	4.10E-05	--
9755	639236.2	4171948.9	Worker	Scenario 1	2.11E-02	4.26E-05	--
9756	639336.2	4171948.9	Worker	Scenario 1	2.20E-02	4.44E-05	--
9757	639436.2	4171948.9	Worker	Scenario 1	2.24E-02	4.53E-05	--
9758	639536.2	4171948.9	Worker	Scenario 1	2.30E-02	4.64E-05	--
9759	639636.2	4171948.9	Worker	Scenario 1	2.37E-02	4.79E-05	--
9760	639736.2	4171948.9	Worker	Scenario 1	2.41E-02	4.87E-05	--
9761	639836.2	4171948.9	Worker	Scenario 1	2.37E-02	4.79E-05	--
9762	639936.2	4171948.9	Worker	Scenario 1	2.41E-02	4.87E-05	--
9763	640036.2	4171948.9	Worker	Scenario 1	2.45E-02	4.95E-05	--
9764	640136.2	4171948.9	Worker	Scenario 1	2.49E-02	5.03E-05	--
9765	640236.2	4171948.9	Worker	Scenario 1	2.53E-02	5.11E-05	--
9766	640336.2	4171948.9	Worker	Scenario 1	2.57E-02	5.19E-05	--
9767	636736.2	4172048.9	Worker	Scenario 1	1.16E-02	2.35E-05	--
9768	636836.2	4172048.9	Worker	Scenario 1	1.23E-02	2.48E-05	--
9769	637236.2	4172048.9	Worker	Scenario 1	1.32E-02	2.66E-05	--
9770	637336.2	4172048.9	Worker	Scenario 1	1.35E-02	2.73E-05	--
9771	637436.2	4172048.9	Worker	Scenario 1	1.39E-02	2.80E-05	--
9772	637536.2	4172048.9	Worker	Scenario 1	1.43E-02	2.88E-05	--
9773	637636.2	4172048.9	Worker	Scenario 1	1.47E-02	2.97E-05	--
9774	637736.2	4172048.9	Worker	Scenario 1	1.51E-02	3.05E-05	--
9775	637836.2	4172048.9	Worker	Scenario 1	1.55E-02	3.14E-05	--
9776	637936.2	4172048.9	Worker	Scenario 1	1.59E-02	3.21E-05	--
9777	638136.2	4172048.9	Worker	Scenario 1	1.58E-02	3.20E-05	--
9778	638236.2	4172048.9	Worker	Scenario 1	1.63E-02	3.30E-05	--
9779	638336.2	4172048.9	Worker	Scenario 1	1.69E-02	3.41E-05	--
9780	638436.2	4172048.9	Worker	Scenario 1	1.73E-02	3.50E-05	--
9781	638536.2	4172048.9	Worker	Scenario 1	1.78E-02	3.59E-05	--
9782	638636.2	4172048.9	Worker	Scenario 1	1.82E-02	3.67E-05	--
9783	638736.2	4172048.9	Worker	Scenario 1	1.86E-02	3.77E-05	--
9784	638836.2	4172048.9	Worker	Scenario 1	1.97E-02	3.97E-05	--
9785	638936.2	4172048.9	Worker	Scenario 1	1.90E-02	3.83E-05	--
9786	639036.2	4172048.9	Worker	Scenario 1	2.00E-02	4.05E-05	--
9787	639136.2	4172048.9	Worker	Scenario 1	2.00E-02	4.04E-05	--
9788	639236.2	4172048.9	Worker	Scenario 1	2.15E-02	4.34E-05	--
9789	639336.2	4172048.9	Worker	Scenario 1	2.16E-02	4.35E-05	--
9790	639436.2	4172048.9	Worker	Scenario 1	2.20E-02	4.44E-05	--
9791	639536.2	4172048.9	Worker	Scenario 1	2.25E-02	4.54E-05	--
9792	639636.2	4172048.9	Worker	Scenario 1	2.32E-02	4.69E-05	--
9793	639736.2	4172048.9	Worker	Scenario 1	2.36E-02	4.77E-05	--
9794	639836.2	4172048.9	Worker	Scenario 1	2.32E-02	4.68E-05	--
9795	639936.2	4172048.9	Worker	Scenario 1	2.36E-02	4.76E-05	--
9796	640036.2	4172048.9	Worker	Scenario 1	2.39E-02	4.83E-05	--
9797	640136.2	4172048.9	Worker	Scenario 1	2.43E-02	4.91E-05	--
9798	637136.2	4172148.9	Worker	Scenario 1	1.30E-02	2.62E-05	--
9799	637236.2	4172148.9	Worker	Scenario 1	1.33E-02	2.70E-05	--
9800	637336.2	4172148.9	Worker	Scenario 1	1.35E-02	2.72E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9801	637436.2	4172148.9	Worker	Scenario 1	1.40E-02	2.83E-05	--
9802	637536.2	4172148.9	Worker	Scenario 1	1.43E-02	2.89E-05	--
9803	637636.2	4172148.9	Worker	Scenario 1	1.47E-02	2.97E-05	--
9804	637736.2	4172148.9	Worker	Scenario 1	1.51E-02	3.04E-05	--
9805	637836.2	4172148.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
9806	637936.2	4172148.9	Worker	Scenario 1	1.58E-02	3.19E-05	--
9807	638136.2	4172148.9	Worker	Scenario 1	1.57E-02	3.17E-05	--
9808	638236.2	4172148.9	Worker	Scenario 1	1.62E-02	3.27E-05	--
9809	638336.2	4172148.9	Worker	Scenario 1	1.67E-02	3.37E-05	--
9810	638436.2	4172148.9	Worker	Scenario 1	1.72E-02	3.47E-05	--
9811	638536.2	4172148.9	Worker	Scenario 1	1.76E-02	3.56E-05	--
9812	638636.2	4172148.9	Worker	Scenario 1	1.81E-02	3.65E-05	--
9813	638736.2	4172148.9	Worker	Scenario 1	1.86E-02	3.75E-05	--
9814	638836.2	4172148.9	Worker	Scenario 1	1.92E-02	3.88E-05	--
9815	638936.2	4172148.9	Worker	Scenario 1	1.98E-02	4.00E-05	--
9816	639036.2	4172148.9	Worker	Scenario 1	1.93E-02	3.90E-05	--
9817	639136.2	4172148.9	Worker	Scenario 1	2.04E-02	4.12E-05	--
9818	639236.2	4172148.9	Worker	Scenario 1	2.07E-02	4.19E-05	--
9819	639336.2	4172148.9	Worker	Scenario 1	2.11E-02	4.27E-05	--
9820	639436.2	4172148.9	Worker	Scenario 1	2.15E-02	4.35E-05	--
9821	639536.2	4172148.9	Worker	Scenario 1	2.20E-02	4.44E-05	--
9822	639636.2	4172148.9	Worker	Scenario 1	2.27E-02	4.59E-05	--
9823	639736.2	4172148.9	Worker	Scenario 1	2.31E-02	4.66E-05	--
9824	639836.2	4172148.9	Worker	Scenario 1	2.27E-02	4.58E-05	--
9825	639936.2	4172148.9	Worker	Scenario 1	2.30E-02	4.65E-05	--
9826	640036.2	4172148.9	Worker	Scenario 1	2.34E-02	4.72E-05	--
9827	637036.2	4172248.9	Worker	Scenario 1	1.25E-02	2.53E-05	--
9828	637136.2	4172248.9	Worker	Scenario 1	1.30E-02	2.62E-05	--
9829	637236.2	4172248.9	Worker	Scenario 1	1.33E-02	2.68E-05	--
9830	637336.2	4172248.9	Worker	Scenario 1	1.36E-02	2.75E-05	--
9831	637436.2	4172248.9	Worker	Scenario 1	1.39E-02	2.81E-05	--
9832	637536.2	4172248.9	Worker	Scenario 1	1.43E-02	2.89E-05	--
9833	637636.2	4172248.9	Worker	Scenario 1	1.46E-02	2.95E-05	--
9834	637736.2	4172248.9	Worker	Scenario 1	1.50E-02	3.03E-05	--
9835	637836.2	4172248.9	Worker	Scenario 1	1.53E-02	3.09E-05	--
9836	637936.2	4172248.9	Worker	Scenario 1	1.57E-02	3.17E-05	--
9837	638136.2	4172248.9	Worker	Scenario 1	1.56E-02	3.15E-05	--
9838	638236.2	4172248.9	Worker	Scenario 1	1.61E-02	3.24E-05	--
9839	638336.2	4172248.9	Worker	Scenario 1	1.65E-02	3.34E-05	--
9840	638436.2	4172248.9	Worker	Scenario 1	1.70E-02	3.44E-05	--
9841	638536.2	4172248.9	Worker	Scenario 1	1.75E-02	3.53E-05	--
9842	638636.2	4172248.9	Worker	Scenario 1	1.83E-02	3.69E-05	--
9843	638736.2	4172248.9	Worker	Scenario 1	1.82E-02	3.68E-05	--
9844	638836.2	4172248.9	Worker	Scenario 1	1.87E-02	3.77E-05	--
9845	638936.2	4172248.9	Worker	Scenario 1	1.92E-02	3.89E-05	--
9846	639036.2	4172248.9	Worker	Scenario 1	2.00E-02	4.03E-05	--
9847	639136.2	4172248.9	Worker	Scenario 1	2.03E-02	4.11E-05	--
9848	639236.2	4172248.9	Worker	Scenario 1	2.07E-02	4.18E-05	--
9849	639336.2	4172248.9	Worker	Scenario 1	2.11E-02	4.25E-05	--
9850	639436.2	4172248.9	Worker	Scenario 1	2.14E-02	4.32E-05	--
9851	639536.2	4172248.9	Worker	Scenario 1	2.17E-02	4.38E-05	--
9852	639736.2	4172248.9	Worker	Scenario 1	2.25E-02	4.54E-05	--
9853	639836.2	4172248.9	Worker	Scenario 1	2.21E-02	4.47E-05	--
9854	637236.2	4172348.9	Worker	Scenario 1	1.32E-02	2.67E-05	--
9855	637336.2	4172348.9	Worker	Scenario 1	1.35E-02	2.73E-05	--
9856	637436.2	4172348.9	Worker	Scenario 1	1.39E-02	2.80E-05	--
9857	637536.2	4172348.9	Worker	Scenario 1	1.42E-02	2.87E-05	--
9858	637636.2	4172348.9	Worker	Scenario 1	1.45E-02	2.94E-05	--
9859	637736.2	4172348.9	Worker	Scenario 1	1.49E-02	3.00E-05	--
9860	637836.2	4172348.9	Worker	Scenario 1	1.52E-02	3.07E-05	--
9861	637936.2	4172348.9	Worker	Scenario 1	1.55E-02	3.14E-05	--
9862	638136.2	4172348.9	Worker	Scenario 1	1.53E-02	3.08E-05	--
9863	638236.2	4172348.9	Worker	Scenario 1	1.60E-02	3.23E-05	--
9864	638336.2	4172348.9	Worker	Scenario 1	1.64E-02	3.30E-05	--
9865	638436.2	4172348.9	Worker	Scenario 1	1.66E-02	3.36E-05	--
9866	638536.2	4172348.9	Worker	Scenario 1	1.76E-02	3.56E-05	--
9867	638636.2	4172348.9	Worker	Scenario 1	1.76E-02	3.55E-05	--
9868	638736.2	4172348.9	Worker	Scenario 1	1.80E-02	3.63E-05	--
9869	638836.2	4172348.9	Worker	Scenario 1	1.84E-02	3.71E-05	--
9870	638936.2	4172348.9	Worker	Scenario 1	1.90E-02	3.83E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9871	639036.2	4172348.9	Worker	Scenario 1	1.96E-02	3.96E-05	--
9872	639136.2	4172348.9	Worker	Scenario 1	2.00E-02	4.05E-05	--
9873	639236.2	4172348.9	Worker	Scenario 1	2.05E-02	4.14E-05	--
9874	639336.2	4172348.9	Worker	Scenario 1	2.06E-02	4.16E-05	--
9875	639436.2	4172348.9	Worker	Scenario 1	2.08E-02	4.20E-05	--
9876	639536.2	4172348.9	Worker	Scenario 1	2.11E-02	4.27E-05	--
9877	637636.2	4172448.9	Worker	Scenario 1	1.44E-02	2.91E-05	--
9878	637736.2	4172448.9	Worker	Scenario 1	1.47E-02	2.98E-05	--
9879	637836.2	4172448.9	Worker	Scenario 1	1.51E-02	3.05E-05	--
9880	637936.2	4172448.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
9881	638136.2	4172448.9	Worker	Scenario 1	1.50E-02	3.02E-05	--
9882	638236.2	4172448.9	Worker	Scenario 1	1.54E-02	3.11E-05	--
9883	638336.2	4172448.9	Worker	Scenario 1	1.59E-02	3.21E-05	--
9884	638436.2	4172448.9	Worker	Scenario 1	1.71E-02	3.45E-05	--
9885	638536.2	4172448.9	Worker	Scenario 1	1.70E-02	3.44E-05	--
9886	638636.2	4172448.9	Worker	Scenario 1	1.74E-02	3.51E-05	--
9887	638736.2	4172448.9	Worker	Scenario 1	1.78E-02	3.59E-05	--
9888	638836.2	4172448.9	Worker	Scenario 1	1.82E-02	3.68E-05	--
9889	638936.2	4172448.9	Worker	Scenario 1	1.86E-02	3.76E-05	--
9890	639036.2	4172448.9	Worker	Scenario 1	1.92E-02	3.87E-05	--
9891	639136.2	4172448.9	Worker	Scenario 1	1.97E-02	3.97E-05	--
9892	639236.2	4172448.9	Worker	Scenario 1	2.00E-02	4.05E-05	--
9893	639336.2	4172448.9	Worker	Scenario 1	2.03E-02	4.11E-05	--
9894	639657.4	4168449.3	Resident	Scenario 1	2.67E-01	4.87E-05	--
9895	639682.4	4168449.8	Resident	Scenario 1	2.71E-01	4.96E-05	--
9896	639707.4	4168450.2	Resident	Scenario 1	2.76E-01	5.04E-05	--
9897	639719.4	4168437.2	Resident	Scenario 1	2.77E-01	5.06E-05	--
9898	639719.8	4168412.2	Resident	Scenario 1	2.74E-01	5.01E-05	--
9899	639720.3	4168387.2	Resident	Scenario 1	2.72E-01	4.96E-05	--
9900	639720.7	4168362.2	Resident	Scenario 1	2.69E-01	4.92E-05	--
9901	639721.2	4168337.2	Resident	Scenario 1	2.67E-01	4.87E-05	--
9902	639721.6	4168312.2	Resident	Scenario 1	2.65E-01	4.83E-05	--
9903	639722.1	4168287.2	Resident	Scenario 1	2.63E-01	4.80E-05	--
9904	639722.5	4168262.2	Resident	Scenario 1	2.60E-01	4.76E-05	--
9905	641271.3	4168602.3	Resident	Scenario 1	2.40E+00	4.38E-04	--
9906	641272.0	4168577.4	Resident	Scenario 1	2.41E+00	4.40E-04	--
9907	641272.7	4168552.4	Resident	Scenario 1	2.42E+00	4.43E-04	--
9908	641273.4	4168527.4	Resident	Scenario 1	2.43E+00	4.44E-04	--
9909	641274.1	4168502.4	Resident	Scenario 1	2.44E+00	4.45E-04	--
9910	641288.1	4168491.5	Resident	Scenario 1	2.76E+00	5.04E-04	--
9911	641313.1	4168492.2	Resident	Scenario 1	3.81E+00	6.95E-04	--
9912	641329.9	4168500.8	Resident	Scenario 1	5.47E+00	1.00E-03	--
9913	641329.4	4168525.7	Resident	Scenario 1	5.44E+00	9.93E-04	--
9914	641328.8	4168550.7	Resident	Scenario 1	5.39E+00	9.84E-04	--
9915	641328.3	4168575.7	Resident	Scenario 1	5.35E+00	9.76E-04	--
9916	641327.8	4168600.7	Resident	Scenario 1	5.31E+00	9.69E-04	--
9917	641327.3	4168625.7	Resident	Scenario 1	5.27E+00	9.62E-04	--
9918	644628.2	4167344.9	Resident	Scenario 1	5.06E+00	9.24E-04	--
9919	644603.2	4167344.6	Resident	Scenario 1	5.19E+00	9.48E-04	--
9920	644595.5	4167361.9	Resident	Scenario 1	5.23E+00	9.55E-04	--
9921	644608.1	4167373.7	Resident	Scenario 1	5.17E+00	9.44E-04	--
9922	644633.0	4167372.9	Resident	Scenario 1	5.05E+00	9.21E-04	--
9923	644644.0	4167386.8	Resident	Scenario 1	5.00E+00	9.12E-04	--
9924	644641.0	4167411.5	Resident	Scenario 1	5.02E+00	9.16E-04	--
9925	644572.2	4167547.1	Resident	Scenario 1	5.20E+00	9.50E-04	--
9926	644564.9	4167529.8	Resident	Scenario 1	5.28E+00	9.65E-04	--
9927	644585.7	4167544.7	Resident	Scenario 1	5.15E+00	9.40E-04	--
9928	644607.0	4167541.3	Resident	Scenario 1	5.04E+00	9.20E-04	--
9929	644631.9	4167541.8	Resident	Scenario 1	4.92E+00	8.98E-04	--
9930	644656.9	4167542.4	Resident	Scenario 1	4.81E+00	8.77E-04	--
9931	644681.9	4167543.0	Resident	Scenario 1	4.69E+00	8.57E-04	--
9932	643875.3	4167591.4	Resident	Scenario 1	1.18E+01	2.15E-03	--
9933	643900.3	4167591.5	Resident	Scenario 1	1.13E+01	2.07E-03	--
9934	643925.3	4167591.5	Resident	Scenario 1	1.09E+01	1.99E-03	--
9935	640593.1	4166856.1	Resident	Scenario 1	3.02E-01	5.52E-05	--
9936	640618.1	4166856.5	Resident	Scenario 1	3.09E-01	5.64E-05	--
9937	640643.1	4166856.9	Resident	Scenario 1	3.16E-01	5.77E-05	--
9938	640668.1	4166857.3	Resident	Scenario 1	3.24E-01	5.92E-05	--
9939	640693.1	4166857.7	Resident	Scenario 1	3.32E-01	6.07E-05	--
9940	640718.1	4166858.1	Resident	Scenario 1	3.41E-01	6.23E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9941	640743.1	4166858.4	Resident	Scenario 1	3.49E-01	6.37E-05	--
9942	640768.1	4166858.8	Resident	Scenario 1	3.56E-01	6.49E-05	--
9943	640793.1	4166859.2	Resident	Scenario 1	3.64E-01	6.65E-05	--
9944	640818.1	4166859.6	Resident	Scenario 1	3.74E-01	6.83E-05	--
9945	640843.1	4166860.0	Resident	Scenario 1	3.84E-01	7.02E-05	--
9946	640868.1	4166860.3	Resident	Scenario 1	3.97E-01	7.24E-05	--
9947	640893.1	4166860.7	Resident	Scenario 1	4.09E-01	7.46E-05	--
9948	640918.1	4166861.1	Resident	Scenario 1	4.23E-01	7.73E-05	--
9949	640943.1	4166861.5	Resident	Scenario 1	4.38E-01	8.00E-05	--
9950	640968.0	4166861.4	Resident	Scenario 1	4.55E-01	8.31E-05	--
9951	640992.8	4166858.1	Resident	Scenario 1	4.72E-01	8.62E-05	--
9952	641015.9	4166849.2	Resident	Scenario 1	4.89E-01	8.92E-05	--
9953	641038.0	4166837.5	Resident	Scenario 1	5.04E-01	9.21E-05	--
9954	641058.4	4166823.1	Resident	Scenario 1	5.19E-01	9.48E-05	--
9955	641078.8	4166808.7	Resident	Scenario 1	5.36E-01	9.79E-05	--
9956	641099.0	4166793.9	Resident	Scenario 1	5.54E-01	1.01E-04	--
9957	641117.9	4166777.7	Resident	Scenario 1	5.72E-01	1.04E-04	--
9958	641136.9	4166761.4	Resident	Scenario 1	5.91E-01	1.08E-04	--
9959	641155.9	4166745.1	Resident	Scenario 1	6.12E-01	1.12E-04	--
9960	641174.9	4166728.9	Resident	Scenario 1	6.37E-01	1.16E-04	--
9961	641193.9	4166712.6	Resident	Scenario 1	6.67E-01	1.22E-04	--
9962	641210.2	4166693.8	Resident	Scenario 1	6.90E-01	1.26E-04	--
9963	641225.7	4166674.2	Resident	Scenario 1	7.14E-01	1.30E-04	--
9964	641241.2	4166654.5	Resident	Scenario 1	7.41E-01	1.35E-04	--
9965	641256.7	4166634.9	Resident	Scenario 1	7.68E-01	1.40E-04	--
9966	641272.2	4166615.3	Resident	Scenario 1	8.00E-01	1.46E-04	--
9967	641287.7	4166595.7	Resident	Scenario 1	8.28E-01	1.51E-04	--
9968	641302.9	4166575.9	Resident	Scenario 1	8.65E-01	1.58E-04	--
9969	641317.9	4166555.9	Resident	Scenario 1	8.65E-01	1.58E-04	--
9970	641330.9	4166534.8	Resident	Scenario 1	8.17E-01	1.49E-04	--
9971	641338.1	4166510.9	Resident	Scenario 1	7.17E-01	1.31E-04	--
1	639723.5	4168261.2	Resident	Scenario 2	1.96E-01	1.69E-04	--
2	639698.5	4168286.2	Resident	Scenario 2	1.94E-01	1.67E-04	--
3	639723.5	4168286.2	Resident	Scenario 2	1.97E-01	1.70E-04	--
4	639648.5	4168311.2	Resident	Scenario 2	1.88E-01	1.61E-04	--
5	639673.5	4168311.2	Resident	Scenario 2	1.92E-01	1.64E-04	--
6	639698.5	4168311.2	Resident	Scenario 2	1.95E-01	1.67E-04	--
7	639648.5	4168336.2	Resident	Scenario 2	1.90E-01	1.62E-04	--
8	639673.5	4168336.2	Resident	Scenario 2	1.93E-01	1.65E-04	--
9	639698.5	4168336.2	Resident	Scenario 2	1.97E-01	1.68E-04	--
10	639648.5	4168361.2	Resident	Scenario 2	1.91E-01	1.63E-04	--
11	639673.5	4168361.2	Resident	Scenario 2	1.95E-01	1.66E-04	--
12	639698.5	4168361.2	Resident	Scenario 2	1.98E-01	1.69E-04	--
13	639648.5	4168386.2	Resident	Scenario 2	1.93E-01	1.63E-04	--
14	639673.5	4168386.2	Resident	Scenario 2	1.96E-01	1.67E-04	--
15	639698.5	4168386.2	Resident	Scenario 2	2.00E-01	1.70E-04	--
16	639648.5	4168411.2	Resident	Scenario 2	1.94E-01	1.64E-04	--
17	639673.5	4168411.2	Resident	Scenario 2	1.98E-01	1.67E-04	--
18	639698.5	4168411.2	Resident	Scenario 2	2.01E-01	1.71E-04	--
19	639648.5	4168436.2	Resident	Scenario 2	1.96E-01	1.65E-04	--
20	639673.5	4168436.2	Resident	Scenario 2	1.99E-01	1.68E-04	--
21	639698.5	4168436.2	Resident	Scenario 2	2.03E-01	1.72E-04	--
22	641298.5	4168511.2	Resident	Scenario 2	3.78E+00	5.64E-03	--
23	641323.5	4168511.2	Resident	Scenario 2	6.11E+00	9.60E-03	--
24	641298.5	4168536.2	Resident	Scenario 2	3.80E+00	5.69E-03	--
25	641323.5	4168536.2	Resident	Scenario 2	6.18E+00	9.72E-03	--
26	641298.5	4168561.2	Resident	Scenario 2	3.82E+00	5.73E-03	--
27	641323.5	4168561.2	Resident	Scenario 2	6.21E+00	9.80E-03	--
28	641298.5	4168586.2	Resident	Scenario 2	3.85E+00	5.79E-03	--
29	641323.5	4168586.2	Resident	Scenario 2	6.26E+00	9.90E-03	--
30	641298.5	4168611.2	Resident	Scenario 2	3.88E+00	5.87E-03	--
31	641323.5	4168611.2	Resident	Scenario 2	6.32E+00	1.00E-02	--
32	641298.5	4168636.2	Resident	Scenario 2	3.91E+00	5.95E-03	--
33	641323.5	4168636.2	Resident	Scenario 2	6.38E+00	1.01E-02	--
34	641298.5	4168661.2	Resident	Scenario 2	3.96E+00	6.07E-03	--
35	641323.5	4168661.2	Resident	Scenario 2	6.45E+00	1.03E-02	--
36	642036.2	4165948.9	Resident	Scenario 2	2.75E-01	2.60E-04	--
37	640636.2	4166448.9	Resident	Scenario 2	2.01E-01	1.82E-04	--
38	640836.2	4166448.9	Resident	Scenario 2	2.29E-01	2.13E-04	--
39	640936.2	4166448.9	Resident	Scenario 2	2.48E-01	2.34E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
40	641036.2	4166448.9	Resident	Scenario 2	2.72E-01	2.62E-04	--
41	641136.2	4166448.9	Resident	Scenario 2	3.11E-01	3.07E-04	--
42	641236.2	4166448.9	Resident	Scenario 2	3.66E-01	3.76E-04	--
43	640636.2	4166548.9	Resident	Scenario 2	2.15E-01	1.96E-04	--
44	640736.2	4166548.9	Resident	Scenario 2	2.32E-01	2.15E-04	--
45	640836.2	4166548.9	Resident	Scenario 2	2.51E-01	2.36E-04	--
46	641036.2	4166548.9	Resident	Scenario 2	3.10E-01	3.05E-04	--
47	641136.2	4166548.9	Resident	Scenario 2	3.69E-01	3.77E-04	--
48	641236.2	4166548.9	Resident	Scenario 2	4.92E-01	5.37E-04	--
49	640636.2	4166648.9	Resident	Scenario 2	2.30E-01	2.11E-04	--
50	640736.2	4166648.9	Resident	Scenario 2	2.50E-01	2.34E-04	--
51	640836.2	4166648.9	Resident	Scenario 2	2.73E-01	2.60E-04	--
52	640936.2	4166648.9	Resident	Scenario 2	3.04E-01	2.96E-04	--
53	641036.2	4166648.9	Resident	Scenario 2	3.52E-01	3.53E-04	--
54	641136.2	4166648.9	Resident	Scenario 2	4.29E-01	4.57E-04	--
55	641236.2	4166648.9	Resident	Scenario 2	6.42E-01	7.37E-04	--
56	640636.2	4166748.9	Resident	Scenario 2	2.42E-01	2.26E-04	--
57	640736.2	4166748.9	Resident	Scenario 2	2.68E-01	2.55E-04	--
58	640836.2	4166748.9	Resident	Scenario 2	2.89E-01	2.83E-04	--
59	640936.2	4166748.9	Resident	Scenario 2	3.28E-01	3.29E-04	--
60	641036.2	4166748.9	Resident	Scenario 2	3.89E-01	4.02E-04	--
61	641136.2	4166748.9	Resident	Scenario 2	5.02E-01	5.44E-04	--
62	640636.2	4166848.9	Resident	Scenario 2	2.52E-01	2.42E-04	--
63	640736.2	4166848.9	Resident	Scenario 2	2.82E-01	2.75E-04	--
64	640836.2	4166848.9	Resident	Scenario 2	3.12E-01	3.10E-04	--
65	640936.2	4166848.9	Resident	Scenario 2	3.59E-01	3.66E-04	--
66	644636.2	4167548.9	Resident	Scenario 2	2.79E+00	1.08E-03	--
67	644636.2	4167648.9	Resident	Scenario 2	2.61E+00	1.01E-03	--
68	644736.2	4167648.9	Resident	Scenario 2	2.40E+00	9.35E-04	--
69	644836.2	4167648.9	Resident	Scenario 2	2.22E+00	8.65E-04	--
70	644936.2	4167648.9	Resident	Scenario 2	2.05E+00	8.04E-04	--
71	645036.2	4167648.9	Resident	Scenario 2	1.91E+00	7.49E-04	--
72	645236.2	4167648.9	Resident	Scenario 2	1.67E+00	6.60E-04	--
73	644536.2	4167748.9	Resident	Scenario 2	2.55E+00	9.97E-04	--
74	644636.2	4168848.9	Resident	Scenario 2	6.28E-01	3.01E-04	--
75	644736.2	4168848.9	Resident	Scenario 2	6.12E-01	2.91E-04	--
76	644636.2	4168948.9	Resident	Scenario 2	5.92E-01	2.85E-04	--
77	644536.2	4169048.9	Resident	Scenario 2	5.72E-01	2.77E-04	--
78	644636.2	4169048.9	Resident	Scenario 2	5.58E-01	2.69E-04	--
79	644736.2	4169048.9	Resident	Scenario 2	5.45E-01	2.62E-04	--
80	644336.2	4169148.9	Resident	Scenario 2	5.71E-01	2.80E-04	--
81	644436.2	4169148.9	Resident	Scenario 2	5.55E-01	2.71E-04	--
82	644536.2	4169148.9	Resident	Scenario 2	5.42E-01	2.63E-04	--
83	644336.2	4169248.9	Resident	Scenario 2	5.43E-01	2.66E-04	--
84	644436.2	4169248.9	Resident	Scenario 2	5.29E-01	2.58E-04	--
85	644436.2	4169348.9	Resident	Scenario 2	5.05E-01	2.47E-04	--
86	642336.2	4169948.9	Resident	Scenario 2	5.63E-01	3.15E-04	--
87	642436.2	4169948.9	Resident	Scenario 2	5.55E-01	3.07E-04	--
88	642536.2	4169948.9	Resident	Scenario 2	5.46E-01	2.99E-04	--
89	642636.2	4169948.9	Resident	Scenario 2	5.36E-01	2.91E-04	--
90	642736.2	4169948.9	Resident	Scenario 2	5.24E-01	2.83E-04	--
91	642836.2	4169948.9	Resident	Scenario 2	5.12E-01	2.75E-04	--
92	642936.2	4169948.9	Resident	Scenario 2	5.01E-01	2.68E-04	--
93	643036.2	4169948.9	Resident	Scenario 2	4.92E-01	2.62E-04	--
94	643136.2	4169948.9	Resident	Scenario 2	4.84E-01	2.56E-04	--
95	644136.2	4169948.9	Resident	Scenario 2	3.86E-01	1.98E-04	--
96	642236.2	4170048.9	Resident	Scenario 2	5.34E-01	3.02E-04	--
97	642336.2	4170048.9	Resident	Scenario 2	5.27E-01	2.94E-04	--
98	642436.2	4170048.9	Resident	Scenario 2	5.21E-01	2.88E-04	--
99	642536.2	4170048.9	Resident	Scenario 2	5.13E-01	2.81E-04	--
100	642636.2	4170048.9	Resident	Scenario 2	5.03E-01	2.73E-04	--
101	642736.2	4170048.9	Resident	Scenario 2	4.92E-01	2.66E-04	--
102	642836.2	4170048.9	Resident	Scenario 2	4.81E-01	2.59E-04	--
103	642936.2	4170048.9	Resident	Scenario 2	4.72E-01	2.52E-04	--
104	643036.2	4170048.9	Resident	Scenario 2	4.64E-01	2.47E-04	--
105	643136.2	4170048.9	Resident	Scenario 2	4.57E-01	2.42E-04	--
106	643236.2	4170048.9	Resident	Scenario 2	4.50E-01	2.37E-04	--
107	643336.2	4170048.9	Resident	Scenario 2	4.42E-01	2.32E-04	--
108	643436.2	4170048.9	Resident	Scenario 2	4.35E-01	2.27E-04	--
109	643536.2	4170048.9	Resident	Scenario 2	4.28E-01	2.22E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
110	643636.2	4170048.9	Resident	Scenario 2	4.20E-01	2.17E-04	--
111	643736.2	4170048.9	Resident	Scenario 2	4.09E-01	2.12E-04	--
112	643836.2	4170048.9	Resident	Scenario 2	3.98E-01	2.06E-04	--
113	643936.2	4170048.9	Resident	Scenario 2	3.87E-01	2.00E-04	--
114	644036.2	4170048.9	Resident	Scenario 2	3.77E-01	1.95E-04	--
115	642136.2	4170148.9	Resident	Scenario 2	5.00E-01	2.86E-04	--
116	642236.2	4170148.9	Resident	Scenario 2	4.95E-01	2.80E-04	--
117	642336.2	4170148.9	Resident	Scenario 2	4.92E-01	2.75E-04	--
118	643436.2	4170148.9	Resident	Scenario 2	4.12E-01	2.15E-04	--
119	643536.2	4170148.9	Resident	Scenario 2	4.06E-01	2.11E-04	--
120	643636.2	4170148.9	Resident	Scenario 2	3.98E-01	2.06E-04	--
121	643736.2	4170148.9	Resident	Scenario 2	3.90E-01	2.02E-04	--
122	643836.2	4170148.9	Resident	Scenario 2	3.81E-01	1.97E-04	--
123	643936.2	4170148.9	Resident	Scenario 2	3.71E-01	1.92E-04	--
124	643436.2	4170248.9	Resident	Scenario 2	3.92E-01	2.04E-04	--
125	643536.2	4170248.9	Resident	Scenario 2	3.86E-01	2.00E-04	--
126	643636.2	4170248.9	Resident	Scenario 2	3.79E-01	1.96E-04	--
127	643736.2	4170248.9	Resident	Scenario 2	3.72E-01	1.93E-04	--
128	643836.2	4170248.9	Resident	Scenario 2	3.64E-01	1.88E-04	--
129	635936.2	4170748.9	Resident	Scenario 2	6.01E-02	4.08E-05	--
130	636036.2	4170748.9	Resident	Scenario 2	6.16E-02	4.18E-05	--
131	636136.2	4170748.9	Resident	Scenario 2	6.36E-02	4.30E-05	--
132	635936.2	4170848.9	Resident	Scenario 2	6.06E-02	4.10E-05	--
133	636036.2	4170848.9	Resident	Scenario 2	6.25E-02	4.22E-05	--
134	636136.2	4170848.9	Resident	Scenario 2	6.45E-02	4.35E-05	--
135	636236.2	4170848.9	Resident	Scenario 2	6.67E-02	4.49E-05	--
136	636836.2	4170848.9	Resident	Scenario 2	8.21E-02	5.50E-05	--
137	636036.2	4170948.9	Resident	Scenario 2	6.34E-02	4.27E-05	--
138	636136.2	4170948.9	Resident	Scenario 2	6.55E-02	4.40E-05	--
139	636236.2	4170948.9	Resident	Scenario 2	6.77E-02	4.54E-05	--
140	636336.2	4170948.9	Resident	Scenario 2	7.02E-02	4.70E-05	--
141	636636.2	4170948.9	Resident	Scenario 2	7.79E-02	5.21E-05	--
142	636736.2	4170948.9	Resident	Scenario 2	8.05E-02	5.38E-05	--
143	636836.2	4170948.9	Resident	Scenario 2	8.29E-02	5.54E-05	--
144	635936.2	4171048.9	Resident	Scenario 2	6.27E-02	4.21E-05	--
145	636036.2	4171048.9	Resident	Scenario 2	6.45E-02	4.32E-05	--
146	636136.2	4171048.9	Resident	Scenario 2	6.67E-02	4.46E-05	--
147	636236.2	4171048.9	Resident	Scenario 2	6.88E-02	4.60E-05	--
148	636336.2	4171048.9	Resident	Scenario 2	7.09E-02	4.74E-05	--
149	636536.2	4171048.9	Resident	Scenario 2	7.56E-02	5.04E-05	--
150	636636.2	4171048.9	Resident	Scenario 2	7.83E-02	5.22E-05	--
151	636736.2	4171048.9	Resident	Scenario 2	8.14E-02	5.42E-05	--
152	635936.2	4171148.9	Resident	Scenario 2	6.39E-02	4.26E-05	--
153	636036.2	4171148.9	Resident	Scenario 2	6.57E-02	4.38E-05	--
154	636136.2	4171148.9	Resident	Scenario 2	6.78E-02	4.51E-05	--
155	636236.2	4171148.9	Resident	Scenario 2	6.96E-02	4.64E-05	--
156	636336.2	4171148.9	Resident	Scenario 2	7.17E-02	4.78E-05	--
157	636536.2	4171148.9	Resident	Scenario 2	7.66E-02	5.09E-05	--
158	636636.2	4171148.9	Resident	Scenario 2	7.88E-02	5.24E-05	--
159	636136.2	4171248.9	Resident	Scenario 2	6.87E-02	4.56E-05	--
160	636236.2	4171248.9	Resident	Scenario 2	7.07E-02	4.69E-05	--
161	636336.2	4171248.9	Resident	Scenario 2	7.27E-02	4.83E-05	--
162	636536.2	4171248.9	Resident	Scenario 2	7.72E-02	5.13E-05	--
163	636036.2	4171348.9	Resident	Scenario 2	6.78E-02	4.49E-05	--
164	636136.2	4171348.9	Resident	Scenario 2	6.96E-02	4.61E-05	--
165	636236.2	4171348.9	Resident	Scenario 2	7.15E-02	4.74E-05	--
166	636336.2	4171348.9	Resident	Scenario 2	7.37E-02	4.88E-05	--
167	636136.2	4171448.9	Resident	Scenario 2	7.04E-02	4.65E-05	--
168	642573.5	4166836.2	Roadway/Waterway	Scenario 2	--	--	--
169	644323.5	4166836.2	Roadway/Waterway	Scenario 2	--	--	--
170	641523.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
171	641548.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
172	641573.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
173	642048.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
174	642073.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
175	642098.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
176	642198.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
177	642223.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
178	642248.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
179	642273.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
180	642548.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
181	642573.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
182	642598.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
183	642623.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
184	642648.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
185	642673.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
186	642698.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
187	642723.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
188	642748.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
189	642773.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
190	642798.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
191	642823.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
192	642848.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
193	642873.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
194	642898.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
195	642923.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
196	642948.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
197	642973.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
198	642998.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
199	643023.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
200	643048.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
201	643073.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
202	643098.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
203	643123.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
204	643148.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
205	643173.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
206	643198.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
207	643223.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
208	643248.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
209	643273.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
210	643298.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
211	643323.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
212	643348.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
213	643373.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
214	643398.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
215	643423.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
216	643448.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
217	643473.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
218	643498.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
219	643523.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
220	643548.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
221	643573.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
222	643598.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
223	643623.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
224	643648.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
225	643673.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
226	643698.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
227	643723.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
228	643748.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
229	643773.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
230	643798.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
231	643823.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
232	643848.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
233	643873.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
234	643898.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
235	643923.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
236	643948.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
237	643973.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
238	643998.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
239	644023.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
240	644048.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
241	644073.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
242	644098.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
243	644123.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
244	644148.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
245	644173.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
246	644198.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
247	644223.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
248	644248.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
249	644273.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
250	644298.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
251	644323.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
252	644348.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
253	644373.5	4166861.2	Roadway/Waterway	Scenario 2	--	--	--
254	641423.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
255	641448.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
256	641473.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
257	641498.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
258	641523.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
259	641548.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
260	641573.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
261	641598.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
262	641623.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
263	641648.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
264	641673.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
265	641698.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
266	641723.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
267	641748.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
268	641773.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
269	641798.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
270	641823.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
271	641848.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
272	641873.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
273	641898.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
274	641923.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
275	641948.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
276	641973.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
277	641998.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
278	642023.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
279	642048.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
280	642073.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
281	642098.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
282	642123.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
283	642148.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
284	642173.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
285	642198.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
286	642223.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
287	642248.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
288	642273.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
289	642298.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
290	642323.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
291	642348.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
292	642373.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
293	642398.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
294	642423.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
295	642448.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
296	642473.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
297	642498.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
298	642523.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
299	642548.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
300	642573.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
301	642598.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
302	642623.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
303	642648.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
304	642673.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
305	642698.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
306	642723.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
307	642748.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
308	642773.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
309	642798.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
310	642823.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
311	642848.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
312	642873.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
313	642898.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
314	642923.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
315	642948.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
316	642973.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
317	642998.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
318	643023.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
319	643048.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
320	643073.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
321	643098.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
322	643123.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
323	643148.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
324	643173.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
325	643198.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
326	643223.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
327	643248.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
328	643273.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
329	643298.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
330	643323.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
331	643348.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
332	643373.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
333	643398.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
334	643423.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
335	643448.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
336	643473.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
337	643498.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
338	643523.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
339	643548.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
340	643573.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
341	643598.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
342	643623.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
343	643648.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
344	643673.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
345	643698.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
346	643723.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
347	643748.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
348	643773.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
349	643798.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
350	643823.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
351	643848.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
352	643873.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
353	643898.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
354	643923.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
355	643948.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
356	643973.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
357	643998.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
358	644023.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
359	644048.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
360	644073.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
361	644098.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
362	644123.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
363	644148.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
364	644173.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
365	644198.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
366	644223.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
367	644248.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
368	644273.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
369	644298.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
370	644323.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
371	644348.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
372	644373.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
373	644398.5	4166886.2	Roadway/Waterway	Scenario 2	--	--	--
374	641348.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
375	641373.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
376	641398.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
377	641423.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
378	641448.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
379	641473.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
380	641498.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
381	641523.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
382	641548.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
383	641573.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
384	641598.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
385	641623.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
386	641648.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
387	641673.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
388	641698.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
389	641723.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
390	641748.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
391	641773.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
392	641798.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
393	641823.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
394	641848.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
395	641873.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
396	641898.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
397	641923.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
398	641948.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
399	641973.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
400	641998.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
401	642023.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
402	642048.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
403	642073.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
404	642098.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
405	642123.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
406	642148.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
407	642173.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
408	642198.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
409	642223.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
410	642248.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
411	642273.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
412	642298.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
413	642323.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
414	642348.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
415	642373.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
416	642398.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
417	642423.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
418	642448.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
419	642473.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
420	642498.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
421	642523.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
422	642548.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
423	642573.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
424	642598.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
425	642623.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
426	642648.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
427	642673.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
428	642698.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
429	642723.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
430	642748.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
431	642773.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
432	643548.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
433	643573.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
434	643598.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
435	643623.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
436	643648.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
437	643673.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
438	643698.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
439	643723.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
440	643748.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
441	643773.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
442	643798.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
443	643823.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
444	643848.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
445	643873.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
446	643898.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
447	643923.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
448	643948.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
449	643973.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
450	643998.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
451	644023.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
452	644048.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
453	644073.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
454	644098.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
455	644123.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
456	644148.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
457	644173.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
458	644198.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
459	644223.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
460	644248.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
461	644273.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
462	644298.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
463	644323.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
464	644348.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
465	644373.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
466	644398.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
467	644423.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
468	644448.5	4166911.2	Roadway/Waterway	Scenario 2	--	--	--
469	641323.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
470	641348.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
471	641373.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
472	641398.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
473	641423.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
474	641448.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
475	641473.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
476	641498.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
477	641523.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
478	641548.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
479	641573.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
480	641598.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
481	641623.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
482	641648.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
483	641673.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
484	641698.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
485	641723.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
486	641748.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
487	641773.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
488	641798.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
489	641823.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
490	641848.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
491	641873.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
492	641898.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
493	641923.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
494	641948.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
495	642223.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
496	642248.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
497	642273.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
498	642298.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
499	642323.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
500	642348.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
501	642373.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
502	642398.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
503	642423.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
504	642448.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
505	642473.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
506	642498.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
507	642523.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
508	642548.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
509	642573.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
510	644323.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
511	644348.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
512	644373.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
513	644398.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
514	644423.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
515	644448.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
516	644473.5	4166936.2	Roadway/Waterway	Scenario 2	--	--	--
517	641323.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
518	641348.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
519	641373.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
520	641398.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
521	641423.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
522	641448.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
523	641473.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
524	641498.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
525	641523.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
526	642198.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
527	642223.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
528	642248.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
529	642273.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
530	642298.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
531	642323.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
532	642348.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
533	642373.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
534	642398.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
535	642423.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
536	642448.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
537	642473.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
538	642498.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
539	642523.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
540	642548.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
541	644373.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
542	644398.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
543	644423.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
544	644448.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
545	644473.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
546	644498.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
547	644523.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
548	644548.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
549	644573.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
550	644598.5	4166961.2	Roadway/Waterway	Scenario 2	--	--	--
551	641298.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
552	641323.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
553	641348.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
554	641373.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
555	641398.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
556	641423.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
557	642173.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
558	642198.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
559	642223.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
560	642248.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
561	642273.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
562	642298.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
563	642323.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
564	642348.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
565	644398.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
566	644423.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
567	644448.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
568	644473.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
569	644498.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
570	644523.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
571	644548.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
572	644573.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
573	644598.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
574	644623.5	4166986.2	Roadway/Waterway	Scenario 2	--	--	--
575	641348.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
576	641373.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
577	642148.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
578	642173.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
579	642198.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
580	642223.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
581	642248.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
582	642273.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
583	642298.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
584	642323.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
585	644423.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
586	644448.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
587	644473.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
588	644498.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
589	644523.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
590	644548.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
591	644573.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
592	644598.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
593	644623.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
594	644648.5	4167011.2	Roadway/Waterway	Scenario 2	--	--	--
595	641348.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
596	641373.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
597	642123.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
598	642148.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
599	642173.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
600	642198.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
601	642223.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
602	642248.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
603	642273.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
604	642298.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
605	644473.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
606	644498.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
607	644523.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
608	644548.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
609	644573.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
610	644598.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
611	644623.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
612	644648.5	4167036.2	Roadway/Waterway	Scenario 2	--	--	--
613	641373.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
614	642098.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
615	642123.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
616	642148.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
617	642173.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
618	642198.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
619	642223.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
620	642248.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
621	642273.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
622	644573.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
623	644598.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
624	644623.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
625	644648.5	4167061.2	Roadway/Waterway	Scenario 2	--	--	--
626	641373.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
627	642073.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
628	642098.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
629	642123.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
630	642148.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
631	642173.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
632	642198.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
633	642223.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
634	642248.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
635	644598.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
636	644623.5	4167086.2	Roadway/Waterway	Scenario 2	--	--	--
637	641373.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
638	642048.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
639	642073.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
640	642098.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
641	642123.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
642	642148.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
643	642173.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
644	642198.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
645	642223.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
646	644598.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
647	644623.5	4167111.2	Roadway/Waterway	Scenario 2	--	--	--
648	641373.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
649	642023.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
650	642048.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
651	642073.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
652	642098.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
653	642123.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
654	642148.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
655	642173.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
656	642198.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
657	644598.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
658	644623.5	4167136.2	Roadway/Waterway	Scenario 2	--	--	--
659	641373.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
660	641998.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
661	642023.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
662	642048.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
663	642073.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
664	642098.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
665	642123.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
666	642148.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
667	644598.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
668	644623.5	4167161.2	Roadway/Waterway	Scenario 2	--	--	--
669	641373.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
670	641948.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
671	641973.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
672	641998.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
673	642023.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
674	642048.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
675	642073.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
676	642098.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
677	642123.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
678	644598.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
679	644623.5	4167186.2	Roadway/Waterway	Scenario 2	--	--	--
680	641373.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
681	641923.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
682	641948.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
683	641973.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
684	641998.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
685	642023.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
686	642048.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
687	642073.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
688	642098.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
689	644598.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
690	644623.5	4167211.2	Roadway/Waterway	Scenario 2	--	--	--
691	641373.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
692	641898.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
693	641923.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
694	641948.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
695	641973.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
696	641998.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
697	642023.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
698	642048.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
699	642073.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
700	644598.5	4167236.2	Roadway/Waterway	Scenario 2	--	--	--
701	641373.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
702	641873.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
703	641898.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
704	641923.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
705	641948.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
706	641973.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
707	641998.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
708	642023.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
709	642048.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
710	644548.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
711	644573.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
712	644598.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
713	644623.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
714	644648.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
715	644673.5	4167261.2	Roadway/Waterway	Scenario 2	--	--	--
716	641373.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
717	641823.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
718	641848.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
719	641873.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
720	641898.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
721	641923.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
722	641948.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
723	641973.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
724	641998.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
725	642023.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
726	644448.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
727	644473.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
728	644498.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
729	644523.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
730	644548.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
731	644573.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
732	644598.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
733	644623.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
734	644648.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
735	644673.5	4167286.2	Roadway/Waterway	Scenario 2	--	--	--
736	641373.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
737	641748.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
738	641773.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
739	641798.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
740	641823.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
741	641848.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
742	641873.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
743	641898.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
744	641923.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
745	641948.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
746	641973.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
747	641998.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
748	644373.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
749	644398.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
750	644423.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
751	644448.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
752	644473.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
753	644498.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
754	644523.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
755	644548.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
756	644573.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
757	644598.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
758	644623.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
759	644648.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
760	641373.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
761	641673.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
762	641698.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
763	641723.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
764	641748.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
765	641773.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
766	641798.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
767	641823.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
768	641848.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
769	641873.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
770	641898.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
771	641923.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
772	641948.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
773	641973.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
774	644298.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
775	644323.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
776	644348.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
777	644373.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
778	644398.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
779	644423.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
780	644448.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
781	644473.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
782	644498.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
783	644523.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
784	644548.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
785	644573.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
786	644598.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
787	644623.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
788	641373.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
789	641573.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
790	641598.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
791	641623.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
792	641648.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
793	641673.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
794	641698.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
795	641723.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
796	641748.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
797	641773.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
798	641798.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
799	641823.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
800	641848.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
801	641873.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
802	641898.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
803	641923.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
804	643348.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
805	643373.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
806	643398.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
807	643423.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
808	643448.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
809	643473.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
810	643498.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
811	643523.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
812	643548.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
813	643573.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
814	643598.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
815	643623.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
816	643648.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
817	643673.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
818	643698.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
819	643723.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
820	643748.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
821	643773.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
822	643798.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
823	643823.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
824	643848.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
825	643873.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
826	644248.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
827	644273.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
828	644298.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
829	644323.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
830	644348.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
831	644373.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
832	644398.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
833	644423.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
834	644448.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
835	644473.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
836	644498.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--
837	641373.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
838	641498.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
839	641523.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
840	641548.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
841	641573.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
842	641598.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
843	641623.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
844	641648.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
845	641673.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
846	641698.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
847	641723.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
848	641748.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
849	641773.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
850	641798.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
851	641823.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
852	641848.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
853	641873.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
854	643323.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
855	643348.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
856	643373.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
857	643398.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
858	643423.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
859	643448.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
860	643473.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
861	643498.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
862	643523.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
863	643548.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
864	643573.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
865	643598.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
866	643623.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
867	643648.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
868	643673.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
869	643698.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
870	643723.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
871	643748.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
872	643773.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
873	643798.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
874	643823.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
875	643848.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
876	643873.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
877	643898.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
878	643923.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
879	643948.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
880	643973.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
881	643998.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
882	644023.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
883	644048.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
884	644073.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
885	644148.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
886	644173.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
887	644198.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
888	644223.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
889	644248.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
890	644273.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
891	644298.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
892	644323.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
893	644348.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
894	644373.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
895	644398.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
896	644423.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
897	641373.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
898	641398.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
899	641423.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
900	641448.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
901	641473.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
902	641498.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
903	641523.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
904	641548.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
905	641573.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
906	641598.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
907	641623.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
908	641648.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
909	641673.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
910	641698.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
911	641723.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
912	641748.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
913	641773.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
914	641798.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
915	641823.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
916	641848.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
917	643298.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
918	643323.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
919	643348.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
920	643373.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
921	643398.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
922	643423.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
923	643448.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
924	643473.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
925	643498.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
926	643523.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
927	643548.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
928	643573.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
929	643598.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
930	643623.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
931	643648.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
932	643673.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
933	643698.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
934	643723.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
935	643748.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
936	643773.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
937	643798.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
938	643823.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
939	643848.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
940	643873.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
941	643898.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
942	643923.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
943	643948.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
944	643973.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
945	643998.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
946	644023.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
947	644048.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
948	644073.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
949	644098.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
950	644123.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
951	644148.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
952	644173.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
953	644198.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
954	644223.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
955	644248.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
956	644273.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
957	644298.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
958	644323.5	4167411.2	Roadway/Waterway	Scenario 2	--	--	--
959	641298.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
960	641323.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
961	641348.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
962	641373.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
963	641398.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
964	641423.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
965	641448.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
966	641473.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
967	641498.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
968	641523.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
969	641548.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
970	641573.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
971	641598.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
972	641623.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
973	641648.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
974	641673.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
975	641698.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
976	641723.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
977	641748.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
978	641773.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
979	643273.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
980	643298.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
981	643323.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
982	643773.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
983	643798.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
984	643823.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
985	643848.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
986	643873.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
987	643898.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
988	643923.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
989	643948.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
990	643973.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
991	643998.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
992	644023.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
993	644048.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
994	644073.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
995	644098.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
996	644123.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
997	644148.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
998	644173.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
999	644198.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
1000	644223.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
1001	644248.5	4167436.2	Roadway/Waterway	Scenario 2	--	--	--
1002	641323.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1003	641348.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1004	641373.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1005	641398.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1006	641423.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1007	641448.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1008	641473.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1009	641498.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1010	641523.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1011	641548.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1012	641573.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1013	641598.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1014	641623.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1015	641648.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1016	641673.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1017	641698.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1018	643248.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1019	643273.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1020	643298.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1021	643923.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1022	643948.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1023	643973.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1024	643998.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1025	644023.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1026	644048.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1027	644073.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1028	644098.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1029	644123.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1030	644148.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1031	644173.5	4167461.2	Roadway/Waterway	Scenario 2	--	--	--
1032	641273.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1033	641298.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1034	641323.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1035	641348.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1036	641373.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1037	641398.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1038	641423.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1039	641448.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1040	641473.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1041	641498.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1042	641523.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1043	641548.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1044	641573.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1045	641598.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1046	643223.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1047	643248.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1048	643273.5	4167486.2	Roadway/Waterway	Scenario 2	--	--	--
1049	641198.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1050	641223.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1051	641248.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1052	641273.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1053	641298.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1054	641323.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1055	641348.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1056	641373.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1057	641398.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1058	641423.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1059	641448.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1060	641473.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1061	641498.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1062	641523.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1063	643223.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1064	643248.5	4167511.2	Roadway/Waterway	Scenario 2	--	--	--
1065	641098.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1066	641123.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1067	641148.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1068	641173.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1069	641198.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1070	641223.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1071	641248.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1072	641273.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1073	641298.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1074	641323.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1075	641348.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1076	641373.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1077	641398.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1078	641423.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1079	643198.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1080	643223.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1081	643248.5	4167536.2	Roadway/Waterway	Scenario 2	--	--	--
1082	641023.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1083	641048.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1084	641073.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1085	641098.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1086	641123.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1087	641148.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1088	641173.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1089	641198.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1090	641223.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1091	641248.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1092	641273.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1093	641298.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1094	641323.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1095	641348.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1096	643173.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1097	643198.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1098	643223.5	4167561.2	Roadway/Waterway	Scenario 2	--	--	--
1099	640923.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1100	640948.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1101	640973.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1102	640998.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1103	641023.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1104	641048.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1105	641073.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1106	641098.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1107	641123.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1108	641148.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1109	641173.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1110	641198.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1111	641223.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1112	641248.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1113	641273.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1114	643148.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1115	643173.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1116	643198.5	4167586.2	Roadway/Waterway	Scenario 2	--	--	--
1117	640823.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1118	640848.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1119	640873.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1120	640898.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1121	640923.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1122	640948.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1123	640973.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1124	640998.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1125	641023.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1126	641048.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1127	641073.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1128	641098.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1129	641123.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1130	641148.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1131	641173.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1132	643123.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1133	643148.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1134	643173.5	4167611.2	Roadway/Waterway	Scenario 2	--	--	--
1135	640723.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1136	640748.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1137	640773.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1138	640798.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1139	640823.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1140	640848.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1141	640873.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1142	640898.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1143	640923.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1144	640948.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1145	640973.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1146	640998.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1147	641023.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1148	641048.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1149	641073.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1150	641098.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1151	643123.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1152	643148.5	4167636.2	Roadway/Waterway	Scenario 2	--	--	--
1153	640623.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1154	640648.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1155	640673.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1156	640698.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1157	640723.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1158	640748.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1159	640773.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1160	640798.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1161	640823.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1162	640848.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1163	640873.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1164	640898.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1165	640923.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1166	640948.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1167	640973.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1168	640998.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1169	643098.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1170	643123.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1171	643148.5	4167661.2	Roadway/Waterway	Scenario 2	--	--	--
1172	640523.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1173	640548.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1174	640573.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1175	640598.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1176	640623.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1177	640648.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1178	640673.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1179	640698.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1180	640723.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1181	640748.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1182	640773.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1183	640798.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1184	640823.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1185	640848.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1186	640873.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1187	640898.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1188	643073.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1189	643098.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1190	643123.5	4167686.2	Roadway/Waterway	Scenario 2	--	--	--
1191	640423.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1192	640448.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1193	640473.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1194	640498.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1195	640523.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1196	640548.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1197	640573.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1198	640598.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1199	640623.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1200	640648.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1201	640673.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1202	640698.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1203	640723.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1204	640748.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1205	640773.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1206	640798.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1207	643048.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1208	643073.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1209	643098.5	4167711.2	Roadway/Waterway	Scenario 2	--	--	--
1210	640373.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1211	640398.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1212	640423.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1213	640448.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1214	640473.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1215	640498.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1216	640523.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1217	640548.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1218	640573.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1219	640598.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1220	640623.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1221	640648.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1222	640673.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1223	640698.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1224	640723.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1225	643023.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1226	643048.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1227	643073.5	4167736.2	Roadway/Waterway	Scenario 2	--	--	--
1228	640323.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1229	640348.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1230	640373.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1231	640398.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1232	640423.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1233	640448.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1234	640473.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1235	640498.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1236	640523.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1237	640548.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1238	640573.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1239	640598.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1240	640623.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1241	643023.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1242	643048.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1243	643073.5	4167761.2	Roadway/Waterway	Scenario 2	--	--	--
1244	640273.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1245	640298.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1246	640323.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1247	640348.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1248	640373.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1249	640398.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1250	640423.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1251	640448.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1252	640473.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1253	640498.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1254	640523.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1255	642998.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1256	643023.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1257	643048.5	4167786.2	Roadway/Waterway	Scenario 2	--	--	--
1258	640223.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1259	640248.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1260	640273.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1261	640298.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1262	640323.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1263	640348.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1264	640373.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1265	640398.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1266	640423.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1267	642973.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1268	642998.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1269	643023.5	4167811.2	Roadway/Waterway	Scenario 2	--	--	--
1270	640198.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1271	640223.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1272	640248.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1273	640273.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1274	640298.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1275	640323.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1276	640348.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1277	640373.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1278	642923.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1279	642948.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1280	642973.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1281	642998.5	4167836.2	Roadway/Waterway	Scenario 2	--	--	--
1282	640148.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1283	640173.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1284	640198.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1285	640223.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1286	640248.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1287	640273.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1288	640298.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1289	640323.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1290	642898.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1291	642923.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1292	642948.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1293	642973.5	4167861.2	Roadway/Waterway	Scenario 2	--	--	--
1294	640123.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1295	640148.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1296	640173.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1297	640198.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1298	640223.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1299	640248.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1300	640273.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1301	642848.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1302	642873.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1303	642898.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1304	642923.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1305	642948.5	4167886.2	Roadway/Waterway	Scenario 2	--	--	--
1306	640073.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1307	640098.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1308	640123.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1309	640148.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1310	640173.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1311	640198.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1312	640223.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1313	640248.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1314	642823.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1315	642848.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1316	642873.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1317	642898.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1318	642923.5	4167911.2	Roadway/Waterway	Scenario 2	--	--	--
1319	640048.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1320	640073.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1321	640098.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1322	640123.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1323	640148.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1324	640173.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1325	640198.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1326	642773.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1327	642798.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1328	642823.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1329	642848.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1330	642873.5	4167936.2	Roadway/Waterway	Scenario 2	--	--	--
1331	639998.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1332	640023.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1333	640048.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1334	640073.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1335	640098.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1336	640123.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1337	640148.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1338	640173.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1339	642748.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1340	642773.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1341	642798.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1342	642823.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1343	642848.5	4167961.2	Roadway/Waterway	Scenario 2	--	--	--
1344	639973.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1345	639998.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1346	640023.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1347	640048.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1348	640073.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1349	640098.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1350	640123.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1351	642698.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1352	642723.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1353	642748.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1354	642773.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1355	642798.5	4167986.2	Roadway/Waterway	Scenario 2	--	--	--
1356	639923.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1357	639948.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1358	639973.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1359	639998.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1360	640023.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1361	640048.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1362	640073.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1363	640098.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1364	642648.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1365	642673.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1366	642698.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1367	642723.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1368	642748.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--
1369	642773.5	4168011.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1370	639898.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1371	639923.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1372	639948.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1373	639973.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1374	639998.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1375	640023.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1376	640048.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1377	642623.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1378	642648.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1379	642673.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1380	642698.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1381	642723.5	4168036.2	Roadway/Waterway	Scenario 2	--	--	--
1382	639848.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1383	639873.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1384	639898.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1385	639923.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1386	639948.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1387	639973.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1388	639998.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1389	642573.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1390	642598.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1391	642623.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1392	642648.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1393	642673.5	4168061.2	Roadway/Waterway	Scenario 2	--	--	--
1394	639823.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1395	639848.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1396	639873.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1397	639898.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1398	639923.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1399	639948.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1400	639973.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1401	642548.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1402	642573.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1403	642598.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1404	642623.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1405	642648.5	4168086.2	Roadway/Waterway	Scenario 2	--	--	--
1406	639773.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1407	639798.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1408	639823.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1409	639848.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1410	639873.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1411	639898.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1412	639923.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1413	642498.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1414	642523.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1415	642548.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1416	642573.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1417	642598.5	4168111.2	Roadway/Waterway	Scenario 2	--	--	--
1418	639748.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1419	639773.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1420	639798.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1421	639823.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1422	639848.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1423	639873.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1424	639898.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1425	642473.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1426	642498.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1427	642523.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1428	642548.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1429	642573.5	4168136.2	Roadway/Waterway	Scenario 2	--	--	--
1430	639698.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1431	639723.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1432	639748.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1433	639773.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1434	639798.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1435	639823.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1436	639848.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1437	642448.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1438	642473.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1439	642498.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1440	642523.5	4168161.2	Roadway/Waterway	Scenario 2	--	--	--
1441	639673.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1442	639698.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1443	639723.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1444	639748.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1445	639773.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1446	639798.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1447	639823.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1448	642423.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1449	642448.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1450	642473.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1451	642498.5	4168186.2	Roadway/Waterway	Scenario 2	--	--	--
1452	639648.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1453	639673.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1454	639698.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1455	639723.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1456	639748.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1457	639773.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1458	642398.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1459	642423.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1460	642448.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1461	642473.5	4168211.2	Roadway/Waterway	Scenario 2	--	--	--
1462	639648.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1463	639673.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1464	639698.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1465	639723.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1466	639748.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1467	642373.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1468	642398.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1469	642423.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1470	642448.5	4168236.2	Roadway/Waterway	Scenario 2	--	--	--
1471	639648.5	4168261.2	Roadway/Waterway	Scenario 2	--	--	--
1472	639673.5	4168261.2	Roadway/Waterway	Scenario 2	--	--	--
1473	639698.5	4168261.2	Roadway/Waterway	Scenario 2	--	--	--
1474	642348.5	4168261.2	Roadway/Waterway	Scenario 2	--	--	--
1475	642373.5	4168261.2	Roadway/Waterway	Scenario 2	--	--	--
1476	642398.5	4168261.2	Roadway/Waterway	Scenario 2	--	--	--
1477	642423.5	4168261.2	Roadway/Waterway	Scenario 2	--	--	--
1478	639648.5	4168286.2	Roadway/Waterway	Scenario 2	--	--	--
1479	639673.5	4168286.2	Roadway/Waterway	Scenario 2	--	--	--
1480	642298.5	4168286.2	Roadway/Waterway	Scenario 2	--	--	--
1481	642323.5	4168286.2	Roadway/Waterway	Scenario 2	--	--	--
1482	642348.5	4168286.2	Roadway/Waterway	Scenario 2	--	--	--
1483	642373.5	4168286.2	Roadway/Waterway	Scenario 2	--	--	--
1484	642398.5	4168286.2	Roadway/Waterway	Scenario 2	--	--	--
1485	639723.5	4168311.2	Roadway/Waterway	Scenario 2	--	--	--
1486	642248.5	4168311.2	Roadway/Waterway	Scenario 2	--	--	--
1487	642273.5	4168311.2	Roadway/Waterway	Scenario 2	--	--	--
1488	642298.5	4168311.2	Roadway/Waterway	Scenario 2	--	--	--
1489	642323.5	4168311.2	Roadway/Waterway	Scenario 2	--	--	--
1490	642348.5	4168311.2	Roadway/Waterway	Scenario 2	--	--	--
1491	642373.5	4168311.2	Roadway/Waterway	Scenario 2	--	--	--
1492	639723.5	4168336.2	Roadway/Waterway	Scenario 2	--	--	--
1493	642198.5	4168336.2	Roadway/Waterway	Scenario 2	--	--	--
1494	642223.5	4168336.2	Roadway/Waterway	Scenario 2	--	--	--
1495	642248.5	4168336.2	Roadway/Waterway	Scenario 2	--	--	--
1496	642273.5	4168336.2	Roadway/Waterway	Scenario 2	--	--	--
1497	642298.5	4168336.2	Roadway/Waterway	Scenario 2	--	--	--
1498	642323.5	4168336.2	Roadway/Waterway	Scenario 2	--	--	--
1499	639373.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1500	639398.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1501	639423.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1502	639448.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1503	639473.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1504	639498.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1505	639523.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1506	639548.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1507	639723.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1508	642148.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1509	642173.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1510	642198.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1511	642223.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1512	642248.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1513	642273.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1514	642298.5	4168361.2	Roadway/Waterway	Scenario 2	--	--	--
1515	639323.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1516	639348.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1517	639373.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1518	639398.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1519	639423.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1520	639448.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1521	639473.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1522	639498.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1523	639723.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1524	642098.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1525	642123.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1526	642148.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1527	642173.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1528	642198.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1529	642223.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1530	642248.5	4168386.2	Roadway/Waterway	Scenario 2	--	--	--
1531	639298.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1532	639323.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1533	639348.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1534	639373.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1535	639398.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1536	639423.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1537	639448.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1538	639473.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1539	639723.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1540	642023.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1541	642048.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1542	642073.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1543	642098.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1544	642123.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1545	642148.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1546	642173.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1547	642198.5	4168411.2	Roadway/Waterway	Scenario 2	--	--	--
1548	639248.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1549	639273.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1550	639298.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1551	639323.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1552	639348.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1553	639373.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1554	639398.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1555	639423.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1556	639723.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1557	641973.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1558	641998.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1559	642023.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1560	642048.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1561	642073.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1562	642098.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1563	642123.5	4168436.2	Roadway/Waterway	Scenario 2	--	--	--
1564	639198.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1565	639223.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1566	639248.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1567	639273.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1568	639298.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1569	639323.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1570	639348.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1571	639373.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1572	641923.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1573	641948.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1574	641973.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1575	641998.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1576	642023.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1577	642048.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1578	642073.5	4168461.2	Roadway/Waterway	Scenario 2	--	--	--
1579	639173.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1580	639198.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1581	639223.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1582	639248.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1583	639273.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1584	639298.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1585	639323.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1586	641848.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1587	641873.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1588	641898.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1589	641923.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1590	641948.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1591	641973.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1592	641998.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1593	642023.5	4168486.2	Roadway/Waterway	Scenario 2	--	--	--
1594	639123.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1595	639148.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1596	639173.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1597	639198.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1598	639223.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1599	639248.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1600	639273.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1601	639298.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1602	641348.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1603	641798.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1604	641823.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1605	641848.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1606	641873.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1607	641898.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1608	641923.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1609	641948.5	4168511.2	Roadway/Waterway	Scenario 2	--	--	--
1610	639073.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1611	639098.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1612	639123.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1613	639148.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1614	639173.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1615	639198.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1616	639223.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1617	639248.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1618	641348.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1619	641723.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1620	641748.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1621	641773.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1622	641798.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1623	641823.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1624	641848.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1625	641873.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1626	641898.5	4168536.2	Roadway/Waterway	Scenario 2	--	--	--
1627	639048.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1628	639073.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1629	639098.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1630	639123.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1631	639148.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1632	639173.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1633	639198.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1634	641348.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1635	641648.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1636	641673.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1637	641698.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1638	641723.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1639	641748.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1640	641773.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1641	641798.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1642	641823.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1643	641848.5	4168561.2	Roadway/Waterway	Scenario 2	--	--	--
1644	638998.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1645	639023.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1646	639048.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1647	639073.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1648	639098.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1649	639123.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1650	639148.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1651	639173.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1652	641348.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1653	641573.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1654	641598.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1655	641623.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1656	641648.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1657	641673.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1658	641698.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1659	641723.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1660	641748.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1661	641773.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1662	641798.5	4168586.2	Roadway/Waterway	Scenario 2	--	--	--
1663	638948.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1664	638973.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1665	638998.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1666	639023.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1667	639048.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1668	639073.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1669	639098.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1670	639123.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1671	641348.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1672	641498.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1673	641523.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1674	641548.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1675	641573.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1676	641598.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1677	641623.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1678	641648.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1679	641673.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1680	641698.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1681	641723.5	4168611.2	Roadway/Waterway	Scenario 2	--	--	--
1682	638923.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1683	638948.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1684	638973.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1685	638998.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1686	639023.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1687	639048.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1688	639073.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1689	641348.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1690	641423.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1691	641448.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1692	641473.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1693	641498.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1694	641523.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1695	641548.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1696	641573.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1697	641598.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1698	641623.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1699	641648.5	4168636.2	Roadway/Waterway	Scenario 2	--	--	--
1700	638873.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1701	638898.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1702	638923.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1703	638948.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1704	638973.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1705	638998.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1706	639023.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1707	639048.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1708	641348.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1709	641373.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1710	641398.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1711	641423.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1712	641448.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1713	641473.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1714	641498.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1715	641523.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1716	641548.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1717	641573.5	4168661.2	Roadway/Waterway	Scenario 2	--	--	--
1718	638823.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1719	638848.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1720	638873.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1721	638898.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1722	638923.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1723	638948.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1724	638973.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1725	638998.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1726	641273.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1727	641298.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1728	641323.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1729	641348.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1730	641373.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1731	641398.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1732	641423.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1733	641448.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1734	641473.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1735	641498.5	4168686.2	Roadway/Waterway	Scenario 2	--	--	--
1736	638773.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1737	638798.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1738	638823.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1739	638848.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1740	638873.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1741	638898.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1742	638923.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1743	638948.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1744	641198.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1745	641223.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1746	641248.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1747	641273.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1748	641298.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1749	641323.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1750	641348.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1751	641373.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1752	641398.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1753	641423.5	4168711.2	Roadway/Waterway	Scenario 2	--	--	--
1754	638748.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1755	638773.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1756	638798.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1757	638823.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1758	638848.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1759	638873.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1760	638898.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1761	638923.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1762	640123.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1763	640148.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1764	640173.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1765	640198.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1766	640223.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1767	640248.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1768	640273.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1769	640298.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1770	641123.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1771	641148.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1772	641173.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1773	641198.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1774	641223.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1775	641248.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1776	641273.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1777	641298.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1778	641323.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1779	641348.5	4168736.2	Roadway/Waterway	Scenario 2	--	--	--
1780	638698.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1781	638723.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1782	638748.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1783	638773.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1784	638798.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1785	638823.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1786	638848.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1787	638873.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1788	640098.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1789	640123.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1790	640148.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1791	640173.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1792	640198.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1793	640223.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1794	640248.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1795	640273.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1796	640298.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1797	640323.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1798	640348.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1799	641048.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1800	641073.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1801	641098.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1802	641123.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1803	641148.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1804	641173.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1805	641198.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1806	641223.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1807	641248.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1808	641273.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
1809	638673.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1810	638698.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1811	638723.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1812	638748.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1813	638773.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1814	638798.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1815	638823.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1816	640048.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1817	640073.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1818	640098.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1819	640123.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1820	640148.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1821	640173.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1822	640198.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1823	640223.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1824	640248.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1825	640273.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1826	640298.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1827	640323.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1828	640348.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1829	640373.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1830	640398.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1831	640973.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1832	640998.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1833	641023.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1834	641048.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1835	641073.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1836	641098.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1837	641123.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1838	641148.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1839	641173.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1840	641198.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1841	641223.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
1842	638648.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1843	638673.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1844	638698.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1845	638723.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1846	638748.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1847	638773.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1848	638798.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1849	640048.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1850	640073.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1851	640098.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1852	640123.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1853	640148.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1854	640173.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1855	640198.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1856	640223.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1857	640248.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1858	640273.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1859	640298.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1860	640323.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1861	640348.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1862	640373.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1863	640398.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1864	640423.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1865	640448.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1866	640898.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1867	640923.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1868	640948.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1869	640973.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1870	640998.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1871	641023.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1872	641048.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1873	641073.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1874	641098.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1875	641123.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1876	641148.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
1877	638598.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1878	638623.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1879	638648.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1880	638673.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1881	638698.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1882	638723.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1883	638748.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1884	640023.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1885	640048.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1886	640073.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1887	640098.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1888	640123.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1889	640148.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1890	640298.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1891	640323.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1892	640348.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1893	640373.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1894	640398.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1895	640423.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1896	640448.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1897	640473.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1898	640498.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1899	640823.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1900	640848.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1901	640873.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1902	640898.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1903	640923.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1904	640948.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1905	640973.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1906	640998.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1907	641023.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1908	641048.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1909	641073.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
1910	638573.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1911	638598.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1912	638623.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1913	638648.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1914	638673.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1915	638698.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1916	638723.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1917	639998.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1918	640023.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1919	640048.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1920	640073.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1921	640098.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1922	640348.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1923	640373.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1924	640398.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1925	640423.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1926	640448.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1927	640473.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1928	640498.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1929	640523.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1930	640548.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1931	640748.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1932	640773.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1933	640798.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1934	640823.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1935	640848.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1936	640873.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1937	640898.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1938	640923.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1939	640948.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1940	640973.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1941	640998.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
1942	638548.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1943	638573.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1944	638598.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1945	638623.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1946	638648.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1947	638673.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1948	639973.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1949	639998.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1950	640023.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1951	640048.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1952	640073.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1953	640398.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1954	640423.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1955	640448.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1956	640473.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1957	640498.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1958	640523.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1959	640548.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1960	640573.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1961	640598.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1962	640623.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1963	640648.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1964	640673.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1965	640698.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1966	640723.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1967	640748.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1968	640773.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1969	640798.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1970	640823.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1971	640848.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1972	640873.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1973	640898.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1974	640923.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
1975	638523.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1976	638548.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1977	638573.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1978	638598.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1979	638623.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1980	638648.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1981	639948.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1982	639973.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1983	639998.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1984	640023.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1985	640048.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1986	640448.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1987	640473.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1988	640498.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1989	640523.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1990	640548.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1991	640573.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1992	640598.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1993	640623.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1994	640648.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1995	640673.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1996	640698.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1997	640723.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1998	640748.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
1999	640773.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2000	640798.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
2001	640823.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
2002	640848.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
2003	638473.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2004	638498.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2005	638523.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2006	638548.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2007	638573.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2008	638598.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2009	638623.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2010	639923.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2011	639948.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2012	639973.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2013	639998.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2014	640023.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2015	640448.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2016	640473.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2017	640498.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2018	640523.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2019	640548.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2020	640573.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2021	640598.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2022	640623.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2023	640648.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2024	640673.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2025	640698.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2026	640723.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2027	640748.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
2028	638448.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2029	638473.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2030	638498.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2031	638523.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2032	638548.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2033	638573.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2034	639898.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2035	639923.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2036	639948.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2037	639973.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2038	639998.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2039	640023.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2040	640448.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2041	640473.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2042	640498.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2043	640523.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2044	640598.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2045	640623.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2046	640648.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2047	640673.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
2048	638423.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2049	638448.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2050	638473.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2051	638498.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2052	638523.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2053	638548.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2054	639873.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2055	639898.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2056	639923.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2057	639948.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2058	639973.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2059	639998.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2060	640448.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2061	640473.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2062	640498.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2063	640523.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
2064	638398.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2065	638423.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2066	638448.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2067	638473.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2068	638498.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2069	638523.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2070	639848.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2071	639873.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2072	639898.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2073	639923.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2074	639948.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2075	639973.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2076	640473.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2077	640498.5	4169011.2	Roadway/Waterway	Scenario 2	--	--	--
2078	638373.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2079	638398.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2080	638423.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2081	638448.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2082	638473.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2083	638498.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2084	639823.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2085	639848.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2086	639873.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2087	639898.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2088	639923.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2089	639948.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2090	640498.5	4169036.2	Roadway/Waterway	Scenario 2	--	--	--
2091	638348.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2092	638373.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2093	638398.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2094	638423.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2095	638448.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2096	639823.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2097	639848.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2098	639873.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2099	639898.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2100	639923.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2101	640498.5	4169061.2	Roadway/Waterway	Scenario 2	--	--	--
2102	638323.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2103	638348.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2104	638373.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2105	638398.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2106	638423.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2107	638448.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2108	639648.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2109	639673.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2110	639698.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2111	639723.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2112	639748.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2113	639773.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2114	639798.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2115	639823.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2116	639848.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2117	639873.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2118	639898.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2119	640498.5	4169086.2	Roadway/Waterway	Scenario 2	--	--	--
2120	638298.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2121	638323.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2122	638348.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2123	638373.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2124	638398.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2125	638423.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2126	639598.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2127	639623.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2128	639648.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2129	639673.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2130	639698.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2131	639723.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2132	639748.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2133	639773.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2134	639798.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2135	639823.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2136	639848.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2137	639873.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2138	640498.5	4169111.2	Roadway/Waterway	Scenario 2	--	--	--
2139	638273.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2140	638298.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2141	638323.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2142	638348.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2143	638373.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2144	638398.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2145	639573.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2146	639598.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2147	639623.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2148	639648.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2149	639673.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2150	639698.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2151	639723.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2152	639748.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2153	639773.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2154	639798.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2155	639823.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2156	639848.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2157	640498.5	4169136.2	Roadway/Waterway	Scenario 2	--	--	--
2158	638248.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2159	638273.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2160	638298.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2161	638323.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2162	638348.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2163	638373.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2164	639548.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2165	639573.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2166	639598.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2167	639623.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2168	639648.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2169	639673.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2170	639698.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2171	639723.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2172	639748.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2173	639773.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2174	639798.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2175	639823.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2176	640498.5	4169161.2	Roadway/Waterway	Scenario 2	--	--	--
2177	638223.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2178	638248.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2179	638273.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2180	638298.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2181	638323.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2182	638348.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2183	639548.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2184	639573.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2185	639598.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2186	639623.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2187	639648.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2188	640498.5	4169186.2	Roadway/Waterway	Scenario 2	--	--	--
2189	638198.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2190	638223.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2191	638248.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2192	638273.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2193	638298.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2194	638323.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2195	639523.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2196	639548.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2197	639573.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2198	639598.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2199	639623.5	4169211.2	Roadway/Waterway	Scenario 2	--	--	--
2200	638173.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2201	638198.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2202	638223.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2203	638248.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2204	638273.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2205	638298.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2206	639523.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2207	639548.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2208	639573.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--
2209	639598.5	4169236.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2210	638148.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2211	638173.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2212	638198.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2213	638223.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2214	638248.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2215	638273.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2216	639498.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2217	639523.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2218	639548.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2219	639573.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2220	639598.5	4169261.2	Roadway/Waterway	Scenario 2	--	--	--
2221	638123.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2222	638148.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2223	638173.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2224	638198.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2225	638223.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2226	638248.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2227	639473.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2228	639498.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2229	639523.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2230	639548.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2231	639573.5	4169286.2	Roadway/Waterway	Scenario 2	--	--	--
2232	638098.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2233	638123.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2234	638148.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2235	638173.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2236	638198.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2237	638223.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2238	639473.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2239	639498.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2240	639523.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2241	639548.5	4169311.2	Roadway/Waterway	Scenario 2	--	--	--
2242	638073.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2243	638098.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2244	638123.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2245	638148.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2246	638173.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2247	638198.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2248	639448.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2249	639473.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2250	639498.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2251	639523.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2252	639548.5	4169336.2	Roadway/Waterway	Scenario 2	--	--	--
2253	638048.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2254	638073.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2255	638098.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2256	638123.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2257	638148.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2258	638173.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2259	639398.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2260	639423.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2261	639448.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2262	639473.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2263	639498.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2264	639523.5	4169361.2	Roadway/Waterway	Scenario 2	--	--	--
2265	638023.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2266	638048.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2267	638073.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2268	638098.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2269	638123.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2270	638148.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2271	639373.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2272	639398.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2273	639423.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2274	639448.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2275	639473.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2276	639498.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2277	641323.5	4169386.2	Roadway/Waterway	Scenario 2	--	--	--
2278	638023.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2279	638048.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2280	638073.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2281	638098.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2282	638123.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2283	639348.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2284	639373.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2285	639398.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2286	639423.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2287	639448.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2288	639473.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2289	641323.5	4169411.2	Roadway/Waterway	Scenario 2	--	--	--
2290	637998.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2291	638023.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2292	638048.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2293	638073.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2294	638098.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2295	639323.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2296	639348.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2297	639373.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2298	639398.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2299	639423.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2300	639448.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2301	641323.5	4169436.2	Roadway/Waterway	Scenario 2	--	--	--
2302	637998.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2303	638023.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2304	638048.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2305	638073.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2306	639298.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2307	639323.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2308	639348.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2309	639373.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2310	639398.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2311	639423.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2312	641323.5	4169461.2	Roadway/Waterway	Scenario 2	--	--	--
2313	637998.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2314	638023.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2315	638048.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2316	639248.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2317	639273.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2318	639298.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2319	639323.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2320	639348.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2321	639373.5	4169486.2	Roadway/Waterway	Scenario 2	--	--	--
2322	637998.5	4169511.2	Roadway/Waterway	Scenario 2	--	--	--
2323	638023.5	4169511.2	Roadway/Waterway	Scenario 2	--	--	--
2324	639223.5	4169511.2	Roadway/Waterway	Scenario 2	--	--	--
2325	639248.5	4169511.2	Roadway/Waterway	Scenario 2	--	--	--
2326	639273.5	4169511.2	Roadway/Waterway	Scenario 2	--	--	--
2327	639298.5	4169511.2	Roadway/Waterway	Scenario 2	--	--	--
2328	639323.5	4169511.2	Roadway/Waterway	Scenario 2	--	--	--
2329	639348.5	4169511.2	Roadway/Waterway	Scenario 2	--	--	--
2330	637998.5	4169536.2	Roadway/Waterway	Scenario 2	--	--	--
2331	639198.5	4169536.2	Roadway/Waterway	Scenario 2	--	--	--
2332	639223.5	4169536.2	Roadway/Waterway	Scenario 2	--	--	--
2333	639248.5	4169536.2	Roadway/Waterway	Scenario 2	--	--	--
2334	639273.5	4169536.2	Roadway/Waterway	Scenario 2	--	--	--
2335	639298.5	4169536.2	Roadway/Waterway	Scenario 2	--	--	--
2336	639323.5	4169536.2	Roadway/Waterway	Scenario 2	--	--	--
2337	639173.5	4169561.2	Roadway/Waterway	Scenario 2	--	--	--
2338	639198.5	4169561.2	Roadway/Waterway	Scenario 2	--	--	--
2339	639223.5	4169561.2	Roadway/Waterway	Scenario 2	--	--	--
2340	639248.5	4169561.2	Roadway/Waterway	Scenario 2	--	--	--
2341	639273.5	4169561.2	Roadway/Waterway	Scenario 2	--	--	--
2342	639298.5	4169561.2	Roadway/Waterway	Scenario 2	--	--	--
2343	639123.5	4169586.2	Roadway/Waterway	Scenario 2	--	--	--
2344	639148.5	4169586.2	Roadway/Waterway	Scenario 2	--	--	--
2345	639173.5	4169586.2	Roadway/Waterway	Scenario 2	--	--	--
2346	639198.5	4169586.2	Roadway/Waterway	Scenario 2	--	--	--
2347	639223.5	4169586.2	Roadway/Waterway	Scenario 2	--	--	--
2348	639248.5	4169586.2	Roadway/Waterway	Scenario 2	--	--	--
2349	639273.5	4169586.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2350	639098.5	4169611.2	Roadway/Waterway	Scenario 2	--	--	--
2351	639123.5	4169611.2	Roadway/Waterway	Scenario 2	--	--	--
2352	639148.5	4169611.2	Roadway/Waterway	Scenario 2	--	--	--
2353	639173.5	4169611.2	Roadway/Waterway	Scenario 2	--	--	--
2354	639198.5	4169611.2	Roadway/Waterway	Scenario 2	--	--	--
2355	639223.5	4169611.2	Roadway/Waterway	Scenario 2	--	--	--
2356	639073.5	4169636.2	Roadway/Waterway	Scenario 2	--	--	--
2357	639098.5	4169636.2	Roadway/Waterway	Scenario 2	--	--	--
2358	639123.5	4169636.2	Roadway/Waterway	Scenario 2	--	--	--
2359	639148.5	4169636.2	Roadway/Waterway	Scenario 2	--	--	--
2360	639173.5	4169636.2	Roadway/Waterway	Scenario 2	--	--	--
2361	639198.5	4169636.2	Roadway/Waterway	Scenario 2	--	--	--
2362	639048.5	4169661.2	Roadway/Waterway	Scenario 2	--	--	--
2363	639073.5	4169661.2	Roadway/Waterway	Scenario 2	--	--	--
2364	639098.5	4169661.2	Roadway/Waterway	Scenario 2	--	--	--
2365	639123.5	4169661.2	Roadway/Waterway	Scenario 2	--	--	--
2366	639148.5	4169661.2	Roadway/Waterway	Scenario 2	--	--	--
2367	639173.5	4169661.2	Roadway/Waterway	Scenario 2	--	--	--
2368	639023.5	4169686.2	Roadway/Waterway	Scenario 2	--	--	--
2369	639048.5	4169686.2	Roadway/Waterway	Scenario 2	--	--	--
2370	639073.5	4169686.2	Roadway/Waterway	Scenario 2	--	--	--
2371	639098.5	4169686.2	Roadway/Waterway	Scenario 2	--	--	--
2372	639123.5	4169686.2	Roadway/Waterway	Scenario 2	--	--	--
2373	639148.5	4169686.2	Roadway/Waterway	Scenario 2	--	--	--
2374	638998.5	4169711.2	Roadway/Waterway	Scenario 2	--	--	--
2375	639023.5	4169711.2	Roadway/Waterway	Scenario 2	--	--	--
2376	639048.5	4169711.2	Roadway/Waterway	Scenario 2	--	--	--
2377	639073.5	4169711.2	Roadway/Waterway	Scenario 2	--	--	--
2378	639098.5	4169711.2	Roadway/Waterway	Scenario 2	--	--	--
2379	639123.5	4169711.2	Roadway/Waterway	Scenario 2	--	--	--
2380	638973.5	4169736.2	Roadway/Waterway	Scenario 2	--	--	--
2381	638998.5	4169736.2	Roadway/Waterway	Scenario 2	--	--	--
2382	639023.5	4169736.2	Roadway/Waterway	Scenario 2	--	--	--
2383	639048.5	4169736.2	Roadway/Waterway	Scenario 2	--	--	--
2384	639073.5	4169736.2	Roadway/Waterway	Scenario 2	--	--	--
2385	638948.5	4169761.2	Roadway/Waterway	Scenario 2	--	--	--
2386	638973.5	4169761.2	Roadway/Waterway	Scenario 2	--	--	--
2387	638998.5	4169761.2	Roadway/Waterway	Scenario 2	--	--	--
2388	639023.5	4169761.2	Roadway/Waterway	Scenario 2	--	--	--
2389	639048.5	4169761.2	Roadway/Waterway	Scenario 2	--	--	--
2390	638948.5	4169786.2	Roadway/Waterway	Scenario 2	--	--	--
2391	638973.5	4169786.2	Roadway/Waterway	Scenario 2	--	--	--
2392	638998.5	4169786.2	Roadway/Waterway	Scenario 2	--	--	--
2393	639023.5	4169786.2	Roadway/Waterway	Scenario 2	--	--	--
2394	638923.5	4169811.2	Roadway/Waterway	Scenario 2	--	--	--
2395	638948.5	4169811.2	Roadway/Waterway	Scenario 2	--	--	--
2396	638973.5	4169811.2	Roadway/Waterway	Scenario 2	--	--	--
2397	638998.5	4169811.2	Roadway/Waterway	Scenario 2	--	--	--
2398	639023.5	4169811.2	Roadway/Waterway	Scenario 2	--	--	--
2399	638898.5	4169836.2	Roadway/Waterway	Scenario 2	--	--	--
2400	638923.5	4169836.2	Roadway/Waterway	Scenario 2	--	--	--
2401	638948.5	4169836.2	Roadway/Waterway	Scenario 2	--	--	--
2402	638973.5	4169836.2	Roadway/Waterway	Scenario 2	--	--	--
2403	638998.5	4169836.2	Roadway/Waterway	Scenario 2	--	--	--
2404	638873.5	4169861.2	Roadway/Waterway	Scenario 2	--	--	--
2405	638898.5	4169861.2	Roadway/Waterway	Scenario 2	--	--	--
2406	638923.5	4169861.2	Roadway/Waterway	Scenario 2	--	--	--
2407	638948.5	4169861.2	Roadway/Waterway	Scenario 2	--	--	--
2408	638973.5	4169861.2	Roadway/Waterway	Scenario 2	--	--	--
2409	638848.5	4169886.2	Roadway/Waterway	Scenario 2	--	--	--
2410	638873.5	4169886.2	Roadway/Waterway	Scenario 2	--	--	--
2411	638898.5	4169886.2	Roadway/Waterway	Scenario 2	--	--	--
2412	638923.5	4169886.2	Roadway/Waterway	Scenario 2	--	--	--
2413	638948.5	4169886.2	Roadway/Waterway	Scenario 2	--	--	--
2414	638823.5	4169911.2	Roadway/Waterway	Scenario 2	--	--	--
2415	638848.5	4169911.2	Roadway/Waterway	Scenario 2	--	--	--
2416	638873.5	4169911.2	Roadway/Waterway	Scenario 2	--	--	--
2417	638898.5	4169911.2	Roadway/Waterway	Scenario 2	--	--	--
2418	638923.5	4169911.2	Roadway/Waterway	Scenario 2	--	--	--
2419	638798.5	4169936.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2420	638823.5	4169936.2	Roadway/Waterway	Scenario 2	--	--	--
2421	638848.5	4169936.2	Roadway/Waterway	Scenario 2	--	--	--
2422	638873.5	4169936.2	Roadway/Waterway	Scenario 2	--	--	--
2423	638898.5	4169936.2	Roadway/Waterway	Scenario 2	--	--	--
2424	638798.5	4169961.2	Roadway/Waterway	Scenario 2	--	--	--
2425	638823.5	4169961.2	Roadway/Waterway	Scenario 2	--	--	--
2426	638848.5	4169961.2	Roadway/Waterway	Scenario 2	--	--	--
2427	638873.5	4169961.2	Roadway/Waterway	Scenario 2	--	--	--
2428	638798.5	4169986.2	Roadway/Waterway	Scenario 2	--	--	--
2429	638823.5	4169986.2	Roadway/Waterway	Scenario 2	--	--	--
2430	638848.5	4169986.2	Roadway/Waterway	Scenario 2	--	--	--
2431	638873.5	4169986.2	Roadway/Waterway	Scenario 2	--	--	--
2432	638098.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2433	638123.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2434	638148.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2435	638173.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2436	638198.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2437	638223.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2438	638248.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2439	638273.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2440	638298.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2441	638773.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2442	638798.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2443	638823.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2444	638848.5	4170011.2	Roadway/Waterway	Scenario 2	--	--	--
2445	638773.5	4170036.2	Roadway/Waterway	Scenario 2	--	--	--
2446	638798.5	4170036.2	Roadway/Waterway	Scenario 2	--	--	--
2447	638823.5	4170036.2	Roadway/Waterway	Scenario 2	--	--	--
2448	638848.5	4170036.2	Roadway/Waterway	Scenario 2	--	--	--
2449	638773.5	4170061.2	Roadway/Waterway	Scenario 2	--	--	--
2450	638798.5	4170061.2	Roadway/Waterway	Scenario 2	--	--	--
2451	638823.5	4170061.2	Roadway/Waterway	Scenario 2	--	--	--
2452	638848.5	4170061.2	Roadway/Waterway	Scenario 2	--	--	--
2453	638748.5	4170086.2	Roadway/Waterway	Scenario 2	--	--	--
2454	638773.5	4170086.2	Roadway/Waterway	Scenario 2	--	--	--
2455	638798.5	4170086.2	Roadway/Waterway	Scenario 2	--	--	--
2456	638823.5	4170086.2	Roadway/Waterway	Scenario 2	--	--	--
2457	638723.5	4170111.2	Roadway/Waterway	Scenario 2	--	--	--
2458	638748.5	4170111.2	Roadway/Waterway	Scenario 2	--	--	--
2459	638773.5	4170111.2	Roadway/Waterway	Scenario 2	--	--	--
2460	638798.5	4170111.2	Roadway/Waterway	Scenario 2	--	--	--
2461	642611.0	4166673.7	Roadway/Waterway	Scenario 2	--	--	--
2462	642661.0	4166673.7	Roadway/Waterway	Scenario 2	--	--	--
2463	642461.0	4166723.7	Roadway/Waterway	Scenario 2	--	--	--
2464	642511.0	4166723.7	Roadway/Waterway	Scenario 2	--	--	--
2465	642561.0	4166723.7	Roadway/Waterway	Scenario 2	--	--	--
2466	642611.0	4166723.7	Roadway/Waterway	Scenario 2	--	--	--
2467	641311.0	4166773.7	Roadway/Waterway	Scenario 2	--	--	--
2468	641361.0	4166773.7	Roadway/Waterway	Scenario 2	--	--	--
2469	641411.0	4166773.7	Roadway/Waterway	Scenario 2	--	--	--
2470	642411.0	4166773.7	Roadway/Waterway	Scenario 2	--	--	--
2471	642461.0	4166773.7	Roadway/Waterway	Scenario 2	--	--	--
2472	642511.0	4166773.7	Roadway/Waterway	Scenario 2	--	--	--
2473	642561.0	4166773.7	Roadway/Waterway	Scenario 2	--	--	--
2474	641261.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2475	641311.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2476	641361.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2477	641411.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2478	641461.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2479	642361.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2480	642411.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2481	642461.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2482	642511.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2483	642561.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2484	644361.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2485	644561.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2486	644611.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2487	644661.0	4166823.7	Roadway/Waterway	Scenario 2	--	--	--
2488	641211.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2489	641261.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2490	641311.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2491	641361.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2492	641411.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2493	641461.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2494	642311.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2495	644411.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2496	644461.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2497	644511.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2498	644561.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2499	644611.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2500	644661.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2501	644711.0	4166873.7	Roadway/Waterway	Scenario 2	--	--	--
2502	641161.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2503	641211.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2504	641261.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2505	641311.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2506	644511.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2507	644561.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2508	644611.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2509	644661.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2510	644711.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2511	644761.0	4166923.7	Roadway/Waterway	Scenario 2	--	--	--
2512	641161.0	4166973.7	Roadway/Waterway	Scenario 2	--	--	--
2513	641211.0	4166973.7	Roadway/Waterway	Scenario 2	--	--	--
2514	641261.0	4166973.7	Roadway/Waterway	Scenario 2	--	--	--
2515	644661.0	4166973.7	Roadway/Waterway	Scenario 2	--	--	--
2516	644711.0	4167273.7	Roadway/Waterway	Scenario 2	--	--	--
2517	644761.0	4167273.7	Roadway/Waterway	Scenario 2	--	--	--
2518	644811.0	4167273.7	Roadway/Waterway	Scenario 2	--	--	--
2519	644711.0	4167323.7	Roadway/Waterway	Scenario 2	--	--	--
2520	644761.0	4167323.7	Roadway/Waterway	Scenario 2	--	--	--
2521	644811.0	4167323.7	Roadway/Waterway	Scenario 2	--	--	--
2522	641161.0	4167473.7	Roadway/Waterway	Scenario 2	--	--	--
2523	641211.0	4167473.7	Roadway/Waterway	Scenario 2	--	--	--
2524	641261.0	4167473.7	Roadway/Waterway	Scenario 2	--	--	--
2525	641011.0	4167523.7	Roadway/Waterway	Scenario 2	--	--	--
2526	641061.0	4167523.7	Roadway/Waterway	Scenario 2	--	--	--
2527	641111.0	4167523.7	Roadway/Waterway	Scenario 2	--	--	--
2528	640861.0	4167573.7	Roadway/Waterway	Scenario 2	--	--	--
2529	640911.0	4167573.7	Roadway/Waterway	Scenario 2	--	--	--
2530	640711.0	4167623.7	Roadway/Waterway	Scenario 2	--	--	--
2531	640561.0	4167673.7	Roadway/Waterway	Scenario 2	--	--	--
2532	640111.0	4167873.7	Roadway/Waterway	Scenario 2	--	--	--
2533	639961.0	4167973.7	Roadway/Waterway	Scenario 2	--	--	--
2534	639861.0	4168023.7	Roadway/Waterway	Scenario 2	--	--	--
2535	639811.0	4168073.7	Roadway/Waterway	Scenario 2	--	--	--
2536	639711.0	4168123.7	Roadway/Waterway	Scenario 2	--	--	--
2537	639611.0	4168173.7	Roadway/Waterway	Scenario 2	--	--	--
2538	639661.0	4168173.7	Roadway/Waterway	Scenario 2	--	--	--
2539	639561.0	4168223.7	Roadway/Waterway	Scenario 2	--	--	--
2540	639611.0	4168223.7	Roadway/Waterway	Scenario 2	--	--	--
2541	639461.0	4168273.7	Roadway/Waterway	Scenario 2	--	--	--
2542	639511.0	4168273.7	Roadway/Waterway	Scenario 2	--	--	--
2543	639561.0	4168273.7	Roadway/Waterway	Scenario 2	--	--	--
2544	639611.0	4168273.7	Roadway/Waterway	Scenario 2	--	--	--
2545	639161.0	4168323.7	Roadway/Waterway	Scenario 2	--	--	--
2546	639411.0	4168323.7	Roadway/Waterway	Scenario 2	--	--	--
2547	639461.0	4168323.7	Roadway/Waterway	Scenario 2	--	--	--
2548	639511.0	4168323.7	Roadway/Waterway	Scenario 2	--	--	--
2549	639561.0	4168323.7	Roadway/Waterway	Scenario 2	--	--	--
2550	639611.0	4168323.7	Roadway/Waterway	Scenario 2	--	--	--
2551	639061.0	4168373.7	Roadway/Waterway	Scenario 2	--	--	--
2552	639311.0	4168373.7	Roadway/Waterway	Scenario 2	--	--	--
2553	639011.0	4168423.7	Roadway/Waterway	Scenario 2	--	--	--
2554	639211.0	4168423.7	Roadway/Waterway	Scenario 2	--	--	--
2555	638911.0	4168473.7	Roadway/Waterway	Scenario 2	--	--	--
2556	638961.0	4168473.7	Roadway/Waterway	Scenario 2	--	--	--
2557	639161.0	4168473.7	Roadway/Waterway	Scenario 2	--	--	--
2558	638811.0	4168523.7	Roadway/Waterway	Scenario 2	--	--	--
2559	638861.0	4168523.7	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2560	639061.0	4168523.7	Roadway/Waterway	Scenario 2	--	--	--
2561	638711.0	4168573.7	Roadway/Waterway	Scenario 2	--	--	--
2562	638761.0	4168573.7	Roadway/Waterway	Scenario 2	--	--	--
2563	638811.0	4168573.7	Roadway/Waterway	Scenario 2	--	--	--
2564	638661.0	4168623.7	Roadway/Waterway	Scenario 2	--	--	--
2565	638711.0	4168623.7	Roadway/Waterway	Scenario 2	--	--	--
2566	638761.0	4168623.7	Roadway/Waterway	Scenario 2	--	--	--
2567	638911.0	4168623.7	Roadway/Waterway	Scenario 2	--	--	--
2568	638561.0	4168673.7	Roadway/Waterway	Scenario 2	--	--	--
2569	638611.0	4168673.7	Roadway/Waterway	Scenario 2	--	--	--
2570	638661.0	4168673.7	Roadway/Waterway	Scenario 2	--	--	--
2571	638511.0	4168723.7	Roadway/Waterway	Scenario 2	--	--	--
2572	638561.0	4168723.7	Roadway/Waterway	Scenario 2	--	--	--
2573	638611.0	4168723.7	Roadway/Waterway	Scenario 2	--	--	--
2574	638461.0	4168773.7	Roadway/Waterway	Scenario 2	--	--	--
2575	638511.0	4168773.7	Roadway/Waterway	Scenario 2	--	--	--
2576	638411.0	4168823.7	Roadway/Waterway	Scenario 2	--	--	--
2577	638461.0	4168823.7	Roadway/Waterway	Scenario 2	--	--	--
2578	640211.0	4168823.7	Roadway/Waterway	Scenario 2	--	--	--
2579	638311.0	4168873.7	Roadway/Waterway	Scenario 2	--	--	--
2580	638361.0	4168873.7	Roadway/Waterway	Scenario 2	--	--	--
2581	638411.0	4168873.7	Roadway/Waterway	Scenario 2	--	--	--
2582	640111.0	4168873.7	Roadway/Waterway	Scenario 2	--	--	--
2583	640161.0	4168873.7	Roadway/Waterway	Scenario 2	--	--	--
2584	640261.0	4168873.7	Roadway/Waterway	Scenario 2	--	--	--
2585	640311.0	4168873.7	Roadway/Waterway	Scenario 2	--	--	--
2586	640361.0	4168873.7	Roadway/Waterway	Scenario 2	--	--	--
2587	638261.0	4168923.7	Roadway/Waterway	Scenario 2	--	--	--
2588	638311.0	4168923.7	Roadway/Waterway	Scenario 2	--	--	--
2589	640061.0	4168923.7	Roadway/Waterway	Scenario 2	--	--	--
2590	640411.0	4168923.7	Roadway/Waterway	Scenario 2	--	--	--
2591	638211.0	4168973.7	Roadway/Waterway	Scenario 2	--	--	--
2592	638261.0	4168973.7	Roadway/Waterway	Scenario 2	--	--	--
2593	638211.0	4169023.7	Roadway/Waterway	Scenario 2	--	--	--
2594	638311.0	4169073.7	Roadway/Waterway	Scenario 2	--	--	--
2595	638111.0	4169123.7	Roadway/Waterway	Scenario 2	--	--	--
2596	638261.0	4169123.7	Roadway/Waterway	Scenario 2	--	--	--
2597	638111.0	4169173.7	Roadway/Waterway	Scenario 2	--	--	--
2598	638211.0	4169173.7	Roadway/Waterway	Scenario 2	--	--	--
2599	638111.0	4169223.7	Roadway/Waterway	Scenario 2	--	--	--
2600	638161.0	4169223.7	Roadway/Waterway	Scenario 2	--	--	--
2601	639711.0	4169223.7	Roadway/Waterway	Scenario 2	--	--	--
2602	638111.0	4169273.7	Roadway/Waterway	Scenario 2	--	--	--
2603	639711.0	4169273.7	Roadway/Waterway	Scenario 2	--	--	--
2604	638061.0	4169323.7	Roadway/Waterway	Scenario 2	--	--	--
2605	639711.0	4169323.7	Roadway/Waterway	Scenario 2	--	--	--
2606	638011.0	4169373.7	Roadway/Waterway	Scenario 2	--	--	--
2607	637961.0	4169423.7	Roadway/Waterway	Scenario 2	--	--	--
2608	637911.0	4169473.7	Roadway/Waterway	Scenario 2	--	--	--
2609	637961.0	4169473.7	Roadway/Waterway	Scenario 2	--	--	--
2610	637861.0	4169523.7	Roadway/Waterway	Scenario 2	--	--	--
2611	637911.0	4169523.7	Roadway/Waterway	Scenario 2	--	--	--
2612	637961.0	4169523.7	Roadway/Waterway	Scenario 2	--	--	--
2613	641311.0	4169523.7	Roadway/Waterway	Scenario 2	--	--	--
2614	637861.0	4169573.7	Roadway/Waterway	Scenario 2	--	--	--
2615	637911.0	4169573.7	Roadway/Waterway	Scenario 2	--	--	--
2616	637961.0	4169573.7	Roadway/Waterway	Scenario 2	--	--	--
2617	641311.0	4169573.7	Roadway/Waterway	Scenario 2	--	--	--
2618	637861.0	4169623.7	Roadway/Waterway	Scenario 2	--	--	--
2619	637911.0	4169623.7	Roadway/Waterway	Scenario 2	--	--	--
2620	641311.0	4169623.7	Roadway/Waterway	Scenario 2	--	--	--
2621	637861.0	4169673.7	Roadway/Waterway	Scenario 2	--	--	--
2622	638861.0	4170073.7	Roadway/Waterway	Scenario 2	--	--	--
2623	638811.0	4170123.7	Roadway/Waterway	Scenario 2	--	--	--
2624	638861.0	4170123.7	Roadway/Waterway	Scenario 2	--	--	--
2625	638661.0	4170173.7	Roadway/Waterway	Scenario 2	--	--	--
2626	638711.0	4170173.7	Roadway/Waterway	Scenario 2	--	--	--
2627	638761.0	4170173.7	Roadway/Waterway	Scenario 2	--	--	--
2628	638811.0	4170173.7	Roadway/Waterway	Scenario 2	--	--	--
2629	638611.0	4170223.7	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2630	638661.0	4170223.7	Roadway/Waterway	Scenario 2	--	--	--
2631	638711.0	4170223.7	Roadway/Waterway	Scenario 2	--	--	--
2632	638761.0	4170223.7	Roadway/Waterway	Scenario 2	--	--	--
2633	638711.0	4170273.7	Roadway/Waterway	Scenario 2	--	--	--
2634	644236.2	4164448.9	Roadway/Waterway	Scenario 2	--	--	--
2635	644136.2	4164548.9	Roadway/Waterway	Scenario 2	--	--	--
2636	643936.2	4164648.9	Roadway/Waterway	Scenario 2	--	--	--
2637	644036.2	4164648.9	Roadway/Waterway	Scenario 2	--	--	--
2638	644636.2	4164648.9	Roadway/Waterway	Scenario 2	--	--	--
2639	643836.2	4164748.9	Roadway/Waterway	Scenario 2	--	--	--
2640	643936.2	4164748.9	Roadway/Waterway	Scenario 2	--	--	--
2641	644636.2	4164748.9	Roadway/Waterway	Scenario 2	--	--	--
2642	643736.2	4164848.9	Roadway/Waterway	Scenario 2	--	--	--
2643	643836.2	4164848.9	Roadway/Waterway	Scenario 2	--	--	--
2644	644636.2	4164848.9	Roadway/Waterway	Scenario 2	--	--	--
2645	643636.2	4164948.9	Roadway/Waterway	Scenario 2	--	--	--
2646	644636.2	4164948.9	Roadway/Waterway	Scenario 2	--	--	--
2647	643536.2	4165048.9	Roadway/Waterway	Scenario 2	--	--	--
2648	644636.2	4165048.9	Roadway/Waterway	Scenario 2	--	--	--
2649	645836.2	4165048.9	Roadway/Waterway	Scenario 2	--	--	--
2650	645936.2	4165048.9	Roadway/Waterway	Scenario 2	--	--	--
2651	643436.2	4165148.9	Roadway/Waterway	Scenario 2	--	--	--
2652	644636.2	4165148.9	Roadway/Waterway	Scenario 2	--	--	--
2653	645836.2	4165148.9	Roadway/Waterway	Scenario 2	--	--	--
2654	643236.2	4165248.9	Roadway/Waterway	Scenario 2	--	--	--
2655	643336.2	4165248.9	Roadway/Waterway	Scenario 2	--	--	--
2656	644636.2	4165248.9	Roadway/Waterway	Scenario 2	--	--	--
2657	645736.2	4165248.9	Roadway/Waterway	Scenario 2	--	--	--
2658	645836.2	4165248.9	Roadway/Waterway	Scenario 2	--	--	--
2659	646236.2	4165248.9	Roadway/Waterway	Scenario 2	--	--	--
2660	643136.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2661	644636.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2662	645736.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2663	645836.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2664	645936.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2665	646036.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2666	646136.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2667	646236.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2668	646336.2	4165348.9	Roadway/Waterway	Scenario 2	--	--	--
2669	643036.2	4165448.9	Roadway/Waterway	Scenario 2	--	--	--
2670	645736.2	4165448.9	Roadway/Waterway	Scenario 2	--	--	--
2671	645836.2	4165448.9	Roadway/Waterway	Scenario 2	--	--	--
2672	646236.2	4165448.9	Roadway/Waterway	Scenario 2	--	--	--
2673	642836.2	4165548.9	Roadway/Waterway	Scenario 2	--	--	--
2674	642936.2	4165548.9	Roadway/Waterway	Scenario 2	--	--	--
2675	645736.2	4165548.9	Roadway/Waterway	Scenario 2	--	--	--
2676	645836.2	4165548.9	Roadway/Waterway	Scenario 2	--	--	--
2677	646236.2	4165548.9	Roadway/Waterway	Scenario 2	--	--	--
2678	642736.2	4165648.9	Roadway/Waterway	Scenario 2	--	--	--
2679	645636.2	4165648.9	Roadway/Waterway	Scenario 2	--	--	--
2680	645736.2	4165648.9	Roadway/Waterway	Scenario 2	--	--	--
2681	646236.2	4165648.9	Roadway/Waterway	Scenario 2	--	--	--
2682	642636.2	4165748.9	Roadway/Waterway	Scenario 2	--	--	--
2683	645436.2	4165748.9	Roadway/Waterway	Scenario 2	--	--	--
2684	645536.2	4165748.9	Roadway/Waterway	Scenario 2	--	--	--
2685	645636.2	4165748.9	Roadway/Waterway	Scenario 2	--	--	--
2686	646236.2	4165748.9	Roadway/Waterway	Scenario 2	--	--	--
2687	642436.2	4165848.9	Roadway/Waterway	Scenario 2	--	--	--
2688	642536.2	4165848.9	Roadway/Waterway	Scenario 2	--	--	--
2689	645136.2	4165848.9	Roadway/Waterway	Scenario 2	--	--	--
2690	645236.2	4165848.9	Roadway/Waterway	Scenario 2	--	--	--
2691	645336.2	4165848.9	Roadway/Waterway	Scenario 2	--	--	--
2692	646236.2	4165848.9	Roadway/Waterway	Scenario 2	--	--	--
2693	641936.2	4165948.9	Roadway/Waterway	Scenario 2	--	--	--
2694	642336.2	4165948.9	Roadway/Waterway	Scenario 2	--	--	--
2695	644836.2	4165948.9	Roadway/Waterway	Scenario 2	--	--	--
2696	644936.2	4165948.9	Roadway/Waterway	Scenario 2	--	--	--
2697	645036.2	4165948.9	Roadway/Waterway	Scenario 2	--	--	--
2698	645136.2	4165948.9	Roadway/Waterway	Scenario 2	--	--	--
2699	646236.2	4165948.9	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2700	641536.2	4166048.9	Roadway/Waterway	Scenario 2	--	--	--
2701	642236.2	4166048.9	Roadway/Waterway	Scenario 2	--	--	--
2702	644436.2	4166048.9	Roadway/Waterway	Scenario 2	--	--	--
2703	644536.2	4166048.9	Roadway/Waterway	Scenario 2	--	--	--
2704	644636.2	4166048.9	Roadway/Waterway	Scenario 2	--	--	--
2705	644736.2	4166048.9	Roadway/Waterway	Scenario 2	--	--	--
2706	644836.2	4166048.9	Roadway/Waterway	Scenario 2	--	--	--
2707	646236.2	4166048.9	Roadway/Waterway	Scenario 2	--	--	--
2708	642036.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2709	642136.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2710	643136.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2711	643236.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2712	643336.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2713	643436.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2714	643536.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2715	643636.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2716	643736.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2717	643836.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2718	643936.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2719	644036.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2720	644136.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2721	644236.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2722	644336.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2723	644436.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2724	646236.2	4166148.9	Roadway/Waterway	Scenario 2	--	--	--
2725	643036.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2726	643136.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2727	643236.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2728	643336.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2729	643436.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2730	643536.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2731	643636.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2732	643736.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2733	643836.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2734	643936.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2735	644036.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2736	644136.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2737	646236.2	4166248.9	Roadway/Waterway	Scenario 2	--	--	--
2738	641736.2	4166348.9	Roadway/Waterway	Scenario 2	--	--	--
2739	641836.2	4166348.9	Roadway/Waterway	Scenario 2	--	--	--
2740	642936.2	4166348.9	Roadway/Waterway	Scenario 2	--	--	--
2741	646236.2	4166348.9	Roadway/Waterway	Scenario 2	--	--	--
2742	646936.2	4166348.9	Roadway/Waterway	Scenario 2	--	--	--
2743	640736.2	4166448.9	Roadway/Waterway	Scenario 2	--	--	--
2744	641336.2	4166448.9	Roadway/Waterway	Scenario 2	--	--	--
2745	641636.2	4166448.9	Roadway/Waterway	Scenario 2	--	--	--
2746	642736.2	4166448.9	Roadway/Waterway	Scenario 2	--	--	--
2747	642836.2	4166448.9	Roadway/Waterway	Scenario 2	--	--	--
2748	646236.2	4166448.9	Roadway/Waterway	Scenario 2	--	--	--
2749	646936.2	4166448.9	Roadway/Waterway	Scenario 2	--	--	--
2750	640936.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2751	641336.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2752	641436.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2753	641536.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2754	642636.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2755	642736.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2756	646236.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2757	646736.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2758	646836.2	4166548.9	Roadway/Waterway	Scenario 2	--	--	--
2759	641336.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2760	641436.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2761	642536.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2762	642636.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2763	645936.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2764	646036.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2765	646136.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2766	646236.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2767	646336.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2768	646436.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2769	646536.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2770	646636.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2771	646736.2	4166648.9	Roadway/Waterway	Scenario 2	--	--	--
2772	641236.2	4166748.9	Roadway/Waterway	Scenario 2	--	--	--
2773	641336.2	4166748.9	Roadway/Waterway	Scenario 2	--	--	--
2774	644736.2	4166748.9	Roadway/Waterway	Scenario 2	--	--	--
2775	645836.2	4166748.9	Roadway/Waterway	Scenario 2	--	--	--
2776	646136.2	4166748.9	Roadway/Waterway	Scenario 2	--	--	--
2777	646236.2	4166748.9	Roadway/Waterway	Scenario 2	--	--	--
2778	646336.2	4166748.9	Roadway/Waterway	Scenario 2	--	--	--
2779	639836.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2780	639936.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2781	640036.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2782	640136.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2783	640236.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2784	640336.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2785	640436.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2786	640536.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2787	641036.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2788	641136.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2789	644736.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2790	645736.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2791	646036.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2792	646136.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2793	646236.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2794	646336.2	4166848.9	Roadway/Waterway	Scenario 2	--	--	--
2795	640836.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2796	640936.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2797	641036.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2798	641136.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2799	644836.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2800	644936.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2801	645036.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2802	645136.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2803	645236.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2804	645336.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2805	645436.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2806	645536.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2807	645736.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2808	645836.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2809	645936.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2810	646036.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2811	646136.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2812	646236.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2813	646336.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2814	646436.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2815	646536.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2816	646636.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2817	646736.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2818	646836.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2819	646936.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2820	647036.2	4166948.9	Roadway/Waterway	Scenario 2	--	--	--
2821	640636.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2822	640736.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2823	640836.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2824	640936.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2825	645236.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2826	645336.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2827	645736.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2828	646036.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2829	646136.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2830	646236.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2831	646336.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2832	646836.2	4167048.9	Roadway/Waterway	Scenario 2	--	--	--
2833	640536.2	4167148.9	Roadway/Waterway	Scenario 2	--	--	--
2834	640636.2	4167148.9	Roadway/Waterway	Scenario 2	--	--	--
2835	640736.2	4167148.9	Roadway/Waterway	Scenario 2	--	--	--
2836	645236.2	4167148.9	Roadway/Waterway	Scenario 2	--	--	--
2837	645336.2	4167148.9	Roadway/Waterway	Scenario 2	--	--	--
2838	645736.2	4167148.9	Roadway/Waterway	Scenario 2	--	--	--
2839	646136.2	4167148.9	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2840	646236.2	4167148.9	Roadway/Waterway	Scenario 2	--	--	--
2841	640436.2	4167248.9	Roadway/Waterway	Scenario 2	--	--	--
2842	640536.2	4167248.9	Roadway/Waterway	Scenario 2	--	--	--
2843	644936.2	4167248.9	Roadway/Waterway	Scenario 2	--	--	--
2844	645236.2	4167248.9	Roadway/Waterway	Scenario 2	--	--	--
2845	646236.2	4167248.9	Roadway/Waterway	Scenario 2	--	--	--
2846	640336.2	4167348.9	Roadway/Waterway	Scenario 2	--	--	--
2847	640436.2	4167348.9	Roadway/Waterway	Scenario 2	--	--	--
2848	646136.2	4167348.9	Roadway/Waterway	Scenario 2	--	--	--
2849	646236.2	4167348.9	Roadway/Waterway	Scenario 2	--	--	--
2850	640236.2	4167448.9	Roadway/Waterway	Scenario 2	--	--	--
2851	640336.2	4167448.9	Roadway/Waterway	Scenario 2	--	--	--
2852	646036.2	4167448.9	Roadway/Waterway	Scenario 2	--	--	--
2853	646136.2	4167448.9	Roadway/Waterway	Scenario 2	--	--	--
2854	646236.2	4167448.9	Roadway/Waterway	Scenario 2	--	--	--
2855	640136.2	4167548.9	Roadway/Waterway	Scenario 2	--	--	--
2856	646136.2	4167548.9	Roadway/Waterway	Scenario 2	--	--	--
2857	640036.2	4167648.9	Roadway/Waterway	Scenario 2	--	--	--
2858	646136.2	4167648.9	Roadway/Waterway	Scenario 2	--	--	--
2859	639836.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2860	639936.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2861	644136.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2862	644236.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2863	645036.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2864	645136.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2865	645236.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2866	645336.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2867	645436.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2868	645536.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2869	645636.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2870	645736.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2871	645836.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2872	645936.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2873	646136.2	4167748.9	Roadway/Waterway	Scenario 2	--	--	--
2874	639736.2	4167848.9	Roadway/Waterway	Scenario 2	--	--	--
2875	646136.2	4167848.9	Roadway/Waterway	Scenario 2	--	--	--
2876	639636.2	4167948.9	Roadway/Waterway	Scenario 2	--	--	--
2877	646136.2	4167948.9	Roadway/Waterway	Scenario 2	--	--	--
2878	639436.2	4168048.9	Roadway/Waterway	Scenario 2	--	--	--
2879	639536.2	4168048.9	Roadway/Waterway	Scenario 2	--	--	--
2880	646136.2	4168048.9	Roadway/Waterway	Scenario 2	--	--	--
2881	639336.2	4168148.9	Roadway/Waterway	Scenario 2	--	--	--
2882	639436.2	4168148.9	Roadway/Waterway	Scenario 2	--	--	--
2883	646136.2	4168148.9	Roadway/Waterway	Scenario 2	--	--	--
2884	639236.2	4168248.9	Roadway/Waterway	Scenario 2	--	--	--
2885	646136.2	4168248.9	Roadway/Waterway	Scenario 2	--	--	--
2886	639036.2	4168348.9	Roadway/Waterway	Scenario 2	--	--	--
2887	646136.2	4168348.9	Roadway/Waterway	Scenario 2	--	--	--
2888	646136.2	4168448.9	Roadway/Waterway	Scenario 2	--	--	--
2889	644836.2	4168548.9	Roadway/Waterway	Scenario 2	--	--	--
2890	644936.2	4168548.9	Roadway/Waterway	Scenario 2	--	--	--
2891	645036.2	4168548.9	Roadway/Waterway	Scenario 2	--	--	--
2892	645136.2	4168548.9	Roadway/Waterway	Scenario 2	--	--	--
2893	645236.2	4168548.9	Roadway/Waterway	Scenario 2	--	--	--
2894	645336.2	4168548.9	Roadway/Waterway	Scenario 2	--	--	--
2895	646136.2	4168548.9	Roadway/Waterway	Scenario 2	--	--	--
2896	646136.2	4168648.9	Roadway/Waterway	Scenario 2	--	--	--
2897	646636.2	4168648.9	Roadway/Waterway	Scenario 2	--	--	--
2898	646136.2	4168748.9	Roadway/Waterway	Scenario 2	--	--	--
2899	646136.2	4168848.9	Roadway/Waterway	Scenario 2	--	--	--
2900	644736.2	4168948.9	Roadway/Waterway	Scenario 2	--	--	--
2901	645936.2	4168948.9	Roadway/Waterway	Scenario 2	--	--	--
2902	646136.2	4168948.9	Roadway/Waterway	Scenario 2	--	--	--
2903	638136.2	4169048.9	Roadway/Waterway	Scenario 2	--	--	--
2904	644136.2	4169048.9	Roadway/Waterway	Scenario 2	--	--	--
2905	646136.2	4169048.9	Roadway/Waterway	Scenario 2	--	--	--
2906	637936.2	4169148.9	Roadway/Waterway	Scenario 2	--	--	--
2907	638036.2	4169148.9	Roadway/Waterway	Scenario 2	--	--	--
2908	644236.2	4169148.9	Roadway/Waterway	Scenario 2	--	--	--
2909	646136.2	4169148.9	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2910	637836.2	4169248.9	Roadway/Waterway	Scenario 2	--	--	--
2911	644536.2	4169248.9	Roadway/Waterway	Scenario 2	--	--	--
2912	637736.2	4169348.9	Roadway/Waterway	Scenario 2	--	--	--
2913	644536.2	4169348.9	Roadway/Waterway	Scenario 2	--	--	--
2914	637536.2	4169448.9	Roadway/Waterway	Scenario 2	--	--	--
2915	637636.2	4169448.9	Roadway/Waterway	Scenario 2	--	--	--
2916	644436.2	4169448.9	Roadway/Waterway	Scenario 2	--	--	--
2917	644536.2	4169448.9	Roadway/Waterway	Scenario 2	--	--	--
2918	637436.2	4169548.9	Roadway/Waterway	Scenario 2	--	--	--
2919	637836.2	4169548.9	Roadway/Waterway	Scenario 2	--	--	--
2920	644536.2	4169548.9	Roadway/Waterway	Scenario 2	--	--	--
2921	637236.2	4169648.9	Roadway/Waterway	Scenario 2	--	--	--
2922	637336.2	4169648.9	Roadway/Waterway	Scenario 2	--	--	--
2923	637836.2	4169648.9	Roadway/Waterway	Scenario 2	--	--	--
2924	644536.2	4169648.9	Roadway/Waterway	Scenario 2	--	--	--
2925	637136.2	4169748.9	Roadway/Waterway	Scenario 2	--	--	--
2926	637736.2	4169748.9	Roadway/Waterway	Scenario 2	--	--	--
2927	644536.2	4169748.9	Roadway/Waterway	Scenario 2	--	--	--
2928	637036.2	4169848.9	Roadway/Waterway	Scenario 2	--	--	--
2929	637636.2	4169848.9	Roadway/Waterway	Scenario 2	--	--	--
2930	637736.2	4169848.9	Roadway/Waterway	Scenario 2	--	--	--
2931	644536.2	4169848.9	Roadway/Waterway	Scenario 2	--	--	--
2932	636836.2	4169948.9	Roadway/Waterway	Scenario 2	--	--	--
2933	636936.2	4169948.9	Roadway/Waterway	Scenario 2	--	--	--
2934	637636.2	4169948.9	Roadway/Waterway	Scenario 2	--	--	--
2935	639636.2	4169948.9	Roadway/Waterway	Scenario 2	--	--	--
2936	636736.2	4170048.9	Roadway/Waterway	Scenario 2	--	--	--
2937	636836.2	4170048.9	Roadway/Waterway	Scenario 2	--	--	--
2938	637536.2	4170048.9	Roadway/Waterway	Scenario 2	--	--	--
2939	635636.2	4170148.9	Roadway/Waterway	Scenario 2	--	--	--
2940	636636.2	4170148.9	Roadway/Waterway	Scenario 2	--	--	--
2941	637436.2	4170148.9	Roadway/Waterway	Scenario 2	--	--	--
2942	637536.2	4170148.9	Roadway/Waterway	Scenario 2	--	--	--
2943	635636.2	4170248.9	Roadway/Waterway	Scenario 2	--	--	--
2944	635736.2	4170248.9	Roadway/Waterway	Scenario 2	--	--	--
2945	636436.2	4170248.9	Roadway/Waterway	Scenario 2	--	--	--
2946	636536.2	4170248.9	Roadway/Waterway	Scenario 2	--	--	--
2947	637336.2	4170248.9	Roadway/Waterway	Scenario 2	--	--	--
2948	637436.2	4170248.9	Roadway/Waterway	Scenario 2	--	--	--
2949	635736.2	4170348.9	Roadway/Waterway	Scenario 2	--	--	--
2950	635836.2	4170348.9	Roadway/Waterway	Scenario 2	--	--	--
2951	636336.2	4170348.9	Roadway/Waterway	Scenario 2	--	--	--
2952	636436.2	4170348.9	Roadway/Waterway	Scenario 2	--	--	--
2953	637336.2	4170348.9	Roadway/Waterway	Scenario 2	--	--	--
2954	638536.2	4170348.9	Roadway/Waterway	Scenario 2	--	--	--
2955	638636.2	4170348.9	Roadway/Waterway	Scenario 2	--	--	--
2956	635736.2	4170448.9	Roadway/Waterway	Scenario 2	--	--	--
2957	635936.2	4170448.9	Roadway/Waterway	Scenario 2	--	--	--
2958	636136.2	4170448.9	Roadway/Waterway	Scenario 2	--	--	--
2959	636236.2	4170448.9	Roadway/Waterway	Scenario 2	--	--	--
2960	637236.2	4170448.9	Roadway/Waterway	Scenario 2	--	--	--
2961	637336.2	4170448.9	Roadway/Waterway	Scenario 2	--	--	--
2962	638436.2	4170448.9	Roadway/Waterway	Scenario 2	--	--	--
2963	638536.2	4170448.9	Roadway/Waterway	Scenario 2	--	--	--
2964	635736.2	4170548.9	Roadway/Waterway	Scenario 2	--	--	--
2965	636036.2	4170548.9	Roadway/Waterway	Scenario 2	--	--	--
2966	636136.2	4170548.9	Roadway/Waterway	Scenario 2	--	--	--
2967	637236.2	4170548.9	Roadway/Waterway	Scenario 2	--	--	--
2968	638436.2	4170548.9	Roadway/Waterway	Scenario 2	--	--	--
2969	635936.2	4170648.9	Roadway/Waterway	Scenario 2	--	--	--
2970	636036.2	4170648.9	Roadway/Waterway	Scenario 2	--	--	--
2971	636136.2	4170648.9	Roadway/Waterway	Scenario 2	--	--	--
2972	637136.2	4170648.9	Roadway/Waterway	Scenario 2	--	--	--
2973	637236.2	4170648.9	Roadway/Waterway	Scenario 2	--	--	--
2974	638436.2	4170648.9	Roadway/Waterway	Scenario 2	--	--	--
2975	635836.2	4170748.9	Roadway/Waterway	Scenario 2	--	--	--
2976	636236.2	4170748.9	Roadway/Waterway	Scenario 2	--	--	--
2977	637036.2	4170748.9	Roadway/Waterway	Scenario 2	--	--	--
2978	637136.2	4170748.9	Roadway/Waterway	Scenario 2	--	--	--
2979	638436.2	4170748.9	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2980	638536.2	4170748.9	Roadway/Waterway	Scenario 2	--	--	--
2981	635736.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2982	635836.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2983	636336.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2984	636636.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2985	636736.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2986	637036.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2987	637136.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2988	637236.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2989	638436.2	4170848.9	Roadway/Waterway	Scenario 2	--	--	--
2990	635836.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2991	635936.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2992	636436.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2993	636536.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2994	636936.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2995	637036.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2996	637136.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2997	637236.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2998	638336.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
2999	638436.2	4170948.9	Roadway/Waterway	Scenario 2	--	--	--
3000	635836.2	4171048.9	Roadway/Waterway	Scenario 2	--	--	--
3001	636436.2	4171048.9	Roadway/Waterway	Scenario 2	--	--	--
3002	636936.2	4171048.9	Roadway/Waterway	Scenario 2	--	--	--
3003	638336.2	4171048.9	Roadway/Waterway	Scenario 2	--	--	--
3004	636436.2	4171148.9	Roadway/Waterway	Scenario 2	--	--	--
3005	636736.2	4171148.9	Roadway/Waterway	Scenario 2	--	--	--
3006	636836.2	4171148.9	Roadway/Waterway	Scenario 2	--	--	--
3007	638236.2	4171148.9	Roadway/Waterway	Scenario 2	--	--	--
3008	638336.2	4171148.9	Roadway/Waterway	Scenario 2	--	--	--
3009	635936.2	4171248.9	Roadway/Waterway	Scenario 2	--	--	--
3010	636036.2	4171248.9	Roadway/Waterway	Scenario 2	--	--	--
3011	636436.2	4171248.9	Roadway/Waterway	Scenario 2	--	--	--
3012	636636.2	4171248.9	Roadway/Waterway	Scenario 2	--	--	--
3013	636736.2	4171248.9	Roadway/Waterway	Scenario 2	--	--	--
3014	638036.2	4171248.9	Roadway/Waterway	Scenario 2	--	--	--
3015	638136.2	4171248.9	Roadway/Waterway	Scenario 2	--	--	--
3016	638236.2	4171248.9	Roadway/Waterway	Scenario 2	--	--	--
3017	636436.2	4171348.9	Roadway/Waterway	Scenario 2	--	--	--
3018	636536.2	4171348.9	Roadway/Waterway	Scenario 2	--	--	--
3019	636636.2	4171348.9	Roadway/Waterway	Scenario 2	--	--	--
3020	637936.2	4171348.9	Roadway/Waterway	Scenario 2	--	--	--
3021	638036.2	4171348.9	Roadway/Waterway	Scenario 2	--	--	--
3022	636336.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3023	636436.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3024	636536.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3025	637436.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3026	637536.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3027	637636.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3028	637736.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3029	637836.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3030	637936.2	4171448.9	Roadway/Waterway	Scenario 2	--	--	--
3031	636136.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3032	636236.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3033	636336.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3034	636436.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3035	637336.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3036	637436.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3037	637536.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3038	637636.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3039	637736.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3040	637836.2	4171548.9	Roadway/Waterway	Scenario 2	--	--	--
3041	636236.2	4171648.9	Roadway/Waterway	Scenario 2	--	--	--
3042	636436.2	4171648.9	Roadway/Waterway	Scenario 2	--	--	--
3043	637336.2	4171648.9	Roadway/Waterway	Scenario 2	--	--	--
3044	637436.2	4171648.9	Roadway/Waterway	Scenario 2	--	--	--
3045	636436.2	4171748.9	Roadway/Waterway	Scenario 2	--	--	--
3046	637236.2	4171748.9	Roadway/Waterway	Scenario 2	--	--	--
3047	636436.2	4171848.9	Roadway/Waterway	Scenario 2	--	--	--
3048	637136.2	4171848.9	Roadway/Waterway	Scenario 2	--	--	--
3049	637036.2	4171948.9	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3050	637136.2	4171948.9	Roadway/Waterway	Scenario 2	--	--	--
3051	638036.2	4171948.9	Roadway/Waterway	Scenario 2	--	--	--
3052	636936.2	4172048.9	Roadway/Waterway	Scenario 2	--	--	--
3053	637036.2	4172048.9	Roadway/Waterway	Scenario 2	--	--	--
3054	637136.2	4172048.9	Roadway/Waterway	Scenario 2	--	--	--
3055	638036.2	4172048.9	Roadway/Waterway	Scenario 2	--	--	--
3056	636836.2	4172148.9	Roadway/Waterway	Scenario 2	--	--	--
3057	636936.2	4172148.9	Roadway/Waterway	Scenario 2	--	--	--
3058	637036.2	4172148.9	Roadway/Waterway	Scenario 2	--	--	--
3059	638036.2	4172148.9	Roadway/Waterway	Scenario 2	--	--	--
3060	638036.2	4172248.9	Roadway/Waterway	Scenario 2	--	--	--
3061	639636.2	4172248.9	Roadway/Waterway	Scenario 2	--	--	--
3062	638036.2	4172348.9	Roadway/Waterway	Scenario 2	--	--	--
3063	639636.2	4172348.9	Roadway/Waterway	Scenario 2	--	--	--
3064	638036.2	4172448.9	Roadway/Waterway	Scenario 2	--	--	--
3065	642798.5	4166811.2	Worker	Scenario 2	1.43E-01	9.74E-04	--
3066	642823.5	4166811.2	Worker	Scenario 2	1.46E-01	9.73E-04	--
3067	642848.5	4166811.2	Worker	Scenario 2	1.48E-01	9.72E-04	--
3068	642873.5	4166811.2	Worker	Scenario 2	1.50E-01	9.71E-04	--
3069	642898.5	4166811.2	Worker	Scenario 2	1.53E-01	9.69E-04	--
3070	642923.5	4166811.2	Worker	Scenario 2	1.55E-01	9.68E-04	--
3071	642948.5	4166811.2	Worker	Scenario 2	1.57E-01	9.65E-04	--
3072	642973.5	4166811.2	Worker	Scenario 2	1.65E-01	9.78E-04	--
3073	642998.5	4166811.2	Worker	Scenario 2	1.66E-01	9.71E-04	--
3074	643023.5	4166811.2	Worker	Scenario 2	1.69E-01	9.72E-04	--
3075	643048.5	4166811.2	Worker	Scenario 2	1.73E-01	9.73E-04	--
3076	643073.5	4166811.2	Worker	Scenario 2	1.78E-01	9.76E-04	--
3077	643098.5	4166811.2	Worker	Scenario 2	1.84E-01	9.81E-04	--
3078	643123.5	4166811.2	Worker	Scenario 2	1.90E-01	9.87E-04	--
3079	643148.5	4166811.2	Worker	Scenario 2	1.96E-01	9.94E-04	--
3080	643173.5	4166811.2	Worker	Scenario 2	2.03E-01	1.00E-03	--
3081	643198.5	4166811.2	Worker	Scenario 2	2.11E-01	1.01E-03	--
3082	643223.5	4166811.2	Worker	Scenario 2	2.18E-01	1.02E-03	--
3083	643248.5	4166811.2	Worker	Scenario 2	2.26E-01	1.03E-03	--
3084	643273.5	4166811.2	Worker	Scenario 2	2.33E-01	1.04E-03	--
3085	643298.5	4166811.2	Worker	Scenario 2	2.41E-01	1.05E-03	--
3086	643323.5	4166811.2	Worker	Scenario 2	2.48E-01	1.06E-03	--
3087	643348.5	4166811.2	Worker	Scenario 2	2.56E-01	1.07E-03	--
3088	643373.5	4166811.2	Worker	Scenario 2	2.63E-01	1.08E-03	--
3089	643398.5	4166811.2	Worker	Scenario 2	2.70E-01	1.09E-03	--
3090	643423.5	4166811.2	Worker	Scenario 2	2.76E-01	1.09E-03	--
3091	643448.5	4166811.2	Worker	Scenario 2	2.82E-01	1.10E-03	--
3092	643473.5	4166811.2	Worker	Scenario 2	2.87E-01	1.10E-03	--
3093	643498.5	4166811.2	Worker	Scenario 2	2.91E-01	1.10E-03	--
3094	643523.5	4166811.2	Worker	Scenario 2	2.94E-01	1.10E-03	--
3095	641973.5	4166836.2	Worker	Scenario 2	8.67E-02	8.42E-04	--
3096	641998.5	4166836.2	Worker	Scenario 2	8.65E-02	8.40E-04	--
3097	642023.5	4166836.2	Worker	Scenario 2	8.66E-02	8.39E-04	--
3098	642048.5	4166836.2	Worker	Scenario 2	8.69E-02	8.41E-04	--
3099	642073.5	4166836.2	Worker	Scenario 2	8.70E-02	8.41E-04	--
3100	642098.5	4166836.2	Worker	Scenario 2	8.73E-02	8.41E-04	--
3101	642123.5	4166836.2	Worker	Scenario 2	8.79E-02	8.45E-04	--
3102	642148.5	4166836.2	Worker	Scenario 2	8.87E-02	8.49E-04	--
3103	642173.5	4166836.2	Worker	Scenario 2	8.98E-02	8.55E-04	--
3104	642198.5	4166836.2	Worker	Scenario 2	9.09E-02	8.60E-04	--
3105	642223.5	4166836.2	Worker	Scenario 2	9.23E-02	8.68E-04	--
3106	642248.5	4166836.2	Worker	Scenario 2	9.39E-02	8.76E-04	--
3107	642598.5	4166836.2	Worker	Scenario 2	1.32E-01	1.05E-03	--
3108	642623.5	4166836.2	Worker	Scenario 2	1.35E-01	1.04E-03	--
3109	642648.5	4166836.2	Worker	Scenario 2	1.37E-01	1.04E-03	--
3110	642673.5	4166836.2	Worker	Scenario 2	1.39E-01	1.03E-03	--
3111	642698.5	4166836.2	Worker	Scenario 2	1.41E-01	1.03E-03	--
3112	642723.5	4166836.2	Worker	Scenario 2	1.44E-01	1.03E-03	--
3113	642748.5	4166836.2	Worker	Scenario 2	1.47E-01	1.02E-03	--
3114	642773.5	4166836.2	Worker	Scenario 2	1.49E-01	1.02E-03	--
3115	642798.5	4166836.2	Worker	Scenario 2	1.52E-01	1.02E-03	--
3116	642823.5	4166836.2	Worker	Scenario 2	1.55E-01	1.02E-03	--
3117	642848.5	4166836.2	Worker	Scenario 2	1.58E-01	1.02E-03	--
3118	642873.5	4166836.2	Worker	Scenario 2	1.60E-01	1.02E-03	--
3119	642898.5	4166836.2	Worker	Scenario 2	1.63E-01	1.01E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3120	642923.5	4166836.2	Worker	Scenario 2	1.66E-01	1.01E-03	--
3121	642948.5	4166836.2	Worker	Scenario 2	1.69E-01	1.01E-03	--
3122	642973.5	4166836.2	Worker	Scenario 2	1.73E-01	1.01E-03	--
3123	642998.5	4166836.2	Worker	Scenario 2	1.80E-01	1.03E-03	--
3124	643023.5	4166836.2	Worker	Scenario 2	1.81E-01	1.02E-03	--
3125	643048.5	4166836.2	Worker	Scenario 2	1.85E-01	1.02E-03	--
3126	643073.5	4166836.2	Worker	Scenario 2	1.90E-01	1.02E-03	--
3127	643098.5	4166836.2	Worker	Scenario 2	1.97E-01	1.03E-03	--
3128	643123.5	4166836.2	Worker	Scenario 2	2.04E-01	1.04E-03	--
3129	643148.5	4166836.2	Worker	Scenario 2	2.12E-01	1.05E-03	--
3130	643173.5	4166836.2	Worker	Scenario 2	2.20E-01	1.06E-03	--
3131	643198.5	4166836.2	Worker	Scenario 2	2.28E-01	1.07E-03	--
3132	643223.5	4166836.2	Worker	Scenario 2	2.36E-01	1.08E-03	--
3133	643248.5	4166836.2	Worker	Scenario 2	2.44E-01	1.09E-03	--
3134	643273.5	4166836.2	Worker	Scenario 2	2.53E-01	1.10E-03	--
3135	643298.5	4166836.2	Worker	Scenario 2	2.62E-01	1.11E-03	--
3136	643323.5	4166836.2	Worker	Scenario 2	2.70E-01	1.12E-03	--
3137	643348.5	4166836.2	Worker	Scenario 2	2.78E-01	1.13E-03	--
3138	643373.5	4166836.2	Worker	Scenario 2	2.86E-01	1.14E-03	--
3139	643398.5	4166836.2	Worker	Scenario 2	2.93E-01	1.15E-03	--
3140	643423.5	4166836.2	Worker	Scenario 2	2.99E-01	1.16E-03	--
3141	643448.5	4166836.2	Worker	Scenario 2	3.05E-01	1.16E-03	--
3142	643473.5	4166836.2	Worker	Scenario 2	3.10E-01	1.16E-03	--
3143	643498.5	4166836.2	Worker	Scenario 2	3.13E-01	1.17E-03	--
3144	643523.5	4166836.2	Worker	Scenario 2	3.16E-01	1.16E-03	--
3145	643548.5	4166836.2	Worker	Scenario 2	3.17E-01	1.16E-03	--
3146	643573.5	4166836.2	Worker	Scenario 2	3.18E-01	1.15E-03	--
3147	643598.5	4166836.2	Worker	Scenario 2	3.17E-01	1.14E-03	--
3148	643623.5	4166836.2	Worker	Scenario 2	3.16E-01	1.13E-03	--
3149	643648.5	4166836.2	Worker	Scenario 2	3.14E-01	1.12E-03	--
3150	643673.5	4166836.2	Worker	Scenario 2	3.11E-01	1.10E-03	--
3151	643698.5	4166836.2	Worker	Scenario 2	3.08E-01	1.09E-03	--
3152	643723.5	4166836.2	Worker	Scenario 2	3.04E-01	1.07E-03	--
3153	643748.5	4166836.2	Worker	Scenario 2	3.00E-01	1.06E-03	--
3154	643773.5	4166836.2	Worker	Scenario 2	2.96E-01	1.04E-03	--
3155	643798.5	4166836.2	Worker	Scenario 2	2.92E-01	1.02E-03	--
3156	643823.5	4166836.2	Worker	Scenario 2	2.88E-01	1.01E-03	--
3157	643848.5	4166836.2	Worker	Scenario 2	2.84E-01	9.90E-04	--
3158	643873.5	4166836.2	Worker	Scenario 2	2.81E-01	9.75E-04	--
3159	643898.5	4166836.2	Worker	Scenario 2	2.78E-01	9.61E-04	--
3160	643923.5	4166836.2	Worker	Scenario 2	2.75E-01	9.48E-04	--
3161	643948.5	4166836.2	Worker	Scenario 2	2.73E-01	9.36E-04	--
3162	643973.5	4166836.2	Worker	Scenario 2	2.70E-01	9.25E-04	--
3163	643998.5	4166836.2	Worker	Scenario 2	2.69E-01	9.15E-04	--
3164	644023.5	4166836.2	Worker	Scenario 2	2.67E-01	9.07E-04	--
3165	644048.5	4166836.2	Worker	Scenario 2	2.66E-01	8.98E-04	--
3166	644073.5	4166836.2	Worker	Scenario 2	2.64E-01	8.90E-04	--
3167	644098.5	4166836.2	Worker	Scenario 2	2.63E-01	8.82E-04	--
3168	644123.5	4166836.2	Worker	Scenario 2	2.62E-01	8.74E-04	--
3169	644148.5	4166836.2	Worker	Scenario 2	2.60E-01	8.66E-04	--
3170	644173.5	4166836.2	Worker	Scenario 2	2.59E-01	8.59E-04	--
3171	644198.5	4166836.2	Worker	Scenario 2	2.57E-01	8.51E-04	--
3172	644223.5	4166836.2	Worker	Scenario 2	2.56E-01	8.44E-04	--
3173	644248.5	4166836.2	Worker	Scenario 2	2.55E-01	8.36E-04	--
3174	644273.5	4166836.2	Worker	Scenario 2	2.53E-01	8.29E-04	--
3175	644298.5	4166836.2	Worker	Scenario 2	2.52E-01	8.22E-04	--
3176	641598.5	4166861.2	Worker	Scenario 2	1.34E-01	1.36E-03	--
3177	641623.5	4166861.2	Worker	Scenario 2	1.25E-01	1.26E-03	--
3178	641648.5	4166861.2	Worker	Scenario 2	1.18E-01	1.18E-03	--
3179	641673.5	4166861.2	Worker	Scenario 2	1.13E-01	1.12E-03	--
3180	641698.5	4166861.2	Worker	Scenario 2	1.08E-01	1.07E-03	--
3181	641723.5	4166861.2	Worker	Scenario 2	1.04E-01	1.02E-03	--
3182	641748.5	4166861.2	Worker	Scenario 2	1.01E-01	9.89E-04	--
3183	641773.5	4166861.2	Worker	Scenario 2	9.80E-02	9.61E-04	--
3184	641798.5	4166861.2	Worker	Scenario 2	9.58E-02	9.38E-04	--
3185	641823.5	4166861.2	Worker	Scenario 2	9.40E-02	9.20E-04	--
3186	641848.5	4166861.2	Worker	Scenario 2	9.25E-02	9.05E-04	--
3187	641873.5	4166861.2	Worker	Scenario 2	9.14E-02	8.94E-04	--
3188	641898.5	4166861.2	Worker	Scenario 2	9.05E-02	8.85E-04	--
3189	641923.5	4166861.2	Worker	Scenario 2	8.98E-02	8.78E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3190	641948.5	4166861.2	Worker	Scenario 2	8.93E-02	8.73E-04	--
3191	641973.5	4166861.2	Worker	Scenario 2	8.91E-02	8.71E-04	--
3192	641998.5	4166861.2	Worker	Scenario 2	8.90E-02	8.70E-04	--
3193	642023.5	4166861.2	Worker	Scenario 2	8.91E-02	8.70E-04	--
3194	642123.5	4166861.2	Worker	Scenario 2	9.10E-02	8.79E-04	--
3195	642148.5	4166861.2	Worker	Scenario 2	9.20E-02	8.85E-04	--
3196	642173.5	4166861.2	Worker	Scenario 2	9.32E-02	8.91E-04	--
3197	641298.5	4167011.2	Worker	Scenario 2	1.52E-01	1.95E-03	--
3198	641323.5	4167011.2	Worker	Scenario 2	1.99E-01	2.66E-03	--
3199	641298.5	4167036.2	Worker	Scenario 2	1.54E-01	1.98E-03	--
3200	641323.5	4167036.2	Worker	Scenario 2	2.02E-01	2.71E-03	--
3201	641298.5	4167061.2	Worker	Scenario 2	1.56E-01	2.02E-03	--
3202	641323.5	4167061.2	Worker	Scenario 2	2.05E-01	2.76E-03	--
3203	641348.5	4167061.2	Worker	Scenario 2	3.06E-01	4.36E-03	--
3204	644673.5	4167061.2	Worker	Scenario 2	3.14E-01	9.31E-04	--
3205	641298.5	4167086.2	Worker	Scenario 2	1.59E-01	2.05E-03	--
3206	641323.5	4167086.2	Worker	Scenario 2	2.10E-01	2.82E-03	--
3207	641348.5	4167086.2	Worker	Scenario 2	3.15E-01	4.50E-03	--
3208	644648.5	4167086.2	Worker	Scenario 2	3.31E-01	9.76E-04	--
3209	644673.5	4167086.2	Worker	Scenario 2	3.23E-01	9.52E-04	--
3210	641298.5	4167111.2	Worker	Scenario 2	1.62E-01	2.09E-03	--
3211	641323.5	4167111.2	Worker	Scenario 2	2.14E-01	2.88E-03	--
3212	641348.5	4167111.2	Worker	Scenario 2	3.26E-01	4.66E-03	--
3213	644648.5	4167111.2	Worker	Scenario 2	3.39E-01	9.95E-04	--
3214	644673.5	4167111.2	Worker	Scenario 2	3.31E-01	9.72E-04	--
3215	641298.5	4167136.2	Worker	Scenario 2	1.65E-01	2.13E-03	--
3216	641323.5	4167136.2	Worker	Scenario 2	2.19E-01	2.95E-03	--
3217	641348.5	4167136.2	Worker	Scenario 2	3.37E-01	4.82E-03	--
3218	644648.5	4167136.2	Worker	Scenario 2	3.46E-01	1.01E-03	--
3219	644673.5	4167136.2	Worker	Scenario 2	3.38E-01	9.88E-04	--
3220	641298.5	4167161.2	Worker	Scenario 2	1.67E-01	2.17E-03	--
3221	641323.5	4167161.2	Worker	Scenario 2	2.24E-01	3.01E-03	--
3222	641348.5	4167161.2	Worker	Scenario 2	3.47E-01	4.97E-03	--
3223	644648.5	4167161.2	Worker	Scenario 2	3.51E-01	1.02E-03	--
3224	644673.5	4167161.2	Worker	Scenario 2	3.42E-01	9.98E-04	--
3225	641298.5	4167186.2	Worker	Scenario 2	1.70E-01	2.21E-03	--
3226	641323.5	4167186.2	Worker	Scenario 2	2.28E-01	3.07E-03	--
3227	641348.5	4167186.2	Worker	Scenario 2	3.57E-01	5.12E-03	--
3228	644648.5	4167186.2	Worker	Scenario 2	3.56E-01	1.03E-03	--
3229	644673.5	4167186.2	Worker	Scenario 2	3.48E-01	1.01E-03	--
3230	641298.5	4167211.2	Worker	Scenario 2	1.73E-01	2.25E-03	--
3231	641323.5	4167211.2	Worker	Scenario 2	2.32E-01	3.14E-03	--
3232	641348.5	4167211.2	Worker	Scenario 2	3.65E-01	5.23E-03	--
3233	644648.5	4167211.2	Worker	Scenario 2	3.63E-01	1.05E-03	--
3234	644673.5	4167211.2	Worker	Scenario 2	3.54E-01	1.03E-03	--
3235	641298.5	4167236.2	Worker	Scenario 2	1.76E-01	2.29E-03	--
3236	641323.5	4167236.2	Worker	Scenario 2	2.36E-01	3.20E-03	--
3237	641348.5	4167236.2	Worker	Scenario 2	3.73E-01	5.36E-03	--
3238	644623.5	4167236.2	Worker	Scenario 2	3.77E-01	1.09E-03	--
3239	644648.5	4167236.2	Worker	Scenario 2	3.68E-01	1.06E-03	--
3240	644673.5	4167236.2	Worker	Scenario 2	3.59E-01	1.04E-03	--
3241	641298.5	4167261.2	Worker	Scenario 2	1.78E-01	2.33E-03	--
3242	641323.5	4167261.2	Worker	Scenario 2	2.40E-01	3.26E-03	--
3243	641348.5	4167261.2	Worker	Scenario 2	3.81E-01	5.47E-03	--
3244	641298.5	4167286.2	Worker	Scenario 2	1.81E-01	2.38E-03	--
3245	641323.5	4167286.2	Worker	Scenario 2	2.44E-01	3.32E-03	--
3246	641348.5	4167286.2	Worker	Scenario 2	3.88E-01	5.59E-03	--
3247	641298.5	4167311.2	Worker	Scenario 2	1.83E-01	2.42E-03	--
3248	641323.5	4167311.2	Worker	Scenario 2	2.47E-01	3.38E-03	--
3249	641348.5	4167311.2	Worker	Scenario 2	3.96E-01	5.71E-03	--
3250	641723.5	4167311.2	Roadway/Waterway	Scenario 2	--	--	--
3251	641298.5	4167336.2	Worker	Scenario 2	1.86E-01	2.47E-03	--
3252	641323.5	4167336.2	Worker	Scenario 2	2.51E-01	3.45E-03	--
3253	641348.5	4167336.2	Worker	Scenario 2	4.03E-01	5.84E-03	--
3254	641623.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
3255	641648.5	4167336.2	Roadway/Waterway	Scenario 2	--	--	--
3256	641298.5	4167361.2	Worker	Scenario 2	1.88E-01	2.52E-03	--
3257	641323.5	4167361.2	Worker	Scenario 2	2.55E-01	3.52E-03	--
3258	641348.5	4167361.2	Worker	Scenario 2	4.12E-01	5.98E-03	--
3259	641548.5	4167361.2	Roadway/Waterway	Scenario 2	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3260	644523.5	4167361.2	Worker	Scenario 2	4.35E-01	1.23E-03	--
3261	641298.5	4167386.2	Worker	Scenario 2	1.91E-01	2.57E-03	--
3262	641323.5	4167386.2	Worker	Scenario 2	2.58E-01	3.59E-03	--
3263	641348.5	4167386.2	Worker	Scenario 2	4.20E-01	6.11E-03	--
3264	641448.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
3265	641473.5	4167386.2	Roadway/Waterway	Scenario 2	--	--	--
3266	644448.5	4167386.2	Worker	Scenario 2	4.73E-01	1.33E-03	--
3267	641298.5	4167411.2	Worker	Scenario 2	1.93E-01	2.63E-03	--
3268	641323.5	4167411.2	Worker	Scenario 2	2.62E-01	3.67E-03	--
3269	641348.5	4167411.2	Worker	Scenario 2	4.27E-01	6.25E-03	--
3270	644348.5	4167411.2	Worker	Scenario 2	5.30E-01	1.48E-03	--
3271	644373.5	4167411.2	Worker	Scenario 2	5.15E-01	1.44E-03	--
3272	643348.5	4167436.2	Worker	Scenario 2	4.39E+00	1.13E-02	--
3273	643373.5	4167436.2	Worker	Scenario 2	3.90E+00	1.01E-02	--
3274	643398.5	4167436.2	Worker	Scenario 2	3.52E+00	9.13E-03	--
3275	643423.5	4167436.2	Worker	Scenario 2	3.20E+00	8.30E-03	--
3276	643448.5	4167436.2	Worker	Scenario 2	2.92E+00	7.59E-03	--
3277	643473.5	4167436.2	Worker	Scenario 2	2.67E+00	6.97E-03	--
3278	643498.5	4167436.2	Worker	Scenario 2	2.46E+00	6.43E-03	--
3279	643523.5	4167436.2	Worker	Scenario 2	2.27E+00	5.96E-03	--
3280	643548.5	4167436.2	Worker	Scenario 2	2.11E+00	5.54E-03	--
3281	643573.5	4167436.2	Worker	Scenario 2	1.96E+00	5.18E-03	--
3282	643598.5	4167436.2	Worker	Scenario 2	1.83E+00	4.85E-03	--
3283	643623.5	4167436.2	Worker	Scenario 2	1.72E+00	4.56E-03	--
3284	643648.5	4167436.2	Worker	Scenario 2	1.62E+00	4.29E-03	--
3285	643673.5	4167436.2	Worker	Scenario 2	1.52E+00	4.06E-03	--
3286	643698.5	4167436.2	Worker	Scenario 2	1.44E+00	3.84E-03	--
3287	643723.5	4167436.2	Worker	Scenario 2	1.36E+00	3.65E-03	--
3288	643748.5	4167436.2	Worker	Scenario 2	1.29E+00	3.47E-03	--
3289	644273.5	4167436.2	Worker	Scenario 2	5.78E-01	1.61E-03	--
3290	644298.5	4167436.2	Worker	Scenario 2	5.61E-01	1.57E-03	--
3291	643323.5	4167461.2	Worker	Scenario 2	5.53E+00	1.41E-02	--
3292	643348.5	4167461.2	Worker	Scenario 2	4.79E+00	1.22E-02	--
3293	643873.5	4167461.2	Worker	Scenario 2	1.03E+00	2.79E-03	--
3294	643898.5	4167461.2	Worker	Scenario 2	9.88E-01	2.68E-03	--
3295	644198.5	4167461.2	Worker	Scenario 2	6.34E-01	1.76E-03	--
3296	644223.5	4167461.2	Worker	Scenario 2	6.13E-01	1.70E-03	--
3297	643298.5	4167486.2	Worker	Scenario 2	7.03E+00	1.77E-02	--
3298	643323.5	4167486.2	Worker	Scenario 2	5.80E+00	1.47E-02	--
3299	643348.5	4167486.2	Worker	Scenario 2	5.00E+00	1.27E-02	--
3300	644098.5	4167486.2	Worker	Scenario 2	7.21E-01	1.98E-03	--
3301	644123.5	4167486.2	Worker	Scenario 2	6.96E-01	1.92E-03	--
3302	644148.5	4167486.2	Worker	Scenario 2	6.72E-01	1.86E-03	--
3303	643273.5	4167511.2	Worker	Scenario 2	8.23E+00	2.06E-02	--
3304	643298.5	4167511.2	Worker	Scenario 2	6.63E+00	1.67E-02	--
3305	643323.5	4167511.2	Worker	Scenario 2	5.64E+00	1.43E-02	--
3306	643273.5	4167536.2	Worker	Scenario 2	6.72E+00	1.69E-02	--
3307	643298.5	4167536.2	Worker	Scenario 2	5.76E+00	1.46E-02	--
3308	643248.5	4167561.2	Worker	Scenario 2	5.55E+00	1.42E-02	--
3309	643273.5	4167561.2	Worker	Scenario 2	4.99E+00	1.28E-02	--
3310	643223.5	4167586.2	Worker	Scenario 2	3.44E+00	9.22E-03	--
3311	643248.5	4167586.2	Worker	Scenario 2	3.44E+00	9.12E-03	--
3312	643198.5	4167611.2	Worker	Scenario 2	1.73E+00	5.20E-03	--
3313	643223.5	4167611.2	Worker	Scenario 2	1.90E+00	5.49E-03	--
3314	643248.5	4167611.2	Worker	Scenario 2	2.09E+00	5.86E-03	--
3315	643173.5	4167636.2	Worker	Scenario 2	1.07E+00	3.65E-03	--
3316	643198.5	4167636.2	Worker	Scenario 2	1.07E+00	3.55E-03	--
3317	643223.5	4167636.2	Worker	Scenario 2	1.19E+00	3.75E-03	--
3318	643173.5	4167661.2	Worker	Scenario 2	8.43E-01	3.04E-03	--
3319	643198.5	4167661.2	Worker	Scenario 2	8.24E-01	2.90E-03	--
3320	643148.5	4167686.2	Worker	Scenario 2	8.21E-01	3.02E-03	--
3321	643173.5	4167686.2	Worker	Scenario 2	7.36E-01	2.71E-03	--
3322	643123.5	4167711.2	Worker	Scenario 2	8.53E-01	3.13E-03	--
3323	643148.5	4167711.2	Worker	Scenario 2	7.30E-01	2.72E-03	--
3324	643098.5	4167736.2	Worker	Scenario 2	8.86E-01	3.24E-03	--
3325	643123.5	4167736.2	Worker	Scenario 2	7.50E-01	2.79E-03	--
3326	643098.5	4167761.2	Worker	Scenario 2	7.75E-01	2.87E-03	--
3327	643123.5	4167761.2	Worker	Scenario 2	6.89E-01	2.58E-03	--
3328	643073.5	4167786.2	Worker	Scenario 2	7.71E-01	2.88E-03	--
3329	643098.5	4167786.2	Worker	Scenario 2	6.98E-01	2.61E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3330	643048.5	4167811.2	Worker	Scenario 2	7.63E-01	2.87E-03	--
3331	643073.5	4167811.2	Worker	Scenario 2	6.91E-01	2.60E-03	--
3332	643023.5	4167836.2	Worker	Scenario 2	7.44E-01	2.82E-03	--
3333	643048.5	4167836.2	Worker	Scenario 2	6.73E-01	2.56E-03	--
3334	642998.5	4167861.2	Worker	Scenario 2	7.11E-01	2.73E-03	--
3335	643023.5	4167861.2	Worker	Scenario 2	6.51E-01	2.50E-03	--
3336	642973.5	4167886.2	Worker	Scenario 2	6.77E-01	2.65E-03	--
3337	642998.5	4167886.2	Worker	Scenario 2	6.24E-01	2.43E-03	--
3338	642948.5	4167911.2	Worker	Scenario 2	6.31E-01	2.52E-03	--
3339	642973.5	4167911.2	Worker	Scenario 2	5.99E-01	2.37E-03	--
3340	642898.5	4167936.2	Worker	Scenario 2	6.21E-01	2.57E-03	--
3341	642923.5	4167936.2	Worker	Scenario 2	5.89E-01	2.40E-03	--
3342	642873.5	4167961.2	Worker	Scenario 2	5.74E-01	2.43E-03	--
3343	642898.5	4167961.2	Worker	Scenario 2	5.57E-01	2.31E-03	--
3344	642823.5	4167986.2	Worker	Scenario 2	5.49E-01	2.43E-03	--
3345	642848.5	4167986.2	Worker	Scenario 2	5.34E-01	2.31E-03	--
3346	642798.5	4168011.2	Worker	Scenario 2	5.09E-01	2.30E-03	--
3347	642823.5	4168011.2	Worker	Scenario 2	5.03E-01	2.22E-03	--
3348	642748.5	4168036.2	Worker	Scenario 2	4.82E-01	2.30E-03	--
3349	642773.5	4168036.2	Worker	Scenario 2	4.75E-01	2.20E-03	--
3350	642698.5	4168061.2	Worker	Scenario 2	4.53E-01	2.27E-03	--
3351	642723.5	4168061.2	Worker	Scenario 2	4.48E-01	2.18E-03	--
3352	642748.5	4168061.2	Worker	Scenario 2	4.47E-01	2.10E-03	--
3353	642673.5	4168086.2	Worker	Scenario 2	4.22E-01	2.17E-03	--
3354	642698.5	4168086.2	Worker	Scenario 2	4.18E-01	2.07E-03	--
3355	642623.5	4168111.2	Worker	Scenario 2	3.94E-01	2.14E-03	--
3356	642648.5	4168111.2	Worker	Scenario 2	3.92E-01	2.06E-03	--
3357	642673.5	4168111.2	Worker	Scenario 2	3.93E-01	1.99E-03	--
3358	642598.5	4168136.2	Worker	Scenario 2	3.70E-01	2.05E-03	--
3359	642623.5	4168136.2	Worker	Scenario 2	3.67E-01	1.96E-03	--
3360	642548.5	4168161.2	Worker	Scenario 2	3.47E-01	2.03E-03	--
3361	642573.5	4168161.2	Worker	Scenario 2	3.45E-01	1.95E-03	--
3362	642523.5	4168186.2	Worker	Scenario 2	3.26E-01	1.95E-03	--
3363	642548.5	4168186.2	Worker	Scenario 2	3.26E-01	1.87E-03	--
3364	642498.5	4168211.2	Worker	Scenario 2	3.08E-01	1.87E-03	--
3365	642473.5	4168236.2	Worker	Scenario 2	2.92E-01	1.80E-03	--
3366	642448.5	4168261.2	Worker	Scenario 2	2.79E-01	1.74E-03	--
3367	642423.5	4168286.2	Worker	Scenario 2	2.66E-01	1.68E-03	--
3368	642398.5	4168311.2	Worker	Scenario 2	2.55E-01	1.62E-03	--
3369	642423.5	4168311.2	Worker	Scenario 2	2.57E-01	1.58E-03	--
3370	642348.5	4168336.2	Worker	Scenario 2	2.47E-01	1.64E-03	--
3371	642373.5	4168336.2	Worker	Scenario 2	2.45E-01	1.57E-03	--
3372	639573.5	4168361.2	Worker	Scenario 2	2.01E-02	1.53E-04	--
3373	639598.5	4168361.2	Worker	Scenario 2	2.05E-02	1.56E-04	--
3374	639623.5	4168361.2	Worker	Scenario 2	2.08E-02	1.59E-04	--
3375	642323.5	4168361.2	Worker	Scenario 2	2.36E-01	1.58E-03	--
3376	642348.5	4168361.2	Worker	Scenario 2	2.35E-01	1.53E-03	--
3377	639523.5	4168386.2	Worker	Scenario 2	1.96E-02	1.48E-04	--
3378	639548.5	4168386.2	Worker	Scenario 2	1.99E-02	1.51E-04	--
3379	639573.5	4168386.2	Worker	Scenario 2	2.03E-02	1.54E-04	--
3380	639598.5	4168386.2	Worker	Scenario 2	2.06E-02	1.57E-04	--
3381	639623.5	4168386.2	Worker	Scenario 2	2.10E-02	1.60E-04	--
3382	642273.5	4168386.2	Worker	Scenario 2	2.26E-01	1.57E-03	--
3383	642298.5	4168386.2	Worker	Scenario 2	2.25E-01	1.52E-03	--
3384	639498.5	4168411.2	Worker	Scenario 2	1.95E-02	1.46E-04	--
3385	639523.5	4168411.2	Worker	Scenario 2	1.98E-02	1.49E-04	--
3386	639548.5	4168411.2	Worker	Scenario 2	2.01E-02	1.51E-04	--
3387	639573.5	4168411.2	Worker	Scenario 2	2.04E-02	1.54E-04	--
3388	639598.5	4168411.2	Worker	Scenario 2	2.08E-02	1.58E-04	--
3389	639623.5	4168411.2	Worker	Scenario 2	2.12E-02	1.61E-04	--
3390	642223.5	4168411.2	Worker	Scenario 2	2.15E-01	1.56E-03	--
3391	642248.5	4168411.2	Worker	Scenario 2	2.15E-01	1.51E-03	--
3392	639448.5	4168436.2	Worker	Scenario 2	1.91E-02	1.41E-04	--
3393	639473.5	4168436.2	Worker	Scenario 2	1.94E-02	1.44E-04	--
3394	639498.5	4168436.2	Worker	Scenario 2	1.97E-02	1.46E-04	--
3395	639523.5	4168436.2	Worker	Scenario 2	2.00E-02	1.49E-04	--
3396	639548.5	4168436.2	Worker	Scenario 2	2.03E-02	1.52E-04	--
3397	639573.5	4168436.2	Worker	Scenario 2	2.06E-02	1.55E-04	--
3398	639598.5	4168436.2	Worker	Scenario 2	2.10E-02	1.58E-04	--
3399	639623.5	4168436.2	Worker	Scenario 2	2.14E-02	1.61E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3400	642148.5	4168436.2	Worker	Scenario 2	2.04E-01	1.59E-03	--
3401	642173.5	4168436.2	Worker	Scenario 2	2.04E-01	1.54E-03	--
3402	642198.5	4168436.2	Worker	Scenario 2	2.05E-01	1.50E-03	--
3403	642098.5	4168461.2	Worker	Scenario 2	1.96E-01	1.59E-03	--
3404	642123.5	4168461.2	Worker	Scenario 2	1.96E-01	1.54E-03	--
3405	642148.5	4168461.2	Worker	Scenario 2	1.97E-01	1.49E-03	--
3406	642048.5	4168486.2	Worker	Scenario 2	1.89E-01	1.59E-03	--
3407	642073.5	4168486.2	Worker	Scenario 2	1.88E-01	1.53E-03	--
3408	642098.5	4168486.2	Worker	Scenario 2	1.89E-01	1.49E-03	--
3409	641973.5	4168511.2	Worker	Scenario 2	1.83E-01	1.64E-03	--
3410	641998.5	4168511.2	Worker	Scenario 2	1.82E-01	1.59E-03	--
3411	642023.5	4168511.2	Worker	Scenario 2	1.82E-01	1.53E-03	--
3412	641923.5	4168536.2	Worker	Scenario 2	1.78E-01	1.66E-03	--
3413	641948.5	4168536.2	Worker	Scenario 2	1.77E-01	1.60E-03	--
3414	641973.5	4168536.2	Worker	Scenario 2	1.77E-01	1.55E-03	--
3415	641873.5	4168561.2	Worker	Scenario 2	1.75E-01	1.69E-03	--
3416	641898.5	4168561.2	Worker	Scenario 2	1.74E-01	1.62E-03	--
3417	641823.5	4168586.2	Worker	Scenario 2	1.73E-01	1.74E-03	--
3418	641848.5	4168586.2	Worker	Scenario 2	1.71E-01	1.67E-03	--
3419	641748.5	4168611.2	Worker	Scenario 2	1.76E-01	1.90E-03	--
3420	641773.5	4168611.2	Worker	Scenario 2	1.73E-01	1.81E-03	--
3421	641798.5	4168611.2	Worker	Scenario 2	1.71E-01	1.73E-03	--
3422	641673.5	4168636.2	Worker	Scenario 2	1.83E-01	2.14E-03	--
3423	641698.5	4168636.2	Worker	Scenario 2	1.79E-01	2.03E-03	--
3424	641723.5	4168636.2	Worker	Scenario 2	1.75E-01	1.92E-03	--
3425	641598.5	4168661.2	Worker	Scenario 2	1.98E-01	2.55E-03	--
3426	641623.5	4168661.2	Worker	Scenario 2	1.90E-01	2.36E-03	--
3427	641648.5	4168661.2	Worker	Scenario 2	1.84E-01	2.21E-03	--
3428	641523.5	4168686.2	Worker	Scenario 2	2.30E-01	3.28E-03	--
3429	641548.5	4168686.2	Worker	Scenario 2	2.15E-01	2.96E-03	--
3430	641573.5	4168686.2	Worker	Scenario 2	2.03E-01	2.69E-03	--
3431	641448.5	4168711.2	Worker	Scenario 2	3.06E-01	4.91E-03	--
3432	641473.5	4168711.2	Worker	Scenario 2	2.69E-01	4.17E-03	--
3433	641498.5	4168711.2	Worker	Scenario 2	2.44E-01	3.64E-03	--
3434	641373.5	4168736.2	Worker	Scenario 2	5.90E-01	1.10E-02	--
3435	641398.5	4168736.2	Worker	Scenario 2	4.32E-01	7.69E-03	--
3436	641423.5	4168736.2	Worker	Scenario 2	3.50E-01	5.97E-03	--
3437	641298.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
3438	641323.5	4168761.2	Roadway/Waterway	Scenario 2	--	--	--
3439	641348.5	4168761.2	Worker	Scenario 2	7.57E-01	1.69E-02	--
3440	641373.5	4168761.2	Worker	Scenario 2	5.68E-01	1.10E-02	--
3441	641398.5	4168761.2	Worker	Scenario 2	4.27E-01	7.81E-03	--
3442	641423.5	4168761.2	Worker	Scenario 2	3.49E-01	6.07E-03	--
3443	641248.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
3444	641273.5	4168786.2	Roadway/Waterway	Scenario 2	--	--	--
3445	641348.5	4168786.2	Worker	Scenario 2	7.50E-01	1.71E-02	--
3446	641373.5	4168786.2	Worker	Scenario 2	5.70E-01	1.13E-02	--
3447	641398.5	4168786.2	Worker	Scenario 2	4.28E-01	8.01E-03	--
3448	641423.5	4168786.2	Worker	Scenario 2	3.49E-01	6.18E-03	--
3449	641173.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
3450	641198.5	4168811.2	Roadway/Waterway	Scenario 2	--	--	--
3451	641348.5	4168811.2	Worker	Scenario 2	8.37E-01	1.93E-02	--
3452	641373.5	4168811.2	Worker	Scenario 2	5.72E-01	1.17E-02	--
3453	641398.5	4168811.2	Worker	Scenario 2	4.29E-01	8.21E-03	--
3454	641423.5	4168811.2	Worker	Scenario 2	3.49E-01	6.26E-03	--
3455	641098.5	4168836.2	Roadway/Waterway	Scenario 2	--	--	--
3456	641348.5	4168836.2	Worker	Scenario 2	8.38E-01	2.00E-02	--
3457	641373.5	4168836.2	Worker	Scenario 2	5.75E-01	1.21E-02	--
3458	641398.5	4168836.2	Worker	Scenario 2	4.29E-01	8.36E-03	--
3459	641423.5	4168836.2	Worker	Scenario 2	3.47E-01	6.29E-03	--
3460	641023.5	4168861.2	Roadway/Waterway	Scenario 2	--	--	--
3461	641348.5	4168861.2	Worker	Scenario 2	9.33E-01	2.30E-02	--
3462	641373.5	4168861.2	Worker	Scenario 2	5.76E-01	1.25E-02	--
3463	641398.5	4168861.2	Worker	Scenario 2	4.26E-01	8.36E-03	--
3464	641423.5	4168861.2	Worker	Scenario 2	3.45E-01	6.20E-03	--
3465	640948.5	4168886.2	Roadway/Waterway	Scenario 2	--	--	--
3466	641348.5	4168886.2	Worker	Scenario 2	8.92E-01	2.35E-02	--
3467	641373.5	4168886.2	Worker	Scenario 2	5.63E-01	1.20E-02	--
3468	641398.5	4168886.2	Worker	Scenario 2	4.20E-01	8.03E-03	--
3469	641423.5	4168886.2	Worker	Scenario 2	3.41E-01	5.99E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3470	640873.5	4168911.2	Roadway/Waterway	Scenario 2	--	--	--
3471	641348.5	4168911.2	Worker	Scenario 2	8.80E-01	2.00E-02	--
3472	641373.5	4168911.2	Worker	Scenario 2	5.56E-01	1.11E-02	--
3473	641398.5	4168911.2	Worker	Scenario 2	4.15E-01	7.58E-03	--
3474	641423.5	4168911.2	Worker	Scenario 2	3.37E-01	5.72E-03	--
3475	640773.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
3476	640798.5	4168936.2	Roadway/Waterway	Scenario 2	--	--	--
3477	641348.5	4168936.2	Worker	Scenario 2	8.62E-01	1.86E-02	--
3478	641373.5	4168936.2	Worker	Scenario 2	5.49E-01	1.05E-02	--
3479	641398.5	4168936.2	Worker	Scenario 2	4.11E-01	7.23E-03	--
3480	641423.5	4168936.2	Worker	Scenario 2	3.34E-01	5.48E-03	--
3481	640548.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
3482	640573.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
3483	640698.5	4168961.2	Roadway/Waterway	Scenario 2	--	--	--
3484	641348.5	4168961.2	Worker	Scenario 2	8.48E-01	1.79E-02	--
3485	641373.5	4168961.2	Worker	Scenario 2	5.43E-01	1.01E-02	--
3486	641398.5	4168961.2	Worker	Scenario 2	4.08E-01	6.97E-03	--
3487	641423.5	4168961.2	Worker	Scenario 2	3.32E-01	5.29E-03	--
3488	640598.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
3489	640623.5	4168986.2	Roadway/Waterway	Scenario 2	--	--	--
3490	641348.5	4168986.2	Worker	Scenario 2	8.40E-01	1.74E-02	--
3491	641373.5	4168986.2	Worker	Scenario 2	5.39E-01	9.80E-03	--
3492	641398.5	4168986.2	Worker	Scenario 2	4.04E-01	6.76E-03	--
3493	641423.5	4168986.2	Worker	Scenario 2	3.29E-01	5.13E-03	--
3494	640448.5	4169011.2	Worker	Scenario 2	4.74E-02	3.93E-04	--
3495	640523.5	4169011.2	Worker	Scenario 2	5.06E-02	4.32E-04	--
3496	641348.5	4169011.2	Worker	Scenario 2	8.35E-01	1.71E-02	--
3497	641373.5	4169011.2	Worker	Scenario 2	5.34E-01	9.55E-03	--
3498	641398.5	4169011.2	Worker	Scenario 2	4.01E-01	6.57E-03	--
3499	641423.5	4169011.2	Worker	Scenario 2	3.26E-01	4.97E-03	--
3500	640448.5	4169036.2	Worker	Scenario 2	4.75E-02	3.91E-04	--
3501	640473.5	4169036.2	Worker	Scenario 2	4.84E-02	4.03E-04	--
3502	640523.5	4169036.2	Worker	Scenario 2	5.05E-02	4.30E-04	--
3503	641348.5	4169036.2	Worker	Scenario 2	8.29E-01	1.67E-02	--
3504	641373.5	4169036.2	Worker	Scenario 2	5.30E-01	9.30E-03	--
3505	641398.5	4169036.2	Worker	Scenario 2	3.97E-01	6.37E-03	--
3506	641423.5	4169036.2	Worker	Scenario 2	3.23E-01	4.81E-03	--
3507	640448.5	4169061.2	Worker	Scenario 2	4.74E-02	3.90E-04	--
3508	640473.5	4169061.2	Worker	Scenario 2	4.84E-02	4.02E-04	--
3509	640523.5	4169061.2	Worker	Scenario 2	5.05E-02	4.29E-04	--
3510	641348.5	4169061.2	Worker	Scenario 2	8.23E-01	1.63E-02	--
3511	641373.5	4169061.2	Worker	Scenario 2	5.27E-01	9.06E-03	--
3512	641398.5	4169061.2	Worker	Scenario 2	3.93E-01	6.16E-03	--
3513	641423.5	4169061.2	Worker	Scenario 2	3.18E-01	4.63E-03	--
3514	640448.5	4169086.2	Worker	Scenario 2	4.74E-02	3.88E-04	--
3515	640473.5	4169086.2	Worker	Scenario 2	4.84E-02	4.00E-04	--
3516	640523.5	4169086.2	Worker	Scenario 2	5.05E-02	4.27E-04	--
3517	641348.5	4169086.2	Worker	Scenario 2	8.16E-01	1.59E-02	--
3518	641373.5	4169086.2	Worker	Scenario 2	5.20E-01	8.74E-03	--
3519	641398.5	4169086.2	Worker	Scenario 2	3.87E-01	5.93E-03	--
3520	641423.5	4169086.2	Worker	Scenario 2	3.15E-01	4.46E-03	--
3521	640448.5	4169111.2	Worker	Scenario 2	4.74E-02	3.87E-04	--
3522	640473.5	4169111.2	Worker	Scenario 2	4.84E-02	3.99E-04	--
3523	640523.5	4169111.2	Worker	Scenario 2	5.05E-02	4.25E-04	--
3524	641348.5	4169111.2	Worker	Scenario 2	8.07E-01	1.54E-02	--
3525	641373.5	4169111.2	Worker	Scenario 2	5.13E-01	8.44E-03	--
3526	641398.5	4169111.2	Worker	Scenario 2	3.84E-01	5.73E-03	--
3527	641423.5	4169111.2	Worker	Scenario 2	3.12E-01	4.29E-03	--
3528	640448.5	4169136.2	Worker	Scenario 2	4.74E-02	3.86E-04	--
3529	640473.5	4169136.2	Worker	Scenario 2	4.83E-02	3.97E-04	--
3530	640523.5	4169136.2	Worker	Scenario 2	5.04E-02	4.23E-04	--
3531	641348.5	4169136.2	Worker	Scenario 2	7.92E-01	1.49E-02	--
3532	641373.5	4169136.2	Worker	Scenario 2	5.09E-01	8.22E-03	--
3533	641398.5	4169136.2	Worker	Scenario 2	3.81E-01	5.54E-03	--
3534	641423.5	4169136.2	Worker	Scenario 2	3.10E-01	4.11E-03	--
3535	640448.5	4169161.2	Worker	Scenario 2	4.73E-02	3.84E-04	--
3536	640473.5	4169161.2	Worker	Scenario 2	4.83E-02	3.96E-04	--
3537	640523.5	4169161.2	Worker	Scenario 2	5.03E-02	4.22E-04	--
3538	641348.5	4169161.2	Worker	Scenario 2	7.83E-01	1.46E-02	--
3539	641373.5	4169161.2	Worker	Scenario 2	5.05E-01	7.98E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3540	641398.5	4169161.2	Worker	Scenario 2	3.77E-01	5.31E-03	--
3541	641423.5	4169161.2	Worker	Scenario 2	3.06E-01	3.90E-03	--
3542	640448.5	4169186.2	Worker	Scenario 2	4.73E-02	3.83E-04	--
3543	640473.5	4169186.2	Worker	Scenario 2	4.82E-02	3.94E-04	--
3544	640523.5	4169186.2	Worker	Scenario 2	5.02E-02	4.20E-04	--
3545	641348.5	4169186.2	Worker	Scenario 2	7.74E-01	1.42E-02	--
3546	641373.5	4169186.2	Worker	Scenario 2	4.99E-01	7.68E-03	--
3547	641398.5	4169186.2	Worker	Scenario 2	3.72E-01	5.04E-03	--
3548	641423.5	4169186.2	Worker	Scenario 2	3.02E-01	3.66E-03	--
3549	640448.5	4169211.2	Worker	Scenario 2	4.72E-02	3.81E-04	--
3550	640473.5	4169211.2	Worker	Scenario 2	4.82E-02	3.93E-04	--
3551	640498.5	4169211.2	Worker	Scenario 2	4.91E-02	4.05E-04	--
3552	640523.5	4169211.2	Worker	Scenario 2	5.02E-02	4.18E-04	--
3553	641348.5	4169211.2	Worker	Scenario 2	7.65E-01	1.37E-02	--
3554	641373.5	4169211.2	Worker	Scenario 2	4.92E-01	7.27E-03	--
3555	641398.5	4169211.2	Worker	Scenario 2	3.66E-01	4.67E-03	--
3556	641423.5	4169211.2	Worker	Scenario 2	2.97E-01	3.35E-03	--
3557	640448.5	4169236.2	Worker	Scenario 2	4.71E-02	3.79E-04	--
3558	640473.5	4169236.2	Worker	Scenario 2	4.81E-02	3.91E-04	--
3559	640498.5	4169236.2	Worker	Scenario 2	4.91E-02	4.03E-04	--
3560	640523.5	4169236.2	Worker	Scenario 2	5.01E-02	4.15E-04	--
3561	641348.5	4169236.2	Worker	Scenario 2	7.51E-01	1.30E-02	--
3562	641373.5	4169236.2	Worker	Scenario 2	4.81E-01	6.63E-03	--
3563	641398.5	4169236.2	Worker	Scenario 2	3.59E-01	4.16E-03	--
3564	641423.5	4169236.2	Worker	Scenario 2	2.91E-01	2.98E-03	--
3565	640448.5	4169261.2	Worker	Scenario 2	4.71E-02	3.78E-04	--
3566	640473.5	4169261.2	Worker	Scenario 2	4.80E-02	3.89E-04	--
3567	640498.5	4169261.2	Worker	Scenario 2	4.90E-02	4.00E-04	--
3568	640523.5	4169261.2	Worker	Scenario 2	5.00E-02	4.13E-04	--
3569	641348.5	4169261.2	Worker	Scenario 2	7.30E-01	1.17E-02	--
3570	641373.5	4169261.2	Worker	Scenario 2	4.66E-01	5.58E-03	--
3571	641398.5	4169261.2	Worker	Scenario 2	3.49E-01	3.49E-03	--
3572	641423.5	4169261.2	Worker	Scenario 2	2.85E-01	2.55E-03	--
3573	640448.5	4169286.2	Worker	Scenario 2	4.70E-02	3.76E-04	--
3574	640473.5	4169286.2	Worker	Scenario 2	4.79E-02	3.87E-04	--
3575	640498.5	4169286.2	Worker	Scenario 2	4.89E-02	3.98E-04	--
3576	640523.5	4169286.2	Worker	Scenario 2	4.98E-02	4.10E-04	--
3577	640923.5	4169286.2	Worker	Scenario 2	7.51E-02	7.60E-04	--
3578	640948.5	4169286.2	Worker	Scenario 2	7.77E-02	7.97E-04	--
3579	640973.5	4169286.2	Worker	Scenario 2	8.06E-02	8.37E-04	--
3580	640998.5	4169286.2	Worker	Scenario 2	8.38E-02	8.82E-04	--
3581	641023.5	4169286.2	Worker	Scenario 2	8.74E-02	9.30E-04	--
3582	641048.5	4169286.2	Worker	Scenario 2	9.14E-02	9.83E-04	--
3583	641073.5	4169286.2	Worker	Scenario 2	9.59E-02	1.04E-03	--
3584	641098.5	4169286.2	Worker	Scenario 2	1.01E-01	1.10E-03	--
3585	641123.5	4169286.2	Worker	Scenario 2	1.07E-01	1.18E-03	--
3586	641148.5	4169286.2	Worker	Scenario 2	1.15E-01	1.27E-03	--
3587	641173.5	4169286.2	Worker	Scenario 2	1.24E-01	1.39E-03	--
3588	641348.5	4169286.2	Worker	Scenario 2	6.82E-01	7.97E-03	--
3589	641373.5	4169286.2	Worker	Scenario 2	4.47E-01	4.03E-03	--
3590	641398.5	4169286.2	Worker	Scenario 2	3.39E-01	2.76E-03	--
3591	641423.5	4169286.2	Worker	Scenario 2	2.79E-01	2.14E-03	--
3592	640423.5	4169311.2	Worker	Scenario 2	4.60E-02	3.63E-04	--
3593	640448.5	4169311.2	Worker	Scenario 2	4.69E-02	3.74E-04	--
3594	640473.5	4169311.2	Worker	Scenario 2	4.78E-02	3.84E-04	--
3595	640498.5	4169311.2	Worker	Scenario 2	4.87E-02	3.96E-04	--
3596	640873.5	4169311.2	Worker	Scenario 2	7.00E-02	6.76E-04	--
3597	640898.5	4169311.2	Worker	Scenario 2	7.22E-02	7.05E-04	--
3598	640923.5	4169311.2	Worker	Scenario 2	7.46E-02	7.37E-04	--
3599	640948.5	4169311.2	Worker	Scenario 2	7.72E-02	7.71E-04	--
3600	640973.5	4169311.2	Worker	Scenario 2	8.01E-02	8.08E-04	--
3601	640998.5	4169311.2	Worker	Scenario 2	8.32E-02	8.47E-04	--
3602	641023.5	4169311.2	Worker	Scenario 2	8.67E-02	8.91E-04	--
3603	641048.5	4169311.2	Worker	Scenario 2	9.06E-02	9.38E-04	--
3604	641073.5	4169311.2	Worker	Scenario 2	9.50E-02	9.89E-04	--
3605	641098.5	4169311.2	Worker	Scenario 2	1.00E-01	1.05E-03	--
3606	641123.5	4169311.2	Worker	Scenario 2	1.06E-01	1.12E-03	--
3607	641148.5	4169311.2	Worker	Scenario 2	1.14E-01	1.20E-03	--
3608	641173.5	4169311.2	Worker	Scenario 2	1.23E-01	1.31E-03	--
3609	641348.5	4169311.2	Worker	Scenario 2	6.29E-01	4.05E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3610	641373.5	4169311.2	Worker	Scenario 2	4.31E-01	2.85E-03	--
3611	641398.5	4169311.2	Worker	Scenario 2	3.31E-01	2.20E-03	--
3612	641423.5	4169311.2	Worker	Scenario 2	2.74E-01	1.82E-03	--
3613	640423.5	4169336.2	Worker	Scenario 2	4.59E-02	3.61E-04	--
3614	640448.5	4169336.2	Worker	Scenario 2	4.68E-02	3.71E-04	--
3615	640473.5	4169336.2	Worker	Scenario 2	4.77E-02	3.82E-04	--
3616	640498.5	4169336.2	Worker	Scenario 2	4.86E-02	3.93E-04	--
3617	640823.5	4169336.2	Worker	Scenario 2	6.57E-02	6.10E-04	--
3618	640848.5	4169336.2	Worker	Scenario 2	6.76E-02	6.34E-04	--
3619	640873.5	4169336.2	Worker	Scenario 2	6.96E-02	6.59E-04	--
3620	640898.5	4169336.2	Worker	Scenario 2	7.18E-02	6.86E-04	--
3621	640923.5	4169336.2	Worker	Scenario 2	7.42E-02	7.15E-04	--
3622	640948.5	4169336.2	Worker	Scenario 2	7.67E-02	7.46E-04	--
3623	640973.5	4169336.2	Worker	Scenario 2	7.95E-02	7.79E-04	--
3624	640998.5	4169336.2	Worker	Scenario 2	8.26E-02	8.15E-04	--
3625	641023.5	4169336.2	Worker	Scenario 2	8.60E-02	8.54E-04	--
3626	641048.5	4169336.2	Worker	Scenario 2	8.98E-02	8.97E-04	--
3627	641073.5	4169336.2	Worker	Scenario 2	9.42E-02	9.43E-04	--
3628	641098.5	4169336.2	Worker	Scenario 2	9.93E-02	9.96E-04	--
3629	641123.5	4169336.2	Worker	Scenario 2	1.05E-01	1.06E-03	--
3630	641148.5	4169336.2	Worker	Scenario 2	1.13E-01	1.13E-03	--
3631	641348.5	4169336.2	Worker	Scenario 2	6.09E-01	2.95E-03	--
3632	641373.5	4169336.2	Worker	Scenario 2	4.21E-01	2.28E-03	--
3633	641398.5	4169336.2	Worker	Scenario 2	3.26E-01	1.86E-03	--
3634	641423.5	4169336.2	Worker	Scenario 2	2.70E-01	1.59E-03	--
3635	640423.5	4169361.2	Worker	Scenario 2	4.58E-02	3.59E-04	--
3636	640448.5	4169361.2	Worker	Scenario 2	4.67E-02	3.69E-04	--
3637	640473.5	4169361.2	Worker	Scenario 2	4.76E-02	3.80E-04	--
3638	640498.5	4169361.2	Worker	Scenario 2	4.85E-02	3.90E-04	--
3639	640798.5	4169361.2	Worker	Scenario 2	6.37E-02	5.76E-04	--
3640	640823.5	4169361.2	Worker	Scenario 2	6.54E-02	5.96E-04	--
3641	640848.5	4169361.2	Worker	Scenario 2	6.73E-02	6.19E-04	--
3642	640873.5	4169361.2	Worker	Scenario 2	6.93E-02	6.42E-04	--
3643	640898.5	4169361.2	Worker	Scenario 2	7.14E-02	6.67E-04	--
3644	640923.5	4169361.2	Worker	Scenario 2	7.37E-02	6.94E-04	--
3645	640948.5	4169361.2	Worker	Scenario 2	7.62E-02	7.22E-04	--
3646	640973.5	4169361.2	Worker	Scenario 2	7.90E-02	7.52E-04	--
3647	640998.5	4169361.2	Worker	Scenario 2	8.20E-02	7.85E-04	--
3648	641023.5	4169361.2	Worker	Scenario 2	8.54E-02	8.20E-04	--
3649	641048.5	4169361.2	Worker	Scenario 2	8.91E-02	8.59E-04	--
3650	641073.5	4169361.2	Worker	Scenario 2	9.34E-02	9.01E-04	--
3651	641098.5	4169361.2	Worker	Scenario 2	9.84E-02	9.49E-04	--
3652	641123.5	4169361.2	Worker	Scenario 2	1.04E-01	1.00E-03	--
3653	641148.5	4169361.2	Worker	Scenario 2	1.11E-01	1.07E-03	--
3654	641348.5	4169361.2	Worker	Scenario 2	5.96E-01	2.50E-03	--
3655	641373.5	4169361.2	Worker	Scenario 2	4.13E-01	1.96E-03	--
3656	641398.5	4169361.2	Worker	Scenario 2	3.21E-01	1.65E-03	--
3657	641423.5	4169361.2	Worker	Scenario 2	2.67E-01	1.44E-03	--
3658	640423.5	4169386.2	Worker	Scenario 2	4.57E-02	3.57E-04	--
3659	640448.5	4169386.2	Worker	Scenario 2	4.66E-02	3.67E-04	--
3660	640473.5	4169386.2	Worker	Scenario 2	4.75E-02	3.77E-04	--
3661	640498.5	4169386.2	Worker	Scenario 2	4.84E-02	3.88E-04	--
3662	640773.5	4169386.2	Worker	Scenario 2	6.17E-02	5.45E-04	--
3663	640798.5	4169386.2	Worker	Scenario 2	6.34E-02	5.64E-04	--
3664	640823.5	4169386.2	Worker	Scenario 2	6.51E-02	5.83E-04	--
3665	640848.5	4169386.2	Worker	Scenario 2	6.69E-02	6.04E-04	--
3666	640873.5	4169386.2	Worker	Scenario 2	6.89E-02	6.26E-04	--
3667	640898.5	4169386.2	Worker	Scenario 2	7.10E-02	6.49E-04	--
3668	640923.5	4169386.2	Worker	Scenario 2	7.33E-02	6.73E-04	--
3669	641098.5	4169386.2	Worker	Scenario 2	9.76E-02	9.04E-04	--
3670	641123.5	4169386.2	Worker	Scenario 2	1.03E-01	9.52E-04	--
3671	641148.5	4169386.2	Worker	Scenario 2	1.10E-01	1.01E-03	--
3672	641173.5	4169386.2	Worker	Scenario 2	1.19E-01	1.07E-03	--
3673	641198.5	4169386.2	Worker	Scenario 2	1.31E-01	1.14E-03	--
3674	641223.5	4169386.2	Worker	Scenario 2	1.46E-01	1.22E-03	--
3675	641248.5	4169386.2	Worker	Scenario 2	1.69E-01	1.32E-03	--
3676	641273.5	4169386.2	Worker	Scenario 2	2.07E-01	1.43E-03	--
3677	641298.5	4169386.2	Worker	Scenario 2	2.84E-01	1.61E-03	--
3678	641348.5	4169386.2	Worker	Scenario 2	5.86E-01	2.26E-03	--
3679	641373.5	4169386.2	Worker	Scenario 2	4.08E-01	1.78E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3680	641398.5	4169386.2	Worker	Scenario 2	3.17E-01	1.50E-03	--
3681	641423.5	4169386.2	Worker	Scenario 2	2.64E-01	1.33E-03	--
3682	640423.5	4169411.2	Worker	Scenario 2	4.56E-02	3.55E-04	--
3683	640448.5	4169411.2	Worker	Scenario 2	4.64E-02	3.65E-04	--
3684	640473.5	4169411.2	Worker	Scenario 2	4.73E-02	3.74E-04	--
3685	640498.5	4169411.2	Worker	Scenario 2	4.83E-02	3.85E-04	--
3686	640698.5	4169411.2	Worker	Scenario 2	5.72E-02	4.87E-04	--
3687	640723.5	4169411.2	Worker	Scenario 2	5.85E-02	5.02E-04	--
3688	640748.5	4169411.2	Worker	Scenario 2	5.99E-02	5.18E-04	--
3689	640773.5	4169411.2	Worker	Scenario 2	6.15E-02	5.35E-04	--
3690	640798.5	4169411.2	Worker	Scenario 2	6.30E-02	5.52E-04	--
3691	640823.5	4169411.2	Worker	Scenario 2	6.47E-02	5.70E-04	--
3692	640848.5	4169411.2	Worker	Scenario 2	6.66E-02	5.89E-04	--
3693	640873.5	4169411.2	Worker	Scenario 2	6.85E-02	6.10E-04	--
3694	641098.5	4169411.2	Worker	Scenario 2	9.68E-02	8.61E-04	--
3695	641123.5	4169411.2	Worker	Scenario 2	1.03E-01	9.02E-04	--
3696	641148.5	4169411.2	Worker	Scenario 2	1.10E-01	9.47E-04	--
3697	641173.5	4169411.2	Worker	Scenario 2	1.18E-01	9.97E-04	--
3698	641198.5	4169411.2	Worker	Scenario 2	1.29E-01	1.05E-03	--
3699	641223.5	4169411.2	Worker	Scenario 2	1.45E-01	1.11E-03	--
3700	641248.5	4169411.2	Worker	Scenario 2	1.68E-01	1.18E-03	--
3701	641273.5	4169411.2	Worker	Scenario 2	2.06E-01	1.28E-03	--
3702	641298.5	4169411.2	Worker	Scenario 2	2.84E-01	1.45E-03	--
3703	641348.5	4169411.2	Worker	Scenario 2	5.78E-01	2.10E-03	--
3704	641373.5	4169411.2	Worker	Scenario 2	4.03E-01	1.65E-03	--
3705	641398.5	4169411.2	Worker	Scenario 2	3.14E-01	1.40E-03	--
3706	641423.5	4169411.2	Worker	Scenario 2	2.62E-01	1.24E-03	--
3707	640423.5	4169436.2	Worker	Scenario 2	4.55E-02	3.53E-04	--
3708	640448.5	4169436.2	Worker	Scenario 2	4.63E-02	3.62E-04	--
3709	640473.5	4169436.2	Worker	Scenario 2	4.72E-02	3.72E-04	--
3710	640498.5	4169436.2	Worker	Scenario 2	4.81E-02	3.82E-04	--
3711	640523.5	4169436.2	Worker	Scenario 2	4.91E-02	3.92E-04	--
3712	640548.5	4169436.2	Worker	Scenario 2	5.00E-02	4.03E-04	--
3713	640573.5	4169436.2	Worker	Scenario 2	5.10E-02	4.15E-04	--
3714	640598.5	4169436.2	Worker	Scenario 2	5.21E-02	4.26E-04	--
3715	640623.5	4169436.2	Worker	Scenario 2	5.32E-02	4.39E-04	--
3716	640648.5	4169436.2	Worker	Scenario 2	5.44E-02	4.52E-04	--
3717	640673.5	4169436.2	Worker	Scenario 2	5.56E-02	4.65E-04	--
3718	640698.5	4169436.2	Worker	Scenario 2	5.69E-02	4.79E-04	--
3719	640723.5	4169436.2	Worker	Scenario 2	5.82E-02	4.93E-04	--
3720	640748.5	4169436.2	Worker	Scenario 2	5.97E-02	5.08E-04	--
3721	640773.5	4169436.2	Worker	Scenario 2	6.12E-02	5.24E-04	--
3722	640798.5	4169436.2	Worker	Scenario 2	6.27E-02	5.40E-04	--
3723	640823.5	4169436.2	Worker	Scenario 2	6.44E-02	5.57E-04	--
3724	641098.5	4169436.2	Worker	Scenario 2	9.60E-02	8.20E-04	--
3725	641123.5	4169436.2	Worker	Scenario 2	1.02E-01	8.54E-04	--
3726	641148.5	4169436.2	Worker	Scenario 2	1.09E-01	8.91E-04	--
3727	641173.5	4169436.2	Worker	Scenario 2	1.17E-01	9.31E-04	--
3728	641198.5	4169436.2	Worker	Scenario 2	1.28E-01	9.73E-04	--
3729	641223.5	4169436.2	Worker	Scenario 2	1.44E-01	1.02E-03	--
3730	641248.5	4169436.2	Worker	Scenario 2	1.67E-01	1.08E-03	--
3731	641273.5	4169436.2	Worker	Scenario 2	2.05E-01	1.17E-03	--
3732	641298.5	4169436.2	Worker	Scenario 2	2.84E-01	1.34E-03	--
3733	641348.5	4169436.2	Worker	Scenario 2	5.70E-01	1.99E-03	--
3734	641373.5	4169436.2	Worker	Scenario 2	3.98E-01	1.56E-03	--
3735	641398.5	4169436.2	Worker	Scenario 2	3.11E-01	1.32E-03	--
3736	640423.5	4169461.2	Worker	Scenario 2	4.53E-02	3.50E-04	--
3737	640448.5	4169461.2	Worker	Scenario 2	4.62E-02	3.59E-04	--
3738	640473.5	4169461.2	Worker	Scenario 2	4.71E-02	3.69E-04	--
3739	640498.5	4169461.2	Worker	Scenario 2	4.80E-02	3.79E-04	--
3740	640523.5	4169461.2	Worker	Scenario 2	4.89E-02	3.89E-04	--
3741	640548.5	4169461.2	Worker	Scenario 2	4.98E-02	3.99E-04	--
3742	640573.5	4169461.2	Worker	Scenario 2	5.08E-02	4.10E-04	--
3743	640598.5	4169461.2	Worker	Scenario 2	5.19E-02	4.21E-04	--
3744	640623.5	4169461.2	Worker	Scenario 2	5.30E-02	4.33E-04	--
3745	640648.5	4169461.2	Worker	Scenario 2	5.42E-02	4.45E-04	--
3746	640673.5	4169461.2	Worker	Scenario 2	5.54E-02	4.58E-04	--
3747	640698.5	4169461.2	Worker	Scenario 2	5.66E-02	4.71E-04	--
3748	640723.5	4169461.2	Worker	Scenario 2	5.80E-02	4.84E-04	--
3749	640748.5	4169461.2	Worker	Scenario 2	5.94E-02	4.99E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3750	640773.5	4169461.2	Worker	Scenario 2	6.09E-02	5.14E-04	--
3751	640798.5	4169461.2	Worker	Scenario 2	6.24E-02	5.29E-04	--
3752	641148.5	4169461.2	Worker	Scenario 2	1.08E-01	8.40E-04	--
3753	641173.5	4169461.2	Worker	Scenario 2	1.16E-01	8.72E-04	--
3754	641198.5	4169461.2	Worker	Scenario 2	1.27E-01	9.07E-04	--
3755	641223.5	4169461.2	Worker	Scenario 2	1.43E-01	9.47E-04	--
3756	641248.5	4169461.2	Worker	Scenario 2	1.66E-01	1.00E-03	--
3757	641273.5	4169461.2	Worker	Scenario 2	2.05E-01	1.09E-03	--
3758	641298.5	4169461.2	Worker	Scenario 2	2.85E-01	1.27E-03	--
3759	641348.5	4169461.2	Worker	Scenario 2	5.63E-01	1.90E-03	--
3760	641373.5	4169461.2	Worker	Scenario 2	3.94E-01	1.49E-03	--
3761	638073.5	4169486.2	Worker	Scenario 2	1.24E-02	7.58E-05	--
3762	639398.5	4169486.2	Worker	Scenario 2	2.49E-02	1.58E-04	--
3763	640448.5	4169486.2	Worker	Scenario 2	4.60E-02	3.56E-04	--
3764	640473.5	4169486.2	Worker	Scenario 2	4.69E-02	3.65E-04	--
3765	640498.5	4169486.2	Worker	Scenario 2	4.78E-02	3.75E-04	--
3766	640523.5	4169486.2	Worker	Scenario 2	4.87E-02	3.85E-04	--
3767	640548.5	4169486.2	Worker	Scenario 2	4.97E-02	3.95E-04	--
3768	640573.5	4169486.2	Worker	Scenario 2	5.07E-02	4.05E-04	--
3769	640598.5	4169486.2	Worker	Scenario 2	5.17E-02	4.16E-04	--
3770	640623.5	4169486.2	Worker	Scenario 2	5.28E-02	4.27E-04	--
3771	640648.5	4169486.2	Worker	Scenario 2	5.40E-02	4.39E-04	--
3772	640673.5	4169486.2	Worker	Scenario 2	5.52E-02	4.51E-04	--
3773	640698.5	4169486.2	Worker	Scenario 2	5.64E-02	4.63E-04	--
3774	640723.5	4169486.2	Worker	Scenario 2	5.77E-02	4.76E-04	--
3775	640748.5	4169486.2	Worker	Scenario 2	5.91E-02	4.89E-04	--
3776	640773.5	4169486.2	Worker	Scenario 2	6.06E-02	5.03E-04	--
3777	638048.5	4169511.2	Worker	Scenario 2	1.23E-02	7.51E-05	--
3778	638073.5	4169511.2	Worker	Scenario 2	1.25E-02	7.62E-05	--
3779	640473.5	4169511.2	Worker	Scenario 2	4.67E-02	3.62E-04	--
3780	640498.5	4169511.2	Worker	Scenario 2	4.76E-02	3.71E-04	--
3781	640523.5	4169511.2	Worker	Scenario 2	4.85E-02	3.81E-04	--
3782	640548.5	4169511.2	Worker	Scenario 2	4.95E-02	3.90E-04	--
3783	640573.5	4169511.2	Worker	Scenario 2	5.05E-02	4.00E-04	--
3784	640598.5	4169511.2	Worker	Scenario 2	5.15E-02	4.11E-04	--
3785	640623.5	4169511.2	Worker	Scenario 2	5.26E-02	4.21E-04	--
3786	640648.5	4169511.2	Worker	Scenario 2	5.37E-02	4.32E-04	--
3787	640673.5	4169511.2	Worker	Scenario 2	5.49E-02	4.43E-04	--
3788	638023.5	4169536.2	Worker	Scenario 2	1.23E-02	7.46E-05	--
3789	638048.5	4169536.2	Worker	Scenario 2	1.25E-02	7.56E-05	--
3790	638073.5	4169536.2	Worker	Scenario 2	1.26E-02	7.64E-05	--
3791	637998.5	4169561.2	Worker	Scenario 2	1.22E-02	7.40E-05	--
3792	638023.5	4169561.2	Worker	Scenario 2	1.24E-02	7.50E-05	--
3793	638048.5	4169561.2	Worker	Scenario 2	1.25E-02	7.58E-05	--
3794	638073.5	4169561.2	Worker	Scenario 2	1.27E-02	7.67E-05	--
3795	637998.5	4169586.2	Worker	Scenario 2	1.23E-02	7.44E-05	--
3796	638023.5	4169586.2	Worker	Scenario 2	1.25E-02	7.52E-05	--
3797	638048.5	4169586.2	Worker	Scenario 2	1.26E-02	7.61E-05	--
3798	638073.5	4169586.2	Worker	Scenario 2	1.28E-02	7.69E-05	--
3799	637998.5	4169611.2	Worker	Scenario 2	1.24E-02	7.46E-05	--
3800	638023.5	4169611.2	Worker	Scenario 2	1.26E-02	7.55E-05	--
3801	638048.5	4169611.2	Worker	Scenario 2	1.27E-02	7.63E-05	--
3802	638073.5	4169611.2	Worker	Scenario 2	1.28E-02	7.71E-05	--
3803	639248.5	4169611.2	Worker	Scenario 2	2.34E-02	1.45E-04	--
3804	637998.5	4169636.2	Worker	Scenario 2	1.25E-02	7.49E-05	--
3805	638023.5	4169636.2	Worker	Scenario 2	1.26E-02	7.57E-05	--
3806	638048.5	4169636.2	Worker	Scenario 2	1.28E-02	7.65E-05	--
3807	638073.5	4169636.2	Worker	Scenario 2	1.29E-02	7.73E-05	--
3808	637998.5	4169661.2	Worker	Scenario 2	1.26E-02	7.51E-05	--
3809	638023.5	4169661.2	Worker	Scenario 2	1.27E-02	7.59E-05	--
3810	638048.5	4169661.2	Worker	Scenario 2	1.28E-02	7.67E-05	--
3811	638073.5	4169661.2	Worker	Scenario 2	1.30E-02	7.75E-05	--
3812	637998.5	4169686.2	Worker	Scenario 2	1.26E-02	7.53E-05	--
3813	638023.5	4169686.2	Worker	Scenario 2	1.28E-02	7.61E-05	--
3814	638048.5	4169686.2	Worker	Scenario 2	1.29E-02	7.69E-05	--
3815	638073.5	4169686.2	Worker	Scenario 2	1.30E-02	7.78E-05	--
3816	637998.5	4169711.2	Worker	Scenario 2	1.27E-02	7.55E-05	--
3817	638023.5	4169711.2	Worker	Scenario 2	1.28E-02	7.63E-05	--
3818	638048.5	4169711.2	Worker	Scenario 2	1.29E-02	7.67E-05	--
3819	638073.5	4169711.2	Worker	Scenario 2	1.31E-02	7.80E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3820	637998.5	4169736.2	Worker	Scenario 2	1.28E-02	7.58E-05	--
3821	638023.5	4169736.2	Worker	Scenario 2	1.29E-02	7.65E-05	--
3822	638048.5	4169736.2	Worker	Scenario 2	1.28E-02	7.66E-05	--
3823	638073.5	4169736.2	Worker	Scenario 2	1.32E-02	7.82E-05	--
3824	639098.5	4169736.2	Worker	Scenario 2	2.20E-02	1.34E-04	--
3825	637998.5	4169761.2	Worker	Scenario 2	1.28E-02	7.60E-05	--
3826	638023.5	4169761.2	Worker	Scenario 2	1.30E-02	7.67E-05	--
3827	638048.5	4169761.2	Worker	Scenario 2	1.30E-02	7.73E-05	--
3828	638073.5	4169761.2	Worker	Scenario 2	1.33E-02	7.85E-05	--
3829	639073.5	4169761.2	Worker	Scenario 2	2.18E-02	1.33E-04	--
3830	637998.5	4169786.2	Worker	Scenario 2	1.29E-02	7.62E-05	--
3831	638023.5	4169786.2	Worker	Scenario 2	1.30E-02	7.70E-05	--
3832	638048.5	4169786.2	Worker	Scenario 2	1.32E-02	7.79E-05	--
3833	638073.5	4169786.2	Worker	Scenario 2	1.33E-02	7.88E-05	--
3834	639048.5	4169786.2	Worker	Scenario 2	2.16E-02	1.31E-04	--
3835	637998.5	4169811.2	Worker	Scenario 2	1.30E-02	7.65E-05	--
3836	638023.5	4169811.2	Worker	Scenario 2	1.31E-02	7.73E-05	--
3837	638048.5	4169811.2	Worker	Scenario 2	1.33E-02	7.81E-05	--
3838	638073.5	4169811.2	Worker	Scenario 2	1.34E-02	7.90E-05	--
3839	637998.5	4169836.2	Worker	Scenario 2	1.31E-02	7.67E-05	--
3840	638023.5	4169836.2	Worker	Scenario 2	1.32E-02	7.76E-05	--
3841	638048.5	4169836.2	Worker	Scenario 2	1.33E-02	7.84E-05	--
3842	638073.5	4169836.2	Worker	Scenario 2	1.35E-02	7.93E-05	--
3843	637998.5	4169861.2	Worker	Scenario 2	1.31E-02	7.70E-05	--
3844	638023.5	4169861.2	Worker	Scenario 2	1.33E-02	7.78E-05	--
3845	638048.5	4169861.2	Worker	Scenario 2	1.34E-02	7.87E-05	--
3846	638073.5	4169861.2	Worker	Scenario 2	1.36E-02	7.95E-05	--
3847	637998.5	4169886.2	Worker	Scenario 2	1.32E-02	7.72E-05	--
3848	638023.5	4169886.2	Worker	Scenario 2	1.33E-02	7.81E-05	--
3849	638048.5	4169886.2	Worker	Scenario 2	1.35E-02	7.89E-05	--
3850	638073.5	4169886.2	Worker	Scenario 2	1.36E-02	7.98E-05	--
3851	637998.5	4169911.2	Worker	Scenario 2	1.33E-02	7.75E-05	--
3852	638023.5	4169911.2	Worker	Scenario 2	1.34E-02	7.84E-05	--
3853	638048.5	4169911.2	Worker	Scenario 2	1.35E-02	7.92E-05	--
3854	638073.5	4169911.2	Worker	Scenario 2	1.37E-02	8.01E-05	--
3855	637998.5	4169936.2	Worker	Scenario 2	1.33E-02	7.78E-05	--
3856	638023.5	4169936.2	Worker	Scenario 2	1.35E-02	7.86E-05	--
3857	638048.5	4169936.2	Worker	Scenario 2	1.36E-02	7.95E-05	--
3858	638073.5	4169936.2	Worker	Scenario 2	1.38E-02	8.04E-05	--
3859	637998.5	4169961.2	Worker	Scenario 2	1.34E-02	7.81E-05	--
3860	638023.5	4169961.2	Worker	Scenario 2	1.36E-02	7.89E-05	--
3861	638048.5	4169961.2	Worker	Scenario 2	1.37E-02	7.97E-05	--
3862	638073.5	4169961.2	Worker	Scenario 2	1.38E-02	8.06E-05	--
3863	637998.5	4169986.2	Worker	Scenario 2	1.35E-02	7.83E-05	--
3864	638023.5	4169986.2	Worker	Scenario 2	1.36E-02	7.92E-05	--
3865	638048.5	4169986.2	Worker	Scenario 2	1.38E-02	8.00E-05	--
3866	638073.5	4169986.2	Worker	Scenario 2	1.39E-02	8.09E-05	--
3867	637998.5	4170011.2	Worker	Scenario 2	1.36E-02	7.86E-05	--
3868	638023.5	4170011.2	Worker	Scenario 2	1.37E-02	7.95E-05	--
3869	638048.5	4170011.2	Worker	Scenario 2	1.38E-02	8.03E-05	--
3870	638073.5	4170011.2	Worker	Scenario 2	1.40E-02	8.12E-05	--
3871	637998.5	4170036.2	Worker	Scenario 2	1.36E-02	7.86E-05	--
3872	638023.5	4170036.2	Worker	Scenario 2	1.37E-02	7.94E-05	--
3873	638048.5	4170036.2	Worker	Scenario 2	1.39E-02	8.04E-05	--
3874	638073.5	4170036.2	Worker	Scenario 2	1.40E-02	8.14E-05	--
3875	638098.5	4170036.2	Worker	Scenario 2	1.42E-02	8.25E-05	--
3876	638123.5	4170036.2	Worker	Scenario 2	1.44E-02	8.34E-05	--
3877	638148.5	4170036.2	Worker	Scenario 2	1.45E-02	8.42E-05	--
3878	638173.5	4170036.2	Worker	Scenario 2	1.46E-02	8.51E-05	--
3879	638198.5	4170036.2	Worker	Scenario 2	1.48E-02	8.60E-05	--
3880	638223.5	4170036.2	Worker	Scenario 2	1.49E-02	8.70E-05	--
3881	638248.5	4170036.2	Worker	Scenario 2	1.51E-02	8.80E-05	--
3882	638273.5	4170036.2	Worker	Scenario 2	1.53E-02	8.90E-05	--
3883	638298.5	4170036.2	Worker	Scenario 2	1.55E-02	9.01E-05	--
3884	638323.5	4170036.2	Worker	Scenario 2	1.57E-02	9.12E-05	--
3885	638348.5	4170036.2	Worker	Scenario 2	1.58E-02	9.23E-05	--
3886	638373.5	4170036.2	Worker	Scenario 2	1.60E-02	9.35E-05	--
3887	638398.5	4170036.2	Worker	Scenario 2	1.62E-02	9.46E-05	--
3888	638423.5	4170036.2	Worker	Scenario 2	1.64E-02	9.57E-05	--
3889	638448.5	4170036.2	Worker	Scenario 2	1.66E-02	9.69E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3890	638473.5	4170036.2	Worker	Scenario 2	1.68E-02	9.84E-05	--
3891	638498.5	4170036.2	Worker	Scenario 2	1.70E-02	9.96E-05	--
3892	638523.5	4170036.2	Worker	Scenario 2	1.72E-02	1.01E-04	--
3893	638548.5	4170036.2	Worker	Scenario 2	1.74E-02	1.02E-04	--
3894	638573.5	4170036.2	Worker	Scenario 2	1.76E-02	1.03E-04	--
3895	638598.5	4170036.2	Worker	Scenario 2	1.78E-02	1.05E-04	--
3896	638623.5	4170036.2	Worker	Scenario 2	1.80E-02	1.06E-04	--
3897	638648.5	4170036.2	Worker	Scenario 2	1.83E-02	1.07E-04	--
3898	638673.5	4170036.2	Worker	Scenario 2	1.85E-02	1.09E-04	--
3899	638698.5	4170036.2	Worker	Scenario 2	1.87E-02	1.10E-04	--
3900	638723.5	4170036.2	Worker	Scenario 2	1.89E-02	1.12E-04	--
3901	638748.5	4170036.2	Worker	Scenario 2	1.92E-02	1.13E-04	--
3902	638023.5	4170061.2	Worker	Scenario 2	1.42E-02	8.16E-05	--
3903	638048.5	4170061.2	Worker	Scenario 2	1.40E-02	8.10E-05	--
3904	638073.5	4170061.2	Worker	Scenario 2	1.41E-02	8.16E-05	--
3905	638098.5	4170061.2	Worker	Scenario 2	1.43E-02	8.27E-05	--
3906	638123.5	4170061.2	Worker	Scenario 2	1.41E-02	8.24E-05	--
3907	638148.5	4170061.2	Worker	Scenario 2	1.40E-02	8.21E-05	--
3908	638173.5	4170061.2	Worker	Scenario 2	1.40E-02	8.25E-05	--
3909	638198.5	4170061.2	Worker	Scenario 2	1.41E-02	8.32E-05	--
3910	638223.5	4170061.2	Worker	Scenario 2	1.42E-02	8.41E-05	--
3911	638248.5	4170061.2	Worker	Scenario 2	1.44E-02	8.51E-05	--
3912	638273.5	4170061.2	Worker	Scenario 2	1.45E-02	8.61E-05	--
3913	638298.5	4170061.2	Worker	Scenario 2	1.47E-02	8.72E-05	--
3914	638323.5	4170061.2	Worker	Scenario 2	1.49E-02	8.83E-05	--
3915	638348.5	4170061.2	Worker	Scenario 2	1.51E-02	8.94E-05	--
3916	638373.5	4170061.2	Worker	Scenario 2	1.52E-02	9.05E-05	--
3917	638398.5	4170061.2	Worker	Scenario 2	1.54E-02	9.17E-05	--
3918	638423.5	4170061.2	Worker	Scenario 2	1.57E-02	9.30E-05	--
3919	638448.5	4170061.2	Worker	Scenario 2	1.59E-02	9.44E-05	--
3920	638473.5	4170061.2	Worker	Scenario 2	1.63E-02	9.63E-05	--
3921	638498.5	4170061.2	Worker	Scenario 2	1.69E-02	9.93E-05	--
3922	638523.5	4170061.2	Worker	Scenario 2	1.72E-02	1.01E-04	--
3923	638548.5	4170061.2	Worker	Scenario 2	1.73E-02	1.02E-04	--
3924	638573.5	4170061.2	Worker	Scenario 2	1.75E-02	1.03E-04	--
3925	638598.5	4170061.2	Worker	Scenario 2	1.77E-02	1.04E-04	--
3926	638623.5	4170061.2	Worker	Scenario 2	1.79E-02	1.06E-04	--
3927	638648.5	4170061.2	Worker	Scenario 2	1.81E-02	1.07E-04	--
3928	638673.5	4170061.2	Worker	Scenario 2	1.84E-02	1.09E-04	--
3929	638698.5	4170061.2	Worker	Scenario 2	1.86E-02	1.10E-04	--
3930	638723.5	4170061.2	Worker	Scenario 2	1.88E-02	1.12E-04	--
3931	638748.5	4170061.2	Worker	Scenario 2	1.92E-02	1.13E-04	--
3932	638048.5	4170086.2	Worker	Scenario 2	1.42E-02	8.15E-05	--
3933	638073.5	4170086.2	Worker	Scenario 2	1.42E-02	8.19E-05	--
3934	638098.5	4170086.2	Worker	Scenario 2	1.43E-02	8.29E-05	--
3935	638123.5	4170086.2	Worker	Scenario 2	1.42E-02	8.27E-05	--
3936	638148.5	4170086.2	Worker	Scenario 2	1.45E-02	8.42E-05	--
3937	638173.5	4170086.2	Worker	Scenario 2	1.47E-02	8.53E-05	--
3938	638198.5	4170086.2	Worker	Scenario 2	1.48E-02	8.62E-05	--
3939	638223.5	4170086.2	Worker	Scenario 2	1.50E-02	8.72E-05	--
3940	638248.5	4170086.2	Worker	Scenario 2	1.52E-02	8.82E-05	--
3941	638273.5	4170086.2	Worker	Scenario 2	1.53E-02	8.92E-05	--
3942	638298.5	4170086.2	Worker	Scenario 2	1.55E-02	9.03E-05	--
3943	638323.5	4170086.2	Worker	Scenario 2	1.57E-02	9.13E-05	--
3944	638348.5	4170086.2	Worker	Scenario 2	1.58E-02	9.23E-05	--
3945	638373.5	4170086.2	Worker	Scenario 2	1.60E-02	9.35E-05	--
3946	638398.5	4170086.2	Worker	Scenario 2	1.62E-02	9.46E-05	--
3947	638423.5	4170086.2	Worker	Scenario 2	1.64E-02	9.58E-05	--
3948	638448.5	4170086.2	Worker	Scenario 2	1.66E-02	9.70E-05	--
3949	638473.5	4170086.2	Worker	Scenario 2	1.66E-02	9.77E-05	--
3950	638498.5	4170086.2	Worker	Scenario 2	1.69E-02	9.93E-05	--
3951	638523.5	4170086.2	Worker	Scenario 2	1.73E-02	1.01E-04	--
3952	638548.5	4170086.2	Worker	Scenario 2	1.75E-02	1.02E-04	--
3953	638573.5	4170086.2	Worker	Scenario 2	1.77E-02	1.04E-04	--
3954	638598.5	4170086.2	Worker	Scenario 2	1.79E-02	1.05E-04	--
3955	638623.5	4170086.2	Worker	Scenario 2	1.81E-02	1.06E-04	--
3956	638648.5	4170086.2	Worker	Scenario 2	1.83E-02	1.08E-04	--
3957	638673.5	4170086.2	Worker	Scenario 2	1.85E-02	1.09E-04	--
3958	638698.5	4170086.2	Worker	Scenario 2	1.88E-02	1.11E-04	--
3959	638723.5	4170086.2	Worker	Scenario 2	1.90E-02	1.12E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3960	638323.5	4170111.2	Worker	Scenario 2	1.58E-02	9.19E-05	--
3961	638348.5	4170111.2	Worker	Scenario 2	1.60E-02	9.30E-05	--
3962	638373.5	4170111.2	Worker	Scenario 2	1.62E-02	9.41E-05	--
3963	638398.5	4170111.2	Worker	Scenario 2	1.64E-02	9.52E-05	--
3964	638423.5	4170111.2	Worker	Scenario 2	1.66E-02	9.67E-05	--
3965	638448.5	4170111.2	Worker	Scenario 2	1.68E-02	9.79E-05	--
3966	638473.5	4170111.2	Worker	Scenario 2	1.69E-02	9.90E-05	--
3967	638498.5	4170111.2	Worker	Scenario 2	1.71E-02	1.00E-04	--
3968	638523.5	4170111.2	Worker	Scenario 2	1.74E-02	1.02E-04	--
3969	638548.5	4170111.2	Worker	Scenario 2	1.76E-02	1.03E-04	--
3970	638573.5	4170111.2	Worker	Scenario 2	1.78E-02	1.04E-04	--
3971	638598.5	4170111.2	Worker	Scenario 2	1.80E-02	1.06E-04	--
3972	638623.5	4170111.2	Worker	Scenario 2	1.82E-02	1.07E-04	--
3973	638648.5	4170111.2	Worker	Scenario 2	1.84E-02	1.08E-04	--
3974	638673.5	4170111.2	Worker	Scenario 2	1.87E-02	1.10E-04	--
3975	638698.5	4170111.2	Worker	Scenario 2	1.89E-02	1.11E-04	--
3976	642711.0	4166673.7	Worker	Scenario 2	1.01E-01	7.70E-04	--
3977	642761.0	4166673.7	Worker	Scenario 2	1.05E-01	7.74E-04	--
3978	642811.0	4166673.7	Worker	Scenario 2	1.07E-01	7.71E-04	--
3979	642861.0	4166673.7	Worker	Scenario 2	1.12E-01	7.79E-04	--
3980	642911.0	4166673.7	Worker	Scenario 2	1.14E-01	7.74E-04	--
3981	642961.0	4166673.7	Worker	Scenario 2	1.15E-01	7.67E-04	--
3982	643011.0	4166673.7	Worker	Scenario 2	1.22E-01	7.76E-04	--
3983	643061.0	4166673.7	Worker	Scenario 2	1.27E-01	7.77E-04	--
3984	643111.0	4166673.7	Worker	Scenario 2	1.33E-01	7.81E-04	--
3985	643161.0	4166673.7	Worker	Scenario 2	1.41E-01	7.89E-04	--
3986	643211.0	4166673.7	Worker	Scenario 2	1.50E-01	7.97E-04	--
3987	643261.0	4166673.7	Worker	Scenario 2	1.58E-01	8.06E-04	--
3988	643311.0	4166673.7	Worker	Scenario 2	1.67E-01	8.16E-04	--
3989	643361.0	4166673.7	Worker	Scenario 2	1.76E-01	8.25E-04	--
3990	643411.0	4166673.7	Worker	Scenario 2	1.85E-01	8.33E-04	--
3991	643461.0	4166673.7	Worker	Scenario 2	1.94E-01	8.40E-04	--
3992	643511.0	4166673.7	Worker	Scenario 2	2.01E-01	8.46E-04	--
3993	643561.0	4166673.7	Worker	Scenario 2	2.08E-01	8.49E-04	--
3994	643611.0	4166673.7	Worker	Scenario 2	2.12E-01	8.48E-04	--
3995	643661.0	4166673.7	Worker	Scenario 2	2.15E-01	8.42E-04	--
3996	643711.0	4166673.7	Worker	Scenario 2	2.16E-01	8.32E-04	--
3997	643761.0	4166673.7	Worker	Scenario 2	2.14E-01	8.18E-04	--
3998	643811.0	4166673.7	Worker	Scenario 2	2.12E-01	8.00E-04	--
3999	643861.0	4166673.7	Worker	Scenario 2	2.08E-01	7.81E-04	--
4000	643911.0	4166673.7	Worker	Scenario 2	2.04E-01	7.60E-04	--
4001	643961.0	4166673.7	Worker	Scenario 2	2.00E-01	7.40E-04	--
4002	644011.0	4166673.7	Worker	Scenario 2	1.96E-01	7.22E-04	--
4003	644061.0	4166673.7	Worker	Scenario 2	1.92E-01	7.04E-04	--
4004	644111.0	4166673.7	Worker	Scenario 2	1.89E-01	6.88E-04	--
4005	641461.0	4166723.7	Worker	Scenario 2	2.41E-01	2.72E-03	--
4006	641511.0	4166723.7	Worker	Scenario 2	1.74E-01	1.86E-03	--
4007	641561.0	4166723.7	Worker	Scenario 2	1.39E-01	1.43E-03	--
4008	641611.0	4166723.7	Worker	Scenario 2	1.18E-01	1.19E-03	--
4009	641661.0	4166723.7	Worker	Scenario 2	1.04E-01	1.03E-03	--
4010	641711.0	4166723.7	Worker	Scenario 2	9.48E-02	9.30E-04	--
4011	641761.0	4166723.7	Worker	Scenario 2	8.84E-02	8.58E-04	--
4012	641811.0	4166723.7	Worker	Scenario 2	8.37E-02	8.07E-04	--
4013	641861.0	4166723.7	Worker	Scenario 2	8.04E-02	7.71E-04	--
4014	641911.0	4166723.7	Worker	Scenario 2	7.81E-02	7.46E-04	--
4015	641961.0	4166723.7	Worker	Scenario 2	7.66E-02	7.30E-04	--
4016	642011.0	4166723.7	Worker	Scenario 2	7.59E-02	7.22E-04	--
4017	642061.0	4166723.7	Worker	Scenario 2	7.54E-02	7.15E-04	--
4018	642111.0	4166723.7	Worker	Scenario 2	7.56E-02	7.14E-04	--
4019	642161.0	4166723.7	Worker	Scenario 2	7.63E-02	7.16E-04	--
4020	642211.0	4166723.7	Worker	Scenario 2	7.76E-02	7.22E-04	--
4021	642261.0	4166723.7	Worker	Scenario 2	7.93E-02	7.30E-04	--
4022	642311.0	4166723.7	Worker	Scenario 2	8.18E-02	7.41E-04	--
4023	642361.0	4166723.7	Worker	Scenario 2	8.47E-02	7.52E-04	--
4024	642411.0	4166723.7	Worker	Scenario 2	8.81E-02	7.67E-04	--
4025	642661.0	4166723.7	Worker	Scenario 2	1.08E-01	8.33E-04	--
4026	642711.0	4166723.7	Worker	Scenario 2	1.12E-01	8.38E-04	--
4027	642761.0	4166723.7	Worker	Scenario 2	1.15E-01	8.39E-04	--
4028	642811.0	4166723.7	Worker	Scenario 2	1.19E-01	8.38E-04	--
4029	642861.0	4166723.7	Worker	Scenario 2	1.21E-01	8.33E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4030	642911.0	4166723.7	Worker	Scenario 2	1.27E-01	8.40E-04	--
4031	642961.0	4166723.7	Worker	Scenario 2	1.28E-01	8.31E-04	--
4032	643011.0	4166723.7	Worker	Scenario 2	1.36E-01	8.38E-04	--
4033	643061.0	4166723.7	Worker	Scenario 2	1.42E-01	8.40E-04	--
4034	643111.0	4166723.7	Worker	Scenario 2	1.49E-01	8.45E-04	--
4035	643161.0	4166723.7	Worker	Scenario 2	1.58E-01	8.54E-04	--
4036	643211.0	4166723.7	Worker	Scenario 2	1.69E-01	8.65E-04	--
4037	643261.0	4166723.7	Worker	Scenario 2	1.79E-01	8.77E-04	--
4038	643311.0	4166723.7	Worker	Scenario 2	1.90E-01	8.89E-04	--
4039	643361.0	4166723.7	Worker	Scenario 2	2.01E-01	9.00E-04	--
4040	643411.0	4166723.7	Worker	Scenario 2	2.11E-01	9.11E-04	--
4041	643461.0	4166723.7	Worker	Scenario 2	2.21E-01	9.20E-04	--
4042	643511.0	4166723.7	Worker	Scenario 2	2.29E-01	9.26E-04	--
4043	643561.0	4166723.7	Worker	Scenario 2	2.35E-01	9.27E-04	--
4044	643611.0	4166723.7	Worker	Scenario 2	2.39E-01	9.23E-04	--
4045	643661.0	4166723.7	Worker	Scenario 2	2.40E-01	9.14E-04	--
4046	643711.0	4166723.7	Worker	Scenario 2	2.39E-01	8.99E-04	--
4047	643761.0	4166723.7	Worker	Scenario 2	2.36E-01	8.79E-04	--
4048	643811.0	4166723.7	Worker	Scenario 2	2.32E-01	8.57E-04	--
4049	643861.0	4166723.7	Worker	Scenario 2	2.27E-01	8.34E-04	--
4050	643911.0	4166723.7	Worker	Scenario 2	2.22E-01	8.11E-04	--
4051	643961.0	4166723.7	Worker	Scenario 2	2.17E-01	7.89E-04	--
4052	644011.0	4166723.7	Worker	Scenario 2	2.13E-01	7.69E-04	--
4053	644061.0	4166723.7	Worker	Scenario 2	2.10E-01	7.51E-04	--
4054	644111.0	4166723.7	Worker	Scenario 2	2.06E-01	7.34E-04	--
4055	644161.0	4166723.7	Worker	Scenario 2	2.04E-01	7.20E-04	--
4056	644211.0	4166723.7	Worker	Scenario 2	2.01E-01	7.06E-04	--
4057	644261.0	4166723.7	Worker	Scenario 2	1.99E-01	6.94E-04	--
4058	644311.0	4166723.7	Worker	Scenario 2	1.97E-01	6.81E-04	--
4059	644361.0	4166723.7	Worker	Scenario 2	1.95E-01	6.70E-04	--
4060	644411.0	4166723.7	Worker	Scenario 2	1.92E-01	6.59E-04	--
4061	641461.0	4166773.7	Worker	Scenario 2	2.45E-01	2.76E-03	--
4062	641511.0	4166773.7	Worker	Scenario 2	1.78E-01	1.90E-03	--
4063	641561.0	4166773.7	Worker	Scenario 2	1.43E-01	1.48E-03	--
4064	641611.0	4166773.7	Worker	Scenario 2	1.22E-01	1.23E-03	--
4065	641661.0	4166773.7	Worker	Scenario 2	1.08E-01	1.07E-03	--
4066	641711.0	4166773.7	Worker	Scenario 2	9.91E-02	9.71E-04	--
4067	641761.0	4166773.7	Worker	Scenario 2	9.26E-02	8.99E-04	--
4068	641811.0	4166773.7	Worker	Scenario 2	8.80E-02	8.50E-04	--
4069	641861.0	4166773.7	Worker	Scenario 2	8.47E-02	8.15E-04	--
4070	641911.0	4166773.7	Worker	Scenario 2	8.25E-02	7.92E-04	--
4071	641961.0	4166773.7	Worker	Scenario 2	8.11E-02	7.77E-04	--
4072	642011.0	4166773.7	Worker	Scenario 2	8.06E-02	7.71E-04	--
4073	642061.0	4166773.7	Worker	Scenario 2	8.02E-02	7.66E-04	--
4074	642111.0	4166773.7	Worker	Scenario 2	8.07E-02	7.67E-04	--
4075	642161.0	4166773.7	Worker	Scenario 2	8.17E-02	7.72E-04	--
4076	642211.0	4166773.7	Worker	Scenario 2	8.33E-02	7.79E-04	--
4077	642261.0	4166773.7	Worker	Scenario 2	8.56E-02	7.91E-04	--
4078	642311.0	4166773.7	Worker	Scenario 2	8.84E-02	8.04E-04	--
4079	642361.0	4166773.7	Worker	Scenario 2	9.19E-02	8.20E-04	--
4080	642611.0	4166773.7	Worker	Scenario 2	1.15E-01	9.11E-04	--
4081	642661.0	4166773.7	Worker	Scenario 2	1.19E-01	9.14E-04	--
4082	642711.0	4166773.7	Worker	Scenario 2	1.24E-01	9.15E-04	--
4083	642761.0	4166773.7	Worker	Scenario 2	1.28E-01	9.14E-04	--
4084	642811.0	4166773.7	Worker	Scenario 2	1.32E-01	9.12E-04	--
4085	642861.0	4166773.7	Worker	Scenario 2	1.36E-01	9.09E-04	--
4086	642911.0	4166773.7	Worker	Scenario 2	1.39E-01	9.03E-04	--
4087	642961.0	4166773.7	Worker	Scenario 2	1.47E-01	9.10E-04	--
4088	643011.0	4166773.7	Worker	Scenario 2	1.53E-01	9.10E-04	--
4089	643061.0	4166773.7	Worker	Scenario 2	1.60E-01	9.12E-04	--
4090	643111.0	4166773.7	Worker	Scenario 2	1.69E-01	9.19E-04	--
4091	643161.0	4166773.7	Worker	Scenario 2	1.80E-01	9.31E-04	--
4092	643211.0	4166773.7	Worker	Scenario 2	1.93E-01	9.45E-04	--
4093	643261.0	4166773.7	Worker	Scenario 2	2.05E-01	9.60E-04	--
4094	643311.0	4166773.7	Worker	Scenario 2	2.18E-01	9.76E-04	--
4095	643361.0	4166773.7	Worker	Scenario 2	2.32E-01	9.91E-04	--
4096	643411.0	4166773.7	Worker	Scenario 2	2.44E-01	1.01E-03	--
4097	643461.0	4166773.7	Worker	Scenario 2	2.55E-01	1.02E-03	--
4098	643511.0	4166773.7	Worker	Scenario 2	2.63E-01	1.02E-03	--
4099	643561.0	4166773.7	Worker	Scenario 2	2.68E-01	1.02E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4100	643611.0	4166773.7	Worker	Scenario 2	2.70E-01	1.01E-03	--
4101	643661.0	4166773.7	Worker	Scenario 2	2.70E-01	9.94E-04	--
4102	643711.0	4166773.7	Worker	Scenario 2	2.66E-01	9.73E-04	--
4103	643761.0	4166773.7	Worker	Scenario 2	2.61E-01	9.48E-04	--
4104	643811.0	4166773.7	Worker	Scenario 2	2.55E-01	9.21E-04	--
4105	643861.0	4166773.7	Worker	Scenario 2	2.49E-01	8.94E-04	--
4106	643911.0	4166773.7	Worker	Scenario 2	2.43E-01	8.68E-04	--
4107	643961.0	4166773.7	Worker	Scenario 2	2.38E-01	8.45E-04	--
4108	644011.0	4166773.7	Worker	Scenario 2	2.34E-01	8.25E-04	--
4109	644061.0	4166773.7	Worker	Scenario 2	2.31E-01	8.07E-04	--
4110	644111.0	4166773.7	Worker	Scenario 2	2.28E-01	7.91E-04	--
4111	644161.0	4166773.7	Worker	Scenario 2	2.25E-01	7.76E-04	--
4112	644211.0	4166773.7	Worker	Scenario 2	2.23E-01	7.62E-04	--
4113	644261.0	4166773.7	Worker	Scenario 2	2.21E-01	7.49E-04	--
4114	644311.0	4166773.7	Worker	Scenario 2	2.18E-01	7.36E-04	--
4115	644361.0	4166773.7	Worker	Scenario 2	2.15E-01	7.23E-04	--
4116	644411.0	4166773.7	Worker	Scenario 2	2.12E-01	7.09E-04	--
4117	644461.0	4166773.7	Worker	Scenario 2	2.08E-01	6.94E-04	--
4118	644511.0	4166773.7	Worker	Scenario 2	2.02E-01	6.72E-04	--
4119	641511.0	4166823.7	Worker	Scenario 2	1.83E-01	1.95E-03	--
4120	641561.0	4166823.7	Worker	Scenario 2	1.48E-01	1.52E-03	--
4121	641611.0	4166823.7	Worker	Scenario 2	1.26E-01	1.27E-03	--
4122	641661.0	4166823.7	Worker	Scenario 2	1.12E-01	1.12E-03	--
4123	641711.0	4166823.7	Worker	Scenario 2	1.03E-01	1.01E-03	--
4124	641761.0	4166823.7	Worker	Scenario 2	9.64E-02	9.41E-04	--
4125	641811.0	4166823.7	Worker	Scenario 2	9.19E-02	8.94E-04	--
4126	641861.0	4166823.7	Worker	Scenario 2	8.89E-02	8.61E-04	--
4127	641911.0	4166823.7	Worker	Scenario 2	8.68E-02	8.41E-04	--
4128	641961.0	4166823.7	Worker	Scenario 2	8.57E-02	8.29E-04	--
4129	642011.0	4166823.7	Worker	Scenario 2	8.53E-02	8.25E-04	--
4130	642061.0	4166823.7	Worker	Scenario 2	8.56E-02	8.25E-04	--
4131	642111.0	4166823.7	Worker	Scenario 2	8.61E-02	8.27E-04	--
4132	642161.0	4166823.7	Worker	Scenario 2	8.76E-02	8.35E-04	--
4133	642211.0	4166823.7	Worker	Scenario 2	8.97E-02	8.45E-04	--
4134	642261.0	4166823.7	Worker	Scenario 2	9.28E-02	8.62E-04	--
4135	642311.0	4166823.7	Worker	Scenario 2	9.65E-02	8.81E-04	--
4136	644111.0	4166823.7	Worker	Scenario 2	2.55E-01	8.59E-04	--
4137	644161.0	4166823.7	Worker	Scenario 2	2.52E-01	8.43E-04	--
4138	644211.0	4166823.7	Worker	Scenario 2	2.49E-01	8.28E-04	--
4139	644261.0	4166823.7	Worker	Scenario 2	2.47E-01	8.15E-04	--
4140	644311.0	4166823.7	Worker	Scenario 2	2.43E-01	8.00E-04	--
4141	644411.0	4166823.7	Worker	Scenario 2	2.34E-01	7.65E-04	--
4142	644461.0	4166823.7	Worker	Scenario 2	2.32E-01	7.53E-04	--
4143	644511.0	4166823.7	Worker	Scenario 2	2.27E-01	7.35E-04	--
4144	644711.0	4166973.7	Worker	Scenario 2	2.71E-01	8.24E-04	--
4145	644761.0	4166973.7	Worker	Scenario 2	2.62E-01	7.98E-04	--
4146	641161.0	4167023.7	Worker	Scenario 2	7.07E-02	8.12E-04	--
4147	641211.0	4167023.7	Worker	Scenario 2	8.65E-02	1.02E-03	--
4148	641261.0	4167023.7	Worker	Scenario 2	1.14E-01	1.41E-03	--
4149	644711.0	4167023.7	Worker	Scenario 2	2.91E-01	8.71E-04	--
4150	644761.0	4167023.7	Worker	Scenario 2	2.80E-01	8.41E-04	--
4151	644811.0	4167023.7	Worker	Scenario 2	2.70E-01	8.13E-04	--
4152	641161.0	4167073.7	Worker	Scenario 2	7.32E-02	8.45E-04	--
4153	641211.0	4167073.7	Worker	Scenario 2	8.94E-02	1.06E-03	--
4154	641261.0	4167073.7	Worker	Scenario 2	1.18E-01	1.45E-03	--
4155	644711.0	4167073.7	Worker	Scenario 2	3.08E-01	9.13E-04	--
4156	644761.0	4167073.7	Worker	Scenario 2	2.96E-01	8.78E-04	--
4157	644811.0	4167073.7	Worker	Scenario 2	2.84E-01	8.45E-04	--
4158	641161.0	4167123.7	Worker	Scenario 2	7.57E-02	8.77E-04	--
4159	641211.0	4167123.7	Worker	Scenario 2	9.22E-02	1.10E-03	--
4160	641261.0	4167123.7	Worker	Scenario 2	1.21E-01	1.50E-03	--
4161	644711.0	4167123.7	Worker	Scenario 2	3.23E-01	9.48E-04	--
4162	644761.0	4167123.7	Worker	Scenario 2	3.08E-01	9.07E-04	--
4163	644811.0	4167123.7	Worker	Scenario 2	2.94E-01	8.68E-04	--
4164	641161.0	4167173.7	Worker	Scenario 2	7.81E-02	9.11E-04	--
4165	641211.0	4167173.7	Worker	Scenario 2	9.51E-02	1.14E-03	--
4166	641261.0	4167173.7	Worker	Scenario 2	1.25E-01	1.55E-03	--
4167	644711.0	4167173.7	Worker	Scenario 2	3.33E-01	9.72E-04	--
4168	644761.0	4167173.7	Worker	Scenario 2	3.18E-01	9.32E-04	--
4169	644811.0	4167173.7	Worker	Scenario 2	3.05E-01	8.95E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4170	641161.0	4167223.7	Worker	Scenario 2	8.06E-02	9.47E-04	--
4171	641211.0	4167223.7	Worker	Scenario 2	9.81E-02	1.19E-03	--
4172	641261.0	4167223.7	Worker	Scenario 2	1.29E-01	1.61E-03	--
4173	644711.0	4167223.7	Worker	Scenario 2	3.44E-01	9.98E-04	--
4174	644761.0	4167223.7	Worker	Scenario 2	3.29E-01	9.56E-04	--
4175	644811.0	4167223.7	Worker	Scenario 2	3.15E-01	9.17E-04	--
4176	641161.0	4167273.7	Worker	Scenario 2	8.30E-02	9.86E-04	--
4177	641211.0	4167273.7	Worker	Scenario 2	1.01E-01	1.23E-03	--
4178	641261.0	4167273.7	Worker	Scenario 2	1.33E-01	1.68E-03	--
4179	641161.0	4167323.7	Worker	Scenario 2	8.52E-02	1.03E-03	--
4180	641211.0	4167323.7	Worker	Scenario 2	1.04E-01	1.28E-03	--
4181	641261.0	4167323.7	Worker	Scenario 2	1.36E-01	1.74E-03	--
4182	641161.0	4167373.7	Worker	Scenario 2	8.74E-02	1.07E-03	--
4183	641211.0	4167373.7	Worker	Scenario 2	1.06E-01	1.34E-03	--
4184	641261.0	4167373.7	Worker	Scenario 2	1.40E-01	1.82E-03	--
4185	644511.0	4167373.7	Worker	Scenario 2	4.42E-01	1.25E-03	--
4186	644561.0	4167373.7	Worker	Scenario 2	4.19E-01	1.19E-03	--
4187	644611.0	4167373.7	Worker	Scenario 2	3.99E-01	1.14E-03	--
4188	644661.0	4167373.7	Worker	Scenario 2	3.80E-01	1.08E-03	--
4189	644711.0	4167373.7	Worker	Scenario 2	3.62E-01	1.04E-03	--
4190	644761.0	4167373.7	Worker	Scenario 2	3.46E-01	9.94E-04	--
4191	644811.0	4167373.7	Worker	Scenario 2	3.31E-01	9.53E-04	--
4192	640961.0	4167423.7	Worker	Scenario 2	5.52E-02	6.22E-04	--
4193	641011.0	4167423.7	Worker	Scenario 2	6.07E-02	7.00E-04	--
4194	641061.0	4167423.7	Worker	Scenario 2	6.76E-02	8.00E-04	--
4195	641111.0	4167423.7	Worker	Scenario 2	7.68E-02	9.32E-04	--
4196	641161.0	4167423.7	Worker	Scenario 2	8.96E-02	1.12E-03	--
4197	641211.0	4167423.7	Worker	Scenario 2	1.09E-01	1.40E-03	--
4198	641261.0	4167423.7	Worker	Scenario 2	1.43E-01	1.90E-03	--
4199	644361.0	4167423.7	Worker	Scenario 2	5.22E-01	1.46E-03	--
4200	644411.0	4167423.7	Worker	Scenario 2	4.93E-01	1.39E-03	--
4201	644461.0	4167423.7	Worker	Scenario 2	4.67E-01	1.32E-03	--
4202	644511.0	4167423.7	Worker	Scenario 2	4.42E-01	1.25E-03	--
4203	644561.0	4167423.7	Worker	Scenario 2	4.20E-01	1.19E-03	--
4204	644611.0	4167423.7	Worker	Scenario 2	3.99E-01	1.14E-03	--
4205	644661.0	4167423.7	Worker	Scenario 2	3.81E-01	1.09E-03	--
4206	644711.0	4167423.7	Worker	Scenario 2	3.63E-01	1.04E-03	--
4207	644761.0	4167423.7	Worker	Scenario 2	3.47E-01	9.94E-04	--
4208	640761.0	4167473.7	Worker	Scenario 2	4.17E-02	4.32E-04	--
4209	640811.0	4167473.7	Worker	Scenario 2	4.45E-02	4.71E-04	--
4210	640861.0	4167473.7	Worker	Scenario 2	4.77E-02	5.17E-04	--
4211	640911.0	4167473.7	Worker	Scenario 2	5.16E-02	5.73E-04	--
4212	640961.0	4167473.7	Worker	Scenario 2	5.63E-02	6.40E-04	--
4213	641011.0	4167473.7	Worker	Scenario 2	6.20E-02	7.23E-04	--
4214	641061.0	4167473.7	Worker	Scenario 2	6.91E-02	8.30E-04	--
4215	641111.0	4167473.7	Worker	Scenario 2	7.86E-02	9.71E-04	--
4216	643361.0	4167473.7	Worker	Scenario 2	4.61E+00	1.18E-02	--
4217	643411.0	4167473.7	Worker	Scenario 2	3.64E+00	9.35E-03	--
4218	643461.0	4167473.7	Worker	Scenario 2	2.96E+00	7.66E-03	--
4219	643511.0	4167473.7	Worker	Scenario 2	2.47E+00	6.43E-03	--
4220	643561.0	4167473.7	Worker	Scenario 2	2.10E+00	5.51E-03	--
4221	643611.0	4167473.7	Worker	Scenario 2	1.82E+00	4.80E-03	--
4222	643661.0	4167473.7	Worker	Scenario 2	1.60E+00	4.24E-03	--
4223	643711.0	4167473.7	Worker	Scenario 2	1.42E+00	3.79E-03	--
4224	643761.0	4167473.7	Worker	Scenario 2	1.27E+00	3.41E-03	--
4225	643811.0	4167473.7	Worker	Scenario 2	1.16E+00	3.11E-03	--
4226	643861.0	4167473.7	Worker	Scenario 2	1.05E+00	2.85E-03	--
4227	643911.0	4167473.7	Worker	Scenario 2	9.66E-01	2.62E-03	--
4228	643961.0	4167473.7	Worker	Scenario 2	8.90E-01	2.42E-03	--
4229	644211.0	4167473.7	Worker	Scenario 2	6.21E-01	1.72E-03	--
4230	644261.0	4167473.7	Worker	Scenario 2	5.83E-01	1.62E-03	--
4231	644311.0	4167473.7	Worker	Scenario 2	5.49E-01	1.53E-03	--
4232	644361.0	4167473.7	Worker	Scenario 2	5.18E-01	1.45E-03	--
4233	644411.0	4167473.7	Worker	Scenario 2	4.90E-01	1.38E-03	--
4234	644461.0	4167473.7	Worker	Scenario 2	4.63E-01	1.31E-03	--
4235	644511.0	4167473.7	Worker	Scenario 2	4.40E-01	1.24E-03	--
4236	644561.0	4167473.7	Worker	Scenario 2	4.18E-01	1.18E-03	--
4237	644611.0	4167473.7	Worker	Scenario 2	3.97E-01	1.13E-03	--
4238	644661.0	4167473.7	Worker	Scenario 2	3.78E-01	1.08E-03	--
4239	640561.0	4167523.7	Worker	Scenario 2	3.44E-02	3.32E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4240	640611.0	4167523.7	Worker	Scenario 2	3.58E-02	3.52E-04	--
4241	640661.0	4167523.7	Worker	Scenario 2	3.77E-02	3.77E-04	--
4242	640711.0	4167523.7	Worker	Scenario 2	3.99E-02	4.07E-04	--
4243	640761.0	4167523.7	Worker	Scenario 2	4.24E-02	4.42E-04	--
4244	640811.0	4167523.7	Worker	Scenario 2	4.53E-02	4.82E-04	--
4245	640861.0	4167523.7	Worker	Scenario 2	4.86E-02	5.29E-04	--
4246	640911.0	4167523.7	Worker	Scenario 2	5.26E-02	5.87E-04	--
4247	640961.0	4167523.7	Worker	Scenario 2	5.74E-02	6.57E-04	--
4248	643361.0	4167523.7	Worker	Scenario 2	4.38E+00	1.11E-02	--
4249	643411.0	4167523.7	Worker	Scenario 2	3.47E+00	8.90E-03	--
4250	643461.0	4167523.7	Worker	Scenario 2	2.84E+00	7.34E-03	--
4251	643511.0	4167523.7	Worker	Scenario 2	2.37E+00	6.18E-03	--
4252	643561.0	4167523.7	Worker	Scenario 2	2.03E+00	5.31E-03	--
4253	643611.0	4167523.7	Worker	Scenario 2	1.76E+00	4.64E-03	--
4254	643661.0	4167523.7	Worker	Scenario 2	1.55E+00	4.11E-03	--
4255	643711.0	4167523.7	Worker	Scenario 2	1.38E+00	3.68E-03	--
4256	643761.0	4167523.7	Worker	Scenario 2	1.24E+00	3.32E-03	--
4257	643811.0	4167523.7	Worker	Scenario 2	1.12E+00	3.03E-03	--
4258	643861.0	4167523.7	Worker	Scenario 2	1.03E+00	2.77E-03	--
4259	643911.0	4167523.7	Worker	Scenario 2	9.41E-01	2.56E-03	--
4260	643961.0	4167523.7	Worker	Scenario 2	8.68E-01	2.37E-03	--
4261	644011.0	4167523.7	Worker	Scenario 2	8.03E-01	2.20E-03	--
4262	644061.0	4167523.7	Worker	Scenario 2	7.45E-01	2.05E-03	--
4263	644111.0	4167523.7	Worker	Scenario 2	6.94E-01	1.91E-03	--
4264	644161.0	4167523.7	Worker	Scenario 2	6.48E-01	1.79E-03	--
4265	644211.0	4167523.7	Worker	Scenario 2	6.07E-01	1.69E-03	--
4266	644261.0	4167523.7	Worker	Scenario 2	5.71E-01	1.59E-03	--
4267	644311.0	4167523.7	Worker	Scenario 2	5.38E-01	1.50E-03	--
4268	644361.0	4167523.7	Worker	Scenario 2	5.08E-01	1.42E-03	--
4269	644411.0	4167523.7	Worker	Scenario 2	4.80E-01	1.35E-03	--
4270	644461.0	4167523.7	Worker	Scenario 2	4.55E-01	1.28E-03	--
4271	644511.0	4167523.7	Worker	Scenario 2	4.32E-01	1.22E-03	--
4272	640361.0	4167573.7	Worker	Scenario 2	2.88E-02	2.64E-04	--
4273	640411.0	4167573.7	Worker	Scenario 2	2.99E-02	2.79E-04	--
4274	640461.0	4167573.7	Worker	Scenario 2	3.14E-02	2.96E-04	--
4275	640511.0	4167573.7	Worker	Scenario 2	3.32E-02	3.17E-04	--
4276	640561.0	4167573.7	Worker	Scenario 2	3.47E-02	3.37E-04	--
4277	640611.0	4167573.7	Worker	Scenario 2	3.63E-02	3.60E-04	--
4278	640661.0	4167573.7	Worker	Scenario 2	3.83E-02	3.86E-04	--
4279	640711.0	4167573.7	Worker	Scenario 2	4.06E-02	4.16E-04	--
4280	640761.0	4167573.7	Worker	Scenario 2	4.32E-02	4.52E-04	--
4281	640811.0	4167573.7	Worker	Scenario 2	4.62E-02	4.94E-04	--
4282	643311.0	4167573.7	Worker	Scenario 2	3.73E+00	9.65E-03	--
4283	643361.0	4167573.7	Worker	Scenario 2	3.17E+00	8.22E-03	--
4284	643411.0	4167573.7	Worker	Scenario 2	2.70E+00	7.05E-03	--
4285	643461.0	4167573.7	Worker	Scenario 2	2.33E+00	6.10E-03	--
4286	643511.0	4167573.7	Worker	Scenario 2	2.02E+00	5.32E-03	--
4287	643561.0	4167573.7	Worker	Scenario 2	1.77E+00	4.68E-03	--
4288	643611.0	4167573.7	Worker	Scenario 2	1.57E+00	4.17E-03	--
4289	643661.0	4167573.7	Worker	Scenario 2	1.40E+00	3.75E-03	--
4290	643711.0	4167573.7	Worker	Scenario 2	1.26E+00	3.39E-03	--
4291	643761.0	4167573.7	Worker	Scenario 2	1.15E+00	3.09E-03	--
4292	643811.0	4167573.7	Worker	Scenario 2	1.05E+00	2.84E-03	--
4293	643861.0	4167573.7	Worker	Scenario 2	9.61E-01	2.61E-03	--
4294	643911.0	4167573.7	Worker	Scenario 2	8.87E-01	2.42E-03	--
4295	643961.0	4167573.7	Worker	Scenario 2	8.21E-01	2.25E-03	--
4296	644011.0	4167573.7	Worker	Scenario 2	7.64E-01	2.10E-03	--
4297	644061.0	4167573.7	Worker	Scenario 2	7.11E-01	1.96E-03	--
4298	644111.0	4167573.7	Worker	Scenario 2	6.64E-01	1.84E-03	--
4299	644161.0	4167573.7	Worker	Scenario 2	6.22E-01	1.73E-03	--
4300	644211.0	4167573.7	Worker	Scenario 2	5.84E-01	1.63E-03	--
4301	644261.0	4167573.7	Worker	Scenario 2	5.51E-01	1.54E-03	--
4302	644311.0	4167573.7	Worker	Scenario 2	5.20E-01	1.46E-03	--
4303	644361.0	4167573.7	Worker	Scenario 2	4.92E-01	1.38E-03	--
4304	640261.0	4167623.7	Worker	Scenario 2	2.66E-02	2.39E-04	--
4305	640311.0	4167623.7	Worker	Scenario 2	2.79E-02	2.53E-04	--
4306	640361.0	4167623.7	Worker	Scenario 2	2.94E-02	2.70E-04	--
4307	640411.0	4167623.7	Worker	Scenario 2	3.05E-02	2.85E-04	--
4308	640461.0	4167623.7	Worker	Scenario 2	3.19E-02	3.03E-04	--
4309	640511.0	4167623.7	Worker	Scenario 2	3.35E-02	3.23E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4310	640561.0	4167623.7	Worker	Scenario 2	3.52E-02	3.44E-04	--
4311	640611.0	4167623.7	Worker	Scenario 2	3.69E-02	3.68E-04	--
4312	640661.0	4167623.7	Worker	Scenario 2	3.89E-02	3.94E-04	--
4313	643261.0	4167623.7	Worker	Scenario 2	1.72E+00	4.93E-03	--
4314	643311.0	4167623.7	Worker	Scenario 2	1.88E+00	5.21E-03	--
4315	643361.0	4167623.7	Worker	Scenario 2	1.88E+00	5.13E-03	--
4316	643411.0	4167623.7	Worker	Scenario 2	1.80E+00	4.86E-03	--
4317	644011.0	4167623.7	Worker	Scenario 2	7.08E-01	1.96E-03	--
4318	644061.0	4167623.7	Worker	Scenario 2	6.63E-01	1.84E-03	--
4319	644111.0	4167623.7	Worker	Scenario 2	6.23E-01	1.74E-03	--
4320	644161.0	4167623.7	Worker	Scenario 2	5.86E-01	1.64E-03	--
4321	644211.0	4167623.7	Worker	Scenario 2	5.53E-01	1.55E-03	--
4322	640211.0	4167673.7	Worker	Scenario 2	2.59E-02	2.30E-04	--
4323	640261.0	4167673.7	Worker	Scenario 2	2.70E-02	2.43E-04	--
4324	640311.0	4167673.7	Worker	Scenario 2	2.80E-02	2.56E-04	--
4325	640361.0	4167673.7	Worker	Scenario 2	2.96E-02	2.73E-04	--
4326	640411.0	4167673.7	Worker	Scenario 2	3.10E-02	2.90E-04	--
4327	640461.0	4167673.7	Worker	Scenario 2	3.23E-02	3.08E-04	--
4328	640511.0	4167673.7	Worker	Scenario 2	3.39E-02	3.28E-04	--
4329	643211.0	4167673.7	Worker	Scenario 2	7.53E-01	2.67E-03	--
4330	643261.0	4167673.7	Worker	Scenario 2	8.33E-01	2.75E-03	--
4331	643311.0	4167673.7	Worker	Scenario 2	9.59E-01	2.96E-03	--
4332	643361.0	4167673.7	Worker	Scenario 2	1.06E+00	3.13E-03	--
4333	640111.0	4167723.7	Worker	Scenario 2	2.43E-02	2.11E-04	--
4334	640161.0	4167723.7	Worker	Scenario 2	2.53E-02	2.21E-04	--
4335	640211.0	4167723.7	Worker	Scenario 2	2.64E-02	2.34E-04	--
4336	640261.0	4167723.7	Worker	Scenario 2	2.76E-02	2.47E-04	--
4337	640311.0	4167723.7	Worker	Scenario 2	2.88E-02	2.62E-04	--
4338	640361.0	4167723.7	Worker	Scenario 2	2.98E-02	2.76E-04	--
4339	643161.0	4167723.7	Worker	Scenario 2	6.66E-01	2.50E-03	--
4340	643211.0	4167723.7	Worker	Scenario 2	5.82E-01	2.18E-03	--
4341	643261.0	4167723.7	Worker	Scenario 2	5.63E-01	2.04E-03	--
4342	643311.0	4167723.7	Worker	Scenario 2	5.94E-01	2.05E-03	--
4343	640011.0	4167773.7	Worker	Scenario 2	2.28E-02	1.93E-04	--
4344	640061.0	4167773.7	Worker	Scenario 2	2.37E-02	2.03E-04	--
4345	640111.0	4167773.7	Worker	Scenario 2	2.47E-02	2.14E-04	--
4346	640161.0	4167773.7	Worker	Scenario 2	2.57E-02	2.25E-04	--
4347	640211.0	4167773.7	Worker	Scenario 2	2.69E-02	2.37E-04	--
4348	640261.0	4167773.7	Worker	Scenario 2	2.81E-02	2.51E-04	--
4349	643161.0	4167773.7	Worker	Scenario 2	5.74E-01	2.18E-03	--
4350	643211.0	4167773.7	Worker	Scenario 2	4.98E-01	1.91E-03	--
4351	643261.0	4167773.7	Worker	Scenario 2	4.60E-01	1.74E-03	--
4352	639961.0	4167823.7	Worker	Scenario 2	2.23E-02	1.87E-04	--
4353	640011.0	4167823.7	Worker	Scenario 2	2.32E-02	1.96E-04	--
4354	640061.0	4167823.7	Worker	Scenario 2	2.41E-02	2.06E-04	--
4355	640111.0	4167823.7	Worker	Scenario 2	2.51E-02	2.16E-04	--
4356	640161.0	4167823.7	Worker	Scenario 2	2.62E-02	2.28E-04	--
4357	643111.0	4167823.7	Worker	Scenario 2	5.94E-01	2.24E-03	--
4358	643161.0	4167823.7	Worker	Scenario 2	5.06E-01	1.94E-03	--
4359	643211.0	4167823.7	Worker	Scenario 2	4.42E-01	1.71E-03	--
4360	643261.0	4167823.7	Worker	Scenario 2	4.05E-01	1.56E-03	--
4361	639861.0	4167873.7	Worker	Scenario 2	2.11E-02	1.74E-04	--
4362	639911.0	4167873.7	Worker	Scenario 2	2.19E-02	1.81E-04	--
4363	639961.0	4167873.7	Worker	Scenario 2	2.28E-02	1.90E-04	--
4364	640011.0	4167873.7	Worker	Scenario 2	2.36E-02	1.99E-04	--
4365	640061.0	4167873.7	Worker	Scenario 2	2.45E-02	2.08E-04	--
4366	643061.0	4167873.7	Worker	Scenario 2	5.80E-01	2.21E-03	--
4367	643111.0	4167873.7	Worker	Scenario 2	5.18E-01	1.97E-03	--
4368	643161.0	4167873.7	Worker	Scenario 2	4.53E-01	1.74E-03	--
4369	643211.0	4167873.7	Worker	Scenario 2	4.01E-01	1.56E-03	--
4370	639811.0	4167923.7	Worker	Scenario 2	2.08E-02	1.69E-04	--
4371	639861.0	4167923.7	Worker	Scenario 2	2.15E-02	1.76E-04	--
4372	639911.0	4167923.7	Worker	Scenario 2	2.23E-02	1.84E-04	--
4373	639961.0	4167923.7	Worker	Scenario 2	2.32E-02	1.92E-04	--
4374	640011.0	4167923.7	Worker	Scenario 2	2.40E-02	2.01E-04	--
4375	643011.0	4167923.7	Worker	Scenario 2	5.44E-01	2.12E-03	--
4376	643061.0	4167923.7	Worker	Scenario 2	5.04E-01	1.94E-03	--
4377	643111.0	4167923.7	Worker	Scenario 2	4.58E-01	1.76E-03	--
4378	643161.0	4167923.7	Worker	Scenario 2	4.10E-01	1.59E-03	--
4379	639711.0	4167973.7	Worker	Scenario 2	1.99E-02	1.58E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4380	639761.0	4167973.7	Worker	Scenario 2	2.07E-02	1.65E-04	--
4381	639811.0	4167973.7	Worker	Scenario 2	2.11E-02	1.70E-04	--
4382	639861.0	4167973.7	Worker	Scenario 2	2.18E-02	1.78E-04	--
4383	639911.0	4167973.7	Worker	Scenario 2	2.27E-02	1.86E-04	--
4384	642911.0	4167973.7	Worker	Scenario 2	5.31E-01	2.18E-03	--
4385	642961.0	4167973.7	Worker	Scenario 2	5.04E-01	2.02E-03	--
4386	643011.0	4167973.7	Worker	Scenario 2	4.74E-01	1.87E-03	--
4387	643061.0	4167973.7	Worker	Scenario 2	4.43E-01	1.73E-03	--
4388	643111.0	4167973.7	Worker	Scenario 2	4.09E-01	1.59E-03	--
4389	639661.0	4168023.7	Worker	Scenario 2	1.95E-02	1.54E-04	--
4390	639711.0	4168023.7	Worker	Scenario 2	2.03E-02	1.60E-04	--
4391	639761.0	4168023.7	Worker	Scenario 2	2.08E-02	1.66E-04	--
4392	639811.0	4168023.7	Worker	Scenario 2	2.16E-02	1.73E-04	--
4393	642861.0	4168023.7	Worker	Scenario 2	4.81E-01	2.04E-03	--
4394	642911.0	4168023.7	Worker	Scenario 2	4.64E-01	1.91E-03	--
4395	642961.0	4168023.7	Worker	Scenario 2	4.42E-01	1.79E-03	--
4396	643011.0	4168023.7	Worker	Scenario 2	4.19E-01	1.67E-03	--
4397	643061.0	4168023.7	Worker	Scenario 2	3.94E-01	1.55E-03	--
4398	639561.0	4168073.7	Worker	Scenario 2	1.85E-02	1.44E-04	--
4399	639611.0	4168073.7	Worker	Scenario 2	1.91E-02	1.49E-04	--
4400	639661.0	4168073.7	Worker	Scenario 2	1.98E-02	1.55E-04	--
4401	639711.0	4168073.7	Worker	Scenario 2	2.04E-02	1.61E-04	--
4402	639761.0	4168073.7	Worker	Scenario 2	2.11E-02	1.67E-04	--
4403	642761.0	4168073.7	Worker	Scenario 2	4.35E-01	2.01E-03	--
4404	642811.0	4168073.7	Worker	Scenario 2	4.33E-01	1.90E-03	--
4405	642861.0	4168073.7	Worker	Scenario 2	4.24E-01	1.80E-03	--
4406	642911.0	4168073.7	Worker	Scenario 2	4.10E-01	1.70E-03	--
4407	642961.0	4168073.7	Worker	Scenario 2	3.93E-01	1.60E-03	--
4408	639561.0	4168123.7	Worker	Scenario 2	1.87E-02	1.45E-04	--
4409	639611.0	4168123.7	Worker	Scenario 2	1.93E-02	1.51E-04	--
4410	639661.0	4168123.7	Worker	Scenario 2	2.00E-02	1.56E-04	--
4411	642661.0	4168123.7	Worker	Scenario 2	3.81E-01	1.95E-03	--
4412	642711.0	4168123.7	Worker	Scenario 2	3.87E-01	1.86E-03	--
4413	642761.0	4168123.7	Worker	Scenario 2	3.88E-01	1.77E-03	--
4414	642811.0	4168123.7	Worker	Scenario 2	3.85E-01	1.69E-03	--
4415	642861.0	4168123.7	Worker	Scenario 2	3.78E-01	1.61E-03	--
4416	642911.0	4168123.7	Worker	Scenario 2	3.66E-01	1.53E-03	--
4417	639511.0	4168173.7	Worker	Scenario 2	1.83E-02	1.41E-04	--
4418	639561.0	4168173.7	Worker	Scenario 2	1.89E-02	1.47E-04	--
4419	642611.0	4168173.7	Worker	Scenario 2	3.41E-01	1.81E-03	--
4420	642661.0	4168173.7	Worker	Scenario 2	3.47E-01	1.73E-03	--
4421	642711.0	4168173.7	Worker	Scenario 2	3.50E-01	1.66E-03	--
4422	642761.0	4168173.7	Worker	Scenario 2	3.50E-01	1.59E-03	--
4423	642811.0	4168173.7	Worker	Scenario 2	3.46E-01	1.52E-03	--
4424	639311.0	4168223.7	Worker	Scenario 2	1.65E-02	1.24E-04	--
4425	639361.0	4168223.7	Worker	Scenario 2	1.69E-02	1.28E-04	--
4426	639411.0	4168223.7	Worker	Scenario 2	1.75E-02	1.33E-04	--
4427	639461.0	4168223.7	Worker	Scenario 2	1.80E-02	1.38E-04	--
4428	639511.0	4168223.7	Worker	Scenario 2	1.85E-02	1.42E-04	--
4429	642511.0	4168223.7	Worker	Scenario 2	3.01E-01	1.77E-03	--
4430	642561.0	4168223.7	Worker	Scenario 2	3.08E-01	1.69E-03	--
4431	642611.0	4168223.7	Worker	Scenario 2	3.13E-01	1.62E-03	--
4432	642661.0	4168223.7	Worker	Scenario 2	3.17E-01	1.55E-03	--
4433	642711.0	4168223.7	Worker	Scenario 2	3.18E-01	1.50E-03	--
4434	642761.0	4168223.7	Worker	Scenario 2	3.17E-01	1.44E-03	--
4435	639261.0	4168273.7	Worker	Scenario 2	1.62E-02	1.20E-04	--
4436	639311.0	4168273.7	Worker	Scenario 2	1.67E-02	1.24E-04	--
4437	639361.0	4168273.7	Worker	Scenario 2	1.71E-02	1.29E-04	--
4438	639411.0	4168273.7	Worker	Scenario 2	1.77E-02	1.34E-04	--
4439	642461.0	4168273.7	Worker	Scenario 2	2.75E-01	1.66E-03	--
4440	642511.0	4168273.7	Worker	Scenario 2	2.80E-01	1.58E-03	--
4441	642561.0	4168273.7	Worker	Scenario 2	2.85E-01	1.52E-03	--
4442	642611.0	4168273.7	Worker	Scenario 2	2.89E-01	1.46E-03	--
4443	642661.0	4168273.7	Worker	Scenario 2	2.91E-01	1.41E-03	--
4444	639211.0	4168323.7	Worker	Scenario 2	1.60E-02	1.17E-04	--
4445	639261.0	4168323.7	Worker	Scenario 2	1.64E-02	1.21E-04	--
4446	639311.0	4168323.7	Worker	Scenario 2	1.69E-02	1.25E-04	--
4447	639361.0	4168323.7	Worker	Scenario 2	1.74E-02	1.30E-04	--
4448	642461.0	4168323.7	Worker	Scenario 2	2.57E-01	1.49E-03	--
4449	642511.0	4168323.7	Worker	Scenario 2	2.61E-01	1.43E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4450	642561.0	4168323.7	Worker	Scenario 2	2.65E-01	1.38E-03	--
4451	642611.0	4168323.7	Worker	Scenario 2	2.67E-01	1.34E-03	--
4452	639111.0	4168373.7	Worker	Scenario 2	1.54E-02	1.11E-04	--
4453	639161.0	4168373.7	Worker	Scenario 2	1.58E-02	1.15E-04	--
4454	639211.0	4168373.7	Worker	Scenario 2	1.62E-02	1.18E-04	--
4455	639261.0	4168373.7	Worker	Scenario 2	1.66E-02	1.22E-04	--
4456	642361.0	4168373.7	Worker	Scenario 2	2.33E-01	1.47E-03	--
4457	642411.0	4168373.7	Worker	Scenario 2	2.37E-01	1.41E-03	--
4458	642461.0	4168373.7	Worker	Scenario 2	2.41E-01	1.36E-03	--
4459	642511.0	4168373.7	Worker	Scenario 2	2.44E-01	1.31E-03	--
4460	642561.0	4168373.7	Worker	Scenario 2	2.47E-01	1.27E-03	--
4461	639061.0	4168423.7	Worker	Scenario 2	1.52E-02	1.08E-04	--
4462	639111.0	4168423.7	Worker	Scenario 2	1.56E-02	1.12E-04	--
4463	639161.0	4168423.7	Worker	Scenario 2	1.60E-02	1.15E-04	--
4464	642261.0	4168423.7	Worker	Scenario 2	2.12E-01	1.45E-03	--
4465	642311.0	4168423.7	Worker	Scenario 2	2.17E-01	1.39E-03	--
4466	642361.0	4168423.7	Worker	Scenario 2	2.20E-01	1.34E-03	--
4467	642411.0	4168423.7	Worker	Scenario 2	2.24E-01	1.29E-03	--
4468	642461.0	4168423.7	Worker	Scenario 2	2.27E-01	1.25E-03	--
4469	642511.0	4168423.7	Worker	Scenario 2	2.29E-01	1.21E-03	--
4470	639011.0	4168473.7	Worker	Scenario 2	1.51E-02	1.06E-04	--
4471	639061.0	4168473.7	Worker	Scenario 2	1.54E-02	1.09E-04	--
4472	639111.0	4168473.7	Worker	Scenario 2	1.58E-02	1.12E-04	--
4473	642161.0	4168473.7	Worker	Scenario 2	1.95E-01	1.44E-03	--
4474	642211.0	4168473.7	Worker	Scenario 2	1.99E-01	1.38E-03	--
4475	642261.0	4168473.7	Worker	Scenario 2	2.02E-01	1.32E-03	--
4476	642311.0	4168473.7	Worker	Scenario 2	2.06E-01	1.28E-03	--
4477	642361.0	4168473.7	Worker	Scenario 2	2.09E-01	1.24E-03	--
4478	642411.0	4168473.7	Worker	Scenario 2	2.12E-01	1.20E-03	--
4479	642461.0	4168473.7	Worker	Scenario 2	2.14E-01	1.16E-03	--
4480	638911.0	4168523.7	Worker	Scenario 2	1.45E-02	1.01E-04	--
4481	638961.0	4168523.7	Worker	Scenario 2	1.49E-02	1.04E-04	--
4482	639011.0	4168523.7	Worker	Scenario 2	1.53E-02	1.07E-04	--
4483	642061.0	4168523.7	Worker	Scenario 2	1.82E-01	1.44E-03	--
4484	642111.0	4168523.7	Worker	Scenario 2	1.85E-01	1.38E-03	--
4485	642161.0	4168523.7	Worker	Scenario 2	1.88E-01	1.32E-03	--
4486	642211.0	4168523.7	Worker	Scenario 2	1.90E-01	1.27E-03	--
4487	642261.0	4168523.7	Worker	Scenario 2	1.93E-01	1.23E-03	--
4488	642311.0	4168523.7	Worker	Scenario 2	1.96E-01	1.19E-03	--
4489	642361.0	4168523.7	Worker	Scenario 2	1.98E-01	1.15E-03	--
4490	638861.0	4168573.7	Worker	Scenario 2	1.43E-02	9.83E-05	--
4491	638911.0	4168573.7	Worker	Scenario 2	1.47E-02	1.01E-04	--
4492	638961.0	4168573.7	Worker	Scenario 2	1.51E-02	1.04E-04	--
4493	641911.0	4168573.7	Worker	Scenario 2	1.72E-01	1.56E-03	--
4494	641961.0	4168573.7	Worker	Scenario 2	1.73E-01	1.47E-03	--
4495	642011.0	4168573.7	Worker	Scenario 2	1.74E-01	1.40E-03	--
4496	642061.0	4168573.7	Worker	Scenario 2	1.76E-01	1.33E-03	--
4497	642111.0	4168573.7	Worker	Scenario 2	1.78E-01	1.28E-03	--
4498	642161.0	4168573.7	Worker	Scenario 2	1.80E-01	1.23E-03	--
4499	642211.0	4168573.7	Worker	Scenario 2	1.82E-01	1.18E-03	--
4500	642261.0	4168573.7	Worker	Scenario 2	1.85E-01	1.14E-03	--
4501	638811.0	4168623.7	Worker	Scenario 2	1.42E-02	9.66E-05	--
4502	638861.0	4168623.7	Worker	Scenario 2	1.45E-02	9.89E-05	--
4503	641811.0	4168623.7	Worker	Scenario 2	1.69E-01	1.67E-03	--
4504	641861.0	4168623.7	Worker	Scenario 2	1.68E-01	1.55E-03	--
4505	641911.0	4168623.7	Worker	Scenario 2	1.67E-01	1.45E-03	--
4506	641961.0	4168623.7	Worker	Scenario 2	1.67E-01	1.37E-03	--
4507	642011.0	4168623.7	Worker	Scenario 2	1.68E-01	1.30E-03	--
4508	642061.0	4168623.7	Worker	Scenario 2	1.70E-01	1.25E-03	--
4509	642111.0	4168623.7	Worker	Scenario 2	1.72E-01	1.19E-03	--
4510	638711.0	4168673.7	Worker	Scenario 2	1.39E-02	9.31E-05	--
4511	638761.0	4168673.7	Worker	Scenario 2	1.42E-02	9.52E-05	--
4512	638811.0	4168673.7	Worker	Scenario 2	1.45E-02	9.75E-05	--
4513	641661.0	4168673.7	Worker	Scenario 2	1.80E-01	2.11E-03	--
4514	641711.0	4168673.7	Worker	Scenario 2	1.73E-01	1.89E-03	--
4515	641761.0	4168673.7	Worker	Scenario 2	1.68E-01	1.71E-03	--
4516	641811.0	4168673.7	Worker	Scenario 2	1.65E-01	1.57E-03	--
4517	641861.0	4168673.7	Worker	Scenario 2	1.64E-01	1.46E-03	--
4518	641911.0	4168673.7	Worker	Scenario 2	1.63E-01	1.37E-03	--
4519	641961.0	4168673.7	Worker	Scenario 2	1.63E-01	1.29E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4520	642011.0	4168673.7	Worker	Scenario 2	1.63E-01	1.23E-03	--
4521	638661.0	4168723.7	Worker	Scenario 2	1.38E-02	9.17E-05	--
4522	638711.0	4168723.7	Worker	Scenario 2	1.41E-02	9.38E-05	--
4523	641511.0	4168723.7	Worker	Scenario 2	2.34E-01	3.42E-03	--
4524	641561.0	4168723.7	Worker	Scenario 2	2.06E-01	2.77E-03	--
4525	641611.0	4168723.7	Worker	Scenario 2	1.89E-01	2.34E-03	--
4526	641661.0	4168723.7	Worker	Scenario 2	1.78E-01	2.03E-03	--
4527	641711.0	4168723.7	Worker	Scenario 2	1.70E-01	1.80E-03	--
4528	641761.0	4168723.7	Worker	Scenario 2	1.65E-01	1.63E-03	--
4529	641811.0	4168723.7	Worker	Scenario 2	1.62E-01	1.49E-03	--
4530	641861.0	4168723.7	Worker	Scenario 2	1.60E-01	1.38E-03	--
4531	641911.0	4168723.7	Worker	Scenario 2	1.59E-01	1.29E-03	--
4532	638561.0	4168773.7	Worker	Scenario 2	1.35E-02	8.85E-05	--
4533	638611.0	4168773.7	Worker	Scenario 2	1.37E-02	9.04E-05	--
4534	638661.0	4168773.7	Worker	Scenario 2	1.40E-02	9.25E-05	--
4535	641461.0	4168773.7	Worker	Scenario 2	2.81E-01	4.57E-03	--
4536	641511.0	4168773.7	Worker	Scenario 2	2.32E-01	3.40E-03	--
4537	641561.0	4168773.7	Worker	Scenario 2	2.04E-01	2.71E-03	--
4538	641611.0	4168773.7	Worker	Scenario 2	1.86E-01	2.26E-03	--
4539	641661.0	4168773.7	Worker	Scenario 2	1.75E-01	1.95E-03	--
4540	641711.0	4168773.7	Worker	Scenario 2	1.67E-01	1.72E-03	--
4541	641761.0	4168773.7	Worker	Scenario 2	1.62E-01	1.55E-03	--
4542	638511.0	4168823.7	Worker	Scenario 2	1.34E-02	8.72E-05	--
4543	638561.0	4168823.7	Worker	Scenario 2	1.37E-02	8.91E-05	--
4544	641461.0	4168823.7	Worker	Scenario 2	2.79E-01	4.57E-03	--
4545	641511.0	4168823.7	Worker	Scenario 2	2.29E-01	3.33E-03	--
4546	641561.0	4168823.7	Worker	Scenario 2	2.01E-01	2.63E-03	--
4547	641611.0	4168823.7	Worker	Scenario 2	1.83E-01	2.17E-03	--
4548	638461.0	4168873.7	Worker	Scenario 2	1.30E-02	8.47E-05	--
4549	638511.0	4168873.7	Worker	Scenario 2	1.34E-02	8.73E-05	--
4550	640211.0	4168873.7	Worker	Scenario 2	3.86E-02	3.00E-04	--
4551	641461.0	4168873.7	Worker	Scenario 2	2.74E-01	4.39E-03	--
4552	641511.0	4168873.7	Worker	Scenario 2	2.25E-01	3.18E-03	--
4553	641561.0	4168873.7	Worker	Scenario 2	1.97E-01	2.50E-03	--
4554	638361.0	4168923.7	Worker	Scenario 2	1.24E-02	8.06E-05	--
4555	638411.0	4168923.7	Worker	Scenario 2	1.28E-02	8.28E-05	--
4556	638461.0	4168923.7	Worker	Scenario 2	1.31E-02	8.52E-05	--
4557	640111.0	4168923.7	Worker	Scenario 2	3.62E-02	2.72E-04	--
4558	640161.0	4168923.7	Worker	Scenario 2	3.76E-02	2.86E-04	--
4559	640211.0	4168923.7	Worker	Scenario 2	3.91E-02	3.01E-04	--
4560	640261.0	4168923.7	Worker	Scenario 2	4.06E-02	3.18E-04	--
4561	640311.0	4168923.7	Worker	Scenario 2	4.23E-02	3.37E-04	--
4562	640361.0	4168923.7	Worker	Scenario 2	4.40E-02	3.57E-04	--
4563	641461.0	4168923.7	Worker	Scenario 2	2.69E-01	4.08E-03	--
4564	641511.0	4168923.7	Worker	Scenario 2	2.21E-01	2.98E-03	--
4565	641561.0	4168923.7	Worker	Scenario 2	1.94E-01	2.34E-03	--
4566	638311.0	4168973.7	Worker	Scenario 2	1.23E-02	7.94E-05	--
4567	638361.0	4168973.7	Worker	Scenario 2	1.26E-02	8.14E-05	--
4568	638411.0	4168973.7	Worker	Scenario 2	1.30E-02	8.36E-05	--
4569	640061.0	4168973.7	Worker	Scenario 2	3.52E-02	2.59E-04	--
4570	640111.0	4168973.7	Worker	Scenario 2	3.65E-02	2.72E-04	--
4571	640161.0	4168973.7	Worker	Scenario 2	3.78E-02	2.86E-04	--
4572	640211.0	4168973.7	Worker	Scenario 2	3.93E-02	3.01E-04	--
4573	640261.0	4168973.7	Worker	Scenario 2	4.08E-02	3.18E-04	--
4574	640311.0	4168973.7	Worker	Scenario 2	4.24E-02	3.36E-04	--
4575	640361.0	4168973.7	Worker	Scenario 2	4.42E-02	3.55E-04	--
4576	640411.0	4168973.7	Worker	Scenario 2	4.60E-02	3.77E-04	--
4577	641461.0	4168973.7	Worker	Scenario 2	2.65E-01	3.80E-03	--
4578	641511.0	4168973.7	Worker	Scenario 2	2.17E-01	2.78E-03	--
4579	641561.0	4168973.7	Worker	Scenario 2	1.90E-01	2.18E-03	--
4580	638261.0	4169023.7	Worker	Scenario 2	1.22E-02	7.83E-05	--
4581	638311.0	4169023.7	Worker	Scenario 2	1.25E-02	8.02E-05	--
4582	638361.0	4169023.7	Worker	Scenario 2	1.29E-02	8.23E-05	--
4583	640011.0	4169023.7	Worker	Scenario 2	3.42E-02	2.47E-04	--
4584	640061.0	4169023.7	Worker	Scenario 2	3.54E-02	2.59E-04	--
4585	640111.0	4169023.7	Worker	Scenario 2	3.66E-02	2.72E-04	--
4586	640161.0	4169023.7	Worker	Scenario 2	3.80E-02	2.86E-04	--
4587	640311.0	4169023.7	Worker	Scenario 2	4.25E-02	3.34E-04	--
4588	640361.0	4169023.7	Worker	Scenario 2	4.42E-02	3.53E-04	--
4589	640411.0	4169023.7	Worker	Scenario 2	4.60E-02	3.74E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4590	641461.0	4169023.7	Worker	Scenario 2	2.60E-01	3.55E-03	--
4591	641511.0	4169023.7	Worker	Scenario 2	2.13E-01	2.58E-03	--
4592	641561.0	4169023.7	Worker	Scenario 2	1.86E-01	2.02E-03	--
4593	638161.0	4169073.7	Worker	Scenario 2	1.19E-02	7.55E-05	--
4594	638211.0	4169073.7	Worker	Scenario 2	1.21E-02	7.73E-05	--
4595	638261.0	4169073.7	Worker	Scenario 2	1.24E-02	7.91E-05	--
4596	639961.0	4169073.7	Worker	Scenario 2	3.32E-02	2.37E-04	--
4597	640011.0	4169073.7	Worker	Scenario 2	3.43E-02	2.48E-04	--
4598	640061.0	4169073.7	Worker	Scenario 2	3.55E-02	2.59E-04	--
4599	640111.0	4169073.7	Worker	Scenario 2	3.68E-02	2.72E-04	--
4600	640311.0	4169073.7	Worker	Scenario 2	4.26E-02	3.33E-04	--
4601	640361.0	4169073.7	Worker	Scenario 2	4.43E-02	3.51E-04	--
4602	640411.0	4169073.7	Worker	Scenario 2	4.60E-02	3.72E-04	--
4603	641461.0	4169073.7	Worker	Scenario 2	2.54E-01	3.29E-03	--
4604	641511.0	4169073.7	Worker	Scenario 2	2.09E-01	2.37E-03	--
4605	641561.0	4169073.7	Worker	Scenario 2	1.83E-01	1.85E-03	--
4606	638161.0	4169123.7	Worker	Scenario 2	1.20E-02	7.59E-05	--
4607	638211.0	4169123.7	Worker	Scenario 2	1.23E-02	7.77E-05	--
4608	639911.0	4169123.7	Worker	Scenario 2	3.23E-02	2.27E-04	--
4609	639961.0	4169123.7	Worker	Scenario 2	3.34E-02	2.37E-04	--
4610	640011.0	4169123.7	Worker	Scenario 2	3.45E-02	2.48E-04	--
4611	640061.0	4169123.7	Worker	Scenario 2	3.57E-02	2.59E-04	--
4612	640311.0	4169123.7	Worker	Scenario 2	4.26E-02	3.31E-04	--
4613	640361.0	4169123.7	Worker	Scenario 2	4.43E-02	3.49E-04	--
4614	640411.0	4169123.7	Worker	Scenario 2	4.60E-02	3.70E-04	--
4615	641461.0	4169123.7	Worker	Scenario 2	2.50E-01	3.00E-03	--
4616	641511.0	4169123.7	Worker	Scenario 2	2.05E-01	2.15E-03	--
4617	641561.0	4169123.7	Worker	Scenario 2	1.79E-01	1.68E-03	--
4618	638061.0	4169173.7	Worker	Scenario 2	1.15E-02	7.28E-05	--
4619	638161.0	4169173.7	Worker	Scenario 2	1.21E-02	7.63E-05	--
4620	639861.0	4169173.7	Worker	Scenario 2	3.14E-02	2.18E-04	--
4621	639911.0	4169173.7	Worker	Scenario 2	3.24E-02	2.27E-04	--
4622	639961.0	4169173.7	Worker	Scenario 2	3.35E-02	2.37E-04	--
4623	640011.0	4169173.7	Worker	Scenario 2	3.46E-02	2.48E-04	--
4624	640311.0	4169173.7	Worker	Scenario 2	4.26E-02	3.30E-04	--
4625	640361.0	4169173.7	Worker	Scenario 2	4.42E-02	3.47E-04	--
4626	640411.0	4169173.7	Worker	Scenario 2	4.59E-02	3.67E-04	--
4627	641461.0	4169173.7	Worker	Scenario 2	2.44E-01	2.65E-03	--
4628	641511.0	4169173.7	Worker	Scenario 2	2.00E-01	1.90E-03	--
4629	641561.0	4169173.7	Worker	Scenario 2	1.75E-01	1.50E-03	--
4630	638011.0	4169223.7	Worker	Scenario 2	1.14E-02	7.16E-05	--
4631	638061.0	4169223.7	Worker	Scenario 2	1.16E-02	7.32E-05	--
4632	639661.0	4169223.7	Worker	Scenario 2	2.80E-02	1.87E-04	--
4633	639761.0	4169223.7	Worker	Scenario 2	2.97E-02	2.02E-04	--
4634	639811.0	4169223.7	Worker	Scenario 2	3.06E-02	2.10E-04	--
4635	639861.0	4169223.7	Worker	Scenario 2	3.15E-02	2.18E-04	--
4636	639911.0	4169223.7	Worker	Scenario 2	3.25E-02	2.28E-04	--
4637	639961.0	4169223.7	Worker	Scenario 2	3.36E-02	2.37E-04	--
4638	640311.0	4169223.7	Worker	Scenario 2	4.25E-02	3.28E-04	--
4639	640361.0	4169223.7	Worker	Scenario 2	4.41E-02	3.45E-04	--
4640	640411.0	4169223.7	Worker	Scenario 2	4.58E-02	3.65E-04	--
4641	641461.0	4169223.7	Worker	Scenario 2	2.36E-01	2.22E-03	--
4642	641511.0	4169223.7	Worker	Scenario 2	1.95E-01	1.63E-03	--
4643	641561.0	4169223.7	Worker	Scenario 2	1.71E-01	1.32E-03	--
4644	637961.0	4169273.7	Worker	Scenario 2	1.13E-02	7.05E-05	--
4645	638011.0	4169273.7	Worker	Scenario 2	1.15E-02	7.21E-05	--
4646	638061.0	4169273.7	Worker	Scenario 2	1.18E-02	7.37E-05	--
4647	639611.0	4169273.7	Worker	Scenario 2	2.73E-02	1.81E-04	--
4648	639661.0	4169273.7	Worker	Scenario 2	2.81E-02	1.87E-04	--
4649	639761.0	4169273.7	Worker	Scenario 2	2.98E-02	2.02E-04	--
4650	639811.0	4169273.7	Worker	Scenario 2	3.07E-02	2.10E-04	--
4651	639861.0	4169273.7	Worker	Scenario 2	3.16E-02	2.19E-04	--
4652	639911.0	4169273.7	Worker	Scenario 2	3.26E-02	2.28E-04	--
4653	640311.0	4169273.7	Worker	Scenario 2	4.24E-02	3.25E-04	--
4654	640361.0	4169273.7	Worker	Scenario 2	4.40E-02	3.42E-04	--
4655	640411.0	4169273.7	Worker	Scenario 2	4.57E-02	3.61E-04	--
4656	641461.0	4169273.7	Worker	Scenario 2	2.29E-01	1.76E-03	--
4657	641511.0	4169273.7	Worker	Scenario 2	1.90E-01	1.37E-03	--
4658	641561.0	4169273.7	Worker	Scenario 2	1.67E-01	1.15E-03	--
4659	637911.0	4169323.7	Worker	Scenario 2	1.12E-02	6.95E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4660	637961.0	4169323.7	Worker	Scenario 2	1.14E-02	7.10E-05	--
4661	638011.0	4169323.7	Worker	Scenario 2	1.17E-02	7.25E-05	--
4662	639611.0	4169323.7	Worker	Scenario 2	2.75E-02	1.81E-04	--
4663	639661.0	4169323.7	Worker	Scenario 2	2.82E-02	1.88E-04	--
4664	639761.0	4169323.7	Worker	Scenario 2	2.99E-02	2.02E-04	--
4665	639811.0	4169323.7	Worker	Scenario 2	3.08E-02	2.10E-04	--
4666	640311.0	4169323.7	Worker	Scenario 2	4.23E-02	3.23E-04	--
4667	640361.0	4169323.7	Worker	Scenario 2	4.39E-02	3.39E-04	--
4668	640411.0	4169323.7	Worker	Scenario 2	4.55E-02	3.58E-04	--
4669	641461.0	4169323.7	Worker	Scenario 2	2.23E-01	1.40E-03	--
4670	641511.0	4169323.7	Worker	Scenario 2	1.85E-01	1.16E-03	--
4671	641561.0	4169323.7	Worker	Scenario 2	1.63E-01	1.02E-03	--
4672	637861.0	4169373.7	Worker	Scenario 2	1.11E-02	6.85E-05	--
4673	637911.0	4169373.7	Worker	Scenario 2	1.13E-02	6.99E-05	--
4674	637961.0	4169373.7	Worker	Scenario 2	1.16E-02	7.15E-05	--
4675	639561.0	4169373.7	Worker	Scenario 2	2.68E-02	1.75E-04	--
4676	639611.0	4169373.7	Worker	Scenario 2	2.76E-02	1.82E-04	--
4677	639661.0	4169373.7	Worker	Scenario 2	2.83E-02	1.88E-04	--
4678	640311.0	4169373.7	Worker	Scenario 2	4.22E-02	3.20E-04	--
4679	640361.0	4169373.7	Worker	Scenario 2	4.37E-02	3.36E-04	--
4680	640411.0	4169373.7	Worker	Scenario 2	4.53E-02	3.54E-04	--
4681	641461.0	4169373.7	Worker	Scenario 2	2.18E-01	1.19E-03	--
4682	641511.0	4169373.7	Worker	Scenario 2	1.82E-01	1.02E-03	--
4683	641561.0	4169373.7	Worker	Scenario 2	1.60E-01	9.15E-04	--
4684	637861.0	4169423.7	Worker	Scenario 2	1.12E-02	6.89E-05	--
4685	637911.0	4169423.7	Worker	Scenario 2	1.15E-02	7.04E-05	--
4686	639511.0	4169423.7	Worker	Scenario 2	2.62E-02	1.70E-04	--
4687	639561.0	4169423.7	Worker	Scenario 2	2.69E-02	1.76E-04	--
4688	639611.0	4169423.7	Worker	Scenario 2	2.77E-02	1.82E-04	--
4689	639661.0	4169423.7	Worker	Scenario 2	2.84E-02	1.88E-04	--
4690	640311.0	4169423.7	Worker	Scenario 2	4.20E-02	3.17E-04	--
4691	640361.0	4169423.7	Worker	Scenario 2	4.35E-02	3.32E-04	--
4692	640411.0	4169423.7	Worker	Scenario 2	4.51E-02	3.49E-04	--
4693	640861.0	4169423.7	Worker	Scenario 2	6.73E-02	5.92E-04	--
4694	640911.0	4169423.7	Worker	Scenario 2	7.14E-02	6.33E-04	--
4695	640961.0	4169423.7	Worker	Scenario 2	7.63E-02	6.79E-04	--
4696	641011.0	4169423.7	Worker	Scenario 2	8.21E-02	7.30E-04	--
4697	641061.0	4169423.7	Worker	Scenario 2	8.95E-02	7.89E-04	--
4698	641461.0	4169423.7	Worker	Scenario 2	2.14E-01	1.06E-03	--
4699	641511.0	4169423.7	Worker	Scenario 2	1.79E-01	9.28E-04	--
4700	641561.0	4169423.7	Worker	Scenario 2	1.57E-01	8.39E-04	--
4701	637861.0	4169473.7	Worker	Scenario 2	1.14E-02	6.93E-05	--
4702	639461.0	4169473.7	Worker	Scenario 2	2.57E-02	1.65E-04	--
4703	639511.0	4169473.7	Worker	Scenario 2	2.63E-02	1.70E-04	--
4704	639561.0	4169473.7	Worker	Scenario 2	2.70E-02	1.76E-04	--
4705	639611.0	4169473.7	Worker	Scenario 2	2.77E-02	1.82E-04	--
4706	640311.0	4169473.7	Worker	Scenario 2	4.18E-02	3.13E-04	--
4707	640361.0	4169473.7	Worker	Scenario 2	4.33E-02	3.28E-04	--
4708	640411.0	4169473.7	Worker	Scenario 2	4.49E-02	3.45E-04	--
4709	640811.0	4169473.7	Worker	Scenario 2	6.31E-02	5.31E-04	--
4710	640861.0	4169473.7	Worker	Scenario 2	6.66E-02	5.63E-04	--
4711	640911.0	4169473.7	Worker	Scenario 2	7.06E-02	5.97E-04	--
4712	640961.0	4169473.7	Worker	Scenario 2	7.53E-02	6.36E-04	--
4713	641011.0	4169473.7	Worker	Scenario 2	8.09E-02	6.78E-04	--
4714	641061.0	4169473.7	Worker	Scenario 2	8.81E-02	7.24E-04	--
4715	641111.0	4169473.7	Worker	Scenario 2	9.76E-02	7.75E-04	--
4716	641161.0	4169473.7	Worker	Scenario 2	1.11E-01	8.30E-04	--
4717	641211.0	4169473.7	Worker	Scenario 2	1.34E-01	8.96E-04	--
4718	641361.0	4169473.7	Worker	Scenario 2	4.60E-01	1.63E-03	--
4719	641411.0	4169473.7	Worker	Scenario 2	2.78E-01	1.16E-03	--
4720	641461.0	4169473.7	Worker	Scenario 2	2.10E-01	9.64E-04	--
4721	641511.0	4169473.7	Worker	Scenario 2	1.75E-01	8.54E-04	--
4722	639361.0	4169523.7	Worker	Scenario 2	2.45E-02	1.55E-04	--
4723	639411.0	4169523.7	Worker	Scenario 2	2.51E-02	1.60E-04	--
4724	639461.0	4169523.7	Worker	Scenario 2	2.57E-02	1.65E-04	--
4725	639511.0	4169523.7	Worker	Scenario 2	2.64E-02	1.70E-04	--
4726	639561.0	4169523.7	Worker	Scenario 2	2.71E-02	1.76E-04	--
4727	640311.0	4169523.7	Worker	Scenario 2	4.16E-02	3.10E-04	--
4728	640361.0	4169523.7	Worker	Scenario 2	4.30E-02	3.24E-04	--
4729	640411.0	4169523.7	Worker	Scenario 2	4.46E-02	3.40E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4730	640461.0	4169523.7	Worker	Scenario 2	4.62E-02	3.56E-04	--
4731	640611.0	4169523.7	Worker	Scenario 2	5.20E-02	4.13E-04	--
4732	640661.0	4169523.7	Worker	Scenario 2	5.42E-02	4.34E-04	--
4733	640711.0	4169523.7	Worker	Scenario 2	5.67E-02	4.57E-04	--
4734	640761.0	4169523.7	Worker	Scenario 2	5.94E-02	4.81E-04	--
4735	640811.0	4169523.7	Worker	Scenario 2	6.24E-02	5.07E-04	--
4736	640861.0	4169523.7	Worker	Scenario 2	6.58E-02	5.35E-04	--
4737	640911.0	4169523.7	Worker	Scenario 2	6.97E-02	5.64E-04	--
4738	640961.0	4169523.7	Worker	Scenario 2	7.42E-02	5.96E-04	--
4739	641011.0	4169523.7	Worker	Scenario 2	7.98E-02	6.30E-04	--
4740	641061.0	4169523.7	Worker	Scenario 2	8.67E-02	6.65E-04	--
4741	641111.0	4169523.7	Worker	Scenario 2	9.60E-02	7.03E-04	--
4742	641161.0	4169523.7	Worker	Scenario 2	1.10E-01	7.46E-04	--
4743	641211.0	4169523.7	Worker	Scenario 2	1.32E-01	8.01E-04	--
4744	641261.0	4169523.7	Worker	Scenario 2	1.82E-01	9.11E-04	--
4745	641361.0	4169523.7	Worker	Scenario 2	4.50E-01	1.52E-03	--
4746	641411.0	4169523.7	Worker	Scenario 2	2.73E-01	1.08E-03	--
4747	641461.0	4169523.7	Worker	Scenario 2	2.07E-01	8.95E-04	--
4748	641511.0	4169523.7	Worker	Scenario 2	1.72E-01	7.95E-04	--
4749	639311.0	4169573.7	Worker	Scenario 2	2.40E-02	1.51E-04	--
4750	639361.0	4169573.7	Worker	Scenario 2	2.45E-02	1.55E-04	--
4751	639411.0	4169573.7	Worker	Scenario 2	2.51E-02	1.60E-04	--
4752	639461.0	4169573.7	Worker	Scenario 2	2.58E-02	1.65E-04	--
4753	639511.0	4169573.7	Worker	Scenario 2	2.64E-02	1.71E-04	--
4754	640361.0	4169573.7	Worker	Scenario 2	4.28E-02	3.20E-04	--
4755	640411.0	4169573.7	Worker	Scenario 2	4.43E-02	3.34E-04	--
4756	640461.0	4169573.7	Worker	Scenario 2	4.59E-02	3.50E-04	--
4757	640511.0	4169573.7	Worker	Scenario 2	4.77E-02	3.66E-04	--
4758	640561.0	4169573.7	Worker	Scenario 2	4.95E-02	3.83E-04	--
4759	640611.0	4169573.7	Worker	Scenario 2	5.15E-02	4.01E-04	--
4760	640661.0	4169573.7	Worker	Scenario 2	5.37E-02	4.20E-04	--
4761	640711.0	4169573.7	Worker	Scenario 2	5.61E-02	4.40E-04	--
4762	640761.0	4169573.7	Worker	Scenario 2	5.88E-02	4.62E-04	--
4763	640811.0	4169573.7	Worker	Scenario 2	6.17E-02	4.84E-04	--
4764	640861.0	4169573.7	Worker	Scenario 2	6.50E-02	5.08E-04	--
4765	640911.0	4169573.7	Worker	Scenario 2	6.88E-02	5.33E-04	--
4766	641061.0	4169573.7	Worker	Scenario 2	8.54E-02	6.14E-04	--
4767	641111.0	4169573.7	Worker	Scenario 2	9.46E-02	6.43E-04	--
4768	641161.0	4169573.7	Worker	Scenario 2	1.08E-01	6.80E-04	--
4769	641211.0	4169573.7	Worker	Scenario 2	1.31E-01	7.32E-04	--
4770	641261.0	4169573.7	Worker	Scenario 2	1.81E-01	8.43E-04	--
4771	641361.0	4169573.7	Worker	Scenario 2	4.42E-01	1.44E-03	--
4772	641411.0	4169573.7	Worker	Scenario 2	2.70E-01	1.02E-03	--
4773	641461.0	4169573.7	Worker	Scenario 2	2.03E-01	8.41E-04	--
4774	637961.0	4169623.7	Worker	Scenario 2	1.23E-02	7.36E-05	--
4775	639261.0	4169623.7	Worker	Scenario 2	2.35E-02	1.46E-04	--
4776	639311.0	4169623.7	Worker	Scenario 2	2.40E-02	1.51E-04	--
4777	639361.0	4169623.7	Worker	Scenario 2	2.46E-02	1.55E-04	--
4778	639411.0	4169623.7	Worker	Scenario 2	2.52E-02	1.60E-04	--
4779	639461.0	4169623.7	Worker	Scenario 2	2.58E-02	1.65E-04	--
4780	640361.0	4169623.7	Worker	Scenario 2	4.25E-02	3.15E-04	--
4781	640411.0	4169623.7	Worker	Scenario 2	4.40E-02	3.28E-04	--
4782	640461.0	4169623.7	Worker	Scenario 2	4.56E-02	3.42E-04	--
4783	640511.0	4169623.7	Worker	Scenario 2	4.73E-02	3.57E-04	--
4784	640561.0	4169623.7	Worker	Scenario 2	4.91E-02	3.73E-04	--
4785	640611.0	4169623.7	Worker	Scenario 2	5.11E-02	3.89E-04	--
4786	640661.0	4169623.7	Worker	Scenario 2	5.32E-02	4.06E-04	--
4787	640711.0	4169623.7	Worker	Scenario 2	5.55E-02	4.24E-04	--
4788	640761.0	4169623.7	Worker	Scenario 2	5.81E-02	4.43E-04	--
4789	640811.0	4169623.7	Worker	Scenario 2	6.09E-02	4.62E-04	--
4790	641261.0	4169623.7	Worker	Scenario 2	1.81E-01	7.94E-04	--
4791	637911.0	4169673.7	Worker	Scenario 2	1.21E-02	7.25E-05	--
4792	637961.0	4169673.7	Worker	Scenario 2	1.24E-02	7.40E-05	--
4793	639211.0	4169673.7	Worker	Scenario 2	2.30E-02	1.42E-04	--
4794	639261.0	4169673.7	Worker	Scenario 2	2.35E-02	1.47E-04	--
4795	639311.0	4169673.7	Worker	Scenario 2	2.41E-02	1.51E-04	--
4796	639361.0	4169673.7	Worker	Scenario 2	2.46E-02	1.56E-04	--
4797	640461.0	4169673.7	Worker	Scenario 2	4.53E-02	3.35E-04	--
4798	640511.0	4169673.7	Worker	Scenario 2	4.69E-02	3.48E-04	--
4799	640561.0	4169673.7	Worker	Scenario 2	4.87E-02	3.62E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4800	640611.0	4169673.7	Worker	Scenario 2	5.06E-02	3.77E-04	--
4801	637861.0	4169723.7	Worker	Scenario 2	1.21E-02	7.15E-05	--
4802	637911.0	4169723.7	Worker	Scenario 2	1.23E-02	7.30E-05	--
4803	637961.0	4169723.7	Worker	Scenario 2	1.25E-02	7.45E-05	--
4804	639161.0	4169723.7	Worker	Scenario 2	2.25E-02	1.39E-04	--
4805	639211.0	4169723.7	Worker	Scenario 2	2.30E-02	1.43E-04	--
4806	639261.0	4169723.7	Worker	Scenario 2	2.36E-02	1.47E-04	--
4807	639311.0	4169723.7	Worker	Scenario 2	2.41E-02	1.51E-04	--
4808	637861.0	4169773.7	Worker	Scenario 2	1.22E-02	7.18E-05	--
4809	637911.0	4169773.7	Worker	Scenario 2	1.24E-02	7.34E-05	--
4810	637961.0	4169773.7	Worker	Scenario 2	1.26E-02	7.48E-05	--
4811	639111.0	4169773.7	Worker	Scenario 2	2.21E-02	1.35E-04	--
4812	639161.0	4169773.7	Worker	Scenario 2	2.26E-02	1.39E-04	--
4813	639211.0	4169773.7	Worker	Scenario 2	2.31E-02	1.43E-04	--
4814	639261.0	4169773.7	Worker	Scenario 2	2.36E-02	1.47E-04	--
4815	637861.0	4169823.7	Worker	Scenario 2	1.23E-02	7.24E-05	--
4816	637911.0	4169823.7	Worker	Scenario 2	1.26E-02	7.39E-05	--
4817	637961.0	4169823.7	Worker	Scenario 2	1.28E-02	7.54E-05	--
4818	639061.0	4169823.7	Worker	Scenario 2	2.17E-02	1.32E-04	--
4819	639111.0	4169823.7	Worker	Scenario 2	2.21E-02	1.35E-04	--
4820	639161.0	4169823.7	Worker	Scenario 2	2.26E-02	1.39E-04	--
4821	639211.0	4169823.7	Worker	Scenario 2	2.31E-02	1.43E-04	--
4822	637861.0	4169873.7	Worker	Scenario 2	1.24E-02	7.28E-05	--
4823	637911.0	4169873.7	Worker	Scenario 2	1.27E-02	7.43E-05	--
4824	637961.0	4169873.7	Worker	Scenario 2	1.30E-02	7.59E-05	--
4825	639011.0	4169873.7	Worker	Scenario 2	2.13E-02	1.29E-04	--
4826	639061.0	4169873.7	Worker	Scenario 2	2.17E-02	1.32E-04	--
4827	639111.0	4169873.7	Worker	Scenario 2	2.22E-02	1.36E-04	--
4828	639161.0	4169873.7	Worker	Scenario 2	2.26E-02	1.39E-04	--
4829	637861.0	4169923.7	Worker	Scenario 2	1.26E-02	7.33E-05	--
4830	637911.0	4169923.7	Worker	Scenario 2	1.28E-02	7.49E-05	--
4831	637961.0	4169923.7	Worker	Scenario 2	1.31E-02	7.64E-05	--
4832	638961.0	4169923.7	Worker	Scenario 2	2.09E-02	1.26E-04	--
4833	639011.0	4169923.7	Worker	Scenario 2	2.13E-02	1.29E-04	--
4834	639061.0	4169923.7	Worker	Scenario 2	2.17E-02	1.32E-04	--
4835	639111.0	4169923.7	Worker	Scenario 2	2.22E-02	1.36E-04	--
4836	637861.0	4169973.7	Worker	Scenario 2	1.27E-02	7.38E-05	--
4837	637911.0	4169973.7	Worker	Scenario 2	1.30E-02	7.54E-05	--
4838	637961.0	4169973.7	Worker	Scenario 2	1.32E-02	7.70E-05	--
4839	638911.0	4169973.7	Worker	Scenario 2	2.05E-02	1.23E-04	--
4840	638961.0	4169973.7	Worker	Scenario 2	2.09E-02	1.26E-04	--
4841	639011.0	4169973.7	Worker	Scenario 2	2.13E-02	1.29E-04	--
4842	639061.0	4169973.7	Worker	Scenario 2	2.17E-02	1.32E-04	--
4843	637861.0	4170023.7	Worker	Scenario 2	1.28E-02	7.42E-05	--
4844	637911.0	4170023.7	Worker	Scenario 2	1.31E-02	7.58E-05	--
4845	637961.0	4170023.7	Worker	Scenario 2	1.34E-02	7.74E-05	--
4846	638911.0	4170023.7	Worker	Scenario 2	2.05E-02	1.23E-04	--
4847	638961.0	4170023.7	Worker	Scenario 2	2.09E-02	1.26E-04	--
4848	639011.0	4170023.7	Worker	Scenario 2	2.13E-02	1.29E-04	--
4849	637861.0	4170073.7	Worker	Scenario 2	1.37E-02	7.76E-05	--
4850	637911.0	4170073.7	Worker	Scenario 2	1.40E-02	7.90E-05	--
4851	637961.0	4170073.7	Worker	Scenario 2	1.42E-02	8.06E-05	--
4852	638011.0	4170073.7	Worker	Scenario 2	1.45E-02	8.21E-05	--
4853	638911.0	4170073.7	Worker	Scenario 2	2.05E-02	1.23E-04	--
4854	638961.0	4170073.7	Worker	Scenario 2	2.09E-02	1.26E-04	--
4855	637911.0	4170123.7	Worker	Scenario 2	1.39E-02	7.88E-05	--
4856	637961.0	4170123.7	Worker	Scenario 2	1.42E-02	8.06E-05	--
4857	638011.0	4170123.7	Worker	Scenario 2	1.46E-02	8.25E-05	--
4858	638061.0	4170123.7	Worker	Scenario 2	1.42E-02	8.18E-05	--
4859	638111.0	4170123.7	Worker	Scenario 2	1.44E-02	8.33E-05	--
4860	638161.0	4170123.7	Worker	Scenario 2	1.48E-02	8.57E-05	--
4861	638211.0	4170123.7	Worker	Scenario 2	1.51E-02	8.74E-05	--
4862	638261.0	4170123.7	Worker	Scenario 2	1.54E-02	8.94E-05	--
4863	638311.0	4170123.7	Worker	Scenario 2	1.58E-02	9.15E-05	--
4864	638361.0	4170123.7	Worker	Scenario 2	1.61E-02	9.37E-05	--
4865	638411.0	4170123.7	Worker	Scenario 2	1.65E-02	9.62E-05	--
4866	638461.0	4170123.7	Worker	Scenario 2	1.69E-02	9.87E-05	--
4867	638511.0	4170123.7	Worker	Scenario 2	1.73E-02	1.01E-04	--
4868	638561.0	4170123.7	Worker	Scenario 2	1.77E-02	1.04E-04	--
4869	638611.0	4170123.7	Worker	Scenario 2	1.82E-02	1.06E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4870	638661.0	4170123.7	Worker	Scenario 2	1.86E-02	1.09E-04	--
4871	638911.0	4170123.7	Worker	Scenario 2	2.05E-02	1.23E-04	--
4872	638961.0	4170123.7	Worker	Scenario 2	2.09E-02	1.26E-04	--
4873	637911.0	4170173.7	Worker	Scenario 2	1.37E-02	7.83E-05	--
4874	637961.0	4170173.7	Worker	Scenario 2	1.41E-02	8.03E-05	--
4875	638011.0	4170173.7	Worker	Scenario 2	1.44E-02	8.20E-05	--
4876	638061.0	4170173.7	Worker	Scenario 2	1.43E-02	8.21E-05	--
4877	638111.0	4170173.7	Worker	Scenario 2	1.45E-02	8.37E-05	--
4878	638161.0	4170173.7	Worker	Scenario 2	1.49E-02	8.60E-05	--
4879	638211.0	4170173.7	Worker	Scenario 2	1.52E-02	8.79E-05	--
4880	638261.0	4170173.7	Worker	Scenario 2	1.55E-02	8.99E-05	--
4881	638311.0	4170173.7	Worker	Scenario 2	1.59E-02	9.20E-05	--
4882	638361.0	4170173.7	Worker	Scenario 2	1.62E-02	9.44E-05	--
4883	638411.0	4170173.7	Worker	Scenario 2	1.66E-02	9.66E-05	--
4884	638461.0	4170173.7	Worker	Scenario 2	1.70E-02	9.91E-05	--
4885	638511.0	4170173.7	Worker	Scenario 2	1.74E-02	1.02E-04	--
4886	638561.0	4170173.7	Worker	Scenario 2	1.79E-02	1.04E-04	--
4887	638611.0	4170173.7	Worker	Scenario 2	1.83E-02	1.07E-04	--
4888	638861.0	4170173.7	Worker	Scenario 2	2.02E-02	1.20E-04	--
4889	638911.0	4170173.7	Worker	Scenario 2	2.05E-02	1.23E-04	--
4890	638961.0	4170173.7	Worker	Scenario 2	2.09E-02	1.26E-04	--
4891	638011.0	4170223.7	Worker	Scenario 2	1.41E-02	8.10E-05	--
4892	638061.0	4170223.7	Worker	Scenario 2	1.43E-02	8.24E-05	--
4893	638111.0	4170223.7	Worker	Scenario 2	1.46E-02	8.41E-05	--
4894	638161.0	4170223.7	Worker	Scenario 2	1.51E-02	8.66E-05	--
4895	638211.0	4170223.7	Worker	Scenario 2	1.54E-02	8.85E-05	--
4896	638261.0	4170223.7	Worker	Scenario 2	1.57E-02	9.05E-05	--
4897	638311.0	4170223.7	Worker	Scenario 2	1.61E-02	9.31E-05	--
4898	638361.0	4170223.7	Worker	Scenario 2	1.65E-02	9.54E-05	--
4899	638411.0	4170223.7	Worker	Scenario 2	1.69E-02	9.76E-05	--
4900	638461.0	4170223.7	Worker	Scenario 2	1.72E-02	9.96E-05	--
4901	638511.0	4170223.7	Worker	Scenario 2	1.75E-02	1.02E-04	--
4902	638561.0	4170223.7	Worker	Scenario 2	1.79E-02	1.05E-04	--
4903	638811.0	4170223.7	Worker	Scenario 2	1.98E-02	1.18E-04	--
4904	638861.0	4170223.7	Worker	Scenario 2	2.01E-02	1.20E-04	--
4905	638911.0	4170223.7	Worker	Scenario 2	2.05E-02	1.23E-04	--
4906	638761.0	4170273.7	Worker	Scenario 2	1.95E-02	1.15E-04	--
4907	641536.2	4164448.9	Worker	Scenario 2	5.49E-03	4.93E-05	--
4908	641636.2	4164448.9	Worker	Scenario 2	5.92E-03	5.33E-05	--
4909	641736.2	4164448.9	Worker	Scenario 2	5.90E-03	5.37E-05	--
4910	641836.2	4164448.9	Worker	Scenario 2	5.99E-03	5.44E-05	--
4911	641936.2	4164448.9	Worker	Scenario 2	6.12E-03	5.58E-05	--
4912	642036.2	4164448.9	Worker	Scenario 2	6.26E-03	5.75E-05	--
4913	642136.2	4164448.9	Worker	Scenario 2	6.39E-03	5.93E-05	--
4914	642236.2	4164448.9	Worker	Scenario 2	6.66E-03	6.26E-05	--
4915	642336.2	4164448.9	Worker	Scenario 2	6.90E-03	6.57E-05	--
4916	642436.2	4164448.9	Worker	Scenario 2	6.93E-03	6.70E-05	--
4917	642536.2	4164448.9	Worker	Scenario 2	6.83E-03	6.69E-05	--
4918	642636.2	4164448.9	Worker	Scenario 2	6.98E-03	6.92E-05	--
4919	642736.2	4164448.9	Worker	Scenario 2	7.48E-03	7.48E-05	--
4920	642836.2	4164448.9	Worker	Scenario 2	8.43E-03	8.26E-05	--
4921	642936.2	4164448.9	Worker	Scenario 2	8.61E-03	8.45E-05	--
4922	643036.2	4164448.9	Worker	Scenario 2	9.02E-03	8.75E-05	--
4923	643136.2	4164448.9	Worker	Scenario 2	1.01E-02	9.38E-05	--
4924	643236.2	4164448.9	Worker	Scenario 2	1.12E-02	9.91E-05	--
4925	643336.2	4164448.9	Worker	Scenario 2	1.25E-02	1.05E-04	--
4926	643436.2	4164448.9	Worker	Scenario 2	1.34E-02	1.09E-04	--
4927	643536.2	4164448.9	Worker	Scenario 2	1.42E-02	1.12E-04	--
4928	643636.2	4164448.9	Worker	Scenario 2	1.53E-02	1.17E-04	--
4929	643736.2	4164448.9	Worker	Scenario 2	1.60E-02	1.20E-04	--
4930	643836.2	4164448.9	Worker	Scenario 2	1.68E-02	1.23E-04	--
4931	643936.2	4164448.9	Worker	Scenario 2	1.78E-02	1.27E-04	--
4932	644036.2	4164448.9	Worker	Scenario 2	1.87E-02	1.30E-04	--
4933	644136.2	4164448.9	Worker	Scenario 2	1.94E-02	1.32E-04	--
4934	644336.2	4164448.9	Worker	Scenario 2	2.04E-02	1.36E-04	--
4935	644436.2	4164448.9	Worker	Scenario 2	2.08E-02	1.37E-04	--
4936	644536.2	4164448.9	Worker	Scenario 2	2.08E-02	1.37E-04	--
4937	640936.2	4164548.9	Worker	Scenario 2	4.90E-03	4.62E-05	--
4938	641036.2	4164548.9	Worker	Scenario 2	4.82E-03	4.52E-05	--
4939	641136.2	4164548.9	Worker	Scenario 2	4.94E-03	4.57E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4940	641236.2	4164548.9	Worker	Scenario 2	5.06E-03	4.65E-05	--
4941	641336.2	4164548.9	Worker	Scenario 2	5.22E-03	4.76E-05	--
4942	641436.2	4164548.9	Worker	Scenario 2	5.28E-03	4.80E-05	--
4943	641536.2	4164548.9	Worker	Scenario 2	5.45E-03	4.96E-05	--
4944	641636.2	4164548.9	Worker	Scenario 2	5.74E-03	5.22E-05	--
4945	641736.2	4164548.9	Worker	Scenario 2	6.18E-03	5.65E-05	--
4946	641836.2	4164548.9	Worker	Scenario 2	6.66E-03	6.12E-05	--
4947	641936.2	4164548.9	Worker	Scenario 2	6.70E-03	6.16E-05	--
4948	642036.2	4164548.9	Worker	Scenario 2	6.54E-03	6.04E-05	--
4949	642136.2	4164548.9	Worker	Scenario 2	6.72E-03	6.27E-05	--
4950	642236.2	4164548.9	Worker	Scenario 2	6.76E-03	6.37E-05	--
4951	642336.2	4164548.9	Worker	Scenario 2	6.99E-03	6.69E-05	--
4952	642436.2	4164548.9	Worker	Scenario 2	7.96E-03	7.59E-05	--
4953	642536.2	4164548.9	Worker	Scenario 2	7.23E-03	7.10E-05	--
4954	642636.2	4164548.9	Worker	Scenario 2	7.32E-03	7.29E-05	--
4955	642736.2	4164548.9	Worker	Scenario 2	7.53E-03	7.59E-05	--
4956	642836.2	4164548.9	Worker	Scenario 2	8.56E-03	8.51E-05	--
4957	642936.2	4164548.9	Worker	Scenario 2	9.62E-03	9.24E-05	--
4958	643036.2	4164548.9	Worker	Scenario 2	9.55E-03	9.27E-05	--
4959	643136.2	4164548.9	Worker	Scenario 2	1.05E-02	9.81E-05	--
4960	643236.2	4164548.9	Worker	Scenario 2	1.18E-02	1.04E-04	--
4961	643336.2	4164548.9	Worker	Scenario 2	1.31E-02	1.10E-04	--
4962	643436.2	4164548.9	Worker	Scenario 2	1.40E-02	1.14E-04	--
4963	643536.2	4164548.9	Worker	Scenario 2	1.52E-02	1.19E-04	--
4964	643636.2	4164548.9	Worker	Scenario 2	1.61E-02	1.23E-04	--
4965	643736.2	4164548.9	Worker	Scenario 2	1.71E-02	1.27E-04	--
4966	643836.2	4164548.9	Worker	Scenario 2	1.78E-02	1.30E-04	--
4967	643936.2	4164548.9	Worker	Scenario 2	1.86E-02	1.33E-04	--
4968	644036.2	4164548.9	Worker	Scenario 2	1.99E-02	1.37E-04	--
4969	644236.2	4164548.9	Worker	Scenario 2	2.01E-02	1.38E-04	--
4970	644336.2	4164548.9	Worker	Scenario 2	2.10E-02	1.41E-04	--
4971	644436.2	4164548.9	Worker	Scenario 2	2.16E-02	1.42E-04	--
4972	644536.2	4164548.9	Worker	Scenario 2	2.22E-02	1.44E-04	--
4973	644636.2	4164548.9	Worker	Scenario 2	2.27E-02	1.44E-04	--
4974	644736.2	4164548.9	Worker	Scenario 2	2.34E-02	1.45E-04	--
4975	644836.2	4164548.9	Worker	Scenario 2	2.39E-02	1.45E-04	--
4976	644936.2	4164548.9	Worker	Scenario 2	2.41E-02	1.44E-04	--
4977	645036.2	4164548.9	Worker	Scenario 2	2.51E-02	1.45E-04	--
4978	640536.2	4164648.9	Worker	Scenario 2	4.43E-03	4.40E-05	--
4979	640636.2	4164648.9	Worker	Scenario 2	4.67E-03	4.57E-05	--
4980	640736.2	4164648.9	Worker	Scenario 2	4.65E-03	4.53E-05	--
4981	640836.2	4164648.9	Worker	Scenario 2	4.82E-03	4.64E-05	--
4982	640936.2	4164648.9	Worker	Scenario 2	5.01E-03	4.76E-05	--
4983	641036.2	4164648.9	Worker	Scenario 2	4.95E-03	4.67E-05	--
4984	641136.2	4164648.9	Worker	Scenario 2	5.08E-03	4.73E-05	--
4985	641236.2	4164648.9	Worker	Scenario 2	5.22E-03	4.81E-05	--
4986	641336.2	4164648.9	Worker	Scenario 2	5.48E-03	5.02E-05	--
4987	641436.2	4164648.9	Worker	Scenario 2	5.46E-03	4.99E-05	--
4988	641536.2	4164648.9	Worker	Scenario 2	5.61E-03	5.14E-05	--
4989	641636.2	4164648.9	Worker	Scenario 2	5.81E-03	5.34E-05	--
4990	641736.2	4164648.9	Worker	Scenario 2	6.05E-03	5.58E-05	--
4991	641836.2	4164648.9	Worker	Scenario 2	6.67E-03	6.17E-05	--
4992	641936.2	4164648.9	Worker	Scenario 2	7.40E-03	6.82E-05	--
4993	642036.2	4164648.9	Worker	Scenario 2	7.06E-03	6.58E-05	--
4994	642136.2	4164648.9	Worker	Scenario 2	6.98E-03	6.55E-05	--
4995	642236.2	4164648.9	Worker	Scenario 2	7.08E-03	6.71E-05	--
4996	642336.2	4164648.9	Worker	Scenario 2	7.21E-03	6.92E-05	--
4997	642436.2	4164648.9	Worker	Scenario 2	7.68E-03	7.50E-05	--
4998	642536.2	4164648.9	Worker	Scenario 2	8.50E-03	8.26E-05	--
4999	642636.2	4164648.9	Worker	Scenario 2	7.81E-03	7.83E-05	--
5000	642736.2	4164648.9	Worker	Scenario 2	7.91E-03	8.01E-05	--
5001	642836.2	4164648.9	Worker	Scenario 2	8.67E-03	8.76E-05	--
5002	642936.2	4164648.9	Worker	Scenario 2	9.87E-03	9.62E-05	--
5003	643036.2	4164648.9	Worker	Scenario 2	1.06E-02	1.01E-04	--
5004	643136.2	4164648.9	Worker	Scenario 2	1.09E-02	1.03E-04	--
5005	643236.2	4164648.9	Worker	Scenario 2	1.25E-02	1.10E-04	--
5006	643336.2	4164648.9	Worker	Scenario 2	1.35E-02	1.15E-04	--
5007	643436.2	4164648.9	Worker	Scenario 2	1.49E-02	1.21E-04	--
5008	643536.2	4164648.9	Worker	Scenario 2	1.61E-02	1.26E-04	--
5009	643636.2	4164648.9	Worker	Scenario 2	1.71E-02	1.30E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5010	643736.2	4164648.9	Worker	Scenario 2	1.82E-02	1.34E-04	--
5011	643836.2	4164648.9	Worker	Scenario 2	1.89E-02	1.37E-04	--
5012	644136.2	4164648.9	Worker	Scenario 2	2.11E-02	1.45E-04	--
5013	644236.2	4164648.9	Worker	Scenario 2	2.16E-02	1.46E-04	--
5014	644336.2	4164648.9	Worker	Scenario 2	2.24E-02	1.49E-04	--
5015	644436.2	4164648.9	Worker	Scenario 2	2.30E-02	1.50E-04	--
5016	644536.2	4164648.9	Worker	Scenario 2	2.36E-02	1.51E-04	--
5017	644736.2	4164648.9	Worker	Scenario 2	2.50E-02	1.52E-04	--
5018	644836.2	4164648.9	Worker	Scenario 2	2.56E-02	1.52E-04	--
5019	644936.2	4164648.9	Worker	Scenario 2	2.62E-02	1.52E-04	--
5020	645036.2	4164648.9	Worker	Scenario 2	2.67E-02	1.52E-04	--
5021	645136.2	4164648.9	Worker	Scenario 2	2.69E-02	1.50E-04	--
5022	645236.2	4164648.9	Worker	Scenario 2	2.74E-02	1.50E-04	--
5023	640336.2	4164748.9	Worker	Scenario 2	5.55E-03	5.48E-05	--
5024	640436.2	4164748.9	Worker	Scenario 2	4.66E-03	4.69E-05	--
5025	640536.2	4164748.9	Worker	Scenario 2	4.56E-03	4.55E-05	--
5026	640636.2	4164748.9	Worker	Scenario 2	4.74E-03	4.68E-05	--
5027	640736.2	4164748.9	Worker	Scenario 2	4.80E-03	4.70E-05	--
5028	640836.2	4164748.9	Worker	Scenario 2	4.93E-03	4.78E-05	--
5029	640936.2	4164748.9	Worker	Scenario 2	5.15E-03	4.93E-05	--
5030	641036.2	4164748.9	Worker	Scenario 2	5.10E-03	4.83E-05	--
5031	641136.2	4164748.9	Worker	Scenario 2	5.23E-03	4.89E-05	--
5032	641236.2	4164748.9	Worker	Scenario 2	5.41E-03	5.02E-05	--
5033	641336.2	4164748.9	Worker	Scenario 2	5.65E-03	5.20E-05	--
5034	641436.2	4164748.9	Worker	Scenario 2	5.65E-03	5.19E-05	--
5035	641536.2	4164748.9	Worker	Scenario 2	5.83E-03	5.37E-05	--
5036	641636.2	4164748.9	Worker	Scenario 2	6.05E-03	5.60E-05	--
5037	641736.2	4164748.9	Worker	Scenario 2	6.25E-03	5.82E-05	--
5038	641836.2	4164748.9	Worker	Scenario 2	6.59E-03	6.15E-05	--
5039	641936.2	4164748.9	Worker	Scenario 2	7.37E-03	6.90E-05	--
5040	642036.2	4164748.9	Worker	Scenario 2	7.34E-03	6.90E-05	--
5041	642136.2	4164748.9	Worker	Scenario 2	7.24E-03	6.83E-05	--
5042	642236.2	4164748.9	Worker	Scenario 2	7.61E-03	7.25E-05	--
5043	642336.2	4164748.9	Worker	Scenario 2	7.67E-03	7.43E-05	--
5044	642436.2	4164748.9	Worker	Scenario 2	7.77E-03	7.61E-05	--
5045	642536.2	4164748.9	Worker	Scenario 2	8.80E-03	8.64E-05	--
5046	642636.2	4164748.9	Worker	Scenario 2	8.44E-03	8.51E-05	--
5047	642736.2	4164748.9	Worker	Scenario 2	8.37E-03	8.52E-05	--
5048	642836.2	4164748.9	Worker	Scenario 2	8.73E-03	8.91E-05	--
5049	642936.2	4164748.9	Worker	Scenario 2	9.51E-03	9.62E-05	--
5050	643036.2	4164748.9	Worker	Scenario 2	1.12E-02	1.07E-04	--
5051	643136.2	4164748.9	Worker	Scenario 2	1.17E-02	1.10E-04	--
5052	643236.2	4164748.9	Worker	Scenario 2	1.34E-02	1.18E-04	--
5053	643336.2	4164748.9	Worker	Scenario 2	1.44E-02	1.22E-04	--
5054	643436.2	4164748.9	Worker	Scenario 2	1.56E-02	1.27E-04	--
5055	643536.2	4164748.9	Worker	Scenario 2	1.70E-02	1.33E-04	--
5056	643636.2	4164748.9	Worker	Scenario 2	1.83E-02	1.38E-04	--
5057	643736.2	4164748.9	Worker	Scenario 2	1.92E-02	1.42E-04	--
5058	644036.2	4164748.9	Worker	Scenario 2	2.17E-02	1.50E-04	--
5059	644136.2	4164748.9	Worker	Scenario 2	2.26E-02	1.53E-04	--
5060	644236.2	4164748.9	Worker	Scenario 2	2.32E-02	1.55E-04	--
5061	644336.2	4164748.9	Worker	Scenario 2	2.39E-02	1.56E-04	--
5062	644436.2	4164748.9	Worker	Scenario 2	2.46E-02	1.58E-04	--
5063	644536.2	4164748.9	Worker	Scenario 2	2.53E-02	1.59E-04	--
5064	644736.2	4164748.9	Worker	Scenario 2	2.69E-02	1.60E-04	--
5065	644836.2	4164748.9	Worker	Scenario 2	2.75E-02	1.60E-04	--
5066	644936.2	4164748.9	Worker	Scenario 2	2.80E-02	1.59E-04	--
5067	645036.2	4164748.9	Worker	Scenario 2	2.80E-02	1.57E-04	--
5068	645136.2	4164748.9	Worker	Scenario 2	2.88E-02	1.57E-04	--
5069	645236.2	4164748.9	Worker	Scenario 2	2.90E-02	1.56E-04	--
5070	645336.2	4164748.9	Worker	Scenario 2	2.90E-02	1.54E-04	--
5071	645436.2	4164748.9	Worker	Scenario 2	2.93E-02	1.52E-04	--
5072	640136.2	4164848.9	Worker	Scenario 2	4.31E-03	4.43E-05	--
5073	640236.2	4164848.9	Worker	Scenario 2	4.86E-03	4.97E-05	--
5074	640336.2	4164848.9	Worker	Scenario 2	5.81E-03	5.72E-05	--
5075	640436.2	4164848.9	Worker	Scenario 2	4.80E-03	4.87E-05	--
5076	640536.2	4164848.9	Worker	Scenario 2	4.63E-03	4.67E-05	--
5077	640636.2	4164848.9	Worker	Scenario 2	4.82E-03	4.81E-05	--
5078	640736.2	4164848.9	Worker	Scenario 2	5.06E-03	4.99E-05	--
5079	640836.2	4164848.9	Worker	Scenario 2	5.09E-03	4.96E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5080	640936.2	4164848.9	Worker	Scenario 2	5.34E-03	5.14E-05	--
5081	641036.2	4164848.9	Worker	Scenario 2	5.25E-03	5.01E-05	--
5082	641136.2	4164848.9	Worker	Scenario 2	5.40E-03	5.08E-05	--
5083	641236.2	4164848.9	Worker	Scenario 2	5.59E-03	5.22E-05	--
5084	641336.2	4164848.9	Worker	Scenario 2	5.83E-03	5.40E-05	--
5085	641436.2	4164848.9	Worker	Scenario 2	5.90E-03	5.43E-05	--
5086	641536.2	4164848.9	Worker	Scenario 2	6.05E-03	5.60E-05	--
5087	641636.2	4164848.9	Worker	Scenario 2	6.23E-03	5.82E-05	--
5088	641736.2	4164848.9	Worker	Scenario 2	6.57E-03	6.17E-05	--
5089	641836.2	4164848.9	Worker	Scenario 2	6.84E-03	6.45E-05	--
5090	641936.2	4164848.9	Worker	Scenario 2	7.32E-03	6.94E-05	--
5091	642036.2	4164848.9	Worker	Scenario 2	8.69E-03	8.06E-05	--
5092	642136.2	4164848.9	Worker	Scenario 2	7.62E-03	7.26E-05	--
5093	642236.2	4164848.9	Worker	Scenario 2	7.83E-03	7.52E-05	--
5094	642336.2	4164848.9	Worker	Scenario 2	8.43E-03	8.21E-05	--
5095	642436.2	4164848.9	Worker	Scenario 2	8.20E-03	8.08E-05	--
5096	642536.2	4164848.9	Worker	Scenario 2	8.65E-03	8.68E-05	--
5097	642636.2	4164848.9	Worker	Scenario 2	9.29E-03	9.34E-05	--
5098	642736.2	4164848.9	Worker	Scenario 2	8.87E-03	9.07E-05	--
5099	642836.2	4164848.9	Worker	Scenario 2	9.22E-03	9.46E-05	--
5100	642936.2	4164848.9	Worker	Scenario 2	9.86E-03	1.01E-04	--
5101	643036.2	4164848.9	Worker	Scenario 2	1.06E-02	1.06E-04	--
5102	643136.2	4164848.9	Worker	Scenario 2	1.36E-02	1.22E-04	--
5103	643236.2	4164848.9	Worker	Scenario 2	1.41E-02	1.25E-04	--
5104	643336.2	4164848.9	Worker	Scenario 2	1.57E-02	1.31E-04	--
5105	643436.2	4164848.9	Worker	Scenario 2	1.69E-02	1.36E-04	--
5106	643536.2	4164848.9	Worker	Scenario 2	1.80E-02	1.41E-04	--
5107	643636.2	4164848.9	Worker	Scenario 2	1.94E-02	1.46E-04	--
5108	643936.2	4164848.9	Worker	Scenario 2	2.25E-02	1.57E-04	--
5109	644036.2	4164848.9	Worker	Scenario 2	2.34E-02	1.60E-04	--
5110	644136.2	4164848.9	Worker	Scenario 2	2.42E-02	1.62E-04	--
5111	644236.2	4164848.9	Worker	Scenario 2	2.49E-02	1.64E-04	--
5112	644336.2	4164848.9	Worker	Scenario 2	2.55E-02	1.65E-04	--
5113	644436.2	4164848.9	Worker	Scenario 2	2.63E-02	1.66E-04	--
5114	644536.2	4164848.9	Worker	Scenario 2	2.71E-02	1.67E-04	--
5115	644736.2	4164848.9	Worker	Scenario 2	2.88E-02	1.68E-04	--
5116	644836.2	4164848.9	Worker	Scenario 2	2.92E-02	1.66E-04	--
5117	644936.2	4164848.9	Worker	Scenario 2	2.97E-02	1.66E-04	--
5118	645036.2	4164848.9	Worker	Scenario 2	3.04E-02	1.66E-04	--
5119	645136.2	4164848.9	Worker	Scenario 2	3.06E-02	1.64E-04	--
5120	645236.2	4164848.9	Worker	Scenario 2	3.07E-02	1.62E-04	--
5121	645336.2	4164848.9	Worker	Scenario 2	3.05E-02	1.59E-04	--
5122	645436.2	4164848.9	Worker	Scenario 2	3.02E-02	1.56E-04	--
5123	645536.2	4164848.9	Worker	Scenario 2	3.01E-02	1.53E-04	--
5124	645636.2	4164848.9	Worker	Scenario 2	3.11E-02	1.53E-04	--
5125	645736.2	4164848.9	Worker	Scenario 2	3.07E-02	1.49E-04	--
5126	640036.2	4164948.9	Worker	Scenario 2	4.18E-03	4.33E-05	--
5127	640136.2	4164948.9	Worker	Scenario 2	4.51E-03	4.66E-05	--
5128	640236.2	4164948.9	Worker	Scenario 2	5.07E-03	5.19E-05	--
5129	640336.2	4164948.9	Worker	Scenario 2	6.07E-03	5.96E-05	--
5130	640436.2	4164948.9	Worker	Scenario 2	5.26E-03	5.35E-05	--
5131	640536.2	4164948.9	Worker	Scenario 2	4.76E-03	4.83E-05	--
5132	640636.2	4164948.9	Worker	Scenario 2	4.87E-03	4.91E-05	--
5133	640736.2	4164948.9	Worker	Scenario 2	5.05E-03	5.03E-05	--
5134	640836.2	4164948.9	Worker	Scenario 2	5.38E-03	5.29E-05	--
5135	640936.2	4164948.9	Worker	Scenario 2	5.63E-03	5.44E-05	--
5136	641036.2	4164948.9	Worker	Scenario 2	5.43E-03	5.21E-05	--
5137	641136.2	4164948.9	Worker	Scenario 2	5.56E-03	5.27E-05	--
5138	641236.2	4164948.9	Worker	Scenario 2	5.82E-03	5.46E-05	--
5139	641336.2	4164948.9	Worker	Scenario 2	6.03E-03	5.62E-05	--
5140	641436.2	4164948.9	Worker	Scenario 2	6.19E-03	5.73E-05	--
5141	641536.2	4164948.9	Worker	Scenario 2	6.28E-03	5.87E-05	--
5142	641636.2	4164948.9	Worker	Scenario 2	6.46E-03	6.08E-05	--
5143	641736.2	4164948.9	Worker	Scenario 2	6.78E-03	6.43E-05	--
5144	641836.2	4164948.9	Worker	Scenario 2	7.42E-03	7.08E-05	--
5145	641936.2	4164948.9	Worker	Scenario 2	7.49E-03	7.16E-05	--
5146	642036.2	4164948.9	Worker	Scenario 2	9.09E-03	8.50E-05	--
5147	642136.2	4164948.9	Worker	Scenario 2	8.02E-03	7.72E-05	--
5148	642236.2	4164948.9	Worker	Scenario 2	8.16E-03	7.91E-05	--
5149	642336.2	4164948.9	Worker	Scenario 2	8.71E-03	8.54E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5150	642436.2	4164948.9	Worker	Scenario 2	9.21E-03	9.13E-05	--
5151	642536.2	4164948.9	Worker	Scenario 2	9.28E-03	9.36E-05	--
5152	642636.2	4164948.9	Worker	Scenario 2	1.02E-02	1.02E-04	--
5153	642736.2	4164948.9	Worker	Scenario 2	9.71E-03	9.97E-05	--
5154	642836.2	4164948.9	Worker	Scenario 2	9.76E-03	1.01E-04	--
5155	642936.2	4164948.9	Worker	Scenario 2	1.04E-02	1.07E-04	--
5156	643036.2	4164948.9	Worker	Scenario 2	1.12E-02	1.12E-04	--
5157	643136.2	4164948.9	Worker	Scenario 2	1.43E-02	1.29E-04	--
5158	643236.2	4164948.9	Worker	Scenario 2	1.54E-02	1.34E-04	--
5159	643336.2	4164948.9	Worker	Scenario 2	1.71E-02	1.41E-04	--
5160	643436.2	4164948.9	Worker	Scenario 2	1.83E-02	1.46E-04	--
5161	643536.2	4164948.9	Worker	Scenario 2	1.95E-02	1.51E-04	--
5162	643736.2	4164948.9	Worker	Scenario 2	2.18E-02	1.59E-04	--
5163	643836.2	4164948.9	Worker	Scenario 2	2.33E-02	1.64E-04	--
5164	643936.2	4164948.9	Worker	Scenario 2	2.44E-02	1.68E-04	--
5165	644036.2	4164948.9	Worker	Scenario 2	2.53E-02	1.71E-04	--
5166	644136.2	4164948.9	Worker	Scenario 2	2.59E-02	1.72E-04	--
5167	644236.2	4164948.9	Worker	Scenario 2	2.67E-02	1.73E-04	--
5168	644336.2	4164948.9	Worker	Scenario 2	2.75E-02	1.74E-04	--
5169	644436.2	4164948.9	Worker	Scenario 2	2.84E-02	1.75E-04	--
5170	644536.2	4164948.9	Worker	Scenario 2	2.94E-02	1.76E-04	--
5171	644736.2	4164948.9	Worker	Scenario 2	3.10E-02	1.76E-04	--
5172	644836.2	4164948.9	Worker	Scenario 2	3.16E-02	1.76E-04	--
5173	644936.2	4164948.9	Worker	Scenario 2	3.11E-02	1.71E-04	--
5174	645036.2	4164948.9	Worker	Scenario 2	3.23E-02	1.73E-04	--
5175	645136.2	4164948.9	Worker	Scenario 2	3.24E-02	1.71E-04	--
5176	645236.2	4164948.9	Worker	Scenario 2	3.22E-02	1.67E-04	--
5177	645336.2	4164948.9	Worker	Scenario 2	3.21E-02	1.65E-04	--
5178	645436.2	4164948.9	Worker	Scenario 2	3.18E-02	1.61E-04	--
5179	645536.2	4164948.9	Worker	Scenario 2	3.30E-02	1.61E-04	--
5180	645636.2	4164948.9	Worker	Scenario 2	3.25E-02	1.57E-04	--
5181	645736.2	4164948.9	Worker	Scenario 2	3.20E-02	1.53E-04	--
5182	645836.2	4164948.9	Worker	Scenario 2	3.16E-02	1.50E-04	--
5183	639836.2	4165048.9	Worker	Scenario 2	4.24E-03	4.37E-05	--
5184	639936.2	4165048.9	Worker	Scenario 2	4.18E-03	4.34E-05	--
5185	640036.2	4165048.9	Worker	Scenario 2	4.35E-03	4.52E-05	--
5186	640136.2	4165048.9	Worker	Scenario 2	4.49E-03	4.66E-05	--
5187	640236.2	4165048.9	Worker	Scenario 2	4.87E-03	5.04E-05	--
5188	640336.2	4165048.9	Worker	Scenario 2	5.86E-03	5.88E-05	--
5189	640436.2	4165048.9	Worker	Scenario 2	6.30E-03	6.21E-05	--
5190	640536.2	4165048.9	Worker	Scenario 2	4.94E-03	5.05E-05	--
5191	640636.2	4165048.9	Worker	Scenario 2	5.05E-03	5.13E-05	--
5192	640736.2	4165048.9	Worker	Scenario 2	5.12E-03	5.17E-05	--
5193	640836.2	4165048.9	Worker	Scenario 2	5.34E-03	5.31E-05	--
5194	640936.2	4165048.9	Worker	Scenario 2	5.88E-03	5.74E-05	--
5195	641036.2	4165048.9	Worker	Scenario 2	5.58E-03	5.41E-05	--
5196	641136.2	4165048.9	Worker	Scenario 2	5.73E-03	5.48E-05	--
5197	641236.2	4165048.9	Worker	Scenario 2	6.05E-03	5.71E-05	--
5198	641336.2	4165048.9	Worker	Scenario 2	6.15E-03	5.76E-05	--
5199	641436.2	4165048.9	Worker	Scenario 2	6.75E-03	6.28E-05	--
5200	641536.2	4165048.9	Worker	Scenario 2	6.76E-03	6.35E-05	--
5201	641636.2	4165048.9	Worker	Scenario 2	6.78E-03	6.44E-05	--
5202	641736.2	4165048.9	Worker	Scenario 2	7.00E-03	6.71E-05	--
5203	641836.2	4165048.9	Worker	Scenario 2	7.38E-03	7.12E-05	--
5204	641936.2	4165048.9	Worker	Scenario 2	8.50E-03	8.21E-05	--
5205	642036.2	4165048.9	Worker	Scenario 2	8.77E-03	8.48E-05	--
5206	642136.2	4165048.9	Worker	Scenario 2	9.13E-03	8.82E-05	--
5207	642236.2	4165048.9	Worker	Scenario 2	8.63E-03	8.45E-05	--
5208	642336.2	4165048.9	Worker	Scenario 2	8.96E-03	8.88E-05	--
5209	642436.2	4165048.9	Worker	Scenario 2	9.43E-03	9.45E-05	--
5210	642536.2	4165048.9	Worker	Scenario 2	1.12E-02	1.09E-04	--
5211	642636.2	4165048.9	Worker	Scenario 2	1.21E-02	1.16E-04	--
5212	642736.2	4165048.9	Worker	Scenario 2	1.10E-02	1.12E-04	--
5213	642836.2	4165048.9	Worker	Scenario 2	1.05E-02	1.09E-04	--
5214	642936.2	4165048.9	Worker	Scenario 2	1.12E-02	1.15E-04	--
5215	643036.2	4165048.9	Worker	Scenario 2	1.33E-02	1.28E-04	--
5216	643136.2	4165048.9	Worker	Scenario 2	1.51E-02	1.37E-04	--
5217	643236.2	4165048.9	Worker	Scenario 2	1.80E-02	1.49E-04	--
5218	643336.2	4165048.9	Worker	Scenario 2	1.88E-02	1.52E-04	--
5219	643436.2	4165048.9	Worker	Scenario 2	2.02E-02	1.58E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5220	643636.2	4165048.9	Worker	Scenario 2	2.25E-02	1.66E-04	--
5221	643736.2	4165048.9	Worker	Scenario 2	2.39E-02	1.71E-04	--
5222	643836.2	4165048.9	Worker	Scenario 2	2.55E-02	1.76E-04	--
5223	643936.2	4165048.9	Worker	Scenario 2	2.65E-02	1.79E-04	--
5224	644036.2	4165048.9	Worker	Scenario 2	2.72E-02	1.81E-04	--
5225	644136.2	4165048.9	Worker	Scenario 2	2.79E-02	1.82E-04	--
5226	644236.2	4165048.9	Worker	Scenario 2	2.87E-02	1.83E-04	--
5227	644336.2	4165048.9	Worker	Scenario 2	2.97E-02	1.84E-04	--
5228	644436.2	4165048.9	Worker	Scenario 2	3.07E-02	1.85E-04	--
5229	644536.2	4165048.9	Worker	Scenario 2	3.17E-02	1.86E-04	--
5230	644736.2	4165048.9	Worker	Scenario 2	3.34E-02	1.86E-04	--
5231	644836.2	4165048.9	Worker	Scenario 2	3.40E-02	1.85E-04	--
5232	644936.2	4165048.9	Worker	Scenario 2	3.44E-02	1.83E-04	--
5233	645036.2	4165048.9	Worker	Scenario 2	3.45E-02	1.81E-04	--
5234	645136.2	4165048.9	Worker	Scenario 2	3.44E-02	1.77E-04	--
5235	645236.2	4165048.9	Worker	Scenario 2	3.40E-02	1.74E-04	--
5236	645336.2	4165048.9	Worker	Scenario 2	3.54E-02	1.74E-04	--
5237	645436.2	4165048.9	Worker	Scenario 2	3.50E-02	1.70E-04	--
5238	645536.2	4165048.9	Worker	Scenario 2	3.45E-02	1.66E-04	--
5239	645636.2	4165048.9	Worker	Scenario 2	3.40E-02	1.62E-04	--
5240	645736.2	4165048.9	Worker	Scenario 2	3.34E-02	1.58E-04	--
5241	646036.2	4165048.9	Worker	Scenario 2	3.11E-02	1.45E-04	--
5242	639736.2	4165148.9	Worker	Scenario 2	4.22E-03	4.33E-05	--
5243	639836.2	4165148.9	Worker	Scenario 2	4.39E-03	4.51E-05	--
5244	639936.2	4165148.9	Worker	Scenario 2	4.30E-03	4.46E-05	--
5245	640036.2	4165148.9	Worker	Scenario 2	4.41E-03	4.57E-05	--
5246	640136.2	4165148.9	Worker	Scenario 2	4.61E-03	4.79E-05	--
5247	640236.2	4165148.9	Worker	Scenario 2	4.78E-03	4.97E-05	--
5248	640336.2	4165148.9	Worker	Scenario 2	5.59E-03	5.73E-05	--
5249	640436.2	4165148.9	Worker	Scenario 2	6.90E-03	6.67E-05	--
5250	640536.2	4165148.9	Worker	Scenario 2	5.24E-03	5.41E-05	--
5251	640636.2	4165148.9	Worker	Scenario 2	5.27E-03	5.40E-05	--
5252	640736.2	4165148.9	Worker	Scenario 2	5.27E-03	5.36E-05	--
5253	640836.2	4165148.9	Worker	Scenario 2	5.47E-03	5.50E-05	--
5254	640936.2	4165148.9	Worker	Scenario 2	6.09E-03	6.02E-05	--
5255	641036.2	4165148.9	Worker	Scenario 2	5.76E-03	5.64E-05	--
5256	641136.2	4165148.9	Worker	Scenario 2	5.93E-03	5.72E-05	--
5257	641236.2	4165148.9	Worker	Scenario 2	6.15E-03	5.85E-05	--
5258	641336.2	4165148.9	Worker	Scenario 2	6.55E-03	6.20E-05	--
5259	641436.2	4165148.9	Worker	Scenario 2	6.73E-03	6.34E-05	--
5260	641536.2	4165148.9	Worker	Scenario 2	7.07E-03	6.71E-05	--
5261	641636.2	4165148.9	Worker	Scenario 2	7.13E-03	6.83E-05	--
5262	641736.2	4165148.9	Worker	Scenario 2	7.38E-03	7.13E-05	--
5263	641836.2	4165148.9	Worker	Scenario 2	7.65E-03	7.46E-05	--
5264	641936.2	4165148.9	Worker	Scenario 2	8.17E-03	8.03E-05	--
5265	642036.2	4165148.9	Worker	Scenario 2	9.45E-03	9.20E-05	--
5266	642136.2	4165148.9	Worker	Scenario 2	1.09E-02	1.02E-04	--
5267	642236.2	4165148.9	Worker	Scenario 2	9.28E-03	9.18E-05	--
5268	642336.2	4165148.9	Worker	Scenario 2	9.57E-03	9.55E-05	--
5269	642436.2	4165148.9	Worker	Scenario 2	9.93E-03	1.00E-04	--
5270	642536.2	4165148.9	Worker	Scenario 2	1.02E-02	1.04E-04	--
5271	642636.2	4165148.9	Worker	Scenario 2	1.16E-02	1.17E-04	--
5272	642736.2	4165148.9	Worker	Scenario 2	1.29E-02	1.26E-04	--
5273	642836.2	4165148.9	Worker	Scenario 2	1.13E-02	1.18E-04	--
5274	642936.2	4165148.9	Worker	Scenario 2	1.21E-02	1.24E-04	--
5275	643036.2	4165148.9	Worker	Scenario 2	1.48E-02	1.40E-04	--
5276	643136.2	4165148.9	Worker	Scenario 2	1.69E-02	1.50E-04	--
5277	643236.2	4165148.9	Worker	Scenario 2	1.87E-02	1.57E-04	--
5278	643336.2	4165148.9	Worker	Scenario 2	2.11E-02	1.66E-04	--
5279	643536.2	4165148.9	Worker	Scenario 2	2.37E-02	1.76E-04	--
5280	643636.2	4165148.9	Worker	Scenario 2	2.54E-02	1.81E-04	--
5281	643736.2	4165148.9	Worker	Scenario 2	2.70E-02	1.87E-04	--
5282	643836.2	4165148.9	Worker	Scenario 2	2.79E-02	1.90E-04	--
5283	643936.2	4165148.9	Worker	Scenario 2	2.87E-02	1.91E-04	--
5284	644036.2	4165148.9	Worker	Scenario 2	2.94E-02	1.93E-04	--
5285	644136.2	4165148.9	Worker	Scenario 2	3.03E-02	1.94E-04	--
5286	644236.2	4165148.9	Worker	Scenario 2	3.12E-02	1.95E-04	--
5287	644336.2	4165148.9	Worker	Scenario 2	3.23E-02	1.96E-04	--
5288	644436.2	4165148.9	Worker	Scenario 2	3.34E-02	1.96E-04	--
5289	644536.2	4165148.9	Worker	Scenario 2	3.43E-02	1.96E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5290	644736.2	4165148.9	Worker	Scenario 2	3.59E-02	1.95E-04	--
5291	644836.2	4165148.9	Worker	Scenario 2	3.64E-02	1.93E-04	--
5292	644936.2	4165148.9	Worker	Scenario 2	3.68E-02	1.91E-04	--
5293	645036.2	4165148.9	Worker	Scenario 2	3.67E-02	1.88E-04	--
5294	645136.2	4165148.9	Worker	Scenario 2	3.63E-02	1.84E-04	--
5295	645236.2	4165148.9	Worker	Scenario 2	3.60E-02	1.80E-04	--
5296	645336.2	4165148.9	Worker	Scenario 2	3.71E-02	1.79E-04	--
5297	645436.2	4165148.9	Worker	Scenario 2	3.66E-02	1.75E-04	--
5298	645536.2	4165148.9	Worker	Scenario 2	3.61E-02	1.71E-04	--
5299	645636.2	4165148.9	Worker	Scenario 2	3.56E-02	1.67E-04	--
5300	645736.2	4165148.9	Worker	Scenario 2	3.37E-02	1.60E-04	--
5301	645936.2	4165148.9	Worker	Scenario 2	3.30E-02	1.53E-04	--
5302	646036.2	4165148.9	Worker	Scenario 2	3.27E-02	1.50E-04	--
5303	646136.2	4165148.9	Worker	Scenario 2	3.25E-02	1.47E-04	--
5304	639636.2	4165248.9	Worker	Scenario 2	4.15E-03	4.22E-05	--
5305	639736.2	4165248.9	Worker	Scenario 2	4.26E-03	4.37E-05	--
5306	639836.2	4165248.9	Worker	Scenario 2	4.40E-03	4.53E-05	--
5307	639936.2	4165248.9	Worker	Scenario 2	4.56E-03	4.70E-05	--
5308	640036.2	4165248.9	Worker	Scenario 2	4.54E-03	4.71E-05	--
5309	640136.2	4165248.9	Worker	Scenario 2	4.72E-03	4.92E-05	--
5310	640236.2	4165248.9	Worker	Scenario 2	5.07E-03	5.27E-05	--
5311	640336.2	4165248.9	Worker	Scenario 2	5.72E-03	5.88E-05	--
5312	640436.2	4165248.9	Worker	Scenario 2	7.12E-03	6.89E-05	--
5313	640536.2	4165248.9	Worker	Scenario 2	6.61E-03	6.62E-05	--
5314	640636.2	4165248.9	Worker	Scenario 2	5.32E-03	5.50E-05	--
5315	640736.2	4165248.9	Worker	Scenario 2	5.41E-03	5.56E-05	--
5316	640836.2	4165248.9	Worker	Scenario 2	5.64E-03	5.74E-05	--
5317	640936.2	4165248.9	Worker	Scenario 2	6.36E-03	6.35E-05	--
5318	641036.2	4165248.9	Worker	Scenario 2	6.05E-03	5.99E-05	--
5319	641136.2	4165248.9	Worker	Scenario 2	6.12E-03	5.97E-05	--
5320	641236.2	4165248.9	Worker	Scenario 2	6.53E-03	6.29E-05	--
5321	641336.2	4165248.9	Worker	Scenario 2	6.99E-03	6.67E-05	--
5322	641436.2	4165248.9	Worker	Scenario 2	6.94E-03	6.58E-05	--
5323	641536.2	4165248.9	Worker	Scenario 2	7.57E-03	7.24E-05	--
5324	641636.2	4165248.9	Worker	Scenario 2	7.46E-03	7.23E-05	--
5325	641736.2	4165248.9	Worker	Scenario 2	7.79E-03	7.62E-05	--
5326	641836.2	4165248.9	Worker	Scenario 2	8.07E-03	7.97E-05	--
5327	641936.2	4165248.9	Worker	Scenario 2	8.45E-03	8.40E-05	--
5328	642036.2	4165248.9	Worker	Scenario 2	9.40E-03	9.40E-05	--
5329	642136.2	4165248.9	Worker	Scenario 2	1.17E-02	1.10E-04	--
5330	642236.2	4165248.9	Worker	Scenario 2	1.07E-02	1.07E-04	--
5331	642336.2	4165248.9	Worker	Scenario 2	1.08E-02	1.09E-04	--
5332	642436.2	4165248.9	Worker	Scenario 2	1.06E-02	1.08E-04	--
5333	642536.2	4165248.9	Worker	Scenario 2	1.13E-02	1.16E-04	--
5334	642636.2	4165248.9	Worker	Scenario 2	1.16E-02	1.20E-04	--
5335	642736.2	4165248.9	Worker	Scenario 2	1.67E-02	1.49E-04	--
5336	642836.2	4165248.9	Worker	Scenario 2	1.24E-02	1.28E-04	--
5337	642936.2	4165248.9	Worker	Scenario 2	1.36E-02	1.38E-04	--
5338	643036.2	4165248.9	Worker	Scenario 2	1.67E-02	1.54E-04	--
5339	643136.2	4165248.9	Worker	Scenario 2	1.86E-02	1.63E-04	--
5340	643436.2	4165248.9	Worker	Scenario 2	2.53E-02	1.88E-04	--
5341	643536.2	4165248.9	Worker	Scenario 2	2.71E-02	1.94E-04	--
5342	643636.2	4165248.9	Worker	Scenario 2	2.85E-02	1.98E-04	--
5343	643736.2	4165248.9	Worker	Scenario 2	2.94E-02	2.01E-04	--
5344	643836.2	4165248.9	Worker	Scenario 2	3.03E-02	2.03E-04	--
5345	643936.2	4165248.9	Worker	Scenario 2	3.11E-02	2.05E-04	--
5346	644036.2	4165248.9	Worker	Scenario 2	3.20E-02	2.06E-04	--
5347	644136.2	4165248.9	Worker	Scenario 2	3.29E-02	2.07E-04	--
5348	644236.2	4165248.9	Worker	Scenario 2	3.41E-02	2.07E-04	--
5349	644336.2	4165248.9	Worker	Scenario 2	3.53E-02	2.08E-04	--
5350	644436.2	4165248.9	Worker	Scenario 2	3.64E-02	2.08E-04	--
5351	644536.2	4165248.9	Worker	Scenario 2	3.74E-02	2.08E-04	--
5352	644736.2	4165248.9	Worker	Scenario 2	3.88E-02	2.05E-04	--
5353	644836.2	4165248.9	Worker	Scenario 2	3.91E-02	2.03E-04	--
5354	644936.2	4165248.9	Worker	Scenario 2	3.93E-02	2.00E-04	--
5355	645036.2	4165248.9	Worker	Scenario 2	3.90E-02	1.96E-04	--
5356	645136.2	4165248.9	Worker	Scenario 2	3.85E-02	1.91E-04	--
5357	645236.2	4165248.9	Worker	Scenario 2	3.80E-02	1.86E-04	--
5358	645336.2	4165248.9	Worker	Scenario 2	3.75E-02	1.82E-04	--
5359	645436.2	4165248.9	Worker	Scenario 2	3.68E-02	1.77E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5360	645536.2	4165248.9	Worker	Scenario 2	3.61E-02	1.72E-04	--
5361	645636.2	4165248.9	Worker	Scenario 2	3.55E-02	1.68E-04	--
5362	645936.2	4165248.9	Worker	Scenario 2	3.48E-02	1.58E-04	--
5363	646036.2	4165248.9	Worker	Scenario 2	3.45E-02	1.55E-04	--
5364	646136.2	4165248.9	Worker	Scenario 2	3.44E-02	1.53E-04	--
5365	639536.2	4165348.9	Worker	Scenario 2	4.16E-03	4.20E-05	--
5366	639636.2	4165348.9	Worker	Scenario 2	4.35E-03	4.39E-05	--
5367	639736.2	4165348.9	Worker	Scenario 2	4.34E-03	4.43E-05	--
5368	639836.2	4165348.9	Worker	Scenario 2	4.52E-03	4.63E-05	--
5369	639936.2	4165348.9	Worker	Scenario 2	4.81E-03	4.95E-05	--
5370	640036.2	4165348.9	Worker	Scenario 2	4.65E-03	4.83E-05	--
5371	640136.2	4165348.9	Worker	Scenario 2	4.81E-03	5.01E-05	--
5372	640236.2	4165348.9	Worker	Scenario 2	5.03E-03	5.25E-05	--
5373	640336.2	4165348.9	Worker	Scenario 2	5.35E-03	5.59E-05	--
5374	640436.2	4165348.9	Worker	Scenario 2	6.83E-03	6.80E-05	--
5375	640536.2	4165348.9	Worker	Scenario 2	8.00E-03	7.57E-05	--
5376	640636.2	4165348.9	Worker	Scenario 2	5.83E-03	6.07E-05	--
5377	640736.2	4165348.9	Worker	Scenario 2	5.62E-03	5.83E-05	--
5378	640836.2	4165348.9	Worker	Scenario 2	5.93E-03	6.10E-05	--
5379	640936.2	4165348.9	Worker	Scenario 2	6.67E-03	6.72E-05	--
5380	641036.2	4165348.9	Worker	Scenario 2	6.12E-03	6.15E-05	--
5381	641136.2	4165348.9	Worker	Scenario 2	6.29E-03	6.23E-05	--
5382	641236.2	4165348.9	Worker	Scenario 2	6.61E-03	6.46E-05	--
5383	641336.2	4165348.9	Worker	Scenario 2	7.18E-03	6.93E-05	--
5384	641436.2	4165348.9	Worker	Scenario 2	7.85E-03	7.49E-05	--
5385	641536.2	4165348.9	Worker	Scenario 2	8.14E-03	7.88E-05	--
5386	641636.2	4165348.9	Worker	Scenario 2	7.91E-03	7.77E-05	--
5387	641736.2	4165348.9	Worker	Scenario 2	8.25E-03	8.18E-05	--
5388	641836.2	4165348.9	Worker	Scenario 2	8.59E-03	8.61E-05	--
5389	641936.2	4165348.9	Worker	Scenario 2	8.96E-03	9.05E-05	--
5390	642036.2	4165348.9	Worker	Scenario 2	9.56E-03	9.72E-05	--
5391	642136.2	4165348.9	Worker	Scenario 2	1.05E-02	1.07E-04	--
5392	642236.2	4165348.9	Worker	Scenario 2	1.46E-02	1.32E-04	--
5393	642336.2	4165348.9	Worker	Scenario 2	1.19E-02	1.20E-04	--
5394	642436.2	4165348.9	Worker	Scenario 2	1.17E-02	1.19E-04	--
5395	642536.2	4165348.9	Worker	Scenario 2	1.27E-02	1.30E-04	--
5396	642636.2	4165348.9	Worker	Scenario 2	1.27E-02	1.31E-04	--
5397	642736.2	4165348.9	Worker	Scenario 2	1.45E-02	1.45E-04	--
5398	642836.2	4165348.9	Worker	Scenario 2	1.65E-02	1.57E-04	--
5399	642936.2	4165348.9	Worker	Scenario 2	1.53E-02	1.52E-04	--
5400	643036.2	4165348.9	Worker	Scenario 2	1.88E-02	1.69E-04	--
5401	643236.2	4165348.9	Worker	Scenario 2	2.53E-02	1.95E-04	--
5402	643336.2	4165348.9	Worker	Scenario 2	2.72E-02	2.02E-04	--
5403	643436.2	4165348.9	Worker	Scenario 2	2.83E-02	2.06E-04	--
5404	643536.2	4165348.9	Worker	Scenario 2	2.98E-02	2.10E-04	--
5405	643636.2	4165348.9	Worker	Scenario 2	3.11E-02	2.14E-04	--
5406	643736.2	4165348.9	Worker	Scenario 2	3.21E-02	2.16E-04	--
5407	643836.2	4165348.9	Worker	Scenario 2	3.30E-02	2.18E-04	--
5408	643936.2	4165348.9	Worker	Scenario 2	3.39E-02	2.19E-04	--
5409	644036.2	4165348.9	Worker	Scenario 2	3.49E-02	2.20E-04	--
5410	644136.2	4165348.9	Worker	Scenario 2	3.60E-02	2.20E-04	--
5411	644236.2	4165348.9	Worker	Scenario 2	3.73E-02	2.21E-04	--
5412	644336.2	4165348.9	Worker	Scenario 2	3.86E-02	2.22E-04	--
5413	644436.2	4165348.9	Worker	Scenario 2	3.98E-02	2.21E-04	--
5414	644536.2	4165348.9	Worker	Scenario 2	4.08E-02	2.20E-04	--
5415	644736.2	4165348.9	Worker	Scenario 2	4.19E-02	2.16E-04	--
5416	644836.2	4165348.9	Worker	Scenario 2	4.20E-02	2.13E-04	--
5417	644936.2	4165348.9	Worker	Scenario 2	4.18E-02	2.08E-04	--
5418	645036.2	4165348.9	Worker	Scenario 2	4.15E-02	2.04E-04	--
5419	645136.2	4165348.9	Worker	Scenario 2	4.08E-02	1.98E-04	--
5420	645236.2	4165348.9	Worker	Scenario 2	4.02E-02	1.93E-04	--
5421	645336.2	4165348.9	Worker	Scenario 2	3.94E-02	1.88E-04	--
5422	645436.2	4165348.9	Worker	Scenario 2	3.89E-02	1.83E-04	--
5423	645536.2	4165348.9	Worker	Scenario 2	3.83E-02	1.78E-04	--
5424	645636.2	4165348.9	Worker	Scenario 2	3.78E-02	1.74E-04	--
5425	639436.2	4165448.9	Worker	Scenario 2	4.17E-03	4.17E-05	--
5426	639536.2	4165448.9	Worker	Scenario 2	4.36E-03	4.38E-05	--
5427	639636.2	4165448.9	Worker	Scenario 2	4.52E-03	4.54E-05	--
5428	639736.2	4165448.9	Worker	Scenario 2	4.47E-03	4.55E-05	--
5429	639836.2	4165448.9	Worker	Scenario 2	4.59E-03	4.69E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million) Receptor Risk	Chronic Hazard Index Receptor Risk	Acute Hazard Index Receptor Risk
5430	639936.2	4165448.9	Worker	Scenario 2	4.94E-03	5.06E-05	--
5431	640036.2	4165448.9	Worker	Scenario 2	4.87E-03	5.03E-05	--
5432	640136.2	4165448.9	Worker	Scenario 2	4.92E-03	5.12E-05	--
5433	640236.2	4165448.9	Worker	Scenario 2	5.17E-03	5.39E-05	--
5434	640336.2	4165448.9	Worker	Scenario 2	5.40E-03	5.66E-05	--
5435	640436.2	4165448.9	Worker	Scenario 2	6.44E-03	6.60E-05	--
5436	640536.2	4165448.9	Worker	Scenario 2	8.46E-03	7.96E-05	--
5437	640636.2	4165448.9	Worker	Scenario 2	6.76E-03	6.95E-05	--
5438	640736.2	4165448.9	Worker	Scenario 2	5.80E-03	6.06E-05	--
5439	640836.2	4165448.9	Worker	Scenario 2	6.17E-03	6.41E-05	--
5440	640936.2	4165448.9	Worker	Scenario 2	6.59E-03	6.77E-05	--
5441	641036.2	4165448.9	Worker	Scenario 2	6.34E-03	6.45E-05	--
5442	641136.2	4165448.9	Worker	Scenario 2	6.51E-03	6.55E-05	--
5443	641236.2	4165448.9	Worker	Scenario 2	6.78E-03	6.71E-05	--
5444	641336.2	4165448.9	Worker	Scenario 2	7.09E-03	6.94E-05	--
5445	641436.2	4165448.9	Worker	Scenario 2	7.63E-03	7.45E-05	--
5446	641536.2	4165448.9	Worker	Scenario 2	9.36E-03	9.00E-05	--
5447	641636.2	4165448.9	Worker	Scenario 2	9.02E-03	9.00E-05	--
5448	641736.2	4165448.9	Worker	Scenario 2	8.67E-03	8.73E-05	--
5449	641836.2	4165448.9	Worker	Scenario 2	9.31E-03	9.53E-05	--
5450	641936.2	4165448.9	Worker	Scenario 2	9.69E-03	9.99E-05	--
5451	642036.2	4165448.9	Worker	Scenario 2	1.04E-02	1.08E-04	--
5452	642136.2	4165448.9	Worker	Scenario 2	1.08E-02	1.12E-04	--
5453	642236.2	4165448.9	Worker	Scenario 2	1.33E-02	1.32E-04	--
5454	642336.2	4165448.9	Worker	Scenario 2	1.57E-02	1.47E-04	--
5455	642436.2	4165448.9	Worker	Scenario 2	1.33E-02	1.36E-04	--
5456	642536.2	4165448.9	Worker	Scenario 2	1.38E-02	1.41E-04	--
5457	642636.2	4165448.9	Worker	Scenario 2	1.61E-02	1.56E-04	--
5458	642736.2	4165448.9	Worker	Scenario 2	1.48E-02	1.51E-04	--
5459	642836.2	4165448.9	Worker	Scenario 2	2.09E-02	1.82E-04	--
5460	642936.2	4165448.9	Worker	Scenario 2	2.13E-02	1.86E-04	--
5461	643136.2	4165448.9	Worker	Scenario 2	2.57E-02	2.06E-04	--
5462	643236.2	4165448.9	Worker	Scenario 2	2.79E-02	2.13E-04	--
5463	643336.2	4165448.9	Worker	Scenario 2	3.00E-02	2.20E-04	--
5464	643436.2	4165448.9	Worker	Scenario 2	3.11E-02	2.23E-04	--
5465	643536.2	4165448.9	Worker	Scenario 2	3.27E-02	2.27E-04	--
5466	643636.2	4165448.9	Worker	Scenario 2	3.40E-02	2.30E-04	--
5467	643736.2	4165448.9	Worker	Scenario 2	3.50E-02	2.33E-04	--
5468	643836.2	4165448.9	Worker	Scenario 2	3.60E-02	2.34E-04	--
5469	643936.2	4165448.9	Worker	Scenario 2	3.71E-02	2.35E-04	--
5470	644036.2	4165448.9	Worker	Scenario 2	3.83E-02	2.35E-04	--
5471	644136.2	4165448.9	Worker	Scenario 2	3.97E-02	2.36E-04	--
5472	644236.2	4165448.9	Worker	Scenario 2	4.10E-02	2.36E-04	--
5473	644336.2	4165448.9	Worker	Scenario 2	4.25E-02	2.36E-04	--
5474	644436.2	4165448.9	Worker	Scenario 2	4.71E-02	2.44E-04	--
5475	644536.2	4165448.9	Worker	Scenario 2	4.80E-02	2.43E-04	--
5476	644636.2	4165448.9	Worker	Scenario 2	4.51E-02	2.31E-04	--
5477	644736.2	4165448.9	Worker	Scenario 2	4.66E-02	2.31E-04	--
5478	644836.2	4165448.9	Worker	Scenario 2	4.44E-02	2.21E-04	--
5479	644936.2	4165448.9	Worker	Scenario 2	4.37E-02	2.14E-04	--
5480	645036.2	4165448.9	Worker	Scenario 2	4.39E-02	2.12E-04	--
5481	645136.2	4165448.9	Worker	Scenario 2	4.44E-02	2.09E-04	--
5482	645236.2	4165448.9	Worker	Scenario 2	4.48E-02	2.06E-04	--
5483	645336.2	4165448.9	Worker	Scenario 2	4.59E-02	2.05E-04	--
5484	645436.2	4165448.9	Worker	Scenario 2	4.48E-02	1.99E-04	--
5485	645536.2	4165448.9	Worker	Scenario 2	4.29E-02	1.90E-04	--
5486	645636.2	4165448.9	Worker	Scenario 2	4.21E-02	1.85E-04	--
5487	645936.2	4165448.9	Worker	Scenario 2	3.93E-02	1.71E-04	--
5488	646036.2	4165448.9	Worker	Scenario 2	3.92E-02	1.69E-04	--
5489	646136.2	4165448.9	Worker	Scenario 2	3.89E-02	1.66E-04	--
5490	646336.2	4165448.9	Worker	Scenario 2	3.86E-02	1.62E-04	--
5491	646436.2	4165448.9	Worker	Scenario 2	3.85E-02	1.60E-04	--
5492	639436.2	4165548.9	Worker	Scenario 2	4.36E-03	4.34E-05	--
5493	639536.2	4165548.9	Worker	Scenario 2	4.44E-03	4.44E-05	--
5494	639636.2	4165548.9	Worker	Scenario 2	4.72E-03	4.72E-05	--
5495	639736.2	4165548.9	Worker	Scenario 2	4.69E-03	4.74E-05	--
5496	639836.2	4165548.9	Worker	Scenario 2	4.84E-03	4.92E-05	--
5497	639936.2	4165548.9	Worker	Scenario 2	5.14E-03	5.24E-05	--
5498	640036.2	4165548.9	Worker	Scenario 2	5.06E-03	5.20E-05	--
5499	640136.2	4165548.9	Worker	Scenario 2	5.06E-03	5.25E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5500	640236.2	4165548.9	Worker	Scenario 2	5.24E-03	5.47E-05	--
5501	640336.2	4165548.9	Worker	Scenario 2	5.60E-03	5.87E-05	--
5502	640436.2	4165548.9	Worker	Scenario 2	5.85E-03	6.14E-05	--
5503	640536.2	4165548.9	Worker	Scenario 2	8.51E-03	8.12E-05	--
5504	640636.2	4165548.9	Worker	Scenario 2	7.48E-03	7.58E-05	--
5505	640736.2	4165548.9	Worker	Scenario 2	6.23E-03	6.57E-05	--
5506	640836.2	4165548.9	Worker	Scenario 2	6.51E-03	6.83E-05	--
5507	640936.2	4165548.9	Worker	Scenario 2	6.81E-03	7.09E-05	--
5508	641036.2	4165548.9	Worker	Scenario 2	6.60E-03	6.81E-05	--
5509	641136.2	4165548.9	Worker	Scenario 2	6.84E-03	6.99E-05	--
5510	641236.2	4165548.9	Worker	Scenario 2	7.12E-03	7.18E-05	--
5511	641336.2	4165548.9	Worker	Scenario 2	7.40E-03	7.38E-05	--
5512	641436.2	4165548.9	Worker	Scenario 2	7.83E-03	7.73E-05	--
5513	641536.2	4165548.9	Worker	Scenario 2	8.67E-03	8.67E-05	--
5514	641636.2	4165548.9	Worker	Scenario 2	1.01E-02	1.01E-04	--
5515	641736.2	4165548.9	Worker	Scenario 2	9.29E-03	9.55E-05	--
5516	641836.2	4165548.9	Worker	Scenario 2	9.80E-03	1.02E-04	--
5517	641936.2	4165548.9	Worker	Scenario 2	1.07E-02	1.12E-04	--
5518	642036.2	4165548.9	Worker	Scenario 2	1.12E-02	1.19E-04	--
5519	642136.2	4165548.9	Worker	Scenario 2	1.18E-02	1.26E-04	--
5520	642236.2	4165548.9	Worker	Scenario 2	1.28E-02	1.35E-04	--
5521	642336.2	4165548.9	Worker	Scenario 2	2.15E-02	1.79E-04	--
5522	642436.2	4165548.9	Worker	Scenario 2	1.49E-02	1.52E-04	--
5523	642536.2	4165548.9	Worker	Scenario 2	1.80E-02	1.70E-04	--
5524	642636.2	4165548.9	Worker	Scenario 2	1.69E-02	1.67E-04	--
5525	642736.2	4165548.9	Worker	Scenario 2	2.15E-02	1.90E-04	--
5526	643036.2	4165548.9	Worker	Scenario 2	2.65E-02	2.18E-04	--
5527	643136.2	4165548.9	Worker	Scenario 2	2.85E-02	2.25E-04	--
5528	643236.2	4165548.9	Worker	Scenario 2	3.07E-02	2.32E-04	--
5529	643336.2	4165548.9	Worker	Scenario 2	3.29E-02	2.38E-04	--
5530	643436.2	4165548.9	Worker	Scenario 2	3.42E-02	2.42E-04	--
5531	643536.2	4165548.9	Worker	Scenario 2	3.59E-02	2.46E-04	--
5532	643636.2	4165548.9	Worker	Scenario 2	3.72E-02	2.49E-04	--
5533	643736.2	4165548.9	Worker	Scenario 2	3.85E-02	2.51E-04	--
5534	643836.2	4165548.9	Worker	Scenario 2	3.96E-02	2.52E-04	--
5535	643936.2	4165548.9	Worker	Scenario 2	4.08E-02	2.52E-04	--
5536	644036.2	4165548.9	Worker	Scenario 2	4.24E-02	2.53E-04	--
5537	644136.2	4165548.9	Worker	Scenario 2	5.08E-02	2.72E-04	--
5538	644236.2	4165548.9	Worker	Scenario 2	5.28E-02	2.73E-04	--
5539	644336.2	4165548.9	Worker	Scenario 2	5.41E-02	2.71E-04	--
5540	644436.2	4165548.9	Worker	Scenario 2	5.50E-02	2.69E-04	--
5541	644536.2	4165548.9	Worker	Scenario 2	5.33E-02	2.59E-04	--
5542	644636.2	4165548.9	Worker	Scenario 2	4.90E-02	2.44E-04	--
5543	644736.2	4165548.9	Worker	Scenario 2	5.13E-02	2.43E-04	--
5544	644836.2	4165548.9	Worker	Scenario 2	5.12E-02	2.39E-04	--
5545	644936.2	4165548.9	Worker	Scenario 2	5.04E-02	2.33E-04	--
5546	645036.2	4165548.9	Worker	Scenario 2	4.64E-02	2.19E-04	--
5547	645136.2	4165548.9	Worker	Scenario 2	4.58E-02	2.14E-04	--
5548	645236.2	4165548.9	Worker	Scenario 2	4.72E-02	2.12E-04	--
5549	645336.2	4165548.9	Worker	Scenario 2	4.63E-02	2.06E-04	--
5550	645436.2	4165548.9	Worker	Scenario 2	4.61E-02	2.03E-04	--
5551	645536.2	4165548.9	Worker	Scenario 2	4.53E-02	1.97E-04	--
5552	645636.2	4165548.9	Worker	Scenario 2	4.47E-02	1.93E-04	--
5553	645936.2	4165548.9	Worker	Scenario 2	4.21E-02	1.79E-04	--
5554	646036.2	4165548.9	Worker	Scenario 2	4.19E-02	1.77E-04	--
5555	646136.2	4165548.9	Worker	Scenario 2	4.17E-02	1.74E-04	--
5556	646336.2	4165548.9	Worker	Scenario 2	4.14E-02	1.70E-04	--
5557	646436.2	4165548.9	Worker	Scenario 2	4.13E-02	1.68E-04	--
5558	646536.2	4165548.9	Worker	Scenario 2	4.12E-02	1.66E-04	--
5559	639236.2	4165648.9	Worker	Scenario 2	4.47E-03	4.37E-05	--
5560	639336.2	4165648.9	Worker	Scenario 2	4.93E-03	4.77E-05	--
5561	639436.2	4165648.9	Worker	Scenario 2	4.65E-03	4.59E-05	--
5562	639536.2	4165648.9	Worker	Scenario 2	4.50E-03	4.51E-05	--
5563	639636.2	4165648.9	Worker	Scenario 2	4.74E-03	4.75E-05	--
5564	639736.2	4165648.9	Worker	Scenario 2	4.99E-03	5.01E-05	--
5565	639836.2	4165648.9	Worker	Scenario 2	5.25E-03	5.29E-05	--
5566	639936.2	4165648.9	Worker	Scenario 2	5.34E-03	5.42E-05	--
5567	640036.2	4165648.9	Worker	Scenario 2	5.18E-03	5.31E-05	--
5568	640136.2	4165648.9	Worker	Scenario 2	5.29E-03	5.48E-05	--
5569	640236.2	4165648.9	Worker	Scenario 2	5.52E-03	5.75E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5570	640336.2	4165648.9	Worker	Scenario 2	6.01E-03	6.25E-05	--
5571	640436.2	4165648.9	Worker	Scenario 2	6.94E-03	7.10E-05	--
5572	640536.2	4165648.9	Worker	Scenario 2	7.86E-03	7.84E-05	--
5573	640636.2	4165648.9	Worker	Scenario 2	9.06E-03	8.69E-05	--
5574	640736.2	4165648.9	Worker	Scenario 2	6.33E-03	6.74E-05	--
5575	640836.2	4165648.9	Worker	Scenario 2	6.47E-03	6.87E-05	--
5576	640936.2	4165648.9	Worker	Scenario 2	8.13E-03	8.28E-05	--
5577	641036.2	4165648.9	Worker	Scenario 2	7.21E-03	7.55E-05	--
5578	641136.2	4165648.9	Worker	Scenario 2	7.43E-03	7.71E-05	--
5579	641236.2	4165648.9	Worker	Scenario 2	7.38E-03	7.57E-05	--
5580	641336.2	4165648.9	Worker	Scenario 2	8.00E-03	8.14E-05	--
5581	641436.2	4165648.9	Worker	Scenario 2	8.41E-03	8.51E-05	--
5582	641536.2	4165648.9	Worker	Scenario 2	8.93E-03	9.14E-05	--
5583	641636.2	4165648.9	Worker	Scenario 2	1.23E-02	1.20E-04	--
5584	641736.2	4165648.9	Worker	Scenario 2	1.02E-02	1.06E-04	--
5585	641836.2	4165648.9	Worker	Scenario 2	1.10E-02	1.18E-04	--
5586	641936.2	4165648.9	Worker	Scenario 2	1.23E-02	1.31E-04	--
5587	642036.2	4165648.9	Worker	Scenario 2	1.37E-02	1.43E-04	--
5588	642136.2	4165648.9	Worker	Scenario 2	1.47E-02	1.52E-04	--
5589	642236.2	4165648.9	Worker	Scenario 2	1.39E-02	1.48E-04	--
5590	642336.2	4165648.9	Worker	Scenario 2	1.79E-02	1.74E-04	--
5591	642436.2	4165648.9	Worker	Scenario 2	2.36E-02	2.00E-04	--
5592	642536.2	4165648.9	Worker	Scenario 2	2.09E-02	1.91E-04	--
5593	642636.2	4165648.9	Worker	Scenario 2	2.62E-02	2.15E-04	--
5594	642836.2	4165648.9	Worker	Scenario 2	2.76E-02	2.29E-04	--
5595	642936.2	4165648.9	Worker	Scenario 2	2.78E-02	2.32E-04	--
5596	643036.2	4165648.9	Worker	Scenario 2	2.91E-02	2.38E-04	--
5597	643136.2	4165648.9	Worker	Scenario 2	3.12E-02	2.46E-04	--
5598	643236.2	4165648.9	Worker	Scenario 2	3.38E-02	2.53E-04	--
5599	643336.2	4165648.9	Worker	Scenario 2	3.56E-02	2.58E-04	--
5600	643436.2	4165648.9	Worker	Scenario 2	3.78E-02	2.63E-04	--
5601	643536.2	4165648.9	Worker	Scenario 2	3.96E-02	2.67E-04	--
5602	643636.2	4165648.9	Worker	Scenario 2	4.11E-02	2.69E-04	--
5603	643736.2	4165648.9	Worker	Scenario 2	4.24E-02	2.71E-04	--
5604	643836.2	4165648.9	Worker	Scenario 2	4.69E-02	2.81E-04	--
5605	643936.2	4165648.9	Worker	Scenario 2	5.25E-02	2.91E-04	--
5606	644036.2	4165648.9	Worker	Scenario 2	5.37E-02	2.90E-04	--
5607	644136.2	4165648.9	Worker	Scenario 2	5.55E-02	2.89E-04	--
5608	644236.2	4165648.9	Worker	Scenario 2	5.74E-02	2.89E-04	--
5609	644336.2	4165648.9	Worker	Scenario 2	5.83E-02	2.86E-04	--
5610	644436.2	4165648.9	Worker	Scenario 2	5.90E-02	2.82E-04	--
5611	644536.2	4165648.9	Worker	Scenario 2	5.67E-02	2.71E-04	--
5612	644636.2	4165648.9	Worker	Scenario 2	5.31E-02	2.57E-04	--
5613	644736.2	4165648.9	Worker	Scenario 2	5.52E-02	2.55E-04	--
5614	644836.2	4165648.9	Worker	Scenario 2	5.39E-02	2.47E-04	--
5615	644936.2	4165648.9	Worker	Scenario 2	5.33E-02	2.41E-04	--
5616	645036.2	4165648.9	Worker	Scenario 2	5.55E-02	2.43E-04	--
5617	645136.2	4165648.9	Worker	Scenario 2	4.90E-02	2.23E-04	--
5618	645236.2	4165648.9	Worker	Scenario 2	4.79E-02	2.16E-04	--
5619	645336.2	4165648.9	Worker	Scenario 2	5.17E-02	2.22E-04	--
5620	645436.2	4165648.9	Worker	Scenario 2	4.91E-02	2.11E-04	--
5621	645536.2	4165648.9	Worker	Scenario 2	4.98E-02	2.11E-04	--
5622	645836.2	4165648.9	Worker	Scenario 2	4.56E-02	1.92E-04	--
5623	645936.2	4165648.9	Worker	Scenario 2	4.54E-02	1.89E-04	--
5624	646036.2	4165648.9	Worker	Scenario 2	4.52E-02	1.86E-04	--
5625	646136.2	4165648.9	Worker	Scenario 2	4.50E-02	1.83E-04	--
5626	646336.2	4165648.9	Worker	Scenario 2	4.46E-02	1.79E-04	--
5627	646436.2	4165648.9	Worker	Scenario 2	4.44E-02	1.77E-04	--
5628	646536.2	4165648.9	Worker	Scenario 2	4.43E-02	1.75E-04	--
5629	646636.2	4165648.9	Worker	Scenario 2	4.42E-02	1.73E-04	--
5630	639036.2	4165748.9	Worker	Scenario 2	4.14E-03	4.06E-05	--
5631	639136.2	4165748.9	Worker	Scenario 2	4.24E-03	4.17E-05	--
5632	639236.2	4165748.9	Worker	Scenario 2	4.55E-03	4.44E-05	--
5633	639336.2	4165748.9	Worker	Scenario 2	5.30E-03	5.06E-05	--
5634	639436.2	4165748.9	Worker	Scenario 2	4.74E-03	4.67E-05	--
5635	639536.2	4165748.9	Worker	Scenario 2	4.62E-03	4.63E-05	--
5636	639636.2	4165748.9	Worker	Scenario 2	4.76E-03	4.79E-05	--
5637	639736.2	4165748.9	Worker	Scenario 2	5.32E-03	5.30E-05	--
5638	639836.2	4165748.9	Worker	Scenario 2	5.78E-03	5.73E-05	--
5639	639936.2	4165748.9	Worker	Scenario 2	5.53E-03	5.60E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5640	640036.2	4165748.9	Worker	Scenario 2	5.60E-03	5.72E-05	--
5641	640136.2	4165748.9	Worker	Scenario 2	5.77E-03	5.93E-05	--
5642	640236.2	4165748.9	Worker	Scenario 2	5.71E-03	5.90E-05	--
5643	640336.2	4165748.9	Worker	Scenario 2	5.94E-03	6.22E-05	--
5644	640436.2	4165748.9	Worker	Scenario 2	6.20E-03	6.52E-05	--
5645	640536.2	4165748.9	Worker	Scenario 2	7.82E-03	7.92E-05	--
5646	640636.2	4165748.9	Worker	Scenario 2	1.12E-02	1.00E-04	--
5647	640736.2	4165748.9	Worker	Scenario 2	7.36E-03	7.77E-05	--
5648	640836.2	4165748.9	Worker	Scenario 2	6.85E-03	7.34E-05	--
5649	640936.2	4165748.9	Worker	Scenario 2	7.14E-03	7.63E-05	--
5650	641036.2	4165748.9	Worker	Scenario 2	8.82E-03	9.01E-05	--
5651	641136.2	4165748.9	Worker	Scenario 2	8.09E-03	8.49E-05	--
5652	641236.2	4165748.9	Worker	Scenario 2	7.86E-03	8.24E-05	--
5653	641336.2	4165748.9	Worker	Scenario 2	8.47E-03	8.79E-05	--
5654	641436.2	4165748.9	Worker	Scenario 2	9.22E-03	9.52E-05	--
5655	641536.2	4165748.9	Worker	Scenario 2	9.59E-03	1.01E-04	--
5656	641636.2	4165748.9	Worker	Scenario 2	1.43E-02	1.39E-04	--
5657	641736.2	4165748.9	Worker	Scenario 2	1.12E-02	1.21E-04	--
5658	641836.2	4165748.9	Worker	Scenario 2	1.24E-02	1.35E-04	--
5659	641936.2	4165748.9	Worker	Scenario 2	1.56E-02	1.60E-04	--
5660	642036.2	4165748.9	Worker	Scenario 2	1.69E-02	1.71E-04	--
5661	642136.2	4165748.9	Worker	Scenario 2	1.52E-02	1.65E-04	--
5662	642236.2	4165748.9	Worker	Scenario 2	1.77E-02	1.81E-04	--
5663	642336.2	4165748.9	Worker	Scenario 2	2.33E-02	2.07E-04	--
5664	642436.2	4165748.9	Worker	Scenario 2	2.81E-02	2.29E-04	--
5665	642536.2	4165748.9	Worker	Scenario 2	3.01E-02	2.41E-04	--
5666	642736.2	4165748.9	Worker	Scenario 2	3.07E-02	2.50E-04	--
5667	642836.2	4165748.9	Worker	Scenario 2	3.05E-02	2.53E-04	--
5668	642936.2	4165748.9	Worker	Scenario 2	3.09E-02	2.56E-04	--
5669	643036.2	4165748.9	Worker	Scenario 2	3.21E-02	2.61E-04	--
5670	643136.2	4165748.9	Worker	Scenario 2	3.44E-02	2.69E-04	--
5671	643236.2	4165748.9	Worker	Scenario 2	3.73E-02	2.77E-04	--
5672	643336.2	4165748.9	Worker	Scenario 2	3.95E-02	2.82E-04	--
5673	643436.2	4165748.9	Worker	Scenario 2	4.18E-02	2.87E-04	--
5674	643536.2	4165748.9	Worker	Scenario 2	4.42E-02	2.92E-04	--
5675	643636.2	4165748.9	Worker	Scenario 2	5.28E-02	3.14E-04	--
5676	643736.2	4165748.9	Worker	Scenario 2	5.44E-02	3.14E-04	--
5677	643836.2	4165748.9	Worker	Scenario 2	5.62E-02	3.14E-04	--
5678	643936.2	4165748.9	Worker	Scenario 2	5.79E-02	3.13E-04	--
5679	644036.2	4165748.9	Worker	Scenario 2	5.95E-02	3.11E-04	--
5680	644136.2	4165748.9	Worker	Scenario 2	6.08E-02	3.08E-04	--
5681	644236.2	4165748.9	Worker	Scenario 2	6.19E-02	3.05E-04	--
5682	644336.2	4165748.9	Worker	Scenario 2	6.27E-02	3.01E-04	--
5683	644436.2	4165748.9	Worker	Scenario 2	6.37E-02	2.97E-04	--
5684	644536.2	4165748.9	Worker	Scenario 2	5.99E-02	2.83E-04	--
5685	644636.2	4165748.9	Worker	Scenario 2	5.75E-02	2.71E-04	--
5686	644736.2	4165748.9	Worker	Scenario 2	5.94E-02	2.68E-04	--
5687	644836.2	4165748.9	Worker	Scenario 2	5.76E-02	2.58E-04	--
5688	644936.2	4165748.9	Worker	Scenario 2	5.62E-02	2.49E-04	--
5689	645036.2	4165748.9	Worker	Scenario 2	5.98E-02	2.56E-04	--
5690	645136.2	4165748.9	Worker	Scenario 2	5.45E-02	2.38E-04	--
5691	645236.2	4165748.9	Worker	Scenario 2	5.17E-02	2.27E-04	--
5692	645336.2	4165748.9	Worker	Scenario 2	5.04E-02	2.20E-04	--
5693	645736.2	4165748.9	Worker	Scenario 2	4.95E-02	2.05E-04	--
5694	645836.2	4165748.9	Worker	Scenario 2	4.93E-02	2.02E-04	--
5695	645936.2	4165748.9	Worker	Scenario 2	4.91E-02	1.99E-04	--
5696	646036.2	4165748.9	Worker	Scenario 2	4.89E-02	1.97E-04	--
5697	646136.2	4165748.9	Worker	Scenario 2	4.86E-02	1.94E-04	--
5698	646336.2	4165748.9	Worker	Scenario 2	4.81E-02	1.89E-04	--
5699	646436.2	4165748.9	Worker	Scenario 2	4.79E-02	1.87E-04	--
5700	646536.2	4165748.9	Worker	Scenario 2	4.77E-02	1.85E-04	--
5701	646636.2	4165748.9	Worker	Scenario 2	4.75E-02	1.83E-04	--
5702	638936.2	4165848.9	Worker	Scenario 2	4.19E-03	4.08E-05	--
5703	639036.2	4165848.9	Worker	Scenario 2	4.27E-03	4.17E-05	--
5704	639136.2	4165848.9	Worker	Scenario 2	4.42E-03	4.33E-05	--
5705	639236.2	4165848.9	Worker	Scenario 2	4.60E-03	4.50E-05	--
5706	639336.2	4165848.9	Worker	Scenario 2	5.19E-03	5.00E-05	--
5707	639436.2	4165848.9	Worker	Scenario 2	5.29E-03	5.14E-05	--
5708	639536.2	4165848.9	Worker	Scenario 2	4.92E-03	4.89E-05	--
5709	639636.2	4165848.9	Worker	Scenario 2	4.91E-03	4.94E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5710	639736.2	4165848.9	Worker	Scenario 2	5.10E-03	5.13E-05	--
5711	639836.2	4165848.9	Worker	Scenario 2	5.47E-03	5.51E-05	--
5712	639936.2	4165848.9	Worker	Scenario 2	5.97E-03	5.99E-05	--
5713	640036.2	4165848.9	Worker	Scenario 2	6.48E-03	6.46E-05	--
5714	640136.2	4165848.9	Worker	Scenario 2	5.77E-03	5.97E-05	--
5715	640236.2	4165848.9	Worker	Scenario 2	5.87E-03	6.09E-05	--
5716	640336.2	4165848.9	Worker	Scenario 2	6.12E-03	6.40E-05	--
5717	640436.2	4165848.9	Worker	Scenario 2	6.31E-03	6.63E-05	--
5718	640536.2	4165848.9	Worker	Scenario 2	6.97E-03	7.33E-05	--
5719	640636.2	4165848.9	Worker	Scenario 2	9.34E-03	9.17E-05	--
5720	640736.2	4165848.9	Worker	Scenario 2	1.28E-02	1.12E-04	--
5721	640836.2	4165848.9	Worker	Scenario 2	9.46E-03	9.55E-05	--
5722	640936.2	4165848.9	Worker	Scenario 2	8.28E-03	8.80E-05	--
5723	641036.2	4165848.9	Worker	Scenario 2	8.10E-03	8.69E-05	--
5724	641136.2	4165848.9	Worker	Scenario 2	1.18E-02	1.11E-04	--
5725	641236.2	4165848.9	Worker	Scenario 2	9.36E-03	9.77E-05	--
5726	641336.2	4165848.9	Worker	Scenario 2	9.23E-03	9.78E-05	--
5727	641436.2	4165848.9	Worker	Scenario 2	1.09E-02	1.12E-04	--
5728	641536.2	4165848.9	Worker	Scenario 2	1.08E-02	1.16E-04	--
5729	641636.2	4165848.9	Worker	Scenario 2	1.64E-02	1.60E-04	--
5730	641736.2	4165848.9	Worker	Scenario 2	1.30E-02	1.43E-04	--
5731	641836.2	4165848.9	Worker	Scenario 2	1.46E-02	1.60E-04	--
5732	641936.2	4165848.9	Worker	Scenario 2	1.70E-02	1.80E-04	--
5733	642036.2	4165848.9	Worker	Scenario 2	2.10E-02	2.04E-04	--
5734	642136.2	4165848.9	Worker	Scenario 2	2.47E-02	2.23E-04	--
5735	642236.2	4165848.9	Worker	Scenario 2	2.92E-02	2.43E-04	--
5736	642336.2	4165848.9	Worker	Scenario 2	3.11E-02	2.54E-04	--
5737	642636.2	4165848.9	Worker	Scenario 2	3.37E-02	2.73E-04	--
5738	642736.2	4165848.9	Worker	Scenario 2	3.39E-02	2.77E-04	--
5739	642836.2	4165848.9	Worker	Scenario 2	3.39E-02	2.79E-04	--
5740	642936.2	4165848.9	Worker	Scenario 2	3.44E-02	2.83E-04	--
5741	643036.2	4165848.9	Worker	Scenario 2	3.57E-02	2.88E-04	--
5742	643136.2	4165848.9	Worker	Scenario 2	3.77E-02	2.94E-04	--
5743	643236.2	4165848.9	Worker	Scenario 2	4.10E-02	3.02E-04	--
5744	643336.2	4165848.9	Worker	Scenario 2	4.41E-02	3.09E-04	--
5745	643436.2	4165848.9	Worker	Scenario 2	4.98E-02	3.25E-04	--
5746	643536.2	4165848.9	Worker	Scenario 2	5.80E-02	3.43E-04	--
5747	643636.2	4165848.9	Worker	Scenario 2	5.23E-02	3.23E-04	--
5748	643736.2	4165848.9	Worker	Scenario 2	5.29E-02	3.19E-04	--
5749	643836.2	4165848.9	Worker	Scenario 2	5.50E-02	3.19E-04	--
5750	643936.2	4165848.9	Worker	Scenario 2	5.72E-02	3.19E-04	--
5751	644036.2	4165848.9	Worker	Scenario 2	5.96E-02	3.19E-04	--
5752	644136.2	4165848.9	Worker	Scenario 2	6.16E-02	3.17E-04	--
5753	644236.2	4165848.9	Worker	Scenario 2	6.33E-02	3.15E-04	--
5754	644336.2	4165848.9	Worker	Scenario 2	6.43E-02	3.10E-04	--
5755	644436.2	4165848.9	Worker	Scenario 2	6.44E-02	3.04E-04	--
5756	644536.2	4165848.9	Worker	Scenario 2	6.35E-02	2.95E-04	--
5757	644636.2	4165848.9	Worker	Scenario 2	6.22E-02	2.86E-04	--
5758	644736.2	4165848.9	Worker	Scenario 2	6.35E-02	2.80E-04	--
5759	644836.2	4165848.9	Worker	Scenario 2	6.20E-02	2.71E-04	--
5760	644936.2	4165848.9	Worker	Scenario 2	6.48E-02	2.75E-04	--
5761	645036.2	4165848.9	Worker	Scenario 2	5.99E-02	2.58E-04	--
5762	645436.2	4165848.9	Worker	Scenario 2	5.46E-02	2.28E-04	--
5763	645536.2	4165848.9	Worker	Scenario 2	5.43E-02	2.25E-04	--
5764	645636.2	4165848.9	Worker	Scenario 2	5.40E-02	2.21E-04	--
5765	645736.2	4165848.9	Worker	Scenario 2	5.37E-02	2.17E-04	--
5766	645836.2	4165848.9	Worker	Scenario 2	5.35E-02	2.14E-04	--
5767	645936.2	4165848.9	Worker	Scenario 2	5.33E-02	2.11E-04	--
5768	646036.2	4165848.9	Worker	Scenario 2	5.31E-02	2.09E-04	--
5769	646136.2	4165848.9	Worker	Scenario 2	5.28E-02	2.06E-04	--
5770	646336.2	4165848.9	Worker	Scenario 2	5.22E-02	2.00E-04	--
5771	646436.2	4165848.9	Worker	Scenario 2	5.18E-02	1.98E-04	--
5772	646536.2	4165848.9	Worker	Scenario 2	5.15E-02	1.95E-04	--
5773	646636.2	4165848.9	Worker	Scenario 2	5.12E-02	1.93E-04	--
5774	646736.2	4165848.9	Worker	Scenario 2	5.08E-02	1.91E-04	--
5775	638736.2	4165948.9	Worker	Scenario 2	4.21E-03	4.04E-05	--
5776	638836.2	4165948.9	Worker	Scenario 2	4.65E-03	4.39E-05	--
5777	638936.2	4165948.9	Worker	Scenario 2	4.46E-03	4.29E-05	--
5778	639036.2	4165948.9	Worker	Scenario 2	4.52E-03	4.37E-05	--
5779	639136.2	4165948.9	Worker	Scenario 2	4.68E-03	4.53E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5780	639236.2	4165948.9	Worker	Scenario 2	4.77E-03	4.65E-05	--
5781	639336.2	4165948.9	Worker	Scenario 2	5.33E-03	5.12E-05	--
5782	639436.2	4165948.9	Worker	Scenario 2	5.42E-03	5.25E-05	--
5783	639536.2	4165948.9	Worker	Scenario 2	4.93E-03	4.92E-05	--
5784	639636.2	4165948.9	Worker	Scenario 2	5.14E-03	5.13E-05	--
5785	639736.2	4165948.9	Worker	Scenario 2	5.31E-03	5.34E-05	--
5786	639836.2	4165948.9	Worker	Scenario 2	5.50E-03	5.56E-05	--
5787	639936.2	4165948.9	Worker	Scenario 2	5.71E-03	5.78E-05	--
5788	640036.2	4165948.9	Worker	Scenario 2	6.95E-03	6.84E-05	--
5789	640136.2	4165948.9	Worker	Scenario 2	6.14E-03	6.32E-05	--
5790	640236.2	4165948.9	Worker	Scenario 2	6.32E-03	6.56E-05	--
5791	640336.2	4165948.9	Worker	Scenario 2	6.62E-03	6.91E-05	--
5792	640436.2	4165948.9	Worker	Scenario 2	6.99E-03	7.31E-05	--
5793	640536.2	4165948.9	Worker	Scenario 2	7.83E-03	8.12E-05	--
5794	640636.2	4165948.9	Worker	Scenario 2	9.10E-03	9.18E-05	--
5795	640736.2	4165948.9	Worker	Scenario 2	1.08E-02	1.04E-04	--
5796	640836.2	4165948.9	Worker	Scenario 2	1.44E-02	1.26E-04	--
5797	640936.2	4165948.9	Worker	Scenario 2	1.49E-02	1.31E-04	--
5798	641036.2	4165948.9	Worker	Scenario 2	1.41E-02	1.27E-04	--
5799	641136.2	4165948.9	Worker	Scenario 2	9.86E-03	1.04E-04	--
5800	641236.2	4165948.9	Worker	Scenario 2	1.08E-02	1.12E-04	--
5801	641336.2	4165948.9	Worker	Scenario 2	1.10E-02	1.15E-04	--
5802	641436.2	4165948.9	Worker	Scenario 2	1.40E-02	1.38E-04	--
5803	641536.2	4165948.9	Worker	Scenario 2	1.48E-02	1.53E-04	--
5804	641636.2	4165948.9	Worker	Scenario 2	1.83E-02	1.83E-04	--
5805	641736.2	4165948.9	Worker	Scenario 2	1.98E-02	1.99E-04	--
5806	641836.2	4165948.9	Worker	Scenario 2	2.32E-02	2.24E-04	--
5807	642136.2	4165948.9	Worker	Scenario 2	3.15E-02	2.74E-04	--
5808	642236.2	4165948.9	Worker	Scenario 2	3.29E-02	2.81E-04	--
5809	642436.2	4165948.9	Worker	Scenario 2	3.52E-02	2.88E-04	--
5810	642536.2	4165948.9	Worker	Scenario 2	3.62E-02	2.94E-04	--
5811	642636.2	4165948.9	Worker	Scenario 2	3.71E-02	3.01E-04	--
5812	642736.2	4165948.9	Worker	Scenario 2	3.75E-02	3.06E-04	--
5813	642836.2	4165948.9	Worker	Scenario 2	3.77E-02	3.09E-04	--
5814	642936.2	4165948.9	Worker	Scenario 2	3.83E-02	3.13E-04	--
5815	643036.2	4165948.9	Worker	Scenario 2	3.96E-02	3.18E-04	--
5816	643136.2	4165948.9	Worker	Scenario 2	4.24E-02	3.25E-04	--
5817	643236.2	4165948.9	Worker	Scenario 2	4.59E-02	3.32E-04	--
5818	643336.2	4165948.9	Worker	Scenario 2	5.25E-02	3.50E-04	--
5819	643436.2	4165948.9	Worker	Scenario 2	5.82E-02	3.62E-04	--
5820	643536.2	4165948.9	Worker	Scenario 2	5.52E-02	3.47E-04	--
5821	643636.2	4165948.9	Worker	Scenario 2	5.76E-02	3.48E-04	--
5822	643736.2	4165948.9	Worker	Scenario 2	5.99E-02	3.48E-04	--
5823	643836.2	4165948.9	Worker	Scenario 2	6.24E-02	3.48E-04	--
5824	643936.2	4165948.9	Worker	Scenario 2	6.51E-02	3.47E-04	--
5825	644036.2	4165948.9	Worker	Scenario 2	6.77E-02	3.46E-04	--
5826	644136.2	4165948.9	Worker	Scenario 2	6.96E-02	3.43E-04	--
5827	644236.2	4165948.9	Worker	Scenario 2	7.08E-02	3.39E-04	--
5828	644336.2	4165948.9	Worker	Scenario 2	7.11E-02	3.32E-04	--
5829	644436.2	4165948.9	Worker	Scenario 2	6.97E-02	3.20E-04	--
5830	644536.2	4165948.9	Worker	Scenario 2	6.84E-02	3.10E-04	--
5831	644636.2	4165948.9	Worker	Scenario 2	6.74E-02	3.01E-04	--
5832	644736.2	4165948.9	Worker	Scenario 2	6.62E-02	2.92E-04	--
5833	645236.2	4165948.9	Worker	Scenario 2	6.09E-02	2.54E-04	--
5834	645336.2	4165948.9	Worker	Scenario 2	6.04E-02	2.48E-04	--
5835	645436.2	4165948.9	Worker	Scenario 2	5.97E-02	2.43E-04	--
5836	645536.2	4165948.9	Worker	Scenario 2	5.93E-02	2.39E-04	--
5837	645636.2	4165948.9	Worker	Scenario 2	5.90E-02	2.35E-04	--
5838	645736.2	4165948.9	Worker	Scenario 2	5.87E-02	2.31E-04	--
5839	645836.2	4165948.9	Worker	Scenario 2	5.85E-02	2.28E-04	--
5840	645936.2	4165948.9	Worker	Scenario 2	5.82E-02	2.25E-04	--
5841	646036.2	4165948.9	Worker	Scenario 2	5.79E-02	2.22E-04	--
5842	646136.2	4165948.9	Worker	Scenario 2	5.75E-02	2.19E-04	--
5843	646336.2	4165948.9	Worker	Scenario 2	5.67E-02	2.13E-04	--
5844	646436.2	4165948.9	Worker	Scenario 2	5.62E-02	2.10E-04	--
5845	646536.2	4165948.9	Worker	Scenario 2	5.57E-02	2.07E-04	--
5846	646636.2	4165948.9	Worker	Scenario 2	5.52E-02	2.04E-04	--
5847	646736.2	4165948.9	Worker	Scenario 2	5.47E-02	2.01E-04	--
5848	638536.2	4166048.9	Worker	Scenario 2	4.82E-03	4.47E-05	--
5849	638636.2	4166048.9	Worker	Scenario 2	4.41E-03	4.21E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5850	638736.2	4166048.9	Worker	Scenario 2	4.34E-03	4.17E-05	--
5851	638836.2	4166048.9	Worker	Scenario 2	4.72E-03	4.48E-05	--
5852	638936.2	4166048.9	Worker	Scenario 2	4.84E-03	4.60E-05	--
5853	639036.2	4166048.9	Worker	Scenario 2	4.75E-03	4.56E-05	--
5854	639136.2	4166048.9	Worker	Scenario 2	4.78E-03	4.61E-05	--
5855	639236.2	4166048.9	Worker	Scenario 2	4.94E-03	4.79E-05	--
5856	639336.2	4166048.9	Worker	Scenario 2	5.57E-03	5.30E-05	--
5857	639436.2	4166048.9	Worker	Scenario 2	5.56E-03	5.37E-05	--
5858	639536.2	4166048.9	Worker	Scenario 2	5.11E-03	5.08E-05	--
5859	639636.2	4166048.9	Worker	Scenario 2	5.35E-03	5.33E-05	--
5860	639736.2	4166048.9	Worker	Scenario 2	5.47E-03	5.49E-05	--
5861	639836.2	4166048.9	Worker	Scenario 2	5.74E-03	5.79E-05	--
5862	639936.2	4166048.9	Worker	Scenario 2	5.94E-03	5.99E-05	--
5863	640036.2	4166048.9	Worker	Scenario 2	6.18E-03	6.31E-05	--
5864	640136.2	4166048.9	Worker	Scenario 2	8.18E-03	7.84E-05	--
5865	640236.2	4166048.9	Worker	Scenario 2	7.14E-03	7.29E-05	--
5866	640336.2	4166048.9	Worker	Scenario 2	7.16E-03	7.43E-05	--
5867	640436.2	4166048.9	Worker	Scenario 2	7.45E-03	7.78E-05	--
5868	640536.2	4166048.9	Worker	Scenario 2	7.67E-03	8.10E-05	--
5869	640636.2	4166048.9	Worker	Scenario 2	8.79E-03	9.13E-05	--
5870	640736.2	4166048.9	Worker	Scenario 2	1.03E-02	1.03E-04	--
5871	640836.2	4166048.9	Worker	Scenario 2	1.28E-02	1.21E-04	--
5872	640936.2	4166048.9	Worker	Scenario 2	1.43E-02	1.32E-04	--
5873	641036.2	4166048.9	Worker	Scenario 2	1.80E-02	1.54E-04	--
5874	641136.2	4166048.9	Worker	Scenario 2	1.42E-02	1.36E-04	--
5875	641236.2	4166048.9	Worker	Scenario 2	1.61E-02	1.48E-04	--
5876	641336.2	4166048.9	Worker	Scenario 2	1.83E-02	1.63E-04	--
5877	641436.2	4166048.9	Worker	Scenario 2	2.03E-02	1.82E-04	--
5878	641636.2	4166048.9	Worker	Scenario 2	2.53E-02	2.42E-04	--
5879	641736.2	4166048.9	Worker	Scenario 2	2.66E-02	2.59E-04	--
5880	641836.2	4166048.9	Worker	Scenario 2	2.96E-02	2.82E-04	--
5881	641936.2	4166048.9	Worker	Scenario 2	3.15E-02	2.95E-04	--
5882	642036.2	4166048.9	Worker	Scenario 2	3.29E-02	3.02E-04	--
5883	642136.2	4166048.9	Worker	Scenario 2	3.43E-02	3.07E-04	--
5884	642336.2	4166048.9	Worker	Scenario 2	3.72E-02	3.16E-04	--
5885	642436.2	4166048.9	Worker	Scenario 2	3.86E-02	3.20E-04	--
5886	642536.2	4166048.9	Worker	Scenario 2	4.00E-02	3.27E-04	--
5887	642636.2	4166048.9	Worker	Scenario 2	4.11E-02	3.34E-04	--
5888	642736.2	4166048.9	Worker	Scenario 2	4.18E-02	3.40E-04	--
5889	642836.2	4166048.9	Worker	Scenario 2	4.18E-02	3.44E-04	--
5890	642936.2	4166048.9	Worker	Scenario 2	4.28E-02	3.48E-04	--
5891	643036.2	4166048.9	Worker	Scenario 2	4.47E-02	3.53E-04	--
5892	643136.2	4166048.9	Worker	Scenario 2	4.78E-02	3.60E-04	--
5893	643236.2	4166048.9	Worker	Scenario 2	5.23E-02	3.69E-04	--
5894	643336.2	4166048.9	Worker	Scenario 2	5.64E-02	3.76E-04	--
5895	643436.2	4166048.9	Worker	Scenario 2	5.97E-02	3.80E-04	--
5896	643536.2	4166048.9	Worker	Scenario 2	6.28E-02	3.82E-04	--
5897	643636.2	4166048.9	Worker	Scenario 2	6.58E-02	3.82E-04	--
5898	643736.2	4166048.9	Worker	Scenario 2	6.89E-02	3.83E-04	--
5899	643836.2	4166048.9	Worker	Scenario 2	7.15E-02	3.81E-04	--
5900	643936.2	4166048.9	Worker	Scenario 2	7.47E-02	3.80E-04	--
5901	644036.2	4166048.9	Worker	Scenario 2	7.72E-02	3.77E-04	--
5902	644136.2	4166048.9	Worker	Scenario 2	7.89E-02	3.73E-04	--
5903	644236.2	4166048.9	Worker	Scenario 2	7.93E-02	3.65E-04	--
5904	644336.2	4166048.9	Worker	Scenario 2	7.88E-02	3.55E-04	--
5905	644936.2	4166048.9	Worker	Scenario 2	6.96E-02	2.91E-04	--
5906	645036.2	4166048.9	Worker	Scenario 2	6.86E-02	2.84E-04	--
5907	645136.2	4166048.9	Worker	Scenario 2	6.77E-02	2.77E-04	--
5908	645236.2	4166048.9	Worker	Scenario 2	6.69E-02	2.70E-04	--
5909	645336.2	4166048.9	Worker	Scenario 2	6.65E-02	2.66E-04	--
5910	645436.2	4166048.9	Worker	Scenario 2	6.55E-02	2.60E-04	--
5911	645536.2	4166048.9	Worker	Scenario 2	6.52E-02	2.55E-04	--
5912	645636.2	4166048.9	Worker	Scenario 2	6.49E-02	2.52E-04	--
5913	645736.2	4166048.9	Worker	Scenario 2	6.45E-02	2.48E-04	--
5914	645836.2	4166048.9	Worker	Scenario 2	6.42E-02	2.44E-04	--
5915	645936.2	4166048.9	Worker	Scenario 2	6.38E-02	2.41E-04	--
5916	646036.2	4166048.9	Worker	Scenario 2	6.34E-02	2.37E-04	--
5917	646136.2	4166048.9	Worker	Scenario 2	6.28E-02	2.34E-04	--
5918	646336.2	4166048.9	Worker	Scenario 2	6.17E-02	2.27E-04	--
5919	646436.2	4166048.9	Worker	Scenario 2	6.10E-02	2.23E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5920	646536.2	4166048.9	Worker	Scenario 2	6.03E-02	2.20E-04	--
5921	646636.2	4166048.9	Worker	Scenario 2	5.97E-02	2.16E-04	--
5922	646736.2	4166048.9	Worker	Scenario 2	5.89E-02	2.13E-04	--
5923	646836.2	4166048.9	Worker	Scenario 2	5.81E-02	2.09E-04	--
5924	638436.2	4166148.9	Worker	Scenario 2	4.56E-03	4.33E-05	--
5925	638536.2	4166148.9	Worker	Scenario 2	4.75E-03	4.48E-05	--
5926	638636.2	4166148.9	Worker	Scenario 2	4.51E-03	4.32E-05	--
5927	638736.2	4166148.9	Worker	Scenario 2	4.49E-03	4.32E-05	--
5928	638836.2	4166148.9	Worker	Scenario 2	4.74E-03	4.54E-05	--
5929	638936.2	4166148.9	Worker	Scenario 2	5.24E-03	4.91E-05	--
5930	639036.2	4166148.9	Worker	Scenario 2	5.13E-03	4.88E-05	--
5931	639136.2	4166148.9	Worker	Scenario 2	4.88E-03	4.72E-05	--
5932	639236.2	4166148.9	Worker	Scenario 2	5.05E-03	4.88E-05	--
5933	639336.2	4166148.9	Worker	Scenario 2	5.50E-03	5.29E-05	--
5934	639436.2	4166148.9	Worker	Scenario 2	6.21E-03	5.84E-05	--
5935	639536.2	4166148.9	Worker	Scenario 2	5.55E-03	5.45E-05	--
5936	639636.2	4166148.9	Worker	Scenario 2	5.91E-03	5.79E-05	--
5937	639736.2	4166148.9	Worker	Scenario 2	5.92E-03	5.88E-05	--
5938	639836.2	4166148.9	Worker	Scenario 2	6.25E-03	6.22E-05	--
5939	639936.2	4166148.9	Worker	Scenario 2	6.78E-03	6.73E-05	--
5940	640036.2	4166148.9	Worker	Scenario 2	6.93E-03	6.96E-05	--
5941	640136.2	4166148.9	Worker	Scenario 2	8.52E-03	8.15E-05	--
5942	640236.2	4166148.9	Worker	Scenario 2	8.23E-03	8.15E-05	--
5943	640336.2	4166148.9	Worker	Scenario 2	7.40E-03	7.71E-05	--
5944	640436.2	4166148.9	Worker	Scenario 2	8.69E-03	8.82E-05	--
5945	640536.2	4166148.9	Worker	Scenario 2	8.53E-03	8.90E-05	--
5946	640636.2	4166148.9	Worker	Scenario 2	9.66E-03	9.93E-05	--
5947	640736.2	4166148.9	Worker	Scenario 2	1.12E-02	1.12E-04	--
5948	640836.2	4166148.9	Worker	Scenario 2	1.41E-02	1.32E-04	--
5949	640936.2	4166148.9	Worker	Scenario 2	1.70E-02	1.52E-04	--
5950	641036.2	4166148.9	Worker	Scenario 2	1.92E-02	1.68E-04	--
5951	641136.2	4166148.9	Worker	Scenario 2	2.14E-02	1.84E-04	--
5952	641236.2	4166148.9	Worker	Scenario 2	2.15E-02	1.89E-04	--
5953	641336.2	4166148.9	Worker	Scenario 2	2.37E-02	2.08E-04	--
5954	641436.2	4166148.9	Worker	Scenario 2	2.63E-02	2.37E-04	--
5955	641536.2	4166148.9	Worker	Scenario 2	2.89E-02	2.76E-04	--
5956	641636.2	4166148.9	Worker	Scenario 2	3.05E-02	3.04E-04	--
5957	641736.2	4166148.9	Worker	Scenario 2	3.17E-02	3.21E-04	--
5958	641836.2	4166148.9	Worker	Scenario 2	3.36E-02	3.34E-04	--
5959	641936.2	4166148.9	Worker	Scenario 2	3.52E-02	3.40E-04	--
5960	642236.2	4166148.9	Worker	Scenario 2	3.92E-02	3.49E-04	--
5961	642336.2	4166148.9	Worker	Scenario 2	4.08E-02	3.53E-04	--
5962	642436.2	4166148.9	Worker	Scenario 2	4.25E-02	3.58E-04	--
5963	642536.2	4166148.9	Worker	Scenario 2	4.43E-02	3.66E-04	--
5964	642636.2	4166148.9	Worker	Scenario 2	4.60E-02	3.74E-04	--
5965	642736.2	4166148.9	Worker	Scenario 2	4.65E-02	3.80E-04	--
5966	642836.2	4166148.9	Worker	Scenario 2	4.73E-02	3.84E-04	--
5967	642936.2	4166148.9	Worker	Scenario 2	4.86E-02	3.89E-04	--
5968	643036.2	4166148.9	Worker	Scenario 2	5.09E-02	3.94E-04	--
5969	644536.2	4166148.9	Worker	Scenario 2	8.27E-02	3.52E-04	--
5970	644636.2	4166148.9	Worker	Scenario 2	8.10E-02	3.41E-04	--
5971	644736.2	4166148.9	Worker	Scenario 2	7.94E-02	3.30E-04	--
5972	644836.2	4166148.9	Worker	Scenario 2	7.79E-02	3.20E-04	--
5973	644936.2	4166148.9	Worker	Scenario 2	7.68E-02	3.12E-04	--
5974	645036.2	4166148.9	Worker	Scenario 2	7.59E-02	3.04E-04	--
5975	645136.2	4166148.9	Worker	Scenario 2	7.50E-02	2.97E-04	--
5976	645236.2	4166148.9	Worker	Scenario 2	7.41E-02	2.91E-04	--
5977	645336.2	4166148.9	Worker	Scenario 2	7.38E-02	2.86E-04	--
5978	645436.2	4166148.9	Worker	Scenario 2	7.25E-02	2.79E-04	--
5979	645536.2	4166148.9	Worker	Scenario 2	7.21E-02	2.75E-04	--
5980	645636.2	4166148.9	Worker	Scenario 2	7.17E-02	2.70E-04	--
5981	645736.2	4166148.9	Worker	Scenario 2	7.12E-02	2.66E-04	--
5982	645836.2	4166148.9	Worker	Scenario 2	7.07E-02	2.62E-04	--
5983	645936.2	4166148.9	Worker	Scenario 2	7.01E-02	2.58E-04	--
5984	646036.2	4166148.9	Worker	Scenario 2	6.95E-02	2.54E-04	--
5985	646136.2	4166148.9	Worker	Scenario 2	6.88E-02	2.50E-04	--
5986	646336.2	4166148.9	Worker	Scenario 2	6.72E-02	2.42E-04	--
5987	646436.2	4166148.9	Worker	Scenario 2	6.63E-02	2.38E-04	--
5988	646536.2	4166148.9	Worker	Scenario 2	6.53E-02	2.33E-04	--
5989	646636.2	4166148.9	Worker	Scenario 2	6.44E-02	2.29E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5990	646736.2	4166148.9	Worker	Scenario 2	6.33E-02	2.25E-04	--
5991	646836.2	4166148.9	Worker	Scenario 2	6.20E-02	2.20E-04	--
5992	638236.2	4166248.9	Worker	Scenario 2	4.49E-03	4.31E-05	--
5993	638336.2	4166248.9	Worker	Scenario 2	4.96E-03	4.68E-05	--
5994	638436.2	4166248.9	Worker	Scenario 2	4.97E-03	4.68E-05	--
5995	638536.2	4166248.9	Worker	Scenario 2	4.81E-03	4.59E-05	--
5996	638636.2	4166248.9	Worker	Scenario 2	4.61E-03	4.45E-05	--
5997	638736.2	4166248.9	Worker	Scenario 2	4.68E-03	4.52E-05	--
5998	638836.2	4166248.9	Worker	Scenario 2	5.28E-03	4.97E-05	--
5999	638936.2	4166248.9	Worker	Scenario 2	5.17E-03	4.93E-05	--
6000	639036.2	4166248.9	Worker	Scenario 2	4.99E-03	4.79E-05	--
6001	639136.2	4166248.9	Worker	Scenario 2	5.11E-03	4.93E-05	--
6002	639236.2	4166248.9	Worker	Scenario 2	5.47E-03	5.25E-05	--
6003	639336.2	4166248.9	Worker	Scenario 2	5.58E-03	5.38E-05	--
6004	639436.2	4166248.9	Worker	Scenario 2	7.71E-03	6.76E-05	--
6005	639536.2	4166248.9	Worker	Scenario 2	6.10E-03	5.88E-05	--
6006	639636.2	4166248.9	Worker	Scenario 2	6.70E-03	6.38E-05	--
6007	639736.2	4166248.9	Worker	Scenario 2	6.80E-03	6.55E-05	--
6008	639836.2	4166248.9	Worker	Scenario 2	7.67E-03	7.22E-05	--
6009	639936.2	4166248.9	Worker	Scenario 2	8.15E-03	7.66E-05	--
6010	640036.2	4166248.9	Worker	Scenario 2	7.41E-03	7.35E-05	--
6011	640136.2	4166248.9	Worker	Scenario 2	8.10E-03	7.98E-05	--
6012	640236.2	4166248.9	Worker	Scenario 2	9.06E-03	8.78E-05	--
6013	640336.2	4166248.9	Worker	Scenario 2	9.32E-03	9.17E-05	--
6014	640436.2	4166248.9	Worker	Scenario 2	1.13E-02	1.06E-04	--
6015	640536.2	4166248.9	Worker	Scenario 2	1.26E-02	1.16E-04	--
6016	640636.2	4166248.9	Worker	Scenario 2	1.55E-02	1.36E-04	--
6017	640736.2	4166248.9	Worker	Scenario 2	1.82E-02	1.55E-04	--
6018	640836.2	4166248.9	Worker	Scenario 2	2.02E-02	1.72E-04	--
6019	640936.2	4166248.9	Worker	Scenario 2	2.13E-02	1.83E-04	--
6020	641036.2	4166248.9	Worker	Scenario 2	2.24E-02	1.95E-04	--
6021	641136.2	4166248.9	Worker	Scenario 2	2.43E-02	2.14E-04	--
6022	641236.2	4166248.9	Worker	Scenario 2	2.56E-02	2.29E-04	--
6023	641336.2	4166248.9	Worker	Scenario 2	2.76E-02	2.53E-04	--
6024	641436.2	4166248.9	Worker	Scenario 2	3.08E-02	2.97E-04	--
6025	641536.2	4166248.9	Worker	Scenario 2	3.44E-02	3.56E-04	--
6026	641636.2	4166248.9	Worker	Scenario 2	3.68E-02	3.93E-04	--
6027	641736.2	4166248.9	Worker	Scenario 2	3.76E-02	3.99E-04	--
6028	641836.2	4166248.9	Worker	Scenario 2	3.84E-02	3.95E-04	--
6029	641936.2	4166248.9	Worker	Scenario 2	3.94E-02	3.90E-04	--
6030	642036.2	4166248.9	Worker	Scenario 2	4.07E-02	3.89E-04	--
6031	642136.2	4166248.9	Worker	Scenario 2	4.19E-02	3.89E-04	--
6032	642236.2	4166248.9	Worker	Scenario 2	4.35E-02	3.93E-04	--
6033	642336.2	4166248.9	Worker	Scenario 2	4.53E-02	3.97E-04	--
6034	642436.2	4166248.9	Worker	Scenario 2	4.74E-02	4.04E-04	--
6035	642536.2	4166248.9	Worker	Scenario 2	4.90E-02	4.11E-04	--
6036	642636.2	4166248.9	Worker	Scenario 2	5.13E-02	4.21E-04	--
6037	642736.2	4166248.9	Worker	Scenario 2	5.32E-02	4.29E-04	--
6038	642836.2	4166248.9	Worker	Scenario 2	5.43E-02	4.34E-04	--
6039	642936.2	4166248.9	Worker	Scenario 2	5.55E-02	4.36E-04	--
6040	644236.2	4166248.9	Worker	Scenario 2	1.00E-01	4.27E-04	--
6041	644336.2	4166248.9	Worker	Scenario 2	1.01E-01	4.18E-04	--
6042	644436.2	4166248.9	Worker	Scenario 2	9.79E-02	4.02E-04	--
6043	644536.2	4166248.9	Worker	Scenario 2	9.51E-02	3.87E-04	--
6044	644636.2	4166248.9	Worker	Scenario 2	8.97E-02	3.66E-04	--
6045	644736.2	4166248.9	Worker	Scenario 2	8.82E-02	3.55E-04	--
6046	644836.2	4166248.9	Worker	Scenario 2	8.69E-02	3.45E-04	--
6047	644936.2	4166248.9	Worker	Scenario 2	8.58E-02	3.37E-04	--
6048	645036.2	4166248.9	Worker	Scenario 2	8.49E-02	3.29E-04	--
6049	645136.2	4166248.9	Worker	Scenario 2	8.39E-02	3.22E-04	--
6050	645236.2	4166248.9	Worker	Scenario 2	8.28E-02	3.15E-04	--
6051	645336.2	4166248.9	Worker	Scenario 2	8.21E-02	3.09E-04	--
6052	645436.2	4166248.9	Worker	Scenario 2	8.10E-02	3.02E-04	--
6053	645536.2	4166248.9	Worker	Scenario 2	8.03E-02	2.97E-04	--
6054	645636.2	4166248.9	Worker	Scenario 2	7.96E-02	2.92E-04	--
6055	645736.2	4166248.9	Worker	Scenario 2	7.89E-02	2.87E-04	--
6056	645836.2	4166248.9	Worker	Scenario 2	7.82E-02	2.83E-04	--
6057	645936.2	4166248.9	Worker	Scenario 2	7.73E-02	2.78E-04	--
6058	646036.2	4166248.9	Worker	Scenario 2	7.64E-02	2.73E-04	--
6059	646136.2	4166248.9	Worker	Scenario 2	7.54E-02	2.68E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6060	646336.2	4166248.9	Worker	Scenario 2	7.32E-02	2.58E-04	--
6061	646436.2	4166248.9	Worker	Scenario 2	7.19E-02	2.53E-04	--
6062	646536.2	4166248.9	Worker	Scenario 2	7.06E-02	2.47E-04	--
6063	646636.2	4166248.9	Worker	Scenario 2	6.93E-02	2.42E-04	--
6064	646736.2	4166248.9	Worker	Scenario 2	6.76E-02	2.36E-04	--
6065	646836.2	4166248.9	Worker	Scenario 2	6.61E-02	2.31E-04	--
6066	646936.2	4166248.9	Worker	Scenario 2	6.47E-02	2.25E-04	--
6067	638136.2	4166348.9	Worker	Scenario 2	4.53E-03	4.35E-05	--
6068	638236.2	4166348.9	Worker	Scenario 2	5.09E-03	4.78E-05	--
6069	638336.2	4166348.9	Worker	Scenario 2	4.98E-03	4.73E-05	--
6070	638436.2	4166348.9	Worker	Scenario 2	4.98E-03	4.76E-05	--
6071	638536.2	4166348.9	Worker	Scenario 2	4.62E-03	4.48E-05	--
6072	638636.2	4166348.9	Worker	Scenario 2	4.81E-03	4.66E-05	--
6073	638736.2	4166348.9	Worker	Scenario 2	5.32E-03	5.05E-05	--
6074	638836.2	4166348.9	Worker	Scenario 2	5.47E-03	5.18E-05	--
6075	638936.2	4166348.9	Worker	Scenario 2	5.23E-03	5.04E-05	--
6076	639036.2	4166348.9	Worker	Scenario 2	5.52E-03	5.27E-05	--
6077	639136.2	4166348.9	Worker	Scenario 2	5.70E-03	5.44E-05	--
6078	639236.2	4166348.9	Worker	Scenario 2	6.24E-03	5.86E-05	--
6079	639336.2	4166348.9	Worker	Scenario 2	6.20E-03	5.88E-05	--
6080	639436.2	4166348.9	Worker	Scenario 2	7.09E-03	6.51E-05	--
6081	639536.2	4166348.9	Worker	Scenario 2	8.50E-03	7.38E-05	--
6082	639636.2	4166348.9	Worker	Scenario 2	7.58E-03	6.99E-05	--
6083	639736.2	4166348.9	Worker	Scenario 2	7.47E-03	7.03E-05	--
6084	639836.2	4166348.9	Worker	Scenario 2	9.30E-03	8.20E-05	--
6085	639936.2	4166348.9	Worker	Scenario 2	9.83E-03	8.66E-05	--
6086	640036.2	4166348.9	Worker	Scenario 2	1.03E-02	9.12E-05	--
6087	640136.2	4166348.9	Worker	Scenario 2	1.07E-02	9.55E-05	--
6088	640236.2	4166348.9	Worker	Scenario 2	1.17E-02	1.04E-04	--
6089	640336.2	4166348.9	Worker	Scenario 2	1.35E-02	1.16E-04	--
6090	640436.2	4166348.9	Worker	Scenario 2	1.61E-02	1.34E-04	--
6091	640536.2	4166348.9	Worker	Scenario 2	1.84E-02	1.52E-04	--
6092	640636.2	4166348.9	Worker	Scenario 2	2.01E-02	1.68E-04	--
6093	640736.2	4166348.9	Worker	Scenario 2	2.15E-02	1.82E-04	--
6094	640836.2	4166348.9	Worker	Scenario 2	2.24E-02	1.93E-04	--
6095	640936.2	4166348.9	Worker	Scenario 2	2.37E-02	2.07E-04	--
6096	641036.2	4166348.9	Worker	Scenario 2	2.53E-02	2.24E-04	--
6097	641136.2	4166348.9	Worker	Scenario 2	2.78E-02	2.52E-04	--
6098	641236.2	4166348.9	Worker	Scenario 2	3.04E-02	2.85E-04	--
6099	641336.2	4166348.9	Worker	Scenario 2	3.35E-02	3.28E-04	--
6100	641436.2	4166348.9	Worker	Scenario 2	3.85E-02	4.11E-04	--
6101	641536.2	4166348.9	Worker	Scenario 2	4.35E-02	5.02E-04	--
6102	641636.2	4166348.9	Worker	Scenario 2	4.52E-02	5.19E-04	--
6103	641936.2	4166348.9	Worker	Scenario 2	4.51E-02	4.51E-04	--
6104	642036.2	4166348.9	Worker	Scenario 2	4.60E-02	4.43E-04	--
6105	642136.2	4166348.9	Worker	Scenario 2	4.72E-02	4.41E-04	--
6106	642236.2	4166348.9	Worker	Scenario 2	4.81E-02	4.41E-04	--
6107	642336.2	4166348.9	Worker	Scenario 2	5.02E-02	4.46E-04	--
6108	642436.2	4166348.9	Worker	Scenario 2	5.28E-02	4.55E-04	--
6109	642536.2	4166348.9	Worker	Scenario 2	5.59E-02	4.67E-04	--
6110	642636.2	4166348.9	Worker	Scenario 2	5.88E-02	4.77E-04	--
6111	642736.2	4166348.9	Worker	Scenario 2	6.13E-02	4.87E-04	--
6112	642836.2	4166348.9	Worker	Scenario 2	6.29E-02	4.92E-04	--
6113	643036.2	4166348.9	Worker	Scenario 2	7.09E-02	5.06E-04	--
6114	643136.2	4166348.9	Worker	Scenario 2	7.72E-02	5.15E-04	--
6115	643236.2	4166348.9	Worker	Scenario 2	8.39E-02	5.23E-04	--
6116	643336.2	4166348.9	Worker	Scenario 2	9.08E-02	5.29E-04	--
6117	643436.2	4166348.9	Worker	Scenario 2	9.72E-02	5.33E-04	--
6118	643536.2	4166348.9	Worker	Scenario 2	1.02E-01	5.29E-04	--
6119	643636.2	4166348.9	Worker	Scenario 2	1.06E-01	5.26E-04	--
6120	643736.2	4166348.9	Worker	Scenario 2	1.12E-01	5.26E-04	--
6121	643836.2	4166348.9	Worker	Scenario 2	1.16E-01	5.23E-04	--
6122	643936.2	4166348.9	Worker	Scenario 2	1.19E-01	5.17E-04	--
6123	644036.2	4166348.9	Worker	Scenario 2	1.22E-01	5.09E-04	--
6124	644136.2	4166348.9	Worker	Scenario 2	1.19E-01	4.91E-04	--
6125	644236.2	4166348.9	Worker	Scenario 2	1.16E-01	4.71E-04	--
6126	644336.2	4166348.9	Worker	Scenario 2	1.12E-01	4.52E-04	--
6127	644436.2	4166348.9	Worker	Scenario 2	1.09E-01	4.35E-04	--
6128	644536.2	4166348.9	Worker	Scenario 2	1.07E-01	4.19E-04	--
6129	644636.2	4166348.9	Worker	Scenario 2	1.01E-01	3.97E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6130	644736.2	4166348.9	Worker	Scenario 2	9.94E-02	3.86E-04	--
6131	644836.2	4166348.9	Worker	Scenario 2	9.80E-02	3.76E-04	--
6132	644936.2	4166348.9	Worker	Scenario 2	9.69E-02	3.67E-04	--
6133	645036.2	4166348.9	Worker	Scenario 2	9.59E-02	3.59E-04	--
6134	645136.2	4166348.9	Worker	Scenario 2	9.47E-02	3.51E-04	--
6135	645236.2	4166348.9	Worker	Scenario 2	9.34E-02	3.44E-04	--
6136	645336.2	4166348.9	Worker	Scenario 2	9.24E-02	3.37E-04	--
6137	645436.2	4166348.9	Worker	Scenario 2	9.10E-02	3.29E-04	--
6138	645536.2	4166348.9	Worker	Scenario 2	8.99E-02	3.23E-04	--
6139	645636.2	4166348.9	Worker	Scenario 2	8.89E-02	3.17E-04	--
6140	645736.2	4166348.9	Worker	Scenario 2	8.78E-02	3.11E-04	--
6141	645836.2	4166348.9	Worker	Scenario 2	8.66E-02	3.05E-04	--
6142	645936.2	4166348.9	Worker	Scenario 2	8.54E-02	2.99E-04	--
6143	646036.2	4166348.9	Worker	Scenario 2	8.40E-02	2.93E-04	--
6144	646136.2	4166348.9	Worker	Scenario 2	8.26E-02	2.87E-04	--
6145	646336.2	4166348.9	Worker	Scenario 2	7.94E-02	2.74E-04	--
6146	646436.2	4166348.9	Worker	Scenario 2	7.77E-02	2.68E-04	--
6147	646536.2	4166348.9	Worker	Scenario 2	7.58E-02	2.61E-04	--
6148	646636.2	4166348.9	Worker	Scenario 2	7.38E-02	2.54E-04	--
6149	646736.2	4166348.9	Worker	Scenario 2	7.20E-02	2.47E-04	--
6150	646836.2	4166348.9	Worker	Scenario 2	7.02E-02	2.41E-04	--
6151	637936.2	4166448.9	Worker	Scenario 2	4.15E-03	4.02E-05	--
6152	638036.2	4166448.9	Worker	Scenario 2	4.30E-03	4.15E-05	--
6153	638136.2	4166448.9	Worker	Scenario 2	4.40E-03	4.26E-05	--
6154	638236.2	4166448.9	Worker	Scenario 2	4.57E-03	4.42E-05	--
6155	638336.2	4166448.9	Worker	Scenario 2	5.69E-03	5.23E-05	--
6156	638436.2	4166448.9	Worker	Scenario 2	5.08E-03	4.86E-05	--
6157	638536.2	4166448.9	Worker	Scenario 2	4.76E-03	4.63E-05	--
6158	638636.2	4166448.9	Worker	Scenario 2	5.17E-03	4.98E-05	--
6159	638736.2	4166448.9	Worker	Scenario 2	5.59E-03	5.32E-05	--
6160	638836.2	4166448.9	Worker	Scenario 2	5.79E-03	5.49E-05	--
6161	638936.2	4166448.9	Worker	Scenario 2	5.80E-03	5.53E-05	--
6162	639036.2	4166448.9	Worker	Scenario 2	6.86E-03	6.24E-05	--
6163	639136.2	4166448.9	Worker	Scenario 2	6.45E-03	6.05E-05	--
6164	639236.2	4166448.9	Worker	Scenario 2	6.83E-03	6.34E-05	--
6165	639336.2	4166448.9	Worker	Scenario 2	7.36E-03	6.71E-05	--
6166	639436.2	4166448.9	Worker	Scenario 2	7.88E-03	7.08E-05	--
6167	639536.2	4166448.9	Worker	Scenario 2	8.91E-03	7.74E-05	--
6168	639636.2	4166448.9	Worker	Scenario 2	9.89E-03	8.36E-05	--
6169	639736.2	4166448.9	Worker	Scenario 2	1.08E-02	8.96E-05	--
6170	639836.2	4166448.9	Worker	Scenario 2	1.22E-02	9.84E-05	--
6171	639936.2	4166448.9	Worker	Scenario 2	1.34E-02	1.06E-04	--
6172	640036.2	4166448.9	Worker	Scenario 2	1.44E-02	1.14E-04	--
6173	640136.2	4166448.9	Worker	Scenario 2	1.46E-02	1.18E-04	--
6174	640236.2	4166448.9	Worker	Scenario 2	1.47E-02	1.21E-04	--
6175	640336.2	4166448.9	Worker	Scenario 2	1.61E-02	1.32E-04	--
6176	640436.2	4166448.9	Worker	Scenario 2	1.79E-02	1.47E-04	--
6177	640536.2	4166448.9	Worker	Scenario 2	1.98E-02	1.64E-04	--
6178	641436.2	4166448.9	Worker	Scenario 2	5.82E-02	7.45E-04	--
6179	641536.2	4166448.9	Worker	Scenario 2	6.17E-02	7.91E-04	--
6180	641736.2	4166448.9	Worker	Scenario 2	5.53E-02	6.05E-04	--
6181	641836.2	4166448.9	Worker	Scenario 2	5.34E-02	5.52E-04	--
6182	641936.2	4166448.9	Worker	Scenario 2	5.16E-02	5.19E-04	--
6183	642036.2	4166448.9	Worker	Scenario 2	5.18E-02	5.03E-04	--
6184	642136.2	4166448.9	Worker	Scenario 2	5.28E-02	4.97E-04	--
6185	642236.2	4166448.9	Worker	Scenario 2	5.43E-02	4.98E-04	--
6186	642336.2	4166448.9	Worker	Scenario 2	5.65E-02	5.04E-04	--
6187	642436.2	4166448.9	Worker	Scenario 2	5.96E-02	5.15E-04	--
6188	642536.2	4166448.9	Worker	Scenario 2	6.34E-02	5.29E-04	--
6189	642636.2	4166448.9	Worker	Scenario 2	6.79E-02	5.46E-04	--
6190	642936.2	4166448.9	Worker	Scenario 2	7.55E-02	5.60E-04	--
6191	643036.2	4166448.9	Worker	Scenario 2	8.37E-02	5.74E-04	--
6192	643136.2	4166448.9	Worker	Scenario 2	9.00E-02	5.79E-04	--
6193	643236.2	4166448.9	Worker	Scenario 2	9.86E-02	5.88E-04	--
6194	643336.2	4166448.9	Worker	Scenario 2	1.07E-01	5.96E-04	--
6195	643436.2	4166448.9	Worker	Scenario 2	1.16E-01	6.01E-04	--
6196	643536.2	4166448.9	Worker	Scenario 2	1.24E-01	6.05E-04	--
6197	643636.2	4166448.9	Worker	Scenario 2	1.33E-01	6.08E-04	--
6198	643736.2	4166448.9	Worker	Scenario 2	1.39E-01	6.06E-04	--
6199	643836.2	4166448.9	Worker	Scenario 2	1.42E-01	5.98E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6200	643936.2	4166448.9	Worker	Scenario 2	1.42E-01	5.82E-04	--
6201	644036.2	4166448.9	Worker	Scenario 2	1.39E-01	5.60E-04	--
6202	644136.2	4166448.9	Worker	Scenario 2	1.35E-01	5.36E-04	--
6203	644236.2	4166448.9	Worker	Scenario 2	1.31E-01	5.13E-04	--
6204	644336.2	4166448.9	Worker	Scenario 2	1.27E-01	4.92E-04	--
6205	644436.2	4166448.9	Worker	Scenario 2	1.24E-01	4.74E-04	--
6206	644536.2	4166448.9	Worker	Scenario 2	1.21E-01	4.58E-04	--
6207	644636.2	4166448.9	Worker	Scenario 2	1.15E-01	4.35E-04	--
6208	644736.2	4166448.9	Worker	Scenario 2	1.13E-01	4.24E-04	--
6209	644836.2	4166448.9	Worker	Scenario 2	1.12E-01	4.14E-04	--
6210	644936.2	4166448.9	Worker	Scenario 2	1.11E-01	4.05E-04	--
6211	645036.2	4166448.9	Worker	Scenario 2	1.10E-01	3.96E-04	--
6212	645136.2	4166448.9	Worker	Scenario 2	1.08E-01	3.87E-04	--
6213	645236.2	4166448.9	Worker	Scenario 2	1.06E-01	3.78E-04	--
6214	645336.2	4166448.9	Worker	Scenario 2	1.05E-01	3.70E-04	--
6215	645436.2	4166448.9	Worker	Scenario 2	1.03E-01	3.60E-04	--
6216	645536.2	4166448.9	Worker	Scenario 2	1.01E-01	3.53E-04	--
6217	645636.2	4166448.9	Worker	Scenario 2	9.95E-02	3.45E-04	--
6218	645736.2	4166448.9	Worker	Scenario 2	9.77E-02	3.37E-04	--
6219	645836.2	4166448.9	Worker	Scenario 2	9.60E-02	3.30E-04	--
6220	645936.2	4166448.9	Worker	Scenario 2	9.41E-02	3.22E-04	--
6221	646036.2	4166448.9	Worker	Scenario 2	9.22E-02	3.14E-04	--
6222	646136.2	4166448.9	Worker	Scenario 2	9.01E-02	3.06E-04	--
6223	646336.2	4166448.9	Worker	Scenario 2	8.58E-02	2.90E-04	--
6224	646436.2	4166448.9	Worker	Scenario 2	8.35E-02	2.82E-04	--
6225	646536.2	4166448.9	Worker	Scenario 2	8.10E-02	2.74E-04	--
6226	646636.2	4166448.9	Worker	Scenario 2	7.86E-02	2.66E-04	--
6227	646736.2	4166448.9	Worker	Scenario 2	7.65E-02	2.59E-04	--
6228	646836.2	4166448.9	Worker	Scenario 2	7.44E-02	2.51E-04	--
6229	637736.2	4166548.9	Worker	Scenario 2	4.29E-03	4.04E-05	--
6230	637836.2	4166548.9	Worker	Scenario 2	4.07E-03	3.92E-05	--
6231	637936.2	4166548.9	Worker	Scenario 2	4.19E-03	4.04E-05	--
6232	638036.2	4166548.9	Worker	Scenario 2	4.36E-03	4.20E-05	--
6233	638136.2	4166548.9	Worker	Scenario 2	4.63E-03	4.43E-05	--
6234	638236.2	4166548.9	Worker	Scenario 2	5.30E-03	4.92E-05	--
6235	638336.2	4166548.9	Worker	Scenario 2	5.46E-03	5.08E-05	--
6236	638436.2	4166548.9	Worker	Scenario 2	5.59E-03	5.22E-05	--
6237	638536.2	4166548.9	Worker	Scenario 2	5.58E-03	5.27E-05	--
6238	638636.2	4166548.9	Worker	Scenario 2	5.90E-03	5.54E-05	--
6239	638736.2	4166548.9	Worker	Scenario 2	6.21E-03	5.78E-05	--
6240	638836.2	4166548.9	Worker	Scenario 2	6.80E-03	6.19E-05	--
6241	638936.2	4166548.9	Worker	Scenario 2	7.19E-03	6.48E-05	--
6242	639036.2	4166548.9	Worker	Scenario 2	8.32E-03	7.16E-05	--
6243	639136.2	4166548.9	Worker	Scenario 2	9.20E-03	7.69E-05	--
6244	639236.2	4166548.9	Worker	Scenario 2	1.00E-02	8.20E-05	--
6245	639336.2	4166548.9	Worker	Scenario 2	9.31E-03	7.92E-05	--
6246	639436.2	4166548.9	Worker	Scenario 2	9.62E-03	8.18E-05	--
6247	639536.2	4166548.9	Worker	Scenario 2	9.89E-03	8.42E-05	--
6248	639636.2	4166548.9	Worker	Scenario 2	1.11E-02	9.20E-05	--
6249	639736.2	4166548.9	Worker	Scenario 2	1.18E-02	9.67E-05	--
6250	639836.2	4166548.9	Worker	Scenario 2	1.28E-02	1.04E-04	--
6251	639936.2	4166548.9	Worker	Scenario 2	1.42E-02	1.13E-04	--
6252	640036.2	4166548.9	Worker	Scenario 2	1.55E-02	1.23E-04	--
6253	640136.2	4166548.9	Worker	Scenario 2	1.61E-02	1.29E-04	--
6254	640236.2	4166548.9	Worker	Scenario 2	1.66E-02	1.34E-04	--
6255	640336.2	4166548.9	Worker	Scenario 2	1.78E-02	1.45E-04	--
6256	640436.2	4166548.9	Worker	Scenario 2	1.93E-02	1.58E-04	--
6257	640536.2	4166548.9	Worker	Scenario 2	2.11E-02	1.75E-04	--
6258	641636.2	4166548.9	Worker	Scenario 2	8.05E-02	8.82E-04	--
6259	641736.2	4166548.9	Worker	Scenario 2	6.86E-02	7.21E-04	--
6260	641836.2	4166548.9	Worker	Scenario 2	6.33E-02	6.39E-04	--
6261	641936.2	4166548.9	Worker	Scenario 2	6.07E-02	5.94E-04	--
6262	642036.2	4166548.9	Worker	Scenario 2	5.98E-02	5.72E-04	--
6263	642136.2	4166548.9	Worker	Scenario 2	6.02E-02	5.64E-04	--
6264	642236.2	4166548.9	Worker	Scenario 2	6.18E-02	5.67E-04	--
6265	642336.2	4166548.9	Worker	Scenario 2	6.44E-02	5.75E-04	--
6266	642436.2	4166548.9	Worker	Scenario 2	6.81E-02	5.88E-04	--
6267	642536.2	4166548.9	Worker	Scenario 2	7.30E-02	6.07E-04	--
6268	642836.2	4166548.9	Worker	Scenario 2	8.73E-02	6.45E-04	--
6269	642936.2	4166548.9	Worker	Scenario 2	8.95E-02	6.41E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6270	643036.2	4166548.9	Worker	Scenario 2	9.86E-02	6.52E-04	--
6271	643136.2	4166548.9	Worker	Scenario 2	1.07E-01	6.58E-04	--
6272	643236.2	4166548.9	Worker	Scenario 2	1.18E-01	6.68E-04	--
6273	643336.2	4166548.9	Worker	Scenario 2	1.30E-01	6.79E-04	--
6274	643436.2	4166548.9	Worker	Scenario 2	1.42E-01	6.87E-04	--
6275	643536.2	4166548.9	Worker	Scenario 2	1.53E-01	6.94E-04	--
6276	643636.2	4166548.9	Worker	Scenario 2	1.62E-01	6.97E-04	--
6277	643736.2	4166548.9	Worker	Scenario 2	1.68E-01	6.91E-04	--
6278	643836.2	4166548.9	Worker	Scenario 2	1.69E-01	6.75E-04	--
6279	643936.2	4166548.9	Worker	Scenario 2	1.65E-01	6.49E-04	--
6280	644036.2	4166548.9	Worker	Scenario 2	1.60E-01	6.20E-04	--
6281	644136.2	4166548.9	Worker	Scenario 2	1.54E-01	5.91E-04	--
6282	644236.2	4166548.9	Worker	Scenario 2	1.49E-01	5.65E-04	--
6283	644336.2	4166548.9	Worker	Scenario 2	1.46E-01	5.44E-04	--
6284	644436.2	4166548.9	Worker	Scenario 2	1.42E-01	5.24E-04	--
6285	644536.2	4166548.9	Worker	Scenario 2	1.39E-01	5.07E-04	--
6286	644636.2	4166548.9	Worker	Scenario 2	1.33E-01	4.84E-04	--
6287	644736.2	4166548.9	Worker	Scenario 2	1.31E-01	4.71E-04	--
6288	644836.2	4166548.9	Worker	Scenario 2	1.30E-01	4.60E-04	--
6289	644936.2	4166548.9	Worker	Scenario 2	1.28E-01	4.50E-04	--
6290	645036.2	4166548.9	Worker	Scenario 2	1.26E-01	4.39E-04	--
6291	645136.2	4166548.9	Worker	Scenario 2	1.24E-01	4.28E-04	--
6292	645236.2	4166548.9	Worker	Scenario 2	1.21E-01	4.17E-04	--
6293	645336.2	4166548.9	Worker	Scenario 2	1.19E-01	4.06E-04	--
6294	645436.2	4166548.9	Worker	Scenario 2	1.16E-01	3.95E-04	--
6295	645536.2	4166548.9	Worker	Scenario 2	1.14E-01	3.85E-04	--
6296	645636.2	4166548.9	Worker	Scenario 2	1.11E-01	3.75E-04	--
6297	645736.2	4166548.9	Worker	Scenario 2	1.09E-01	3.65E-04	--
6298	645836.2	4166548.9	Worker	Scenario 2	1.06E-01	3.55E-04	--
6299	645936.2	4166548.9	Worker	Scenario 2	1.03E-01	3.45E-04	--
6300	646036.2	4166548.9	Worker	Scenario 2	1.01E-01	3.35E-04	--
6301	646136.2	4166548.9	Worker	Scenario 2	9.77E-02	3.25E-04	--
6302	646336.2	4166548.9	Worker	Scenario 2	9.16E-02	3.05E-04	--
6303	646436.2	4166548.9	Worker	Scenario 2	8.85E-02	2.95E-04	--
6304	646536.2	4166548.9	Worker	Scenario 2	8.59E-02	2.86E-04	--
6305	646636.2	4166548.9	Worker	Scenario 2	8.33E-02	2.77E-04	--
6306	646936.2	4166548.9	Worker	Scenario 2	7.63E-02	2.54E-04	--
6307	637636.2	4166648.9	Worker	Scenario 2	4.89E-03	4.36E-05	--
6308	637736.2	4166648.9	Worker	Scenario 2	4.99E-03	4.46E-05	--
6309	637836.2	4166648.9	Worker	Scenario 2	4.99E-03	4.51E-05	--
6310	637936.2	4166648.9	Worker	Scenario 2	4.97E-03	4.55E-05	--
6311	638036.2	4166648.9	Worker	Scenario 2	5.60E-03	4.95E-05	--
6312	638136.2	4166648.9	Worker	Scenario 2	5.66E-03	5.04E-05	--
6313	638236.2	4166648.9	Worker	Scenario 2	5.97E-03	5.28E-05	--
6314	638336.2	4166648.9	Worker	Scenario 2	5.90E-03	5.31E-05	--
6315	638436.2	4166648.9	Worker	Scenario 2	6.42E-03	5.68E-05	--
6316	638536.2	4166648.9	Worker	Scenario 2	6.77E-03	5.95E-05	--
6317	638636.2	4166648.9	Worker	Scenario 2	7.07E-03	6.20E-05	--
6318	638736.2	4166648.9	Worker	Scenario 2	7.39E-03	6.47E-05	--
6319	638836.2	4166648.9	Worker	Scenario 2	7.50E-03	6.61E-05	--
6320	638936.2	4166648.9	Worker	Scenario 2	7.95E-03	6.94E-05	--
6321	639036.2	4166648.9	Worker	Scenario 2	8.77E-03	7.46E-05	--
6322	639136.2	4166648.9	Worker	Scenario 2	9.83E-03	8.11E-05	--
6323	639236.2	4166648.9	Worker	Scenario 2	1.08E-02	8.75E-05	--
6324	639336.2	4166648.9	Worker	Scenario 2	1.10E-02	8.94E-05	--
6325	639436.2	4166648.9	Worker	Scenario 2	1.05E-02	8.81E-05	--
6326	639536.2	4166648.9	Worker	Scenario 2	1.12E-02	9.28E-05	--
6327	639636.2	4166648.9	Worker	Scenario 2	1.13E-02	9.48E-05	--
6328	639736.2	4166648.9	Worker	Scenario 2	1.25E-02	1.03E-04	--
6329	639836.2	4166648.9	Worker	Scenario 2	1.35E-02	1.10E-04	--
6330	639936.2	4166648.9	Worker	Scenario 2	1.46E-02	1.19E-04	--
6331	640036.2	4166648.9	Worker	Scenario 2	1.60E-02	1.29E-04	--
6332	640136.2	4166648.9	Worker	Scenario 2	1.72E-02	1.40E-04	--
6333	640236.2	4166648.9	Worker	Scenario 2	1.81E-02	1.47E-04	--
6334	640336.2	4166648.9	Worker	Scenario 2	1.92E-02	1.58E-04	--
6335	640436.2	4166648.9	Worker	Scenario 2	2.06E-02	1.72E-04	--
6336	640536.2	4166648.9	Worker	Scenario 2	2.25E-02	1.90E-04	--
6337	641536.2	4166648.9	Worker	Scenario 2	1.44E-01	1.53E-03	--
6338	641636.2	4166648.9	Worker	Scenario 2	1.01E-01	1.03E-03	--
6339	641736.2	4166648.9	Worker	Scenario 2	8.34E-02	8.26E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6340	641836.2	4166648.9	Worker	Scenario 2	7.47E-02	7.25E-04	--
6341	641936.2	4166648.9	Worker	Scenario 2	7.04E-02	6.75E-04	--
6342	642036.2	4166648.9	Worker	Scenario 2	6.86E-02	6.50E-04	--
6343	642136.2	4166648.9	Worker	Scenario 2	6.89E-02	6.45E-04	--
6344	642236.2	4166648.9	Worker	Scenario 2	7.07E-02	6.51E-04	--
6345	642336.2	4166648.9	Worker	Scenario 2	7.43E-02	6.64E-04	--
6346	642436.2	4166648.9	Worker	Scenario 2	7.93E-02	6.83E-04	--
6347	642736.2	4166648.9	Worker	Scenario 2	9.86E-02	7.43E-04	--
6348	642836.2	4166648.9	Worker	Scenario 2	1.05E-01	7.50E-04	--
6349	642936.2	4166648.9	Worker	Scenario 2	1.08E-01	7.41E-04	--
6350	643036.2	4166648.9	Worker	Scenario 2	1.19E-01	7.49E-04	--
6351	643136.2	4166648.9	Worker	Scenario 2	1.30E-01	7.56E-04	--
6352	643236.2	4166648.9	Worker	Scenario 2	1.45E-01	7.71E-04	--
6353	643336.2	4166648.9	Worker	Scenario 2	1.62E-01	7.88E-04	--
6354	643436.2	4166648.9	Worker	Scenario 2	1.78E-01	8.02E-04	--
6355	643536.2	4166648.9	Worker	Scenario 2	1.93E-01	8.12E-04	--
6356	643636.2	4166648.9	Worker	Scenario 2	2.02E-01	8.12E-04	--
6357	643736.2	4166648.9	Worker	Scenario 2	2.05E-01	7.96E-04	--
6358	643836.2	4166648.9	Worker	Scenario 2	2.01E-01	7.65E-04	--
6359	643936.2	4166648.9	Worker	Scenario 2	1.94E-01	7.28E-04	--
6360	644036.2	4166648.9	Worker	Scenario 2	1.86E-01	6.92E-04	--
6361	644136.2	4166648.9	Worker	Scenario 2	1.80E-01	6.60E-04	--
6362	644236.2	4166648.9	Worker	Scenario 2	1.75E-01	6.33E-04	--
6363	644336.2	4166648.9	Worker	Scenario 2	1.71E-01	6.11E-04	--
6364	644436.2	4166648.9	Worker	Scenario 2	1.67E-01	5.90E-04	--
6365	644536.2	4166648.9	Worker	Scenario 2	1.63E-01	5.71E-04	--
6366	644636.2	4166648.9	Worker	Scenario 2	1.57E-01	5.46E-04	--
6367	644736.2	4166648.9	Worker	Scenario 2	1.54E-01	5.32E-04	--
6368	644836.2	4166648.9	Worker	Scenario 2	1.52E-01	5.18E-04	--
6369	644936.2	4166648.9	Worker	Scenario 2	1.49E-01	5.05E-04	--
6370	645036.2	4166648.9	Worker	Scenario 2	1.46E-01	4.90E-04	--
6371	645136.2	4166648.9	Worker	Scenario 2	1.42E-01	4.75E-04	--
6372	645236.2	4166648.9	Worker	Scenario 2	1.38E-01	4.61E-04	--
6373	645336.2	4166648.9	Worker	Scenario 2	1.35E-01	4.47E-04	--
6374	645436.2	4166648.9	Worker	Scenario 2	1.31E-01	4.33E-04	--
6375	645536.2	4166648.9	Worker	Scenario 2	1.27E-01	4.19E-04	--
6376	645636.2	4166648.9	Worker	Scenario 2	1.24E-01	4.06E-04	--
6377	645736.2	4166648.9	Worker	Scenario 2	1.20E-01	3.93E-04	--
6378	645836.2	4166648.9	Worker	Scenario 2	1.16E-01	3.81E-04	--
6379	646836.2	4166648.9	Worker	Scenario 2	8.27E-02	2.71E-04	--
6380	646936.2	4166648.9	Worker	Scenario 2	8.02E-02	2.63E-04	--
6381	647036.2	4166648.9	Worker	Scenario 2	7.77E-02	2.55E-04	--
6382	637436.2	4166748.9	Worker	Scenario 2	4.35E-03	3.97E-05	--
6383	637536.2	4166748.9	Worker	Scenario 2	4.35E-03	4.01E-05	--
6384	637636.2	4166748.9	Worker	Scenario 2	4.79E-03	4.31E-05	--
6385	637736.2	4166748.9	Worker	Scenario 2	5.04E-03	4.49E-05	--
6386	637836.2	4166748.9	Worker	Scenario 2	5.65E-03	4.85E-05	--
6387	637936.2	4166748.9	Worker	Scenario 2	6.13E-03	5.14E-05	--
6388	638036.2	4166748.9	Worker	Scenario 2	6.80E-03	5.50E-05	--
6389	638136.2	4166748.9	Worker	Scenario 2	6.72E-03	5.54E-05	--
6390	638236.2	4166748.9	Worker	Scenario 2	6.12E-03	5.34E-05	--
6391	638336.2	4166748.9	Worker	Scenario 2	6.23E-03	5.47E-05	--
6392	638436.2	4166748.9	Worker	Scenario 2	6.55E-03	5.72E-05	--
6393	638536.2	4166748.9	Worker	Scenario 2	6.85E-03	5.96E-05	--
6394	638636.2	4166748.9	Worker	Scenario 2	7.41E-03	6.35E-05	--
6395	638736.2	4166748.9	Worker	Scenario 2	7.86E-03	6.68E-05	--
6396	638836.2	4166748.9	Worker	Scenario 2	8.16E-03	6.94E-05	--
6397	638936.2	4166748.9	Worker	Scenario 2	8.76E-03	7.35E-05	--
6398	639036.2	4166748.9	Worker	Scenario 2	9.46E-03	7.82E-05	--
6399	639136.2	4166748.9	Worker	Scenario 2	1.04E-02	8.40E-05	--
6400	639236.2	4166748.9	Worker	Scenario 2	1.14E-02	9.11E-05	--
6401	639336.2	4166748.9	Worker	Scenario 2	1.17E-02	9.38E-05	--
6402	639436.2	4166748.9	Worker	Scenario 2	1.20E-02	9.69E-05	--
6403	639536.2	4166748.9	Worker	Scenario 2	1.24E-02	1.01E-04	--
6404	639636.2	4166748.9	Worker	Scenario 2	1.28E-02	1.05E-04	--
6405	639736.2	4166748.9	Worker	Scenario 2	1.34E-02	1.10E-04	--
6406	639836.2	4166748.9	Worker	Scenario 2	1.42E-02	1.17E-04	--
6407	639936.2	4166748.9	Worker	Scenario 2	1.54E-02	1.26E-04	--
6408	640036.2	4166748.9	Worker	Scenario 2	1.66E-02	1.36E-04	--
6409	640136.2	4166748.9	Worker	Scenario 2	1.79E-02	1.48E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6410	640236.2	4166748.9	Worker	Scenario 2	1.92E-02	1.59E-04	--
6411	640336.2	4166748.9	Worker	Scenario 2	2.04E-02	1.72E-04	--
6412	640436.2	4166748.9	Worker	Scenario 2	2.19E-02	1.86E-04	--
6413	640536.2	4166748.9	Worker	Scenario 2	2.37E-02	2.05E-04	--
6414	644536.2	4166748.9	Worker	Scenario 2	1.95E-01	6.52E-04	--
6415	644636.2	4166748.9	Worker	Scenario 2	1.87E-01	6.24E-04	--
6416	644836.2	4166748.9	Worker	Scenario 2	1.78E-01	5.86E-04	--
6417	644936.2	4166748.9	Worker	Scenario 2	1.74E-01	5.67E-04	--
6418	645036.2	4166748.9	Worker	Scenario 2	1.68E-01	5.47E-04	--
6419	645136.2	4166748.9	Worker	Scenario 2	1.63E-01	5.27E-04	--
6420	645236.2	4166748.9	Worker	Scenario 2	1.57E-01	5.07E-04	--
6421	645336.2	4166748.9	Worker	Scenario 2	1.52E-01	4.89E-04	--
6422	645436.2	4166748.9	Worker	Scenario 2	1.46E-01	4.71E-04	--
6423	645536.2	4166748.9	Worker	Scenario 2	1.41E-01	4.54E-04	--
6424	645636.2	4166748.9	Worker	Scenario 2	1.36E-01	4.37E-04	--
6425	645736.2	4166748.9	Worker	Scenario 2	1.31E-01	4.21E-04	--
6426	645936.2	4166748.9	Worker	Scenario 2	1.21E-01	3.89E-04	--
6427	646036.2	4166748.9	Worker	Scenario 2	1.16E-01	3.73E-04	--
6428	646436.2	4166748.9	Worker	Scenario 2	9.94E-02	3.21E-04	--
6429	646536.2	4166748.9	Worker	Scenario 2	9.60E-02	3.10E-04	--
6430	646636.2	4166748.9	Worker	Scenario 2	9.27E-02	2.99E-04	--
6431	646736.2	4166748.9	Worker	Scenario 2	8.97E-02	2.90E-04	--
6432	646836.2	4166748.9	Worker	Scenario 2	8.66E-02	2.80E-04	--
6433	646936.2	4166748.9	Worker	Scenario 2	8.39E-02	2.71E-04	--
6434	647036.2	4166748.9	Worker	Scenario 2	8.12E-02	2.63E-04	--
6435	637336.2	4166848.9	Worker	Scenario 2	4.29E-03	3.89E-05	--
6436	637436.2	4166848.9	Worker	Scenario 2	4.58E-03	4.11E-05	--
6437	637536.2	4166848.9	Worker	Scenario 2	4.58E-03	4.14E-05	--
6438	637636.2	4166848.9	Worker	Scenario 2	5.00E-03	4.43E-05	--
6439	637736.2	4166848.9	Worker	Scenario 2	5.45E-03	4.71E-05	--
6440	637836.2	4166848.9	Worker	Scenario 2	5.90E-03	4.98E-05	--
6441	637936.2	4166848.9	Worker	Scenario 2	6.66E-03	5.38E-05	--
6442	638036.2	4166848.9	Worker	Scenario 2	7.20E-03	5.68E-05	--
6443	638136.2	4166848.9	Worker	Scenario 2	7.22E-03	5.76E-05	--
6444	638236.2	4166848.9	Worker	Scenario 2	6.59E-03	5.56E-05	--
6445	638336.2	4166848.9	Worker	Scenario 2	6.61E-03	5.64E-05	--
6446	638436.2	4166848.9	Worker	Scenario 2	7.05E-03	5.94E-05	--
6447	638536.2	4166848.9	Worker	Scenario 2	7.29E-03	6.15E-05	--
6448	638636.2	4166848.9	Worker	Scenario 2	7.67E-03	6.44E-05	--
6449	638736.2	4166848.9	Worker	Scenario 2	8.26E-03	6.83E-05	--
6450	638836.2	4166848.9	Worker	Scenario 2	8.69E-03	7.16E-05	--
6451	638936.2	4166848.9	Worker	Scenario 2	9.22E-03	7.55E-05	--
6452	639036.2	4166848.9	Worker	Scenario 2	1.00E-02	8.07E-05	--
6453	639136.2	4166848.9	Worker	Scenario 2	1.10E-02	8.70E-05	--
6454	639236.2	4166848.9	Worker	Scenario 2	1.19E-02	9.32E-05	--
6455	639336.2	4166848.9	Worker	Scenario 2	1.24E-02	9.76E-05	--
6456	639436.2	4166848.9	Worker	Scenario 2	1.28E-02	1.02E-04	--
6457	639536.2	4166848.9	Worker	Scenario 2	1.33E-02	1.07E-04	--
6458	639636.2	4166848.9	Worker	Scenario 2	1.39E-02	1.12E-04	--
6459	639736.2	4166848.9	Worker	Scenario 2	1.45E-02	1.18E-04	--
6460	644836.2	4166848.9	Worker	Scenario 2	2.09E-01	6.63E-04	--
6461	644936.2	4166848.9	Worker	Scenario 2	2.01E-01	6.34E-04	--
6462	645036.2	4166848.9	Worker	Scenario 2	1.92E-01	6.06E-04	--
6463	645136.2	4166848.9	Worker	Scenario 2	1.84E-01	5.79E-04	--
6464	645236.2	4166848.9	Worker	Scenario 2	1.76E-01	5.54E-04	--
6465	645336.2	4166848.9	Worker	Scenario 2	1.69E-01	5.31E-04	--
6466	645436.2	4166848.9	Worker	Scenario 2	1.62E-01	5.08E-04	--
6467	645536.2	4166848.9	Worker	Scenario 2	1.55E-01	4.86E-04	--
6468	645636.2	4166848.9	Worker	Scenario 2	1.48E-01	4.66E-04	--
6469	645836.2	4166848.9	Worker	Scenario 2	1.35E-01	4.26E-04	--
6470	645936.2	4166848.9	Worker	Scenario 2	1.28E-01	4.06E-04	--
6471	646436.2	4166848.9	Worker	Scenario 2	1.05E-01	3.33E-04	--
6472	646536.2	4166848.9	Worker	Scenario 2	1.01E-01	3.21E-04	--
6473	646636.2	4166848.9	Worker	Scenario 2	9.72E-02	3.10E-04	--
6474	646736.2	4166848.9	Worker	Scenario 2	9.38E-02	2.99E-04	--
6475	646836.2	4166848.9	Worker	Scenario 2	9.05E-02	2.89E-04	--
6476	646936.2	4166848.9	Worker	Scenario 2	8.74E-02	2.79E-04	--
6477	647036.2	4166848.9	Worker	Scenario 2	8.46E-02	2.70E-04	--
6478	637136.2	4166948.9	Worker	Scenario 2	4.32E-03	3.83E-05	--
6479	637236.2	4166948.9	Worker	Scenario 2	4.44E-03	3.94E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6480	637336.2	4166948.9	Worker	Scenario 2	4.44E-03	3.97E-05	--
6481	637436.2	4166948.9	Worker	Scenario 2	4.86E-03	4.25E-05	--
6482	637536.2	4166948.9	Worker	Scenario 2	4.88E-03	4.30E-05	--
6483	637636.2	4166948.9	Worker	Scenario 2	5.34E-03	4.58E-05	--
6484	637736.2	4166948.9	Worker	Scenario 2	5.75E-03	4.85E-05	--
6485	637836.2	4166948.9	Worker	Scenario 2	5.52E-03	4.79E-05	--
6486	637936.2	4166948.9	Worker	Scenario 2	5.74E-03	4.96E-05	--
6487	638036.2	4166948.9	Worker	Scenario 2	6.64E-03	5.44E-05	--
6488	638136.2	4166948.9	Worker	Scenario 2	8.06E-03	6.13E-05	--
6489	638236.2	4166948.9	Worker	Scenario 2	6.97E-03	5.74E-05	--
6490	638336.2	4166948.9	Worker	Scenario 2	6.96E-03	5.81E-05	--
6491	638436.2	4166948.9	Worker	Scenario 2	7.84E-03	6.29E-05	--
6492	638536.2	4166948.9	Worker	Scenario 2	7.69E-03	6.33E-05	--
6493	638636.2	4166948.9	Worker	Scenario 2	8.13E-03	6.63E-05	--
6494	638736.2	4166948.9	Worker	Scenario 2	8.61E-03	6.97E-05	--
6495	638836.2	4166948.9	Worker	Scenario 2	9.28E-03	7.41E-05	--
6496	638936.2	4166948.9	Worker	Scenario 2	9.73E-03	7.76E-05	--
6497	639036.2	4166948.9	Worker	Scenario 2	1.04E-02	8.24E-05	--
6498	639136.2	4166948.9	Worker	Scenario 2	1.12E-02	8.74E-05	--
6499	639236.2	4166948.9	Worker	Scenario 2	1.20E-02	9.31E-05	--
6500	639336.2	4166948.9	Worker	Scenario 2	1.29E-02	9.99E-05	--
6501	639436.2	4166948.9	Worker	Scenario 2	1.37E-02	1.06E-04	--
6502	639536.2	4166948.9	Worker	Scenario 2	1.41E-02	1.11E-04	--
6503	639636.2	4166948.9	Worker	Scenario 2	1.48E-02	1.18E-04	--
6504	639736.2	4166948.9	Worker	Scenario 2	1.55E-02	1.25E-04	--
6505	639836.2	4166948.9	Worker	Scenario 2	1.63E-02	1.33E-04	--
6506	639936.2	4166948.9	Worker	Scenario 2	1.72E-02	1.42E-04	--
6507	640036.2	4166948.9	Worker	Scenario 2	1.84E-02	1.54E-04	--
6508	640136.2	4166948.9	Worker	Scenario 2	1.91E-02	1.65E-04	--
6509	640236.2	4166948.9	Worker	Scenario 2	2.05E-02	1.80E-04	--
6510	640336.2	4166948.9	Worker	Scenario 2	2.20E-02	1.96E-04	--
6511	640436.2	4166948.9	Worker	Scenario 2	2.37E-02	2.14E-04	--
6512	640536.2	4166948.9	Worker	Scenario 2	2.57E-02	2.36E-04	--
6513	640636.2	4166948.9	Worker	Scenario 2	2.79E-02	2.62E-04	--
6514	640736.2	4166948.9	Worker	Scenario 2	3.12E-02	2.99E-04	--
6515	645636.2	4166948.9	Worker	Scenario 2	1.58E-01	4.88E-04	--
6516	637036.2	4167048.9	Worker	Scenario 2	4.05E-03	3.63E-05	--
6517	637136.2	4167048.9	Worker	Scenario 2	4.61E-03	3.97E-05	--
6518	637236.2	4167048.9	Worker	Scenario 2	4.85E-03	4.13E-05	--
6519	637336.2	4167048.9	Worker	Scenario 2	4.59E-03	4.04E-05	--
6520	637436.2	4167048.9	Worker	Scenario 2	5.10E-03	4.34E-05	--
6521	637536.2	4167048.9	Worker	Scenario 2	5.18E-03	4.43E-05	--
6522	637636.2	4167048.9	Worker	Scenario 2	5.19E-03	4.49E-05	--
6523	637736.2	4167048.9	Worker	Scenario 2	5.34E-03	4.62E-05	--
6524	637836.2	4167048.9	Worker	Scenario 2	5.98E-03	4.99E-05	--
6525	637936.2	4167048.9	Worker	Scenario 2	6.16E-03	5.15E-05	--
6526	638036.2	4167048.9	Worker	Scenario 2	6.74E-03	5.48E-05	--
6527	638136.2	4167048.9	Worker	Scenario 2	7.91E-03	6.06E-05	--
6528	638236.2	4167048.9	Worker	Scenario 2	7.95E-03	6.16E-05	--
6529	638336.2	4167048.9	Worker	Scenario 2	7.44E-03	6.03E-05	--
6530	638436.2	4167048.9	Worker	Scenario 2	8.42E-03	6.55E-05	--
6531	638536.2	4167048.9	Worker	Scenario 2	8.12E-03	6.52E-05	--
6532	638636.2	4167048.9	Worker	Scenario 2	8.76E-03	6.91E-05	--
6533	638736.2	4167048.9	Worker	Scenario 2	9.02E-03	7.15E-05	--
6534	638836.2	4167048.9	Worker	Scenario 2	9.75E-03	7.61E-05	--
6535	638936.2	4167048.9	Worker	Scenario 2	1.02E-02	7.99E-05	--
6536	639036.2	4167048.9	Worker	Scenario 2	1.09E-02	8.46E-05	--
6537	639136.2	4167048.9	Worker	Scenario 2	1.16E-02	8.95E-05	--
6538	639236.2	4167048.9	Worker	Scenario 2	1.24E-02	9.52E-05	--
6539	639336.2	4167048.9	Worker	Scenario 2	1.32E-02	1.01E-04	--
6540	639436.2	4167048.9	Worker	Scenario 2	1.41E-02	1.08E-04	--
6541	639536.2	4167048.9	Worker	Scenario 2	1.47E-02	1.14E-04	--
6542	639636.2	4167048.9	Worker	Scenario 2	1.51E-02	1.21E-04	--
6543	639736.2	4167048.9	Worker	Scenario 2	1.60E-02	1.29E-04	--
6544	639836.2	4167048.9	Worker	Scenario 2	1.68E-02	1.38E-04	--
6545	639936.2	4167048.9	Worker	Scenario 2	1.78E-02	1.49E-04	--
6546	640036.2	4167048.9	Worker	Scenario 2	1.90E-02	1.62E-04	--
6547	640136.2	4167048.9	Worker	Scenario 2	2.02E-02	1.75E-04	--
6548	640236.2	4167048.9	Worker	Scenario 2	2.16E-02	1.91E-04	--
6549	640336.2	4167048.9	Worker	Scenario 2	2.32E-02	2.08E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6550	640436.2	4167048.9	Worker	Scenario 2	2.52E-02	2.29E-04	--
6551	640536.2	4167048.9	Worker	Scenario 2	2.73E-02	2.54E-04	--
6552	641036.2	4167048.9	Worker	Scenario 2	5.11E-02	5.55E-04	--
6553	641136.2	4167048.9	Worker	Scenario 2	6.63E-02	7.53E-04	--
6554	644836.2	4167048.9	Worker	Scenario 2	2.72E-01	8.15E-04	--
6555	644936.2	4167048.9	Worker	Scenario 2	2.50E-01	7.54E-04	--
6556	645036.2	4167048.9	Worker	Scenario 2	2.34E-01	7.06E-04	--
6557	645136.2	4167048.9	Worker	Scenario 2	2.19E-01	6.65E-04	--
6558	645436.2	4167048.9	Worker	Scenario 2	1.84E-01	5.62E-04	--
6559	645536.2	4167048.9	Worker	Scenario 2	1.75E-01	5.33E-04	--
6560	645636.2	4167048.9	Worker	Scenario 2	1.66E-01	5.07E-04	--
6561	645836.2	4167048.9	Worker	Scenario 2	1.50E-01	4.60E-04	--
6562	645936.2	4167048.9	Worker	Scenario 2	1.43E-01	4.39E-04	--
6563	646436.2	4167048.9	Worker	Scenario 2	1.14E-01	3.54E-04	--
6564	646536.2	4167048.9	Worker	Scenario 2	1.09E-01	3.40E-04	--
6565	646636.2	4167048.9	Worker	Scenario 2	1.05E-01	3.27E-04	--
6566	646736.2	4167048.9	Worker	Scenario 2	1.01E-01	3.15E-04	--
6567	646936.2	4167048.9	Worker	Scenario 2	9.35E-02	2.92E-04	--
6568	647036.2	4167048.9	Worker	Scenario 2	9.02E-02	2.82E-04	--
6569	636936.2	4167148.9	Worker	Scenario 2	4.28E-03	3.72E-05	--
6570	637036.2	4167148.9	Worker	Scenario 2	4.09E-03	3.65E-05	--
6571	637136.2	4167148.9	Worker	Scenario 2	4.46E-03	3.88E-05	--
6572	637236.2	4167148.9	Worker	Scenario 2	4.73E-03	4.05E-05	--
6573	637336.2	4167148.9	Worker	Scenario 2	5.02E-03	4.23E-05	--
6574	637436.2	4167148.9	Worker	Scenario 2	5.31E-03	4.42E-05	--
6575	637536.2	4167148.9	Worker	Scenario 2	5.32E-03	4.48E-05	--
6576	637636.2	4167148.9	Worker	Scenario 2	5.11E-03	4.43E-05	--
6577	637736.2	4167148.9	Worker	Scenario 2	5.78E-03	4.80E-05	--
6578	637836.2	4167148.9	Worker	Scenario 2	5.92E-03	4.94E-05	--
6579	637936.2	4167148.9	Worker	Scenario 2	6.50E-03	5.26E-05	--
6580	638036.2	4167148.9	Worker	Scenario 2	7.41E-03	5.73E-05	--
6581	638136.2	4167148.9	Worker	Scenario 2	7.38E-03	5.80E-05	--
6582	638236.2	4167148.9	Worker	Scenario 2	8.95E-03	6.56E-05	--
6583	638336.2	4167148.9	Worker	Scenario 2	8.01E-03	6.26E-05	--
6584	638436.2	4167148.9	Worker	Scenario 2	8.68E-03	6.64E-05	--
6585	638536.2	4167148.9	Worker	Scenario 2	8.63E-03	6.73E-05	--
6586	638636.2	4167148.9	Worker	Scenario 2	9.10E-03	7.04E-05	--
6587	638736.2	4167148.9	Worker	Scenario 2	9.53E-03	7.36E-05	--
6588	638836.2	4167148.9	Worker	Scenario 2	1.01E-02	7.76E-05	--
6589	638936.2	4167148.9	Worker	Scenario 2	1.05E-02	8.13E-05	--
6590	639036.2	4167148.9	Worker	Scenario 2	1.11E-02	8.60E-05	--
6591	639136.2	4167148.9	Worker	Scenario 2	1.18E-02	9.11E-05	--
6592	639236.2	4167148.9	Worker	Scenario 2	1.25E-02	9.65E-05	--
6593	639336.2	4167148.9	Worker	Scenario 2	1.32E-02	1.03E-04	--
6594	639436.2	4167148.9	Worker	Scenario 2	1.42E-02	1.10E-04	--
6595	639536.2	4167148.9	Worker	Scenario 2	1.50E-02	1.17E-04	--
6596	639636.2	4167148.9	Worker	Scenario 2	1.57E-02	1.24E-04	--
6597	639736.2	4167148.9	Worker	Scenario 2	1.66E-02	1.33E-04	--
6598	639836.2	4167148.9	Worker	Scenario 2	1.76E-02	1.43E-04	--
6599	639936.2	4167148.9	Worker	Scenario 2	1.87E-02	1.55E-04	--
6600	640036.2	4167148.9	Worker	Scenario 2	1.99E-02	1.68E-04	--
6601	640136.2	4167148.9	Worker	Scenario 2	2.12E-02	1.83E-04	--
6602	640236.2	4167148.9	Worker	Scenario 2	2.27E-02	2.00E-04	--
6603	640336.2	4167148.9	Worker	Scenario 2	2.45E-02	2.20E-04	--
6604	640436.2	4167148.9	Worker	Scenario 2	2.65E-02	2.43E-04	--
6605	640836.2	4167148.9	Worker	Scenario 2	3.94E-02	4.03E-04	--
6606	640936.2	4167148.9	Worker	Scenario 2	4.55E-02	4.82E-04	--
6607	641036.2	4167148.9	Worker	Scenario 2	5.49E-02	6.04E-04	--
6608	641136.2	4167148.9	Worker	Scenario 2	7.09E-02	8.15E-04	--
6609	644836.2	4167148.9	Worker	Scenario 2	2.93E-01	8.65E-04	--
6610	644936.2	4167148.9	Worker	Scenario 2	2.71E-01	8.03E-04	--
6611	645036.2	4167148.9	Worker	Scenario 2	2.52E-01	7.49E-04	--
6612	645136.2	4167148.9	Worker	Scenario 2	2.35E-01	7.01E-04	--
6613	645436.2	4167148.9	Worker	Scenario 2	1.95E-01	5.87E-04	--
6614	645536.2	4167148.9	Worker	Scenario 2	1.84E-01	5.55E-04	--
6615	645636.2	4167148.9	Worker	Scenario 2	1.74E-01	5.26E-04	--
6616	645836.2	4167148.9	Worker	Scenario 2	1.56E-01	4.74E-04	--
6617	645936.2	4167148.9	Worker	Scenario 2	1.48E-01	4.52E-04	--
6618	646036.2	4167148.9	Worker	Scenario 2	1.41E-01	4.31E-04	--
6619	646336.2	4167148.9	Worker	Scenario 2	1.23E-01	3.77E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million) Receptor Risk	Chronic Hazard Index Receptor Risk	Acute Hazard Index Receptor Risk
6620	646436.2	4167148.9	Worker	Scenario 2	1.18E-01	3.62E-04	--
6621	646536.2	4167148.9	Worker	Scenario 2	1.13E-01	3.47E-04	--
6622	646636.2	4167148.9	Worker	Scenario 2	1.08E-01	3.33E-04	--
6623	646736.2	4167148.9	Worker	Scenario 2	1.04E-01	3.21E-04	--
6624	646836.2	4167148.9	Worker	Scenario 2	9.97E-02	3.09E-04	--
6625	646936.2	4167148.9	Worker	Scenario 2	9.60E-02	2.97E-04	--
6626	647036.2	4167148.9	Worker	Scenario 2	9.24E-02	2.87E-04	--
6627	636836.2	4167248.9	Worker	Scenario 2	4.11E-03	3.60E-05	--
6628	636936.2	4167248.9	Worker	Scenario 2	4.56E-03	3.84E-05	--
6629	637036.2	4167248.9	Worker	Scenario 2	4.30E-03	3.76E-05	--
6630	637136.2	4167248.9	Worker	Scenario 2	4.66E-03	3.97E-05	--
6631	637236.2	4167248.9	Worker	Scenario 2	4.84E-03	4.10E-05	--
6632	637336.2	4167248.9	Worker	Scenario 2	5.38E-03	4.38E-05	--
6633	637436.2	4167248.9	Worker	Scenario 2	5.57E-03	4.52E-05	--
6634	637536.2	4167248.9	Worker	Scenario 2	5.58E-03	4.57E-05	--
6635	637636.2	4167248.9	Worker	Scenario 2	5.44E-03	4.57E-05	--
6636	637736.2	4167248.9	Worker	Scenario 2	6.00E-03	4.87E-05	--
6637	637836.2	4167248.9	Worker	Scenario 2	7.09E-03	5.39E-05	--
6638	637936.2	4167248.9	Worker	Scenario 2	6.33E-03	5.15E-05	--
6639	638036.2	4167248.9	Worker	Scenario 2	6.87E-03	5.46E-05	--
6640	638136.2	4167248.9	Worker	Scenario 2	8.07E-03	6.05E-05	--
6641	638236.2	4167248.9	Worker	Scenario 2	8.29E-03	6.23E-05	--
6642	638336.2	4167248.9	Worker	Scenario 2	8.75E-03	6.53E-05	--
6643	638436.2	4167248.9	Worker	Scenario 2	8.87E-03	6.68E-05	--
6644	638536.2	4167248.9	Worker	Scenario 2	9.41E-03	7.03E-05	--
6645	638636.2	4167248.9	Worker	Scenario 2	9.38E-03	7.13E-05	--
6646	638736.2	4167248.9	Worker	Scenario 2	9.79E-03	7.44E-05	--
6647	638836.2	4167248.9	Worker	Scenario 2	1.02E-02	7.80E-05	--
6648	638936.2	4167248.9	Worker	Scenario 2	1.08E-02	8.23E-05	--
6649	639036.2	4167248.9	Worker	Scenario 2	1.14E-02	8.67E-05	--
6650	639136.2	4167248.9	Worker	Scenario 2	1.20E-02	9.20E-05	--
6651	639236.2	4167248.9	Worker	Scenario 2	1.27E-02	9.77E-05	--
6652	639336.2	4167248.9	Worker	Scenario 2	1.35E-02	1.04E-04	--
6653	639436.2	4167248.9	Worker	Scenario 2	1.43E-02	1.11E-04	--
6654	639536.2	4167248.9	Worker	Scenario 2	1.52E-02	1.19E-04	--
6655	639636.2	4167248.9	Worker	Scenario 2	1.61E-02	1.27E-04	--
6656	639736.2	4167248.9	Worker	Scenario 2	1.70E-02	1.36E-04	--
6657	639836.2	4167248.9	Worker	Scenario 2	1.81E-02	1.46E-04	--
6658	639936.2	4167248.9	Worker	Scenario 2	1.93E-02	1.58E-04	--
6659	640036.2	4167248.9	Worker	Scenario 2	2.06E-02	1.72E-04	--
6660	640136.2	4167248.9	Worker	Scenario 2	2.20E-02	1.89E-04	--
6661	640236.2	4167248.9	Worker	Scenario 2	2.37E-02	2.07E-04	--
6662	640336.2	4167248.9	Worker	Scenario 2	2.55E-02	2.29E-04	--
6663	640636.2	4167248.9	Worker	Scenario 2	3.35E-02	3.26E-04	--
6664	640736.2	4167248.9	Worker	Scenario 2	3.76E-02	3.77E-04	--
6665	640836.2	4167248.9	Worker	Scenario 2	4.18E-02	4.33E-04	--
6666	640936.2	4167248.9	Worker	Scenario 2	4.85E-02	5.23E-04	--
6667	641036.2	4167248.9	Worker	Scenario 2	5.85E-02	6.55E-04	--
6668	641136.2	4167248.9	Worker	Scenario 2	7.55E-02	8.81E-04	--
6669	645036.2	4167248.9	Worker	Scenario 2	2.66E-01	7.81E-04	--
6670	645136.2	4167248.9	Worker	Scenario 2	2.47E-01	7.28E-04	--
6671	645336.2	4167248.9	Worker	Scenario 2	2.16E-01	6.41E-04	--
6672	645436.2	4167248.9	Worker	Scenario 2	2.03E-01	6.04E-04	--
6673	645536.2	4167248.9	Worker	Scenario 2	1.91E-01	5.71E-04	--
6674	645636.2	4167248.9	Worker	Scenario 2	1.80E-01	5.39E-04	--
6675	645736.2	4167248.9	Worker	Scenario 2	1.70E-01	5.11E-04	--
6676	645836.2	4167248.9	Worker	Scenario 2	1.61E-01	4.85E-04	--
6677	645936.2	4167248.9	Worker	Scenario 2	1.53E-01	4.62E-04	--
6678	646036.2	4167248.9	Worker	Scenario 2	1.45E-01	4.40E-04	--
6679	646136.2	4167248.9	Worker	Scenario 2	1.38E-01	4.19E-04	--
6680	646336.2	4167248.9	Worker	Scenario 2	1.26E-01	3.83E-04	--
6681	646436.2	4167248.9	Worker	Scenario 2	1.20E-01	3.67E-04	--
6682	646536.2	4167248.9	Worker	Scenario 2	1.15E-01	3.52E-04	--
6683	646636.2	4167248.9	Worker	Scenario 2	1.10E-01	3.38E-04	--
6684	646736.2	4167248.9	Worker	Scenario 2	1.06E-01	3.25E-04	--
6685	646836.2	4167248.9	Worker	Scenario 2	1.02E-01	3.12E-04	--
6686	646936.2	4167248.9	Worker	Scenario 2	9.78E-02	3.01E-04	--
6687	647036.2	4167248.9	Worker	Scenario 2	9.40E-02	2.90E-04	--
6688	636736.2	4167348.9	Worker	Scenario 2	4.28E-03	3.63E-05	--
6689	636836.2	4167348.9	Worker	Scenario 2	4.18E-03	3.63E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6690	636936.2	4167348.9	Worker	Scenario 2	4.73E-03	3.92E-05	--
6691	637036.2	4167348.9	Worker	Scenario 2	4.80E-03	4.00E-05	--
6692	637136.2	4167348.9	Worker	Scenario 2	4.52E-03	3.91E-05	--
6693	637236.2	4167348.9	Worker	Scenario 2	4.61E-03	3.99E-05	--
6694	637336.2	4167348.9	Worker	Scenario 2	4.90E-03	4.17E-05	--
6695	637436.2	4167348.9	Worker	Scenario 2	5.74E-03	4.59E-05	--
6696	637536.2	4167348.9	Worker	Scenario 2	5.87E-03	4.70E-05	--
6697	637636.2	4167348.9	Worker	Scenario 2	5.77E-03	4.71E-05	--
6698	637736.2	4167348.9	Worker	Scenario 2	6.00E-03	4.87E-05	--
6699	637836.2	4167348.9	Worker	Scenario 2	7.22E-03	5.44E-05	--
6700	637936.2	4167348.9	Worker	Scenario 2	7.22E-03	5.51E-05	--
6701	638036.2	4167348.9	Worker	Scenario 2	7.51E-03	5.70E-05	--
6702	638136.2	4167348.9	Worker	Scenario 2	7.94E-03	5.97E-05	--
6703	638236.2	4167348.9	Worker	Scenario 2	8.05E-03	6.10E-05	--
6704	638336.2	4167348.9	Worker	Scenario 2	9.43E-03	6.81E-05	--
6705	638436.2	4167348.9	Worker	Scenario 2	9.66E-03	7.02E-05	--
6706	638536.2	4167348.9	Worker	Scenario 2	9.08E-03	6.85E-05	--
6707	638636.2	4167348.9	Worker	Scenario 2	9.67E-03	7.23E-05	--
6708	638736.2	4167348.9	Worker	Scenario 2	9.93E-03	7.49E-05	--
6709	638836.2	4167348.9	Worker	Scenario 2	1.04E-02	7.84E-05	--
6710	638936.2	4167348.9	Worker	Scenario 2	1.10E-02	8.29E-05	--
6711	639036.2	4167348.9	Worker	Scenario 2	1.15E-02	8.70E-05	--
6712	639136.2	4167348.9	Worker	Scenario 2	1.21E-02	9.19E-05	--
6713	639236.2	4167348.9	Worker	Scenario 2	1.29E-02	9.81E-05	--
6714	639336.2	4167348.9	Worker	Scenario 2	1.37E-02	1.05E-04	--
6715	639436.2	4167348.9	Worker	Scenario 2	1.45E-02	1.12E-04	--
6716	639536.2	4167348.9	Worker	Scenario 2	1.54E-02	1.20E-04	--
6717	639636.2	4167348.9	Worker	Scenario 2	1.64E-02	1.29E-04	--
6718	639736.2	4167348.9	Worker	Scenario 2	1.73E-02	1.38E-04	--
6719	639836.2	4167348.9	Worker	Scenario 2	1.84E-02	1.48E-04	--
6720	639936.2	4167348.9	Worker	Scenario 2	1.96E-02	1.61E-04	--
6721	640036.2	4167348.9	Worker	Scenario 2	2.11E-02	1.76E-04	--
6722	640136.2	4167348.9	Worker	Scenario 2	2.26E-02	1.93E-04	--
6723	640236.2	4167348.9	Worker	Scenario 2	2.44E-02	2.13E-04	--
6724	640536.2	4167348.9	Worker	Scenario 2	3.17E-02	3.01E-04	--
6725	640636.2	4167348.9	Worker	Scenario 2	3.54E-02	3.46E-04	--
6726	640736.2	4167348.9	Worker	Scenario 2	3.87E-02	3.94E-04	--
6727	640836.2	4167348.9	Worker	Scenario 2	4.39E-02	4.64E-04	--
6728	640936.2	4167348.9	Worker	Scenario 2	5.12E-02	5.62E-04	--
6729	641036.2	4167348.9	Worker	Scenario 2	6.18E-02	7.07E-04	--
6730	641136.2	4167348.9	Worker	Scenario 2	7.97E-02	9.54E-04	--
6731	644836.2	4167348.9	Worker	Scenario 2	3.23E-01	9.31E-04	--
6732	644936.2	4167348.9	Worker	Scenario 2	2.96E-01	8.59E-04	--
6733	645036.2	4167348.9	Worker	Scenario 2	2.74E-01	7.98E-04	--
6734	645136.2	4167348.9	Worker	Scenario 2	2.54E-01	7.43E-04	--
6735	645236.2	4167348.9	Worker	Scenario 2	2.37E-01	6.96E-04	--
6736	645336.2	4167348.9	Worker	Scenario 2	2.22E-01	6.53E-04	--
6737	645436.2	4167348.9	Worker	Scenario 2	2.08E-01	6.14E-04	--
6738	645536.2	4167348.9	Worker	Scenario 2	1.95E-01	5.79E-04	--
6739	645636.2	4167348.9	Worker	Scenario 2	1.84E-01	5.47E-04	--
6740	645736.2	4167348.9	Worker	Scenario 2	1.74E-01	5.18E-04	--
6741	645836.2	4167348.9	Worker	Scenario 2	1.64E-01	4.91E-04	--
6742	645936.2	4167348.9	Worker	Scenario 2	1.56E-01	4.67E-04	--
6743	646036.2	4167348.9	Worker	Scenario 2	1.48E-01	4.44E-04	--
6744	646336.2	4167348.9	Worker	Scenario 2	1.28E-01	3.86E-04	--
6745	646436.2	4167348.9	Worker	Scenario 2	1.22E-01	3.70E-04	--
6746	646536.2	4167348.9	Worker	Scenario 2	1.17E-01	3.54E-04	--
6747	646636.2	4167348.9	Worker	Scenario 2	1.12E-01	3.40E-04	--
6748	646736.2	4167348.9	Worker	Scenario 2	1.07E-01	3.27E-04	--
6749	646836.2	4167348.9	Worker	Scenario 2	1.03E-01	3.14E-04	--
6750	646936.2	4167348.9	Worker	Scenario 2	9.88E-02	3.02E-04	--
6751	647036.2	4167348.9	Worker	Scenario 2	9.50E-02	2.91E-04	--
6752	636636.2	4167448.9	Worker	Scenario 2	4.06E-03	3.49E-05	--
6753	636736.2	4167448.9	Worker	Scenario 2	4.45E-03	3.71E-05	--
6754	636836.2	4167448.9	Worker	Scenario 2	4.82E-03	3.92E-05	--
6755	636936.2	4167448.9	Worker	Scenario 2	4.88E-03	3.99E-05	--
6756	637036.2	4167448.9	Worker	Scenario 2	4.36E-03	3.80E-05	--
6757	637136.2	4167448.9	Worker	Scenario 2	4.60E-03	3.95E-05	--
6758	637236.2	4167448.9	Worker	Scenario 2	4.78E-03	4.09E-05	--
6759	637336.2	4167448.9	Worker	Scenario 2	5.17E-03	4.31E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6760	637436.2	4167448.9	Worker	Scenario 2	5.40E-03	4.46E-05	--
6761	637536.2	4167448.9	Worker	Scenario 2	6.15E-03	4.84E-05	--
6762	637636.2	4167448.9	Worker	Scenario 2	6.08E-03	4.87E-05	--
6763	637736.2	4167448.9	Worker	Scenario 2	6.30E-03	5.02E-05	--
6764	637836.2	4167448.9	Worker	Scenario 2	6.28E-03	5.07E-05	--
6765	637936.2	4167448.9	Worker	Scenario 2	7.60E-03	5.70E-05	--
6766	638036.2	4167448.9	Worker	Scenario 2	7.56E-03	5.75E-05	--
6767	638136.2	4167448.9	Worker	Scenario 2	7.76E-03	5.91E-05	--
6768	638236.2	4167448.9	Worker	Scenario 2	8.49E-03	6.31E-05	--
6769	638336.2	4167448.9	Worker	Scenario 2	8.75E-03	6.52E-05	--
6770	638436.2	4167448.9	Worker	Scenario 2	9.79E-03	7.12E-05	--
6771	638536.2	4167448.9	Worker	Scenario 2	9.37E-03	6.99E-05	--
6772	638636.2	4167448.9	Worker	Scenario 2	9.78E-03	7.29E-05	--
6773	638736.2	4167448.9	Worker	Scenario 2	1.02E-02	7.61E-05	--
6774	638836.2	4167448.9	Worker	Scenario 2	1.06E-02	7.96E-05	--
6775	638936.2	4167448.9	Worker	Scenario 2	1.12E-02	8.37E-05	--
6776	639036.2	4167448.9	Worker	Scenario 2	1.17E-02	8.80E-05	--
6777	639136.2	4167448.9	Worker	Scenario 2	1.22E-02	9.25E-05	--
6778	639236.2	4167448.9	Worker	Scenario 2	1.29E-02	9.84E-05	--
6779	639336.2	4167448.9	Worker	Scenario 2	1.37E-02	1.05E-04	--
6780	639436.2	4167448.9	Worker	Scenario 2	1.46E-02	1.12E-04	--
6781	639536.2	4167448.9	Worker	Scenario 2	1.55E-02	1.21E-04	--
6782	639636.2	4167448.9	Worker	Scenario 2	1.67E-02	1.32E-04	--
6783	639736.2	4167448.9	Worker	Scenario 2	1.75E-02	1.39E-04	--
6784	639836.2	4167448.9	Worker	Scenario 2	1.86E-02	1.50E-04	--
6785	639936.2	4167448.9	Worker	Scenario 2	1.99E-02	1.63E-04	--
6786	640036.2	4167448.9	Worker	Scenario 2	2.14E-02	1.79E-04	--
6787	640136.2	4167448.9	Worker	Scenario 2	2.32E-02	1.99E-04	--
6788	640436.2	4167448.9	Worker	Scenario 2	2.95E-02	2.74E-04	--
6789	640536.2	4167448.9	Worker	Scenario 2	3.27E-02	3.12E-04	--
6790	640636.2	4167448.9	Worker	Scenario 2	3.60E-02	3.55E-04	--
6791	640736.2	4167448.9	Worker	Scenario 2	4.01E-02	4.11E-04	--
6792	640836.2	4167448.9	Worker	Scenario 2	4.56E-02	4.88E-04	--
6793	644836.2	4167448.9	Worker	Scenario 2	3.24E-01	9.32E-04	--
6794	644936.2	4167448.9	Worker	Scenario 2	2.98E-01	8.61E-04	--
6795	645036.2	4167448.9	Worker	Scenario 2	2.76E-01	7.99E-04	--
6796	645136.2	4167448.9	Worker	Scenario 2	2.56E-01	7.45E-04	--
6797	645236.2	4167448.9	Worker	Scenario 2	2.38E-01	6.97E-04	--
6798	645336.2	4167448.9	Worker	Scenario 2	2.23E-01	6.54E-04	--
6799	645436.2	4167448.9	Worker	Scenario 2	2.09E-01	6.15E-04	--
6800	645536.2	4167448.9	Worker	Scenario 2	1.96E-01	5.79E-04	--
6801	645636.2	4167448.9	Worker	Scenario 2	1.85E-01	5.47E-04	--
6802	645736.2	4167448.9	Worker	Scenario 2	1.74E-01	5.18E-04	--
6803	645836.2	4167448.9	Worker	Scenario 2	1.65E-01	4.91E-04	--
6804	645936.2	4167448.9	Worker	Scenario 2	1.56E-01	4.66E-04	--
6805	646336.2	4167448.9	Worker	Scenario 2	1.28E-01	3.86E-04	--
6806	646436.2	4167448.9	Worker	Scenario 2	1.22E-01	3.69E-04	--
6807	646536.2	4167448.9	Worker	Scenario 2	1.17E-01	3.54E-04	--
6808	646636.2	4167448.9	Worker	Scenario 2	1.12E-01	3.40E-04	--
6809	646736.2	4167448.9	Worker	Scenario 2	1.07E-01	3.26E-04	--
6810	646836.2	4167448.9	Worker	Scenario 2	1.03E-01	3.14E-04	--
6811	646936.2	4167448.9	Worker	Scenario 2	9.90E-02	3.02E-04	--
6812	647036.2	4167448.9	Worker	Scenario 2	9.51E-02	2.91E-04	--
6813	636536.2	4167548.9	Worker	Scenario 2	4.17E-03	3.51E-05	--
6814	636636.2	4167548.9	Worker	Scenario 2	4.45E-03	3.68E-05	--
6815	636736.2	4167548.9	Worker	Scenario 2	4.56E-03	3.78E-05	--
6816	636836.2	4167548.9	Worker	Scenario 2	4.70E-03	3.88E-05	--
6817	636936.2	4167548.9	Worker	Scenario 2	4.43E-03	3.80E-05	--
6818	637036.2	4167548.9	Worker	Scenario 2	4.36E-03	3.81E-05	--
6819	637136.2	4167548.9	Worker	Scenario 2	4.72E-03	4.03E-05	--
6820	637236.2	4167548.9	Worker	Scenario 2	5.03E-03	4.22E-05	--
6821	637336.2	4167548.9	Worker	Scenario 2	5.00E-03	4.26E-05	--
6822	637436.2	4167548.9	Worker	Scenario 2	5.65E-03	4.61E-05	--
6823	637536.2	4167548.9	Worker	Scenario 2	5.62E-03	4.65E-05	--
6824	637636.2	4167548.9	Worker	Scenario 2	6.61E-03	5.14E-05	--
6825	637736.2	4167548.9	Worker	Scenario 2	6.58E-03	5.19E-05	--
6826	637836.2	4167548.9	Worker	Scenario 2	6.72E-03	5.32E-05	--
6827	637936.2	4167548.9	Worker	Scenario 2	7.96E-03	5.95E-05	--
6828	638036.2	4167548.9	Worker	Scenario 2	8.24E-03	6.14E-05	--
6829	638136.2	4167548.9	Worker	Scenario 2	7.71E-03	5.96E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6830	638236.2	4167548.9	Worker	Scenario 2	8.83E-03	6.56E-05	--
6831	638336.2	4167548.9	Worker	Scenario 2	8.56E-03	6.50E-05	--
6832	638436.2	4167548.9	Worker	Scenario 2	9.74E-03	7.19E-05	--
6833	638536.2	4167548.9	Worker	Scenario 2	9.60E-03	7.18E-05	--
6834	638636.2	4167548.9	Worker	Scenario 2	9.84E-03	7.43E-05	--
6835	638736.2	4167548.9	Worker	Scenario 2	1.05E-02	7.87E-05	--
6836	638836.2	4167548.9	Worker	Scenario 2	1.07E-02	8.11E-05	--
6837	638936.2	4167548.9	Worker	Scenario 2	1.13E-02	8.59E-05	--
6838	639036.2	4167548.9	Worker	Scenario 2	1.18E-02	8.98E-05	--
6839	639136.2	4167548.9	Worker	Scenario 2	1.24E-02	9.44E-05	--
6840	639236.2	4167548.9	Worker	Scenario 2	1.31E-02	1.00E-04	--
6841	639336.2	4167548.9	Worker	Scenario 2	1.39E-02	1.07E-04	--
6842	639436.2	4167548.9	Worker	Scenario 2	1.47E-02	1.15E-04	--
6843	639536.2	4167548.9	Worker	Scenario 2	1.56E-02	1.23E-04	--
6844	639636.2	4167548.9	Worker	Scenario 2	1.67E-02	1.33E-04	--
6845	639736.2	4167548.9	Worker	Scenario 2	1.77E-02	1.42E-04	--
6846	639836.2	4167548.9	Worker	Scenario 2	1.88E-02	1.54E-04	--
6847	639936.2	4167548.9	Worker	Scenario 2	2.02E-02	1.67E-04	--
6848	640036.2	4167548.9	Worker	Scenario 2	2.17E-02	1.83E-04	--
6849	640236.2	4167548.9	Worker	Scenario 2	2.57E-02	2.27E-04	--
6850	640336.2	4167548.9	Worker	Scenario 2	2.80E-02	2.55E-04	--
6851	640436.2	4167548.9	Worker	Scenario 2	3.04E-02	2.84E-04	--
6852	644536.2	4167548.9	Worker	Scenario 2	4.16E-01	1.18E-03	--
6853	644736.2	4167548.9	Worker	Scenario 2	3.45E-01	9.87E-04	--
6854	644836.2	4167548.9	Worker	Scenario 2	3.16E-01	9.10E-04	--
6855	644936.2	4167548.9	Worker	Scenario 2	2.92E-01	8.42E-04	--
6856	645036.2	4167548.9	Worker	Scenario 2	2.70E-01	7.83E-04	--
6857	645136.2	4167548.9	Worker	Scenario 2	2.51E-01	7.31E-04	--
6858	645236.2	4167548.9	Worker	Scenario 2	2.34E-01	6.85E-04	--
6859	645336.2	4167548.9	Worker	Scenario 2	2.19E-01	6.43E-04	--
6860	645436.2	4167548.9	Worker	Scenario 2	2.06E-01	6.05E-04	--
6861	645536.2	4167548.9	Worker	Scenario 2	1.94E-01	5.71E-04	--
6862	645636.2	4167548.9	Worker	Scenario 2	1.82E-01	5.39E-04	--
6863	645736.2	4167548.9	Worker	Scenario 2	1.72E-01	5.11E-04	--
6864	645836.2	4167548.9	Worker	Scenario 2	1.63E-01	4.85E-04	--
6865	645936.2	4167548.9	Worker	Scenario 2	1.54E-01	4.61E-04	--
6866	646036.2	4167548.9	Worker	Scenario 2	1.47E-01	4.39E-04	--
6867	646236.2	4167548.9	Worker	Scenario 2	1.33E-01	3.99E-04	--
6868	646336.2	4167548.9	Worker	Scenario 2	1.27E-01	3.82E-04	--
6869	646436.2	4167548.9	Worker	Scenario 2	1.21E-01	3.65E-04	--
6870	646536.2	4167548.9	Worker	Scenario 2	1.16E-01	3.50E-04	--
6871	646636.2	4167548.9	Worker	Scenario 2	1.11E-01	3.36E-04	--
6872	646736.2	4167548.9	Worker	Scenario 2	1.07E-01	3.23E-04	--
6873	646836.2	4167548.9	Worker	Scenario 2	1.02E-01	3.11E-04	--
6874	646936.2	4167548.9	Worker	Scenario 2	9.84E-02	2.99E-04	--
6875	647036.2	4167548.9	Worker	Scenario 2	9.45E-02	2.88E-04	--
6876	636436.2	4167648.9	Worker	Scenario 2	4.17E-03	3.48E-05	--
6877	636536.2	4167648.9	Worker	Scenario 2	4.42E-03	3.64E-05	--
6878	636636.2	4167648.9	Worker	Scenario 2	4.75E-03	3.82E-05	--
6879	636736.2	4167648.9	Worker	Scenario 2	4.66E-03	3.83E-05	--
6880	636836.2	4167648.9	Worker	Scenario 2	4.87E-03	3.97E-05	--
6881	636936.2	4167648.9	Worker	Scenario 2	4.79E-03	3.98E-05	--
6882	637036.2	4167648.9	Worker	Scenario 2	4.64E-03	3.95E-05	--
6883	637136.2	4167648.9	Worker	Scenario 2	4.97E-03	4.16E-05	--
6884	637236.2	4167648.9	Worker	Scenario 2	4.97E-03	4.21E-05	--
6885	637336.2	4167648.9	Worker	Scenario 2	5.36E-03	4.45E-05	--
6886	637436.2	4167648.9	Worker	Scenario 2	5.98E-03	4.79E-05	--
6887	637536.2	4167648.9	Worker	Scenario 2	5.54E-03	4.65E-05	--
6888	637636.2	4167648.9	Worker	Scenario 2	6.43E-03	5.11E-05	--
6889	637736.2	4167648.9	Worker	Scenario 2	6.88E-03	5.38E-05	--
6890	637836.2	4167648.9	Worker	Scenario 2	6.54E-03	5.29E-05	--
6891	637936.2	4167648.9	Worker	Scenario 2	7.50E-03	5.81E-05	--
6892	638036.2	4167648.9	Worker	Scenario 2	8.62E-03	6.43E-05	--
6893	638136.2	4167648.9	Worker	Scenario 2	7.97E-03	6.17E-05	--
6894	638236.2	4167648.9	Worker	Scenario 2	8.48E-03	6.49E-05	--
6895	638336.2	4167648.9	Worker	Scenario 2	8.98E-03	6.81E-05	--
6896	638436.2	4167648.9	Worker	Scenario 2	9.48E-03	7.16E-05	--
6897	638536.2	4167648.9	Worker	Scenario 2	1.02E-02	7.64E-05	--
6898	638636.2	4167648.9	Worker	Scenario 2	1.00E-02	7.64E-05	--
6899	638736.2	4167648.9	Worker	Scenario 2	1.06E-02	8.07E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6900	638836.2	4167648.9	Worker	Scenario 2	1.10E-02	8.39E-05	--
6901	638936.2	4167648.9	Worker	Scenario 2	1.16E-02	8.86E-05	--
6902	639036.2	4167648.9	Worker	Scenario 2	1.20E-02	9.26E-05	--
6903	639136.2	4167648.9	Worker	Scenario 2	1.26E-02	9.75E-05	--
6904	639236.2	4167648.9	Worker	Scenario 2	1.33E-02	1.03E-04	--
6905	639336.2	4167648.9	Worker	Scenario 2	1.41E-02	1.10E-04	--
6906	639436.2	4167648.9	Worker	Scenario 2	1.51E-02	1.19E-04	--
6907	639536.2	4167648.9	Worker	Scenario 2	1.59E-02	1.27E-04	--
6908	639636.2	4167648.9	Worker	Scenario 2	1.70E-02	1.37E-04	--
6909	639736.2	4167648.9	Worker	Scenario 2	1.82E-02	1.49E-04	--
6910	639836.2	4167648.9	Worker	Scenario 2	1.93E-02	1.59E-04	--
6911	639936.2	4167648.9	Worker	Scenario 2	2.06E-02	1.73E-04	--
6912	640136.2	4167648.9	Worker	Scenario 2	2.41E-02	2.10E-04	--
6913	643436.2	4167648.9	Worker	Scenario 2	1.40E+00	3.88E-03	--
6914	643536.2	4167648.9	Worker	Scenario 2	1.27E+00	3.49E-03	--
6915	643636.2	4167648.9	Worker	Scenario 2	1.11E+00	3.05E-03	--
6916	643736.2	4167648.9	Worker	Scenario 2	9.65E-01	2.66E-03	--
6917	643836.2	4167648.9	Worker	Scenario 2	8.44E-01	2.33E-03	--
6918	643936.2	4167648.9	Worker	Scenario 2	7.40E-01	2.06E-03	--
6919	644036.2	4167648.9	Worker	Scenario 2	6.55E-01	1.83E-03	--
6920	644136.2	4167648.9	Worker	Scenario 2	5.81E-01	1.63E-03	--
6921	644236.2	4167648.9	Worker	Scenario 2	5.20E-01	1.46E-03	--
6922	644336.2	4167648.9	Worker	Scenario 2	4.68E-01	1.33E-03	--
6923	644436.2	4167648.9	Worker	Scenario 2	4.24E-01	1.21E-03	--
6924	644536.2	4167648.9	Worker	Scenario 2	3.86E-01	1.10E-03	--
6925	645136.2	4167648.9	Worker	Scenario 2	2.40E-01	7.02E-04	--
6926	645336.2	4167648.9	Worker	Scenario 2	2.12E-01	6.22E-04	--
6927	645436.2	4167648.9	Worker	Scenario 2	1.99E-01	5.86E-04	--
6928	645536.2	4167648.9	Worker	Scenario 2	1.87E-01	5.53E-04	--
6929	645636.2	4167648.9	Worker	Scenario 2	1.77E-01	5.24E-04	--
6930	645736.2	4167648.9	Worker	Scenario 2	1.67E-01	4.97E-04	--
6931	645836.2	4167648.9	Worker	Scenario 2	1.59E-01	4.73E-04	--
6932	645936.2	4167648.9	Worker	Scenario 2	1.51E-01	4.50E-04	--
6933	646036.2	4167648.9	Worker	Scenario 2	1.43E-01	4.29E-04	--
6934	646236.2	4167648.9	Worker	Scenario 2	1.30E-01	3.91E-04	--
6935	646336.2	4167648.9	Worker	Scenario 2	1.24E-01	3.74E-04	--
6936	646436.2	4167648.9	Worker	Scenario 2	1.19E-01	3.59E-04	--
6937	646536.2	4167648.9	Worker	Scenario 2	1.14E-01	3.44E-04	--
6938	646636.2	4167648.9	Worker	Scenario 2	1.09E-01	3.30E-04	--
6939	646736.2	4167648.9	Worker	Scenario 2	1.05E-01	3.18E-04	--
6940	646836.2	4167648.9	Worker	Scenario 2	1.01E-01	3.06E-04	--
6941	646936.2	4167648.9	Worker	Scenario 2	9.69E-02	2.95E-04	--
6942	647036.2	4167648.9	Worker	Scenario 2	9.32E-02	2.84E-04	--
6943	636336.2	4167748.9	Worker	Scenario 2	3.77E-03	3.26E-05	--
6944	636436.2	4167748.9	Worker	Scenario 2	4.15E-03	3.47E-05	--
6945	636536.2	4167748.9	Worker	Scenario 2	4.10E-03	3.49E-05	--
6946	636636.2	4167748.9	Worker	Scenario 2	4.70E-03	3.81E-05	--
6947	636736.2	4167748.9	Worker	Scenario 2	5.05E-03	4.01E-05	--
6948	636836.2	4167748.9	Worker	Scenario 2	5.38E-03	4.19E-05	--
6949	636936.2	4167748.9	Worker	Scenario 2	5.51E-03	4.30E-05	--
6950	637036.2	4167748.9	Worker	Scenario 2	5.34E-03	4.28E-05	--
6951	637136.2	4167748.9	Worker	Scenario 2	4.90E-03	4.12E-05	--
6952	637236.2	4167748.9	Worker	Scenario 2	5.12E-03	4.28E-05	--
6953	637336.2	4167748.9	Worker	Scenario 2	5.28E-03	4.41E-05	--
6954	637436.2	4167748.9	Worker	Scenario 2	6.20E-03	4.89E-05	--
6955	637536.2	4167748.9	Worker	Scenario 2	5.76E-03	4.75E-05	--
6956	637636.2	4167748.9	Worker	Scenario 2	6.69E-03	5.24E-05	--
6957	637736.2	4167748.9	Worker	Scenario 2	7.22E-03	5.56E-05	--
6958	637836.2	4167748.9	Worker	Scenario 2	7.07E-03	5.56E-05	--
6959	637936.2	4167748.9	Worker	Scenario 2	8.17E-03	6.16E-05	--
6960	638036.2	4167748.9	Worker	Scenario 2	8.78E-03	6.56E-05	--
6961	638136.2	4167748.9	Worker	Scenario 2	8.13E-03	6.29E-05	--
6962	638236.2	4167748.9	Worker	Scenario 2	9.22E-03	6.94E-05	--
6963	638336.2	4167748.9	Worker	Scenario 2	9.00E-03	6.89E-05	--
6964	638436.2	4167748.9	Worker	Scenario 2	9.94E-03	7.49E-05	--
6965	638536.2	4167748.9	Worker	Scenario 2	1.05E-02	7.91E-05	--
6966	638636.2	4167748.9	Worker	Scenario 2	1.03E-02	7.86E-05	--
6967	638736.2	4167748.9	Worker	Scenario 2	1.11E-02	8.43E-05	--
6968	638836.2	4167748.9	Worker	Scenario 2	1.13E-02	8.68E-05	--
6969	638936.2	4167748.9	Worker	Scenario 2	1.19E-02	9.13E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6970	639036.2	4167748.9	Worker	Scenario 2	1.24E-02	9.55E-05	--
6971	639136.2	4167748.9	Worker	Scenario 2	1.30E-02	1.01E-04	--
6972	639236.2	4167748.9	Worker	Scenario 2	1.36E-02	1.06E-04	--
6973	639336.2	4167748.9	Worker	Scenario 2	1.45E-02	1.14E-04	--
6974	639436.2	4167748.9	Worker	Scenario 2	1.54E-02	1.21E-04	--
6975	639536.2	4167748.9	Worker	Scenario 2	1.65E-02	1.31E-04	--
6976	639636.2	4167748.9	Worker	Scenario 2	1.75E-02	1.41E-04	--
6977	639736.2	4167748.9	Worker	Scenario 2	1.89E-02	1.54E-04	--
6978	640036.2	4167748.9	Worker	Scenario 2	2.30E-02	1.97E-04	--
6979	643336.2	4167748.9	Worker	Scenario 2	5.22E-01	1.83E-03	--
6980	643436.2	4167748.9	Worker	Scenario 2	6.02E-01	1.93E-03	--
6981	643536.2	4167748.9	Worker	Scenario 2	6.57E-01	1.99E-03	--
6982	643636.2	4167748.9	Worker	Scenario 2	6.69E-01	1.97E-03	--
6983	643736.2	4167748.9	Worker	Scenario 2	6.43E-01	1.87E-03	--
6984	643836.2	4167748.9	Worker	Scenario 2	6.08E-01	1.75E-03	--
6985	643936.2	4167748.9	Worker	Scenario 2	5.66E-01	1.62E-03	--
6986	644036.2	4167748.9	Worker	Scenario 2	5.22E-01	1.50E-03	--
6987	644336.2	4167748.9	Worker	Scenario 2	4.06E-01	1.17E-03	--
6988	644436.2	4167748.9	Worker	Scenario 2	3.72E-01	1.08E-03	--
6989	644636.2	4167748.9	Worker	Scenario 2	3.19E-01	9.25E-04	--
6990	644736.2	4167748.9	Worker	Scenario 2	2.96E-01	8.61E-04	--
6991	644836.2	4167748.9	Worker	Scenario 2	2.75E-01	8.03E-04	--
6992	644936.2	4167748.9	Worker	Scenario 2	2.57E-01	7.51E-04	--
6993	646036.2	4167748.9	Worker	Scenario 2	1.38E-01	4.15E-04	--
6994	646236.2	4167748.9	Worker	Scenario 2	1.26E-01	3.80E-04	--
6995	646336.2	4167748.9	Worker	Scenario 2	1.21E-01	3.64E-04	--
6996	646436.2	4167748.9	Worker	Scenario 2	1.15E-01	3.49E-04	--
6997	646536.2	4167748.9	Worker	Scenario 2	1.11E-01	3.35E-04	--
6998	646636.2	4167748.9	Worker	Scenario 2	1.06E-01	3.22E-04	--
6999	646736.2	4167748.9	Worker	Scenario 2	1.02E-01	3.10E-04	--
7000	646836.2	4167748.9	Worker	Scenario 2	9.82E-02	2.99E-04	--
7001	646936.2	4167748.9	Worker	Scenario 2	9.46E-02	2.88E-04	--
7002	647036.2	4167748.9	Worker	Scenario 2	9.12E-02	2.78E-04	--
7003	636236.2	4167848.9	Worker	Scenario 2	3.62E-03	3.15E-05	--
7004	636336.2	4167848.9	Worker	Scenario 2	3.84E-03	3.29E-05	--
7005	636436.2	4167848.9	Worker	Scenario 2	3.82E-03	3.30E-05	--
7006	636536.2	4167848.9	Worker	Scenario 2	4.07E-03	3.46E-05	--
7007	636636.2	4167848.9	Worker	Scenario 2	4.05E-03	3.48E-05	--
7008	636736.2	4167848.9	Worker	Scenario 2	4.33E-03	3.66E-05	--
7009	636836.2	4167848.9	Worker	Scenario 2	5.25E-03	4.12E-05	--
7010	636936.2	4167848.9	Worker	Scenario 2	5.90E-03	4.45E-05	--
7011	637036.2	4167848.9	Worker	Scenario 2	5.59E-03	4.37E-05	--
7012	637136.2	4167848.9	Worker	Scenario 2	4.95E-03	4.12E-05	--
7013	637236.2	4167848.9	Worker	Scenario 2	5.62E-03	4.48E-05	--
7014	637336.2	4167848.9	Worker	Scenario 2	5.72E-03	4.58E-05	--
7015	637436.2	4167848.9	Worker	Scenario 2	6.16E-03	4.84E-05	--
7016	637536.2	4167848.9	Worker	Scenario 2	6.39E-03	5.00E-05	--
7017	637636.2	4167848.9	Worker	Scenario 2	6.49E-03	5.12E-05	--
7018	637736.2	4167848.9	Worker	Scenario 2	7.54E-03	5.67E-05	--
7019	637836.2	4167848.9	Worker	Scenario 2	7.52E-03	5.74E-05	--
7020	637936.2	4167848.9	Worker	Scenario 2	7.91E-03	6.00E-05	--
7021	638036.2	4167848.9	Worker	Scenario 2	9.10E-03	6.70E-05	--
7022	638136.2	4167848.9	Worker	Scenario 2	8.59E-03	6.49E-05	--
7023	638236.2	4167848.9	Worker	Scenario 2	9.40E-03	7.01E-05	--
7024	638336.2	4167848.9	Worker	Scenario 2	9.51E-03	7.17E-05	--
7025	638436.2	4167848.9	Worker	Scenario 2	9.92E-03	7.49E-05	--
7026	638536.2	4167848.9	Worker	Scenario 2	1.07E-02	8.01E-05	--
7027	638636.2	4167848.9	Worker	Scenario 2	1.07E-02	8.12E-05	--
7028	638736.2	4167848.9	Worker	Scenario 2	1.15E-02	8.68E-05	--
7029	638836.2	4167848.9	Worker	Scenario 2	1.18E-02	8.94E-05	--
7030	638936.2	4167848.9	Worker	Scenario 2	1.23E-02	9.40E-05	--
7031	639036.2	4167848.9	Worker	Scenario 2	1.29E-02	9.83E-05	--
7032	639136.2	4167848.9	Worker	Scenario 2	1.34E-02	1.03E-04	--
7033	639236.2	4167848.9	Worker	Scenario 2	1.42E-02	1.09E-04	--
7034	639336.2	4167848.9	Worker	Scenario 2	1.51E-02	1.17E-04	--
7035	639436.2	4167848.9	Worker	Scenario 2	1.59E-02	1.25E-04	--
7036	639536.2	4167848.9	Worker	Scenario 2	1.70E-02	1.34E-04	--
7037	639636.2	4167848.9	Worker	Scenario 2	1.82E-02	1.45E-04	--
7038	639836.2	4167848.9	Worker	Scenario 2	2.06E-02	1.69E-04	--
7039	643336.2	4167848.9	Worker	Scenario 2	3.58E-01	1.36E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7040	643436.2	4167848.9	Worker	Scenario 2	3.60E-01	1.30E-03	--
7041	643536.2	4167848.9	Worker	Scenario 2	3.81E-01	1.30E-03	--
7042	643636.2	4167848.9	Worker	Scenario 2	4.05E-01	1.31E-03	--
7043	643736.2	4167848.9	Worker	Scenario 2	4.19E-01	1.31E-03	--
7044	643836.2	4167848.9	Worker	Scenario 2	4.20E-01	1.29E-03	--
7045	643936.2	4167848.9	Worker	Scenario 2	4.12E-01	1.24E-03	--
7046	644036.2	4167848.9	Worker	Scenario 2	3.97E-01	1.19E-03	--
7047	644136.2	4167848.9	Worker	Scenario 2	3.78E-01	1.12E-03	--
7048	644236.2	4167848.9	Worker	Scenario 2	3.58E-01	1.06E-03	--
7049	644336.2	4167848.9	Worker	Scenario 2	3.37E-01	9.96E-04	--
7050	644436.2	4167848.9	Worker	Scenario 2	3.17E-01	9.35E-04	--
7051	644536.2	4167848.9	Worker	Scenario 2	2.98E-01	8.79E-04	--
7052	644636.2	4167848.9	Worker	Scenario 2	2.80E-01	8.26E-04	--
7053	644736.2	4167848.9	Worker	Scenario 2	2.63E-01	7.77E-04	--
7054	644836.2	4167848.9	Worker	Scenario 2	2.47E-01	7.31E-04	--
7055	644936.2	4167848.9	Worker	Scenario 2	2.32E-01	6.88E-04	--
7056	645036.2	4167848.9	Worker	Scenario 2	2.19E-01	6.49E-04	--
7057	645136.2	4167848.9	Worker	Scenario 2	2.07E-01	6.15E-04	--
7058	645236.2	4167848.9	Worker	Scenario 2	1.96E-01	5.83E-04	--
7059	645336.2	4167848.9	Worker	Scenario 2	1.86E-01	5.53E-04	--
7060	645436.2	4167848.9	Worker	Scenario 2	1.77E-01	5.27E-04	--
7061	645536.2	4167848.9	Worker	Scenario 2	1.67E-01	5.01E-04	--
7062	645636.2	4167848.9	Worker	Scenario 2	1.59E-01	4.77E-04	--
7063	645736.2	4167848.9	Worker	Scenario 2	1.52E-01	4.55E-04	--
7064	645836.2	4167848.9	Worker	Scenario 2	1.45E-01	4.34E-04	--
7065	645936.2	4167848.9	Worker	Scenario 2	1.38E-01	4.15E-04	--
7066	646036.2	4167848.9	Worker	Scenario 2	1.32E-01	3.97E-04	--
7067	646236.2	4167848.9	Worker	Scenario 2	1.21E-01	3.65E-04	--
7068	646336.2	4167848.9	Worker	Scenario 2	1.16E-01	3.51E-04	--
7069	646436.2	4167848.9	Worker	Scenario 2	1.11E-01	3.37E-04	--
7070	646536.2	4167848.9	Worker	Scenario 2	1.07E-01	3.24E-04	--
7071	646636.2	4167848.9	Worker	Scenario 2	1.03E-01	3.12E-04	--
7072	646736.2	4167848.9	Worker	Scenario 2	9.88E-02	3.01E-04	--
7073	646836.2	4167848.9	Worker	Scenario 2	9.51E-02	2.90E-04	--
7074	646936.2	4167848.9	Worker	Scenario 2	9.17E-02	2.80E-04	--
7075	636136.2	4167948.9	Worker	Scenario 2	3.82E-03	3.20E-05	--
7076	636236.2	4167948.9	Worker	Scenario 2	4.02E-03	3.32E-05	--
7077	636336.2	4167948.9	Worker	Scenario 2	3.87E-03	3.28E-05	--
7078	636436.2	4167948.9	Worker	Scenario 2	4.03E-03	3.39E-05	--
7079	636536.2	4167948.9	Worker	Scenario 2	4.13E-03	3.47E-05	--
7080	636636.2	4167948.9	Worker	Scenario 2	4.41E-03	3.63E-05	--
7081	636736.2	4167948.9	Worker	Scenario 2	5.04E-03	3.96E-05	--
7082	636836.2	4167948.9	Worker	Scenario 2	5.71E-03	4.29E-05	--
7083	636936.2	4167948.9	Worker	Scenario 2	5.92E-03	4.42E-05	--
7084	637036.2	4167948.9	Worker	Scenario 2	6.24E-03	4.60E-05	--
7085	637136.2	4167948.9	Worker	Scenario 2	6.59E-03	4.81E-05	--
7086	637236.2	4167948.9	Worker	Scenario 2	5.91E-03	4.57E-05	--
7087	637336.2	4167948.9	Worker	Scenario 2	5.93E-03	4.63E-05	--
7088	637436.2	4167948.9	Worker	Scenario 2	6.59E-03	4.98E-05	--
7089	637536.2	4167948.9	Worker	Scenario 2	6.36E-03	4.94E-05	--
7090	637636.2	4167948.9	Worker	Scenario 2	6.64E-03	5.13E-05	--
7091	637736.2	4167948.9	Worker	Scenario 2	7.90E-03	5.77E-05	--
7092	637836.2	4167948.9	Worker	Scenario 2	8.01E-03	5.90E-05	--
7093	637936.2	4167948.9	Worker	Scenario 2	8.06E-03	6.00E-05	--
7094	638036.2	4167948.9	Worker	Scenario 2	9.40E-03	6.78E-05	--
7095	638136.2	4167948.9	Worker	Scenario 2	9.20E-03	6.74E-05	--
7096	638236.2	4167948.9	Worker	Scenario 2	9.19E-03	6.85E-05	--
7097	638336.2	4167948.9	Worker	Scenario 2	1.02E-02	7.49E-05	--
7098	638436.2	4167948.9	Worker	Scenario 2	1.02E-02	7.60E-05	--
7099	638536.2	4167948.9	Worker	Scenario 2	1.10E-02	8.17E-05	--
7100	638636.2	4167948.9	Worker	Scenario 2	1.12E-02	8.34E-05	--
7101	638736.2	4167948.9	Worker	Scenario 2	1.18E-02	8.86E-05	--
7102	638836.2	4167948.9	Worker	Scenario 2	1.22E-02	9.19E-05	--
7103	638936.2	4167948.9	Worker	Scenario 2	1.28E-02	9.68E-05	--
7104	639036.2	4167948.9	Worker	Scenario 2	1.33E-02	1.01E-04	--
7105	639136.2	4167948.9	Worker	Scenario 2	1.40E-02	1.06E-04	--
7106	639236.2	4167948.9	Worker	Scenario 2	1.47E-02	1.12E-04	--
7107	639336.2	4167948.9	Worker	Scenario 2	1.56E-02	1.20E-04	--
7108	639436.2	4167948.9	Worker	Scenario 2	1.65E-02	1.28E-04	--
7109	639536.2	4167948.9	Worker	Scenario 2	1.75E-02	1.37E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7110	639736.2	4167948.9	Worker	Scenario 2	2.00E-02	1.60E-04	--
7111	643236.2	4167948.9	Worker	Scenario 2	3.36E-01	1.32E-03	--
7112	643336.2	4167948.9	Worker	Scenario 2	2.97E-01	1.16E-03	--
7113	643436.2	4167948.9	Worker	Scenario 2	2.79E-01	1.06E-03	--
7114	643536.2	4167948.9	Worker	Scenario 2	2.78E-01	1.02E-03	--
7115	643636.2	4167948.9	Worker	Scenario 2	2.84E-01	9.97E-04	--
7116	643736.2	4167948.9	Worker	Scenario 2	2.92E-01	9.87E-04	--
7117	643836.2	4167948.9	Worker	Scenario 2	2.99E-01	9.79E-04	--
7118	643936.2	4167948.9	Worker	Scenario 2	3.03E-01	9.66E-04	--
7119	644036.2	4167948.9	Worker	Scenario 2	3.01E-01	9.44E-04	--
7120	644136.2	4167948.9	Worker	Scenario 2	2.96E-01	9.14E-04	--
7121	644236.2	4167948.9	Worker	Scenario 2	2.87E-01	8.80E-04	--
7122	644336.2	4167948.9	Worker	Scenario 2	2.76E-01	8.42E-04	--
7123	644436.2	4167948.9	Worker	Scenario 2	2.64E-01	8.02E-04	--
7124	644536.2	4167948.9	Worker	Scenario 2	2.53E-01	7.64E-04	--
7125	644636.2	4167948.9	Worker	Scenario 2	2.41E-01	7.27E-04	--
7126	644736.2	4167948.9	Worker	Scenario 2	2.29E-01	6.91E-04	--
7127	644836.2	4167948.9	Worker	Scenario 2	2.18E-01	6.55E-04	--
7128	644936.2	4167948.9	Worker	Scenario 2	2.07E-01	6.23E-04	--
7129	645036.2	4167948.9	Worker	Scenario 2	1.97E-01	5.92E-04	--
7130	645136.2	4167948.9	Worker	Scenario 2	1.87E-01	5.64E-04	--
7131	645236.2	4167948.9	Worker	Scenario 2	1.79E-01	5.38E-04	--
7132	645336.2	4167948.9	Worker	Scenario 2	1.71E-01	5.14E-04	--
7133	645436.2	4167948.9	Worker	Scenario 2	1.63E-01	4.91E-04	--
7134	645536.2	4167948.9	Worker	Scenario 2	1.55E-01	4.69E-04	--
7135	645636.2	4167948.9	Worker	Scenario 2	1.48E-01	4.48E-04	--
7136	645736.2	4167948.9	Worker	Scenario 2	1.42E-01	4.29E-04	--
7137	645836.2	4167948.9	Worker	Scenario 2	1.36E-01	4.11E-04	--
7138	645936.2	4167948.9	Worker	Scenario 2	1.30E-01	3.94E-04	--
7139	646036.2	4167948.9	Worker	Scenario 2	1.25E-01	3.78E-04	--
7140	646236.2	4167948.9	Worker	Scenario 2	1.15E-01	3.49E-04	--
7141	646336.2	4167948.9	Worker	Scenario 2	1.10E-01	3.35E-04	--
7142	646436.2	4167948.9	Worker	Scenario 2	1.06E-01	3.23E-04	--
7143	646536.2	4167948.9	Worker	Scenario 2	1.02E-01	3.11E-04	--
7144	646636.2	4167948.9	Worker	Scenario 2	9.83E-02	3.00E-04	--
7145	646736.2	4167948.9	Worker	Scenario 2	9.48E-02	2.90E-04	--
7146	646836.2	4167948.9	Worker	Scenario 2	9.15E-02	2.80E-04	--
7147	646936.2	4167948.9	Worker	Scenario 2	8.83E-02	2.70E-04	--
7148	636036.2	4168048.9	Worker	Scenario 2	3.89E-03	3.19E-05	--
7149	636136.2	4168048.9	Worker	Scenario 2	4.12E-03	3.32E-05	--
7150	636236.2	4168048.9	Worker	Scenario 2	4.39E-03	3.47E-05	--
7151	636336.2	4168048.9	Worker	Scenario 2	4.58E-03	3.59E-05	--
7152	636436.2	4168048.9	Worker	Scenario 2	4.77E-03	3.70E-05	--
7153	636536.2	4168048.9	Worker	Scenario 2	5.02E-03	3.85E-05	--
7154	636636.2	4168048.9	Worker	Scenario 2	5.17E-03	3.95E-05	--
7155	636736.2	4168048.9	Worker	Scenario 2	5.28E-03	4.03E-05	--
7156	636836.2	4168048.9	Worker	Scenario 2	5.30E-03	4.08E-05	--
7157	636936.2	4168048.9	Worker	Scenario 2	5.50E-03	4.21E-05	--
7158	637036.2	4168048.9	Worker	Scenario 2	6.09E-03	4.51E-05	--
7159	637136.2	4168048.9	Worker	Scenario 2	6.62E-03	4.78E-05	--
7160	637236.2	4168048.9	Worker	Scenario 2	7.10E-03	5.05E-05	--
7161	637336.2	4168048.9	Worker	Scenario 2	6.36E-03	4.78E-05	--
7162	637436.2	4168048.9	Worker	Scenario 2	7.29E-03	5.25E-05	--
7163	637536.2	4168048.9	Worker	Scenario 2	6.57E-03	4.99E-05	--
7164	637636.2	4168048.9	Worker	Scenario 2	7.42E-03	5.43E-05	--
7165	637736.2	4168048.9	Worker	Scenario 2	8.20E-03	5.86E-05	--
7166	637836.2	4168048.9	Worker	Scenario 2	8.17E-03	5.92E-05	--
7167	637936.2	4168048.9	Worker	Scenario 2	8.75E-03	6.27E-05	--
7168	638036.2	4168048.9	Worker	Scenario 2	9.63E-03	6.83E-05	--
7169	638136.2	4168048.9	Worker	Scenario 2	9.56E-03	6.88E-05	--
7170	638236.2	4168048.9	Worker	Scenario 2	9.71E-03	7.05E-05	--
7171	638336.2	4168048.9	Worker	Scenario 2	1.04E-02	7.51E-05	--
7172	638436.2	4168048.9	Worker	Scenario 2	1.06E-02	7.76E-05	--
7173	638536.2	4168048.9	Worker	Scenario 2	1.15E-02	8.36E-05	--
7174	638636.2	4168048.9	Worker	Scenario 2	1.15E-02	8.49E-05	--
7175	638736.2	4168048.9	Worker	Scenario 2	1.23E-02	9.09E-05	--
7176	638836.2	4168048.9	Worker	Scenario 2	1.27E-02	9.42E-05	--
7177	638936.2	4168048.9	Worker	Scenario 2	1.32E-02	9.89E-05	--
7178	639036.2	4168048.9	Worker	Scenario 2	1.38E-02	1.03E-04	--
7179	639136.2	4168048.9	Worker	Scenario 2	1.44E-02	1.09E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million) Receptor Risk	Chronic Hazard Index Receptor Risk	Acute Hazard Index Receptor Risk
7180	639236.2	4168048.9	Worker	Scenario 2	1.52E-02	1.15E-04	--
7181	639336.2	4168048.9	Worker	Scenario 2	1.60E-02	1.23E-04	--
7182	643136.2	4168048.9	Worker	Scenario 2	3.38E-01	1.33E-03	--
7183	643236.2	4168048.9	Worker	Scenario 2	2.88E-01	1.15E-03	--
7184	643336.2	4168048.9	Worker	Scenario 2	2.56E-01	1.02E-03	--
7185	643436.2	4168048.9	Worker	Scenario 2	2.40E-01	9.36E-04	--
7186	643536.2	4168048.9	Worker	Scenario 2	2.31E-01	8.78E-04	--
7187	643636.2	4168048.9	Worker	Scenario 2	2.28E-01	8.40E-04	--
7188	643736.2	4168048.9	Worker	Scenario 2	2.28E-01	8.15E-04	--
7189	643836.2	4168048.9	Worker	Scenario 2	2.29E-01	7.95E-04	--
7190	643936.2	4168048.9	Worker	Scenario 2	2.32E-01	7.82E-04	--
7191	644036.2	4168048.9	Worker	Scenario 2	2.33E-01	7.69E-04	--
7192	644136.2	4168048.9	Worker	Scenario 2	2.33E-01	7.54E-04	--
7193	644236.2	4168048.9	Worker	Scenario 2	2.31E-01	7.35E-04	--
7194	644336.2	4168048.9	Worker	Scenario 2	2.26E-01	7.12E-04	--
7195	644436.2	4168048.9	Worker	Scenario 2	2.20E-01	6.87E-04	--
7196	644536.2	4168048.9	Worker	Scenario 2	2.13E-01	6.62E-04	--
7197	644636.2	4168048.9	Worker	Scenario 2	2.06E-01	6.36E-04	--
7198	644736.2	4168048.9	Worker	Scenario 2	1.98E-01	6.10E-04	--
7199	644836.2	4168048.9	Worker	Scenario 2	1.90E-01	5.84E-04	--
7200	644936.2	4168048.9	Worker	Scenario 2	1.82E-01	5.59E-04	--
7201	645036.2	4168048.9	Worker	Scenario 2	1.75E-01	5.35E-04	--
7202	645136.2	4168048.9	Worker	Scenario 2	1.68E-01	5.13E-04	--
7203	645236.2	4168048.9	Worker	Scenario 2	1.61E-01	4.92E-04	--
7204	645336.2	4168048.9	Worker	Scenario 2	1.55E-01	4.73E-04	--
7205	645436.2	4168048.9	Worker	Scenario 2	1.49E-01	4.54E-04	--
7206	645536.2	4168048.9	Worker	Scenario 2	1.43E-01	4.35E-04	--
7207	645636.2	4168048.9	Worker	Scenario 2	1.37E-01	4.18E-04	--
7208	645736.2	4168048.9	Worker	Scenario 2	1.32E-01	4.02E-04	--
7209	645836.2	4168048.9	Worker	Scenario 2	1.27E-01	3.86E-04	--
7210	645936.2	4168048.9	Worker	Scenario 2	1.22E-01	3.71E-04	--
7211	646036.2	4168048.9	Worker	Scenario 2	1.17E-01	3.57E-04	--
7212	646236.2	4168048.9	Worker	Scenario 2	1.08E-01	3.31E-04	--
7213	646336.2	4168048.9	Worker	Scenario 2	1.04E-01	3.19E-04	--
7214	646436.2	4168048.9	Worker	Scenario 2	1.01E-01	3.08E-04	--
7215	646536.2	4168048.9	Worker	Scenario 2	9.70E-02	2.97E-04	--
7216	646636.2	4168048.9	Worker	Scenario 2	9.37E-02	2.87E-04	--
7217	646736.2	4168048.9	Worker	Scenario 2	9.05E-02	2.78E-04	--
7218	646836.2	4168048.9	Worker	Scenario 2	8.75E-02	2.69E-04	--
7219	646936.2	4168048.9	Worker	Scenario 2	8.46E-02	2.60E-04	--
7220	636036.2	4168148.9	Worker	Scenario 2	3.80E-03	3.12E-05	--
7221	636136.2	4168148.9	Worker	Scenario 2	3.84E-03	3.17E-05	--
7222	636236.2	4168148.9	Worker	Scenario 2	3.83E-03	3.19E-05	--
7223	636336.2	4168148.9	Worker	Scenario 2	4.00E-03	3.30E-05	--
7224	636436.2	4168148.9	Worker	Scenario 2	4.32E-03	3.48E-05	--
7225	636536.2	4168148.9	Worker	Scenario 2	4.47E-03	3.58E-05	--
7226	636636.2	4168148.9	Worker	Scenario 2	4.71E-03	3.73E-05	--
7227	636736.2	4168148.9	Worker	Scenario 2	4.84E-03	3.82E-05	--
7228	636836.2	4168148.9	Worker	Scenario 2	5.14E-03	3.99E-05	--
7229	636936.2	4168148.9	Worker	Scenario 2	5.59E-03	4.23E-05	--
7230	637036.2	4168148.9	Worker	Scenario 2	5.96E-03	4.44E-05	--
7231	637136.2	4168148.9	Worker	Scenario 2	6.55E-03	4.74E-05	--
7232	637236.2	4168148.9	Worker	Scenario 2	7.08E-03	5.02E-05	--
7233	637336.2	4168148.9	Worker	Scenario 2	7.53E-03	5.27E-05	--
7234	637436.2	4168148.9	Worker	Scenario 2	7.75E-03	5.43E-05	--
7235	637536.2	4168148.9	Worker	Scenario 2	7.01E-03	5.17E-05	--
7236	637636.2	4168148.9	Worker	Scenario 2	7.48E-03	5.44E-05	--
7237	637736.2	4168148.9	Worker	Scenario 2	8.41E-03	5.92E-05	--
7238	637836.2	4168148.9	Worker	Scenario 2	8.48E-03	6.05E-05	--
7239	637936.2	4168148.9	Worker	Scenario 2	9.15E-03	6.45E-05	--
7240	638036.2	4168148.9	Worker	Scenario 2	9.97E-03	6.95E-05	--
7241	638136.2	4168148.9	Worker	Scenario 2	9.61E-03	6.85E-05	--
7242	638236.2	4168148.9	Worker	Scenario 2	1.00E-02	7.14E-05	--
7243	638336.2	4168148.9	Worker	Scenario 2	1.08E-02	7.69E-05	--
7244	638436.2	4168148.9	Worker	Scenario 2	1.08E-02	7.79E-05	--
7245	638536.2	4168148.9	Worker	Scenario 2	1.18E-02	8.43E-05	--
7246	638636.2	4168148.9	Worker	Scenario 2	1.19E-02	8.58E-05	--
7247	638736.2	4168148.9	Worker	Scenario 2	1.25E-02	9.06E-05	--
7248	638836.2	4168148.9	Worker	Scenario 2	1.31E-02	9.59E-05	--
7249	638936.2	4168148.9	Worker	Scenario 2	1.36E-02	1.00E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7250	639036.2	4168148.9	Worker	Scenario 2	1.42E-02	1.05E-04	--
7251	639136.2	4168148.9	Worker	Scenario 2	1.48E-02	1.11E-04	--
7252	639236.2	4168148.9	Worker	Scenario 2	1.55E-02	1.17E-04	--
7253	642936.2	4168148.9	Worker	Scenario 2	3.41E-01	1.42E-03	--
7254	643036.2	4168148.9	Worker	Scenario 2	3.15E-01	1.28E-03	--
7255	643136.2	4168148.9	Worker	Scenario 2	2.83E-01	1.14E-03	--
7256	643236.2	4168148.9	Worker	Scenario 2	2.52E-01	1.01E-03	--
7257	643336.2	4168148.9	Worker	Scenario 2	2.26E-01	9.07E-04	--
7258	643436.2	4168148.9	Worker	Scenario 2	2.12E-01	8.37E-04	--
7259	643536.2	4168148.9	Worker	Scenario 2	2.02E-01	7.86E-04	--
7260	643636.2	4168148.9	Worker	Scenario 2	1.96E-01	7.45E-04	--
7261	643736.2	4168148.9	Worker	Scenario 2	1.92E-01	7.13E-04	--
7262	643836.2	4168148.9	Worker	Scenario 2	1.90E-01	6.87E-04	--
7263	643936.2	4168148.9	Worker	Scenario 2	1.89E-01	6.67E-04	--
7264	644036.2	4168148.9	Worker	Scenario 2	1.89E-01	6.51E-04	--
7265	644136.2	4168148.9	Worker	Scenario 2	1.89E-01	6.38E-04	--
7266	644236.2	4168148.9	Worker	Scenario 2	1.88E-01	6.24E-04	--
7267	644336.2	4168148.9	Worker	Scenario 2	1.86E-01	6.09E-04	--
7268	644436.2	4168148.9	Worker	Scenario 2	1.84E-01	5.93E-04	--
7269	644536.2	4168148.9	Worker	Scenario 2	1.80E-01	5.77E-04	--
7270	644636.2	4168148.9	Worker	Scenario 2	1.76E-01	5.58E-04	--
7271	644736.2	4168148.9	Worker	Scenario 2	1.71E-01	5.40E-04	--
7272	644836.2	4168148.9	Worker	Scenario 2	1.66E-01	5.20E-04	--
7273	644936.2	4168148.9	Worker	Scenario 2	1.60E-01	5.01E-04	--
7274	645036.2	4168148.9	Worker	Scenario 2	1.55E-01	4.83E-04	--
7275	645136.2	4168148.9	Worker	Scenario 2	1.50E-01	4.65E-04	--
7276	645236.2	4168148.9	Worker	Scenario 2	1.45E-01	4.49E-04	--
7277	645336.2	4168148.9	Worker	Scenario 2	1.40E-01	4.33E-04	--
7278	645436.2	4168148.9	Worker	Scenario 2	1.35E-01	4.17E-04	--
7279	645536.2	4168148.9	Worker	Scenario 2	1.30E-01	4.02E-04	--
7280	645636.2	4168148.9	Worker	Scenario 2	1.26E-01	3.87E-04	--
7281	645736.2	4168148.9	Worker	Scenario 2	1.21E-01	3.74E-04	--
7282	645836.2	4168148.9	Worker	Scenario 2	1.17E-01	3.61E-04	--
7283	645936.2	4168148.9	Worker	Scenario 2	1.13E-01	3.48E-04	--
7284	646036.2	4168148.9	Worker	Scenario 2	1.09E-01	3.36E-04	--
7285	646236.2	4168148.9	Worker	Scenario 2	1.02E-01	3.13E-04	--
7286	646336.2	4168148.9	Worker	Scenario 2	9.82E-02	3.02E-04	--
7287	646436.2	4168148.9	Worker	Scenario 2	9.49E-02	2.92E-04	--
7288	646536.2	4168148.9	Worker	Scenario 2	9.18E-02	2.83E-04	--
7289	646636.2	4168148.9	Worker	Scenario 2	8.88E-02	2.74E-04	--
7290	646736.2	4168148.9	Worker	Scenario 2	8.60E-02	2.65E-04	--
7291	646836.2	4168148.9	Worker	Scenario 2	8.33E-02	2.57E-04	--
7292	635936.2	4168248.9	Worker	Scenario 2	3.66E-03	3.02E-05	--
7293	636036.2	4168248.9	Worker	Scenario 2	3.74E-03	3.08E-05	--
7294	636136.2	4168248.9	Worker	Scenario 2	3.70E-03	3.08E-05	--
7295	636236.2	4168248.9	Worker	Scenario 2	3.86E-03	3.19E-05	--
7296	636336.2	4168248.9	Worker	Scenario 2	4.02E-03	3.30E-05	--
7297	636436.2	4168248.9	Worker	Scenario 2	4.15E-03	3.39E-05	--
7298	636536.2	4168248.9	Worker	Scenario 2	4.37E-03	3.52E-05	--
7299	636636.2	4168248.9	Worker	Scenario 2	4.58E-03	3.66E-05	--
7300	636736.2	4168248.9	Worker	Scenario 2	4.83E-03	3.81E-05	--
7301	636836.2	4168248.9	Worker	Scenario 2	5.12E-03	3.98E-05	--
7302	636936.2	4168248.9	Worker	Scenario 2	5.46E-03	4.17E-05	--
7303	637036.2	4168248.9	Worker	Scenario 2	5.86E-03	4.39E-05	--
7304	637136.2	4168248.9	Worker	Scenario 2	6.46E-03	4.69E-05	--
7305	637236.2	4168248.9	Worker	Scenario 2	7.06E-03	4.99E-05	--
7306	637336.2	4168248.9	Worker	Scenario 2	7.63E-03	5.30E-05	--
7307	637436.2	4168248.9	Worker	Scenario 2	8.06E-03	5.55E-05	--
7308	637536.2	4168248.9	Worker	Scenario 2	7.36E-03	5.30E-05	--
7309	637636.2	4168248.9	Worker	Scenario 2	7.75E-03	5.54E-05	--
7310	637736.2	4168248.9	Worker	Scenario 2	8.42E-03	5.91E-05	--
7311	637836.2	4168248.9	Worker	Scenario 2	9.04E-03	6.28E-05	--
7312	637936.2	4168248.9	Worker	Scenario 2	9.04E-03	6.35E-05	--
7313	638036.2	4168248.9	Worker	Scenario 2	9.89E-03	6.86E-05	--
7314	638136.2	4168248.9	Worker	Scenario 2	1.01E-02	7.02E-05	--
7315	638236.2	4168248.9	Worker	Scenario 2	1.02E-02	7.18E-05	--
7316	638336.2	4168248.9	Worker	Scenario 2	1.09E-02	7.67E-05	--
7317	638436.2	4168248.9	Worker	Scenario 2	1.12E-02	7.88E-05	--
7318	638536.2	4168248.9	Worker	Scenario 2	1.20E-02	8.42E-05	--
7319	638636.2	4168248.9	Worker	Scenario 2	1.22E-02	8.65E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7320	638736.2	4168248.9	Worker	Scenario 2	1.27E-02	9.06E-05	--
7321	638836.2	4168248.9	Worker	Scenario 2	1.34E-02	9.61E-05	--
7322	638936.2	4168248.9	Worker	Scenario 2	1.39E-02	1.01E-04	--
7323	639036.2	4168248.9	Worker	Scenario 2	1.45E-02	1.06E-04	--
7324	639136.2	4168248.9	Worker	Scenario 2	1.52E-02	1.12E-04	--
7325	642836.2	4168248.9	Worker	Scenario 2	2.96E-01	1.30E-03	--
7326	642936.2	4168248.9	Worker	Scenario 2	2.83E-01	1.19E-03	--
7327	643036.2	4168248.9	Worker	Scenario 2	2.62E-01	1.09E-03	--
7328	643136.2	4168248.9	Worker	Scenario 2	2.44E-01	9.95E-04	--
7329	643236.2	4168248.9	Worker	Scenario 2	2.22E-01	9.00E-04	--
7330	643336.2	4168248.9	Worker	Scenario 2	2.02E-01	8.16E-04	--
7331	643436.2	4168248.9	Worker	Scenario 2	1.88E-01	7.54E-04	--
7332	643536.2	4168248.9	Worker	Scenario 2	1.81E-01	7.11E-04	--
7333	643636.2	4168248.9	Worker	Scenario 2	1.75E-01	6.75E-04	--
7334	643736.2	4168248.9	Worker	Scenario 2	1.70E-01	6.44E-04	--
7335	643836.2	4168248.9	Worker	Scenario 2	1.65E-01	6.16E-04	--
7336	643936.2	4168248.9	Worker	Scenario 2	1.63E-01	5.94E-04	--
7337	644036.2	4168248.9	Worker	Scenario 2	1.60E-01	5.74E-04	--
7338	644136.2	4168248.9	Worker	Scenario 2	1.59E-01	5.57E-04	--
7339	644236.2	4168248.9	Worker	Scenario 2	1.58E-01	5.44E-04	--
7340	644336.2	4168248.9	Worker	Scenario 2	1.56E-01	5.31E-04	--
7341	644436.2	4168248.9	Worker	Scenario 2	1.55E-01	5.18E-04	--
7342	644536.2	4168248.9	Worker	Scenario 2	1.54E-01	5.07E-04	--
7343	644636.2	4168248.9	Worker	Scenario 2	1.51E-01	4.94E-04	--
7344	644736.2	4168248.9	Worker	Scenario 2	1.49E-01	4.80E-04	--
7345	644836.2	4168248.9	Worker	Scenario 2	1.45E-01	4.66E-04	--
7346	644936.2	4168248.9	Worker	Scenario 2	1.41E-01	4.51E-04	--
7347	645036.2	4168248.9	Worker	Scenario 2	1.37E-01	4.36E-04	--
7348	645136.2	4168248.9	Worker	Scenario 2	1.34E-01	4.23E-04	--
7349	645236.2	4168248.9	Worker	Scenario 2	1.30E-01	4.09E-04	--
7350	645336.2	4168248.9	Worker	Scenario 2	1.26E-01	3.97E-04	--
7351	645436.2	4168248.9	Worker	Scenario 2	1.23E-01	3.84E-04	--
7352	645536.2	4168248.9	Worker	Scenario 2	1.19E-01	3.71E-04	--
7353	645636.2	4168248.9	Worker	Scenario 2	1.15E-01	3.59E-04	--
7354	645736.2	4168248.9	Worker	Scenario 2	1.12E-01	3.47E-04	--
7355	645836.2	4168248.9	Worker	Scenario 2	1.08E-01	3.36E-04	--
7356	645936.2	4168248.9	Worker	Scenario 2	1.05E-01	3.25E-04	--
7357	646036.2	4168248.9	Worker	Scenario 2	1.01E-01	3.15E-04	--
7358	646236.2	4168248.9	Worker	Scenario 2	9.50E-02	2.95E-04	--
7359	646336.2	4168248.9	Worker	Scenario 2	9.20E-02	2.85E-04	--
7360	646436.2	4168248.9	Worker	Scenario 2	8.92E-02	2.77E-04	--
7361	646536.2	4168248.9	Worker	Scenario 2	8.65E-02	2.68E-04	--
7362	646636.2	4168248.9	Worker	Scenario 2	8.39E-02	2.60E-04	--
7363	646736.2	4168248.9	Worker	Scenario 2	8.14E-02	2.52E-04	--
7364	646836.2	4168248.9	Worker	Scenario 2	7.90E-02	2.45E-04	--
7365	635936.2	4168348.9	Worker	Scenario 2	3.63E-03	2.99E-05	--
7366	636036.2	4168348.9	Worker	Scenario 2	3.65E-03	3.02E-05	--
7367	636136.2	4168348.9	Worker	Scenario 2	3.82E-03	3.14E-05	--
7368	636236.2	4168348.9	Worker	Scenario 2	3.98E-03	3.25E-05	--
7369	636336.2	4168348.9	Worker	Scenario 2	4.13E-03	3.35E-05	--
7370	636436.2	4168348.9	Worker	Scenario 2	4.34E-03	3.47E-05	--
7371	636536.2	4168348.9	Worker	Scenario 2	4.51E-03	3.59E-05	--
7372	636636.2	4168348.9	Worker	Scenario 2	4.71E-03	3.71E-05	--
7373	636736.2	4168348.9	Worker	Scenario 2	4.99E-03	3.87E-05	--
7374	636836.2	4168348.9	Worker	Scenario 2	5.31E-03	4.05E-05	--
7375	636936.2	4168348.9	Worker	Scenario 2	5.61E-03	4.22E-05	--
7376	637036.2	4168348.9	Worker	Scenario 2	5.90E-03	4.39E-05	--
7377	637136.2	4168348.9	Worker	Scenario 2	6.30E-03	4.60E-05	--
7378	637236.2	4168348.9	Worker	Scenario 2	7.05E-03	4.96E-05	--
7379	637336.2	4168348.9	Worker	Scenario 2	7.73E-03	5.30E-05	--
7380	637436.2	4168348.9	Worker	Scenario 2	8.23E-03	5.59E-05	--
7381	637536.2	4168348.9	Worker	Scenario 2	7.68E-03	5.40E-05	--
7382	637636.2	4168348.9	Worker	Scenario 2	8.23E-03	5.71E-05	--
7383	637736.2	4168348.9	Worker	Scenario 2	8.40E-03	5.85E-05	--
7384	637836.2	4168348.9	Worker	Scenario 2	9.01E-03	6.21E-05	--
7385	637936.2	4168348.9	Worker	Scenario 2	9.53E-03	6.54E-05	--
7386	638036.2	4168348.9	Worker	Scenario 2	9.80E-03	6.74E-05	--
7387	638136.2	4168348.9	Worker	Scenario 2	1.06E-02	7.24E-05	--
7388	638236.2	4168348.9	Worker	Scenario 2	1.05E-02	7.27E-05	--
7389	638336.2	4168348.9	Worker	Scenario 2	1.11E-02	7.67E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7390	638436.2	4168348.9	Worker	Scenario 2	1.14E-02	7.92E-05	--
7391	638536.2	4168348.9	Worker	Scenario 2	1.22E-02	8.47E-05	--
7392	638636.2	4168348.9	Worker	Scenario 2	1.24E-02	8.66E-05	--
7393	638736.2	4168348.9	Worker	Scenario 2	1.30E-02	9.12E-05	--
7394	638836.2	4168348.9	Worker	Scenario 2	1.36E-02	9.62E-05	--
7395	638936.2	4168348.9	Worker	Scenario 2	1.42E-02	1.01E-04	--
7396	642636.2	4168348.9	Worker	Scenario 2	2.58E-01	1.26E-03	--
7397	642736.2	4168348.9	Worker	Scenario 2	2.56E-01	1.18E-03	--
7398	642836.2	4168348.9	Worker	Scenario 2	2.50E-01	1.10E-03	--
7399	642936.2	4168348.9	Worker	Scenario 2	2.40E-01	1.03E-03	--
7400	643036.2	4168348.9	Worker	Scenario 2	2.26E-01	9.50E-04	--
7401	643136.2	4168348.9	Worker	Scenario 2	2.12E-01	8.78E-04	--
7402	643236.2	4168348.9	Worker	Scenario 2	1.97E-01	8.08E-04	--
7403	643336.2	4168348.9	Worker	Scenario 2	1.82E-01	7.41E-04	--
7404	643436.2	4168348.9	Worker	Scenario 2	1.69E-01	6.86E-04	--
7405	643536.2	4168348.9	Worker	Scenario 2	1.63E-01	6.48E-04	--
7406	643636.2	4168348.9	Worker	Scenario 2	1.58E-01	6.18E-04	--
7407	643736.2	4168348.9	Worker	Scenario 2	1.53E-01	5.90E-04	--
7408	643836.2	4168348.9	Worker	Scenario 2	1.48E-01	5.62E-04	--
7409	643936.2	4168348.9	Worker	Scenario 2	1.45E-01	5.40E-04	--
7410	644036.2	4168348.9	Worker	Scenario 2	1.42E-01	5.21E-04	--
7411	644136.2	4168348.9	Worker	Scenario 2	1.39E-01	5.03E-04	--
7412	644236.2	4168348.9	Worker	Scenario 2	1.37E-01	4.88E-04	--
7413	644336.2	4168348.9	Worker	Scenario 2	1.35E-01	4.73E-04	--
7414	644436.2	4168348.9	Worker	Scenario 2	1.33E-01	4.61E-04	--
7415	644536.2	4168348.9	Worker	Scenario 2	1.32E-01	4.51E-04	--
7416	644636.2	4168348.9	Worker	Scenario 2	1.31E-01	4.41E-04	--
7417	644736.2	4168348.9	Worker	Scenario 2	1.30E-01	4.30E-04	--
7418	644836.2	4168348.9	Worker	Scenario 2	1.27E-01	4.19E-04	--
7419	644936.2	4168348.9	Worker	Scenario 2	1.25E-01	4.08E-04	--
7420	645036.2	4168348.9	Worker	Scenario 2	1.22E-01	3.96E-04	--
7421	645136.2	4168348.9	Worker	Scenario 2	1.20E-01	3.86E-04	--
7422	645236.2	4168348.9	Worker	Scenario 2	1.17E-01	3.75E-04	--
7423	645336.2	4168348.9	Worker	Scenario 2	1.14E-01	3.64E-04	--
7424	645436.2	4168348.9	Worker	Scenario 2	1.11E-01	3.54E-04	--
7425	645536.2	4168348.9	Worker	Scenario 2	1.08E-01	3.43E-04	--
7426	645636.2	4168348.9	Worker	Scenario 2	1.05E-01	3.33E-04	--
7427	645736.2	4168348.9	Worker	Scenario 2	1.03E-01	3.23E-04	--
7428	645836.2	4168348.9	Worker	Scenario 2	9.96E-02	3.13E-04	--
7429	645936.2	4168348.9	Worker	Scenario 2	9.66E-02	3.03E-04	--
7430	646036.2	4168348.9	Worker	Scenario 2	9.39E-02	2.94E-04	--
7431	646236.2	4168348.9	Worker	Scenario 2	8.84E-02	2.77E-04	--
7432	646336.2	4168348.9	Worker	Scenario 2	8.59E-02	2.69E-04	--
7433	646436.2	4168348.9	Worker	Scenario 2	8.35E-02	2.61E-04	--
7434	646536.2	4168348.9	Worker	Scenario 2	8.12E-02	2.54E-04	--
7435	646636.2	4168348.9	Worker	Scenario 2	7.90E-02	2.47E-04	--
7436	646736.2	4168348.9	Worker	Scenario 2	7.68E-02	2.40E-04	--
7437	646836.2	4168348.9	Worker	Scenario 2	7.47E-02	2.33E-04	--
7438	635836.2	4168448.9	Worker	Scenario 2	3.47E-03	2.88E-05	--
7439	635936.2	4168448.9	Worker	Scenario 2	3.59E-03	2.97E-05	--
7440	636036.2	4168448.9	Worker	Scenario 2	3.74E-03	3.06E-05	--
7441	636136.2	4168448.9	Worker	Scenario 2	3.89E-03	3.17E-05	--
7442	636236.2	4168448.9	Worker	Scenario 2	4.09E-03	3.29E-05	--
7443	636336.2	4168448.9	Worker	Scenario 2	4.48E-03	3.50E-05	--
7444	636436.2	4168448.9	Worker	Scenario 2	4.40E-03	3.53E-05	--
7445	636536.2	4168448.9	Worker	Scenario 2	4.61E-03	3.62E-05	--
7446	636636.2	4168448.9	Worker	Scenario 2	4.90E-03	3.78E-05	--
7447	636736.2	4168448.9	Worker	Scenario 2	5.10E-03	3.90E-05	--
7448	636836.2	4168448.9	Worker	Scenario 2	5.38E-03	4.06E-05	--
7449	636936.2	4168448.9	Worker	Scenario 2	5.68E-03	4.22E-05	--
7450	637036.2	4168448.9	Worker	Scenario 2	6.22E-03	4.48E-05	--
7451	637136.2	4168448.9	Worker	Scenario 2	6.41E-03	4.60E-05	--
7452	637236.2	4168448.9	Worker	Scenario 2	6.88E-03	4.84E-05	--
7453	637336.2	4168448.9	Worker	Scenario 2	7.77E-03	5.27E-05	--
7454	637436.2	4168448.9	Worker	Scenario 2	8.26E-03	5.54E-05	--
7455	637536.2	4168448.9	Worker	Scenario 2	7.82E-03	5.40E-05	--
7456	637636.2	4168448.9	Worker	Scenario 2	8.38E-03	5.72E-05	--
7457	637736.2	4168448.9	Worker	Scenario 2	8.67E-03	5.91E-05	--
7458	637836.2	4168448.9	Worker	Scenario 2	9.03E-03	6.15E-05	--
7459	637936.2	4168448.9	Worker	Scenario 2	9.58E-03	6.49E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7460	638036.2	4168448.9	Worker	Scenario 2	9.92E-03	6.74E-05	--
7461	638136.2	4168448.9	Worker	Scenario 2	1.06E-02	7.15E-05	--
7462	638236.2	4168448.9	Worker	Scenario 2	1.07E-02	7.32E-05	--
7463	638336.2	4168448.9	Worker	Scenario 2	1.12E-02	7.66E-05	--
7464	638436.2	4168448.9	Worker	Scenario 2	1.16E-02	7.97E-05	--
7465	638536.2	4168448.9	Worker	Scenario 2	1.23E-02	8.45E-05	--
7466	638636.2	4168448.9	Worker	Scenario 2	1.26E-02	8.71E-05	--
7467	638736.2	4168448.9	Worker	Scenario 2	1.33E-02	9.19E-05	--
7468	638836.2	4168448.9	Worker	Scenario 2	1.38E-02	9.64E-05	--
7469	642536.2	4168448.9	Worker	Scenario 2	2.23E-01	1.15E-03	--
7470	642636.2	4168448.9	Worker	Scenario 2	2.23E-01	1.08E-03	--
7471	642736.2	4168448.9	Worker	Scenario 2	2.21E-01	1.02E-03	--
7472	642836.2	4168448.9	Worker	Scenario 2	2.16E-01	9.61E-04	--
7473	642936.2	4168448.9	Worker	Scenario 2	2.09E-01	9.03E-04	--
7474	643036.2	4168448.9	Worker	Scenario 2	1.98E-01	8.41E-04	--
7475	643136.2	4168448.9	Worker	Scenario 2	1.88E-01	7.86E-04	--
7476	643236.2	4168448.9	Worker	Scenario 2	1.77E-01	7.31E-04	--
7477	643336.2	4168448.9	Worker	Scenario 2	1.65E-01	6.77E-04	--
7478	643436.2	4168448.9	Worker	Scenario 2	1.54E-01	6.29E-04	--
7479	643536.2	4168448.9	Worker	Scenario 2	1.47E-01	5.94E-04	--
7480	643636.2	4168448.9	Worker	Scenario 2	1.44E-01	5.67E-04	--
7481	643736.2	4168448.9	Worker	Scenario 2	1.40E-01	5.43E-04	--
7482	643836.2	4168448.9	Worker	Scenario 2	1.35E-01	5.18E-04	--
7483	643936.2	4168448.9	Worker	Scenario 2	1.31E-01	4.97E-04	--
7484	644036.2	4168448.9	Worker	Scenario 2	1.28E-01	4.79E-04	--
7485	644136.2	4168448.9	Worker	Scenario 2	1.26E-01	4.62E-04	--
7486	644236.2	4168448.9	Worker	Scenario 2	1.23E-01	4.47E-04	--
7487	644336.2	4168448.9	Worker	Scenario 2	1.20E-01	4.31E-04	--
7488	644436.2	4168448.9	Worker	Scenario 2	1.18E-01	4.18E-04	--
7489	644536.2	4168448.9	Worker	Scenario 2	1.16E-01	4.07E-04	--
7490	644636.2	4168448.9	Worker	Scenario 2	1.15E-01	3.98E-04	--
7491	644736.2	4168448.9	Worker	Scenario 2	1.14E-01	3.89E-04	--
7492	644836.2	4168448.9	Worker	Scenario 2	1.12E-01	3.80E-04	--
7493	644936.2	4168448.9	Worker	Scenario 2	1.11E-01	3.71E-04	--
7494	645036.2	4168448.9	Worker	Scenario 2	1.09E-01	3.62E-04	--
7495	645136.2	4168448.9	Worker	Scenario 2	1.07E-01	3.53E-04	--
7496	645236.2	4168448.9	Worker	Scenario 2	1.06E-01	3.45E-04	--
7497	645336.2	4168448.9	Worker	Scenario 2	1.03E-01	3.36E-04	--
7498	645436.2	4168448.9	Worker	Scenario 2	1.01E-01	3.27E-04	--
7499	645536.2	4168448.9	Worker	Scenario 2	9.88E-02	3.18E-04	--
7500	645636.2	4168448.9	Worker	Scenario 2	9.65E-02	3.09E-04	--
7501	645736.2	4168448.9	Worker	Scenario 2	9.41E-02	3.01E-04	--
7502	645836.2	4168448.9	Worker	Scenario 2	9.16E-02	2.92E-04	--
7503	645936.2	4168448.9	Worker	Scenario 2	8.92E-02	2.84E-04	--
7504	646036.2	4168448.9	Worker	Scenario 2	8.69E-02	2.76E-04	--
7505	646236.2	4168448.9	Worker	Scenario 2	8.23E-02	2.60E-04	--
7506	646336.2	4168448.9	Worker	Scenario 2	8.01E-02	2.53E-04	--
7507	646436.2	4168448.9	Worker	Scenario 2	7.81E-02	2.46E-04	--
7508	646536.2	4168448.9	Worker	Scenario 2	7.61E-02	2.40E-04	--
7509	646636.2	4168448.9	Worker	Scenario 2	7.42E-02	2.33E-04	--
7510	646736.2	4168448.9	Worker	Scenario 2	7.23E-02	2.27E-04	--
7511	635836.2	4168548.9	Worker	Scenario 2	3.52E-03	2.90E-05	--
7512	635936.2	4168548.9	Worker	Scenario 2	3.70E-03	3.02E-05	--
7513	636036.2	4168548.9	Worker	Scenario 2	3.92E-03	3.15E-05	--
7514	636136.2	4168548.9	Worker	Scenario 2	3.95E-03	3.19E-05	--
7515	636236.2	4168548.9	Worker	Scenario 2	4.13E-03	3.29E-05	--
7516	636336.2	4168548.9	Worker	Scenario 2	4.53E-03	3.47E-05	--
7517	636436.2	4168548.9	Worker	Scenario 2	4.80E-03	3.64E-05	--
7518	636536.2	4168548.9	Worker	Scenario 2	4.86E-03	3.68E-05	--
7519	636636.2	4168548.9	Worker	Scenario 2	5.16E-03	3.83E-05	--
7520	636736.2	4168548.9	Worker	Scenario 2	5.38E-03	3.98E-05	--
7521	636836.2	4168548.9	Worker	Scenario 2	5.74E-03	4.14E-05	--
7522	636936.2	4168548.9	Worker	Scenario 2	5.98E-03	4.28E-05	--
7523	637036.2	4168548.9	Worker	Scenario 2	6.27E-03	4.44E-05	--
7524	637136.2	4168548.9	Worker	Scenario 2	6.82E-03	4.71E-05	--
7525	637236.2	4168548.9	Worker	Scenario 2	7.09E-03	4.87E-05	--
7526	637336.2	4168548.9	Worker	Scenario 2	7.70E-03	5.19E-05	--
7527	637436.2	4168548.9	Worker	Scenario 2	8.23E-03	5.49E-05	--
7528	637536.2	4168548.9	Worker	Scenario 2	8.29E-03	5.56E-05	--
7529	637636.2	4168548.9	Worker	Scenario 2	8.30E-03	5.62E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7530	637736.2	4168548.9	Worker	Scenario 2	8.91E-03	5.98E-05	--
7531	637836.2	4168548.9	Worker	Scenario 2	9.25E-03	6.21E-05	--
7532	637936.2	4168548.9	Worker	Scenario 2	9.61E-03	6.45E-05	--
7533	638036.2	4168548.9	Worker	Scenario 2	1.00E-02	6.73E-05	--
7534	638136.2	4168548.9	Worker	Scenario 2	1.04E-02	6.99E-05	--
7535	638236.2	4168548.9	Worker	Scenario 2	1.13E-02	7.52E-05	--
7536	638336.2	4168548.9	Worker	Scenario 2	1.15E-02	7.72E-05	--
7537	638436.2	4168548.9	Worker	Scenario 2	1.19E-02	8.04E-05	--
7538	638536.2	4168548.9	Worker	Scenario 2	1.25E-02	8.42E-05	--
7539	638636.2	4168548.9	Worker	Scenario 2	1.31E-02	8.88E-05	--
7540	638736.2	4168548.9	Worker	Scenario 2	1.36E-02	9.29E-05	--
7541	642336.2	4168548.9	Worker	Scenario 2	1.92E-01	1.13E-03	--
7542	642436.2	4168548.9	Worker	Scenario 2	1.96E-01	1.07E-03	--
7543	642536.2	4168548.9	Worker	Scenario 2	1.96E-01	1.00E-03	--
7544	642636.2	4168548.9	Worker	Scenario 2	1.95E-01	9.47E-04	--
7545	642736.2	4168548.9	Worker	Scenario 2	1.94E-01	8.98E-04	--
7546	642836.2	4168548.9	Worker	Scenario 2	1.90E-01	8.50E-04	--
7547	642936.2	4168548.9	Worker	Scenario 2	1.84E-01	8.01E-04	--
7548	643036.2	4168548.9	Worker	Scenario 2	1.76E-01	7.52E-04	--
7549	643136.2	4168548.9	Worker	Scenario 2	1.68E-01	7.08E-04	--
7550	643236.2	4168548.9	Worker	Scenario 2	1.60E-01	6.64E-04	--
7551	643336.2	4168548.9	Worker	Scenario 2	1.51E-01	6.20E-04	--
7552	643436.2	4168548.9	Worker	Scenario 2	1.41E-01	5.79E-04	--
7553	643536.2	4168548.9	Worker	Scenario 2	1.34E-01	5.45E-04	--
7554	643636.2	4168548.9	Worker	Scenario 2	1.31E-01	5.21E-04	--
7555	643736.2	4168548.9	Worker	Scenario 2	1.28E-01	5.02E-04	--
7556	643836.2	4168548.9	Worker	Scenario 2	1.24E-01	4.81E-04	--
7557	643936.2	4168548.9	Worker	Scenario 2	1.21E-01	4.61E-04	--
7558	644036.2	4168548.9	Worker	Scenario 2	1.17E-01	4.44E-04	--
7559	644136.2	4168548.9	Worker	Scenario 2	1.14E-01	4.28E-04	--
7560	644236.2	4168548.9	Worker	Scenario 2	1.12E-01	4.13E-04	--
7561	644336.2	4168548.9	Worker	Scenario 2	1.09E-01	3.99E-04	--
7562	644436.2	4168548.9	Worker	Scenario 2	1.07E-01	3.86E-04	--
7563	644536.2	4168548.9	Worker	Scenario 2	1.05E-01	3.74E-04	--
7564	644636.2	4168548.9	Worker	Scenario 2	1.03E-01	3.65E-04	--
7565	644736.2	4168548.9	Worker	Scenario 2	1.02E-01	3.56E-04	--
7566	645436.2	4168548.9	Worker	Scenario 2	9.22E-02	3.03E-04	--
7567	645536.2	4168548.9	Worker	Scenario 2	9.04E-02	2.96E-04	--
7568	645636.2	4168548.9	Worker	Scenario 2	8.85E-02	2.88E-04	--
7569	645736.2	4168548.9	Worker	Scenario 2	8.66E-02	2.81E-04	--
7570	645836.2	4168548.9	Worker	Scenario 2	8.46E-02	2.73E-04	--
7571	645936.2	4168548.9	Worker	Scenario 2	8.25E-02	2.66E-04	--
7572	646036.2	4168548.9	Worker	Scenario 2	8.05E-02	2.59E-04	--
7573	646236.2	4168548.9	Worker	Scenario 2	7.66E-02	2.45E-04	--
7574	646336.2	4168548.9	Worker	Scenario 2	7.48E-02	2.39E-04	--
7575	646436.2	4168548.9	Worker	Scenario 2	7.30E-02	2.33E-04	--
7576	646536.2	4168548.9	Worker	Scenario 2	7.13E-02	2.27E-04	--
7577	646636.2	4168548.9	Worker	Scenario 2	6.96E-02	2.21E-04	--
7578	635736.2	4168648.9	Worker	Scenario 2	3.39E-03	2.80E-05	--
7579	635836.2	4168648.9	Worker	Scenario 2	3.53E-03	2.89E-05	--
7580	635936.2	4168648.9	Worker	Scenario 2	3.66E-03	2.98E-05	--
7581	636036.2	4168648.9	Worker	Scenario 2	3.85E-03	3.10E-05	--
7582	636136.2	4168648.9	Worker	Scenario 2	4.41E-03	3.36E-05	--
7583	636236.2	4168648.9	Worker	Scenario 2	4.30E-03	3.34E-05	--
7584	636336.2	4168648.9	Worker	Scenario 2	4.59E-03	3.47E-05	--
7585	636436.2	4168648.9	Worker	Scenario 2	4.89E-03	3.62E-05	--
7586	636536.2	4168648.9	Worker	Scenario 2	5.05E-03	3.72E-05	--
7587	636636.2	4168648.9	Worker	Scenario 2	5.18E-03	3.80E-05	--
7588	636736.2	4168648.9	Worker	Scenario 2	5.44E-03	3.94E-05	--
7589	636836.2	4168648.9	Worker	Scenario 2	5.85E-03	4.15E-05	--
7590	636936.2	4168648.9	Worker	Scenario 2	6.28E-03	4.36E-05	--
7591	637036.2	4168648.9	Worker	Scenario 2	6.77E-03	4.60E-05	--
7592	637136.2	4168648.9	Worker	Scenario 2	6.79E-03	4.66E-05	--
7593	637236.2	4168648.9	Worker	Scenario 2	7.17E-03	4.87E-05	--
7594	637336.2	4168648.9	Worker	Scenario 2	7.89E-03	5.23E-05	--
7595	637436.2	4168648.9	Worker	Scenario 2	8.35E-03	5.51E-05	--
7596	637536.2	4168648.9	Worker	Scenario 2	8.61E-03	5.68E-05	--
7597	637636.2	4168648.9	Worker	Scenario 2	8.46E-03	5.66E-05	--
7598	637736.2	4168648.9	Worker	Scenario 2	8.82E-03	5.89E-05	--
7599	637836.2	4168648.9	Worker	Scenario 2	9.34E-03	6.20E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7600	637936.2	4168648.9	Worker	Scenario 2	9.70E-03	6.45E-05	--
7601	638036.2	4168648.9	Worker	Scenario 2	1.02E-02	6.74E-05	--
7602	638136.2	4168648.9	Worker	Scenario 2	1.05E-02	6.99E-05	--
7603	638236.2	4168648.9	Worker	Scenario 2	1.11E-02	7.39E-05	--
7604	638336.2	4168648.9	Worker	Scenario 2	1.17E-02	7.76E-05	--
7605	638436.2	4168648.9	Worker	Scenario 2	1.25E-02	8.28E-05	--
7606	638536.2	4168648.9	Worker	Scenario 2	1.27E-02	8.47E-05	--
7607	642136.2	4168648.9	Worker	Scenario 2	1.69E-01	1.14E-03	--
7608	642236.2	4168648.9	Worker	Scenario 2	1.72E-01	1.06E-03	--
7609	642336.2	4168648.9	Worker	Scenario 2	1.73E-01	9.91E-04	--
7610	642436.2	4168648.9	Worker	Scenario 2	1.75E-01	9.37E-04	--
7611	642536.2	4168648.9	Worker	Scenario 2	1.75E-01	8.88E-04	--
7612	642636.2	4168648.9	Worker	Scenario 2	1.75E-01	8.43E-04	--
7613	642736.2	4168648.9	Worker	Scenario 2	1.73E-01	8.02E-04	--
7614	642836.2	4168648.9	Worker	Scenario 2	1.70E-01	7.61E-04	--
7615	642936.2	4168648.9	Worker	Scenario 2	1.64E-01	7.19E-04	--
7616	643036.2	4168648.9	Worker	Scenario 2	1.58E-01	6.79E-04	--
7617	643136.2	4168648.9	Worker	Scenario 2	1.52E-01	6.42E-04	--
7618	643236.2	4168648.9	Worker	Scenario 2	1.46E-01	6.07E-04	--
7619	643336.2	4168648.9	Worker	Scenario 2	1.38E-01	5.71E-04	--
7620	643436.2	4168648.9	Worker	Scenario 2	1.31E-01	5.36E-04	--
7621	643536.2	4168648.9	Worker	Scenario 2	1.24E-01	5.05E-04	--
7622	643636.2	4168648.9	Worker	Scenario 2	1.20E-01	4.82E-04	--
7623	643736.2	4168648.9	Worker	Scenario 2	1.18E-01	4.65E-04	--
7624	643836.2	4168648.9	Worker	Scenario 2	1.15E-01	4.48E-04	--
7625	643936.2	4168648.9	Worker	Scenario 2	1.12E-01	4.31E-04	--
7626	644036.2	4168648.9	Worker	Scenario 2	1.09E-01	4.14E-04	--
7627	644136.2	4168648.9	Worker	Scenario 2	1.06E-01	3.99E-04	--
7628	644236.2	4168648.9	Worker	Scenario 2	1.03E-01	3.85E-04	--
7629	644336.2	4168648.9	Worker	Scenario 2	1.01E-01	3.73E-04	--
7630	644436.2	4168648.9	Worker	Scenario 2	9.83E-02	3.61E-04	--
7631	644536.2	4168648.9	Worker	Scenario 2	9.59E-02	3.49E-04	--
7632	644636.2	4168648.9	Worker	Scenario 2	9.39E-02	3.39E-04	--
7633	644736.2	4168648.9	Worker	Scenario 2	9.22E-02	3.29E-04	--
7634	644836.2	4168648.9	Worker	Scenario 2	9.07E-02	3.21E-04	--
7635	644936.2	4168648.9	Worker	Scenario 2	8.94E-02	3.13E-04	--
7636	645036.2	4168648.9	Worker	Scenario 2	8.85E-02	3.07E-04	--
7637	645136.2	4168648.9	Worker	Scenario 2	8.75E-02	3.00E-04	--
7638	645236.2	4168648.9	Worker	Scenario 2	8.64E-02	2.94E-04	--
7639	645336.2	4168648.9	Worker	Scenario 2	8.53E-02	2.88E-04	--
7640	645436.2	4168648.9	Worker	Scenario 2	8.41E-02	2.82E-04	--
7641	645536.2	4168648.9	Worker	Scenario 2	8.27E-02	2.76E-04	--
7642	645636.2	4168648.9	Worker	Scenario 2	8.13E-02	2.69E-04	--
7643	645736.2	4168648.9	Worker	Scenario 2	7.98E-02	2.63E-04	--
7644	645836.2	4168648.9	Worker	Scenario 2	7.82E-02	2.57E-04	--
7645	645936.2	4168648.9	Worker	Scenario 2	7.65E-02	2.50E-04	--
7646	646036.2	4168648.9	Worker	Scenario 2	7.48E-02	2.44E-04	--
7647	646236.2	4168648.9	Worker	Scenario 2	7.15E-02	2.31E-04	--
7648	646336.2	4168648.9	Worker	Scenario 2	6.98E-02	2.26E-04	--
7649	646436.2	4168648.9	Worker	Scenario 2	6.83E-02	2.20E-04	--
7650	646536.2	4168648.9	Worker	Scenario 2	6.68E-02	2.15E-04	--
7651	635736.2	4168748.9	Worker	Scenario 2	3.41E-03	2.80E-05	--
7652	635836.2	4168748.9	Worker	Scenario 2	3.54E-03	2.88E-05	--
7653	635936.2	4168748.9	Worker	Scenario 2	3.73E-03	2.99E-05	--
7654	636036.2	4168748.9	Worker	Scenario 2	3.98E-03	3.11E-05	--
7655	636136.2	4168748.9	Worker	Scenario 2	4.17E-03	3.21E-05	--
7656	636236.2	4168748.9	Worker	Scenario 2	4.41E-03	3.34E-05	--
7657	636336.2	4168748.9	Worker	Scenario 2	4.69E-03	3.48E-05	--
7658	636436.2	4168748.9	Worker	Scenario 2	5.11E-03	3.69E-05	--
7659	636536.2	4168748.9	Worker	Scenario 2	5.81E-03	4.00E-05	--
7660	636636.2	4168748.9	Worker	Scenario 2	5.52E-03	3.91E-05	--
7661	636736.2	4168748.9	Worker	Scenario 2	5.58E-03	3.97E-05	--
7662	636836.2	4168748.9	Worker	Scenario 2	5.76E-03	4.08E-05	--
7663	636936.2	4168748.9	Worker	Scenario 2	6.11E-03	4.27E-05	--
7664	637036.2	4168748.9	Worker	Scenario 2	6.44E-03	4.44E-05	--
7665	637136.2	4168748.9	Worker	Scenario 2	7.14E-03	4.78E-05	--
7666	637236.2	4168748.9	Worker	Scenario 2	7.49E-03	4.98E-05	--
7667	637336.2	4168748.9	Worker	Scenario 2	7.97E-03	5.25E-05	--
7668	637436.2	4168748.9	Worker	Scenario 2	8.25E-03	5.44E-05	--
7669	637536.2	4168748.9	Worker	Scenario 2	8.66E-03	5.68E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7670	637636.2	4168748.9	Worker	Scenario 2	8.72E-03	5.76E-05	--
7671	637736.2	4168748.9	Worker	Scenario 2	9.09E-03	5.99E-05	--
7672	637836.2	4168748.9	Worker	Scenario 2	9.49E-03	6.25E-05	--
7673	637936.2	4168748.9	Worker	Scenario 2	9.89E-03	6.51E-05	--
7674	638036.2	4168748.9	Worker	Scenario 2	1.03E-02	6.77E-05	--
7675	638136.2	4168748.9	Worker	Scenario 2	1.07E-02	7.06E-05	--
7676	638236.2	4168748.9	Worker	Scenario 2	1.13E-02	7.40E-05	--
7677	638336.2	4168748.9	Worker	Scenario 2	1.19E-02	7.80E-05	--
7678	638436.2	4168748.9	Worker	Scenario 2	1.26E-02	8.28E-05	--
7679	641936.2	4168748.9	Worker	Scenario 2	1.56E-01	1.22E-03	--
7680	642036.2	4168748.9	Worker	Scenario 2	1.56E-01	1.10E-03	--
7681	642136.2	4168748.9	Worker	Scenario 2	1.57E-01	1.01E-03	--
7682	642236.2	4168748.9	Worker	Scenario 2	1.58E-01	9.42E-04	--
7683	642336.2	4168748.9	Worker	Scenario 2	1.59E-01	8.87E-04	--
7684	642436.2	4168748.9	Worker	Scenario 2	1.59E-01	8.39E-04	--
7685	642536.2	4168748.9	Worker	Scenario 2	1.59E-01	7.96E-04	--
7686	642636.2	4168748.9	Worker	Scenario 2	1.58E-01	7.57E-04	--
7687	642736.2	4168748.9	Worker	Scenario 2	1.56E-01	7.22E-04	--
7688	642836.2	4168748.9	Worker	Scenario 2	1.53E-01	6.87E-04	--
7689	642936.2	4168748.9	Worker	Scenario 2	1.48E-01	6.51E-04	--
7690	643036.2	4168748.9	Worker	Scenario 2	1.43E-01	6.17E-04	--
7691	643136.2	4168748.9	Worker	Scenario 2	1.39E-01	5.86E-04	--
7692	643236.2	4168748.9	Worker	Scenario 2	1.33E-01	5.57E-04	--
7693	643336.2	4168748.9	Worker	Scenario 2	1.28E-01	5.28E-04	--
7694	643436.2	4168748.9	Worker	Scenario 2	1.21E-01	4.98E-04	--
7695	643536.2	4168748.9	Worker	Scenario 2	1.15E-01	4.71E-04	--
7696	643636.2	4168748.9	Worker	Scenario 2	1.11E-01	4.48E-04	--
7697	643736.2	4168748.9	Worker	Scenario 2	1.09E-01	4.32E-04	--
7698	643836.2	4168748.9	Worker	Scenario 2	1.07E-01	4.18E-04	--
7699	643936.2	4168748.9	Worker	Scenario 2	1.05E-01	4.04E-04	--
7700	644036.2	4168748.9	Worker	Scenario 2	1.02E-01	3.88E-04	--
7701	644136.2	4168748.9	Worker	Scenario 2	9.86E-02	3.74E-04	--
7702	644236.2	4168748.9	Worker	Scenario 2	9.61E-02	3.61E-04	--
7703	644336.2	4168748.9	Worker	Scenario 2	9.38E-02	3.50E-04	--
7704	644436.2	4168748.9	Worker	Scenario 2	9.16E-02	3.39E-04	--
7705	644536.2	4168748.9	Worker	Scenario 2	8.93E-02	3.28E-04	--
7706	644636.2	4168748.9	Worker	Scenario 2	8.71E-02	3.18E-04	--
7707	644736.2	4168748.9	Worker	Scenario 2	8.51E-02	3.09E-04	--
7708	644836.2	4168748.9	Worker	Scenario 2	8.34E-02	3.00E-04	--
7709	644936.2	4168748.9	Worker	Scenario 2	8.19E-02	2.92E-04	--
7710	645036.2	4168748.9	Worker	Scenario 2	8.08E-02	2.86E-04	--
7711	645136.2	4168748.9	Worker	Scenario 2	7.99E-02	2.80E-04	--
7712	645236.2	4168748.9	Worker	Scenario 2	7.89E-02	2.74E-04	--
7713	645336.2	4168748.9	Worker	Scenario 2	7.80E-02	2.68E-04	--
7714	645436.2	4168748.9	Worker	Scenario 2	7.70E-02	2.63E-04	--
7715	645536.2	4168748.9	Worker	Scenario 2	7.59E-02	2.58E-04	--
7716	645636.2	4168748.9	Worker	Scenario 2	7.49E-02	2.52E-04	--
7717	645736.2	4168748.9	Worker	Scenario 2	7.37E-02	2.47E-04	--
7718	645836.2	4168748.9	Worker	Scenario 2	7.25E-02	2.41E-04	--
7719	645936.2	4168748.9	Worker	Scenario 2	7.11E-02	2.36E-04	--
7720	646036.2	4168748.9	Worker	Scenario 2	6.97E-02	2.30E-04	--
7721	646236.2	4168748.9	Worker	Scenario 2	6.68E-02	2.19E-04	--
7722	646336.2	4168748.9	Worker	Scenario 2	6.54E-02	2.14E-04	--
7723	646436.2	4168748.9	Worker	Scenario 2	6.40E-02	2.09E-04	--
7724	646536.2	4168748.9	Worker	Scenario 2	6.27E-02	2.04E-04	--
7725	635736.2	4168848.9	Worker	Scenario 2	3.47E-03	2.81E-05	--
7726	635836.2	4168848.9	Worker	Scenario 2	3.60E-03	2.89E-05	--
7727	635936.2	4168848.9	Worker	Scenario 2	3.76E-03	2.98E-05	--
7728	636036.2	4168848.9	Worker	Scenario 2	4.18E-03	3.17E-05	--
7729	636136.2	4168848.9	Worker	Scenario 2	4.26E-03	3.23E-05	--
7730	636236.2	4168848.9	Worker	Scenario 2	4.43E-03	3.32E-05	--
7731	636336.2	4168848.9	Worker	Scenario 2	4.62E-03	3.43E-05	--
7732	636436.2	4168848.9	Worker	Scenario 2	4.85E-03	3.56E-05	--
7733	636536.2	4168848.9	Worker	Scenario 2	5.11E-03	3.70E-05	--
7734	636636.2	4168848.9	Worker	Scenario 2	5.64E-03	3.95E-05	--
7735	636736.2	4168848.9	Worker	Scenario 2	6.47E-03	4.32E-05	--
7736	636836.2	4168848.9	Worker	Scenario 2	6.16E-03	4.24E-05	--
7737	636936.2	4168848.9	Worker	Scenario 2	6.25E-03	4.32E-05	--
7738	637036.2	4168848.9	Worker	Scenario 2	6.58E-03	4.50E-05	--
7739	637136.2	4168848.9	Worker	Scenario 2	6.89E-03	4.68E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7740	637236.2	4168848.9	Worker	Scenario 2	7.29E-03	4.89E-05	--
7741	637336.2	4168848.9	Worker	Scenario 2	7.67E-03	5.11E-05	--
7742	637436.2	4168848.9	Worker	Scenario 2	8.19E-03	5.40E-05	--
7743	637536.2	4168848.9	Worker	Scenario 2	8.76E-03	5.71E-05	--
7744	637636.2	4168848.9	Worker	Scenario 2	8.96E-03	5.86E-05	--
7745	637736.2	4168848.9	Worker	Scenario 2	9.28E-03	6.07E-05	--
7746	637836.2	4168848.9	Worker	Scenario 2	9.76E-03	6.36E-05	--
7747	637936.2	4168848.9	Worker	Scenario 2	1.02E-02	6.63E-05	--
7748	638036.2	4168848.9	Worker	Scenario 2	1.05E-02	6.86E-05	--
7749	638136.2	4168848.9	Worker	Scenario 2	1.10E-02	7.15E-05	--
7750	638236.2	4168848.9	Worker	Scenario 2	1.15E-02	7.47E-05	--
7751	641636.2	4168848.9	Worker	Scenario 2	1.75E-01	1.95E-03	--
7752	641736.2	4168848.9	Worker	Scenario 2	1.59E-01	1.51E-03	--
7753	641836.2	4168848.9	Worker	Scenario 2	1.51E-01	1.25E-03	--
7754	641936.2	4168848.9	Worker	Scenario 2	1.48E-01	1.09E-03	--
7755	642036.2	4168848.9	Worker	Scenario 2	1.46E-01	9.83E-04	--
7756	642136.2	4168848.9	Worker	Scenario 2	1.46E-01	9.06E-04	--
7757	642236.2	4168848.9	Worker	Scenario 2	1.46E-01	8.47E-04	--
7758	642336.2	4168848.9	Worker	Scenario 2	1.46E-01	7.98E-04	--
7759	642436.2	4168848.9	Worker	Scenario 2	1.46E-01	7.55E-04	--
7760	642536.2	4168848.9	Worker	Scenario 2	1.45E-01	7.17E-04	--
7761	642636.2	4168848.9	Worker	Scenario 2	1.43E-01	6.84E-04	--
7762	642736.2	4168848.9	Worker	Scenario 2	1.42E-01	6.54E-04	--
7763	642836.2	4168848.9	Worker	Scenario 2	1.39E-01	6.23E-04	--
7764	642936.2	4168848.9	Worker	Scenario 2	1.35E-01	5.92E-04	--
7765	643036.2	4168848.9	Worker	Scenario 2	1.31E-01	5.64E-04	--
7766	643136.2	4168848.9	Worker	Scenario 2	1.27E-01	5.38E-04	--
7767	643236.2	4168848.9	Worker	Scenario 2	1.23E-01	5.13E-04	--
7768	643336.2	4168848.9	Worker	Scenario 2	1.18E-01	4.89E-04	--
7769	643436.2	4168848.9	Worker	Scenario 2	1.13E-01	4.64E-04	--
7770	643536.2	4168848.9	Worker	Scenario 2	1.08E-01	4.40E-04	--
7771	643636.2	4168848.9	Worker	Scenario 2	1.04E-01	4.19E-04	--
7772	643736.2	4168848.9	Worker	Scenario 2	1.01E-01	4.03E-04	--
7773	643836.2	4168848.9	Worker	Scenario 2	9.92E-02	3.90E-04	--
7774	643936.2	4168848.9	Worker	Scenario 2	9.75E-02	3.78E-04	--
7775	644036.2	4168848.9	Worker	Scenario 2	9.52E-02	3.66E-04	--
7776	644136.2	4168848.9	Worker	Scenario 2	9.25E-02	3.52E-04	--
7777	644236.2	4168848.9	Worker	Scenario 2	9.00E-02	3.40E-04	--
7778	644336.2	4168848.9	Worker	Scenario 2	8.77E-02	3.29E-04	--
7779	644436.2	4168848.9	Worker	Scenario 2	8.57E-02	3.19E-04	--
7780	644536.2	4168848.9	Worker	Scenario 2	8.36E-02	3.10E-04	--
7781	644836.2	4168848.9	Worker	Scenario 2	7.77E-02	2.83E-04	--
7782	644936.2	4168848.9	Worker	Scenario 2	7.61E-02	2.75E-04	--
7783	645036.2	4168848.9	Worker	Scenario 2	7.48E-02	2.69E-04	--
7784	645136.2	4168848.9	Worker	Scenario 2	7.36E-02	2.62E-04	--
7785	645236.2	4168848.9	Worker	Scenario 2	7.26E-02	2.57E-04	--
7786	645336.2	4168848.9	Worker	Scenario 2	7.17E-02	2.51E-04	--
7787	645436.2	4168848.9	Worker	Scenario 2	7.08E-02	2.46E-04	--
7788	645536.2	4168848.9	Worker	Scenario 2	7.00E-02	2.42E-04	--
7789	645636.2	4168848.9	Worker	Scenario 2	6.91E-02	2.37E-04	--
7790	645736.2	4168848.9	Worker	Scenario 2	6.82E-02	2.32E-04	--
7791	645836.2	4168848.9	Worker	Scenario 2	6.72E-02	2.27E-04	--
7792	645936.2	4168848.9	Worker	Scenario 2	6.62E-02	2.23E-04	--
7793	646036.2	4168848.9	Worker	Scenario 2	6.51E-02	2.18E-04	--
7794	646236.2	4168848.9	Worker	Scenario 2	6.26E-02	2.08E-04	--
7795	646336.2	4168848.9	Worker	Scenario 2	6.13E-02	2.03E-04	--
7796	646436.2	4168848.9	Worker	Scenario 2	6.02E-02	1.99E-04	--
7797	635736.2	4168948.9	Worker	Scenario 2	3.52E-03	2.82E-05	--
7798	635836.2	4168948.9	Worker	Scenario 2	3.67E-03	2.91E-05	--
7799	635936.2	4168948.9	Worker	Scenario 2	3.88E-03	3.02E-05	--
7800	636036.2	4168948.9	Worker	Scenario 2	4.23E-03	3.18E-05	--
7801	636136.2	4168948.9	Worker	Scenario 2	4.35E-03	3.25E-05	--
7802	636236.2	4168948.9	Worker	Scenario 2	4.73E-03	3.44E-05	--
7803	636336.2	4168948.9	Worker	Scenario 2	5.09E-03	3.63E-05	--
7804	636436.2	4168948.9	Worker	Scenario 2	5.24E-03	3.72E-05	--
7805	636536.2	4168948.9	Worker	Scenario 2	5.48E-03	3.85E-05	--
7806	636636.2	4168948.9	Worker	Scenario 2	5.75E-03	3.99E-05	--
7807	636736.2	4168948.9	Worker	Scenario 2	5.90E-03	4.10E-05	--
7808	636836.2	4168948.9	Worker	Scenario 2	6.52E-03	4.39E-05	--
7809	636936.2	4168948.9	Worker	Scenario 2	7.01E-03	4.63E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7810	637036.2	4168948.9	Worker	Scenario 2	6.98E-03	4.66E-05	--
7811	637136.2	4168948.9	Worker	Scenario 2	7.14E-03	4.78E-05	--
7812	637236.2	4168948.9	Worker	Scenario 2	7.48E-03	4.97E-05	--
7813	637336.2	4168948.9	Worker	Scenario 2	7.88E-03	5.20E-05	--
7814	637436.2	4168948.9	Worker	Scenario 2	8.25E-03	5.41E-05	--
7815	637536.2	4168948.9	Worker	Scenario 2	8.72E-03	5.68E-05	--
7816	637636.2	4168948.9	Worker	Scenario 2	9.18E-03	5.95E-05	--
7817	637736.2	4168948.9	Worker	Scenario 2	9.48E-03	6.15E-05	--
7818	637836.2	4168948.9	Worker	Scenario 2	9.80E-03	6.36E-05	--
7819	637936.2	4168948.9	Worker	Scenario 2	1.04E-02	6.72E-05	--
7820	638036.2	4168948.9	Worker	Scenario 2	1.08E-02	6.99E-05	--
7821	638136.2	4168948.9	Worker	Scenario 2	1.13E-02	7.28E-05	--
7822	641636.2	4168948.9	Worker	Scenario 2	1.68E-01	1.72E-03	--
7823	641736.2	4168948.9	Worker	Scenario 2	1.52E-01	1.33E-03	--
7824	641836.2	4168948.9	Worker	Scenario 2	1.44E-01	1.11E-03	--
7825	641936.2	4168948.9	Worker	Scenario 2	1.40E-01	9.73E-04	--
7826	642036.2	4168948.9	Worker	Scenario 2	1.38E-01	8.82E-04	--
7827	642136.2	4168948.9	Worker	Scenario 2	1.37E-01	8.14E-04	--
7828	642236.2	4168948.9	Worker	Scenario 2	1.36E-01	7.61E-04	--
7829	642336.2	4168948.9	Worker	Scenario 2	1.35E-01	7.18E-04	--
7830	642436.2	4168948.9	Worker	Scenario 2	1.34E-01	6.81E-04	--
7831	642536.2	4168948.9	Worker	Scenario 2	1.33E-01	6.49E-04	--
7832	642636.2	4168948.9	Worker	Scenario 2	1.32E-01	6.21E-04	--
7833	642736.2	4168948.9	Worker	Scenario 2	1.30E-01	5.95E-04	--
7834	642836.2	4168948.9	Worker	Scenario 2	1.27E-01	5.68E-04	--
7835	642936.2	4168948.9	Worker	Scenario 2	1.24E-01	5.42E-04	--
7836	643036.2	4168948.9	Worker	Scenario 2	1.20E-01	5.17E-04	--
7837	643136.2	4168948.9	Worker	Scenario 2	1.17E-01	4.95E-04	--
7838	643236.2	4168948.9	Worker	Scenario 2	1.14E-01	4.75E-04	--
7839	643336.2	4168948.9	Worker	Scenario 2	1.10E-01	4.54E-04	--
7840	643436.2	4168948.9	Worker	Scenario 2	1.06E-01	4.33E-04	--
7841	643536.2	4168948.9	Worker	Scenario 2	1.01E-01	4.12E-04	--
7842	643636.2	4168948.9	Worker	Scenario 2	9.68E-02	3.93E-04	--
7843	643736.2	4168948.9	Worker	Scenario 2	9.40E-02	3.77E-04	--
7844	643836.2	4168948.9	Worker	Scenario 2	9.23E-02	3.65E-04	--
7845	643936.2	4168948.9	Worker	Scenario 2	9.11E-02	3.55E-04	--
7846	644036.2	4168948.9	Worker	Scenario 2	8.94E-02	3.44E-04	--
7847	644136.2	4168948.9	Worker	Scenario 2	8.72E-02	3.33E-04	--
7848	644236.2	4168948.9	Worker	Scenario 2	8.47E-02	3.21E-04	--
7849	644336.2	4168948.9	Worker	Scenario 2	8.25E-02	3.11E-04	--
7850	644436.2	4168948.9	Worker	Scenario 2	8.05E-02	3.01E-04	--
7851	644536.2	4168948.9	Worker	Scenario 2	7.87E-02	2.93E-04	--
7852	644836.2	4168948.9	Worker	Scenario 2	7.30E-02	2.68E-04	--
7853	644936.2	4168948.9	Worker	Scenario 2	7.13E-02	2.60E-04	--
7854	645036.2	4168948.9	Worker	Scenario 2	6.99E-02	2.54E-04	--
7855	645136.2	4168948.9	Worker	Scenario 2	6.85E-02	2.47E-04	--
7856	645236.2	4168948.9	Worker	Scenario 2	6.73E-02	2.42E-04	--
7857	645336.2	4168948.9	Worker	Scenario 2	6.63E-02	2.36E-04	--
7858	645436.2	4168948.9	Worker	Scenario 2	6.53E-02	2.31E-04	--
7859	645536.2	4168948.9	Worker	Scenario 2	6.45E-02	2.27E-04	--
7860	645636.2	4168948.9	Worker	Scenario 2	6.38E-02	2.22E-04	--
7861	645736.2	4168948.9	Worker	Scenario 2	6.30E-02	2.18E-04	--
7862	645836.2	4168948.9	Worker	Scenario 2	6.22E-02	2.14E-04	--
7863	646036.2	4168948.9	Worker	Scenario 2	6.06E-02	2.06E-04	--
7864	646236.2	4168948.9	Worker	Scenario 2	5.86E-02	1.98E-04	--
7865	646336.2	4168948.9	Worker	Scenario 2	5.76E-02	1.93E-04	--
7866	635636.2	4169048.9	Worker	Scenario 2	3.41E-03	2.73E-05	--
7867	635736.2	4169048.9	Worker	Scenario 2	3.52E-03	2.81E-05	--
7868	635836.2	4169048.9	Worker	Scenario 2	3.70E-03	2.91E-05	--
7869	635936.2	4169048.9	Worker	Scenario 2	4.00E-03	3.07E-05	--
7870	636036.2	4169048.9	Worker	Scenario 2	4.26E-03	3.19E-05	--
7871	636136.2	4169048.9	Worker	Scenario 2	4.40E-03	3.27E-05	--
7872	636236.2	4169048.9	Worker	Scenario 2	4.58E-03	3.38E-05	--
7873	636336.2	4169048.9	Worker	Scenario 2	4.82E-03	3.51E-05	--
7874	636436.2	4169048.9	Worker	Scenario 2	5.10E-03	3.66E-05	--
7875	636536.2	4169048.9	Worker	Scenario 2	5.41E-03	3.82E-05	--
7876	636636.2	4169048.9	Worker	Scenario 2	5.72E-03	3.98E-05	--
7877	636736.2	4169048.9	Worker	Scenario 2	6.22E-03	4.22E-05	--
7878	636836.2	4169048.9	Worker	Scenario 2	6.58E-03	4.40E-05	--
7879	636936.2	4169048.9	Worker	Scenario 2	6.77E-03	4.53E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7880	637036.2	4169048.9	Worker	Scenario 2	7.35E-03	4.81E-05	--
7881	637136.2	4169048.9	Worker	Scenario 2	7.89E-03	5.09E-05	--
7882	637236.2	4169048.9	Worker	Scenario 2	7.88E-03	5.13E-05	--
7883	637336.2	4169048.9	Worker	Scenario 2	8.12E-03	5.28E-05	--
7884	637436.2	4169048.9	Worker	Scenario 2	8.50E-03	5.50E-05	--
7885	637536.2	4169048.9	Worker	Scenario 2	8.86E-03	5.72E-05	--
7886	637636.2	4169048.9	Worker	Scenario 2	9.38E-03	6.02E-05	--
7887	637736.2	4169048.9	Worker	Scenario 2	9.74E-03	6.24E-05	--
7888	637836.2	4169048.9	Worker	Scenario 2	1.01E-02	6.48E-05	--
7889	637936.2	4169048.9	Worker	Scenario 2	1.06E-02	6.79E-05	--
7890	638036.2	4169048.9	Worker	Scenario 2	1.12E-02	7.13E-05	--
7891	640236.2	4169048.9	Worker	Scenario 2	4.02E-02	3.08E-04	--
7892	641636.2	4169048.9	Worker	Scenario 2	1.61E-01	1.48E-03	--
7893	641736.2	4169048.9	Worker	Scenario 2	1.45E-01	1.15E-03	--
7894	641836.2	4169048.9	Worker	Scenario 2	1.37E-01	9.76E-04	--
7895	641936.2	4169048.9	Worker	Scenario 2	1.32E-01	8.65E-04	--
7896	642036.2	4169048.9	Worker	Scenario 2	1.30E-01	7.88E-04	--
7897	642136.2	4169048.9	Worker	Scenario 2	1.28E-01	7.30E-04	--
7898	642236.2	4169048.9	Worker	Scenario 2	1.26E-01	6.85E-04	--
7899	642336.2	4169048.9	Worker	Scenario 2	1.25E-01	6.48E-04	--
7900	642436.2	4169048.9	Worker	Scenario 2	1.23E-01	6.16E-04	--
7901	642536.2	4169048.9	Worker	Scenario 2	1.22E-01	5.89E-04	--
7902	642636.2	4169048.9	Worker	Scenario 2	1.21E-01	5.66E-04	--
7903	642736.2	4169048.9	Worker	Scenario 2	1.20E-01	5.44E-04	--
7904	642836.2	4169048.9	Worker	Scenario 2	1.17E-01	5.21E-04	--
7905	642936.2	4169048.9	Worker	Scenario 2	1.14E-01	4.97E-04	--
7906	643036.2	4169048.9	Worker	Scenario 2	1.11E-01	4.76E-04	--
7907	643136.2	4169048.9	Worker	Scenario 2	1.08E-01	4.58E-04	--
7908	643236.2	4169048.9	Worker	Scenario 2	1.05E-01	4.40E-04	--
7909	643336.2	4169048.9	Worker	Scenario 2	1.02E-01	4.23E-04	--
7910	643436.2	4169048.9	Worker	Scenario 2	9.88E-02	4.05E-04	--
7911	643536.2	4169048.9	Worker	Scenario 2	9.49E-02	3.87E-04	--
7912	643636.2	4169048.9	Worker	Scenario 2	9.10E-02	3.69E-04	--
7913	643736.2	4169048.9	Worker	Scenario 2	8.80E-02	3.54E-04	--
7914	643836.2	4169048.9	Worker	Scenario 2	8.61E-02	3.42E-04	--
7915	643936.2	4169048.9	Worker	Scenario 2	8.50E-02	3.33E-04	--
7916	644036.2	4169048.9	Worker	Scenario 2	8.39E-02	3.24E-04	--
7917	644236.2	4169048.9	Worker	Scenario 2	8.02E-02	3.05E-04	--
7918	644336.2	4169048.9	Worker	Scenario 2	7.80E-02	2.95E-04	--
7919	644436.2	4169048.9	Worker	Scenario 2	7.61E-02	2.86E-04	--
7920	644836.2	4169048.9	Worker	Scenario 2	6.91E-02	2.55E-04	--
7921	644936.2	4169048.9	Worker	Scenario 2	6.75E-02	2.48E-04	--
7922	645036.2	4169048.9	Worker	Scenario 2	6.60E-02	2.41E-04	--
7923	645136.2	4169048.9	Worker	Scenario 2	6.45E-02	2.35E-04	--
7924	645236.2	4169048.9	Worker	Scenario 2	6.32E-02	2.29E-04	--
7925	645336.2	4169048.9	Worker	Scenario 2	6.20E-02	2.24E-04	--
7926	645436.2	4169048.9	Worker	Scenario 2	6.10E-02	2.19E-04	--
7927	645536.2	4169048.9	Worker	Scenario 2	6.02E-02	2.14E-04	--
7928	645636.2	4169048.9	Worker	Scenario 2	5.94E-02	2.10E-04	--
7929	645736.2	4169048.9	Worker	Scenario 2	5.87E-02	2.06E-04	--
7930	645836.2	4169048.9	Worker	Scenario 2	5.80E-02	2.03E-04	--
7931	645936.2	4169048.9	Worker	Scenario 2	5.73E-02	1.99E-04	--
7932	646036.2	4169048.9	Worker	Scenario 2	5.66E-02	1.95E-04	--
7933	646236.2	4169048.9	Worker	Scenario 2	5.50E-02	1.88E-04	--
7934	635636.2	4169148.9	Worker	Scenario 2	4.01E-03	2.99E-05	--
7935	635736.2	4169148.9	Worker	Scenario 2	3.77E-03	2.91E-05	--
7936	635836.2	4169148.9	Worker	Scenario 2	3.80E-03	2.95E-05	--
7937	635936.2	4169148.9	Worker	Scenario 2	4.07E-03	3.07E-05	--
7938	636036.2	4169148.9	Worker	Scenario 2	4.29E-03	3.19E-05	--
7939	636136.2	4169148.9	Worker	Scenario 2	4.63E-03	3.36E-05	--
7940	636236.2	4169148.9	Worker	Scenario 2	4.95E-03	3.53E-05	--
7941	636336.2	4169148.9	Worker	Scenario 2	5.15E-03	3.63E-05	--
7942	636436.2	4169148.9	Worker	Scenario 2	5.37E-03	3.76E-05	--
7943	636536.2	4169148.9	Worker	Scenario 2	5.63E-03	3.90E-05	--
7944	636636.2	4169148.9	Worker	Scenario 2	5.86E-03	4.02E-05	--
7945	636736.2	4169148.9	Worker	Scenario 2	6.20E-03	4.20E-05	--
7946	636836.2	4169148.9	Worker	Scenario 2	6.55E-03	4.38E-05	--
7947	636936.2	4169148.9	Worker	Scenario 2	6.89E-03	4.55E-05	--
7948	637036.2	4169148.9	Worker	Scenario 2	7.27E-03	4.75E-05	--
7949	637136.2	4169148.9	Worker	Scenario 2	7.68E-03	4.97E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7950	637236.2	4169148.9	Worker	Scenario 2	8.17E-03	5.24E-05	--
7951	637336.2	4169148.9	Worker	Scenario 2	8.55E-03	5.45E-05	--
7952	637436.2	4169148.9	Worker	Scenario 2	8.77E-03	5.60E-05	--
7953	637536.2	4169148.9	Worker	Scenario 2	9.19E-03	5.84E-05	--
7954	637636.2	4169148.9	Worker	Scenario 2	9.58E-03	6.08E-05	--
7955	637736.2	4169148.9	Worker	Scenario 2	9.96E-03	6.32E-05	--
7956	637836.2	4169148.9	Worker	Scenario 2	1.04E-02	6.58E-05	--
7957	640136.2	4169148.9	Worker	Scenario 2	3.76E-02	2.78E-04	--
7958	640236.2	4169148.9	Worker	Scenario 2	4.03E-02	3.06E-04	--
7959	641636.2	4169148.9	Worker	Scenario 2	1.55E-01	1.24E-03	--
7960	641736.2	4169148.9	Worker	Scenario 2	1.39E-01	9.93E-04	--
7961	641836.2	4169148.9	Worker	Scenario 2	1.31E-01	8.56E-04	--
7962	641936.2	4169148.9	Worker	Scenario 2	1.26E-01	7.68E-04	--
7963	642036.2	4169148.9	Worker	Scenario 2	1.22E-01	7.05E-04	--
7964	642136.2	4169148.9	Worker	Scenario 2	1.20E-01	6.57E-04	--
7965	642236.2	4169148.9	Worker	Scenario 2	1.18E-01	6.18E-04	--
7966	642336.2	4169148.9	Worker	Scenario 2	1.16E-01	5.87E-04	--
7967	642436.2	4169148.9	Worker	Scenario 2	1.15E-01	5.60E-04	--
7968	642536.2	4169148.9	Worker	Scenario 2	1.14E-01	5.38E-04	--
7969	642636.2	4169148.9	Worker	Scenario 2	1.13E-01	5.18E-04	--
7970	642736.2	4169148.9	Worker	Scenario 2	1.11E-01	4.99E-04	--
7971	642836.2	4169148.9	Worker	Scenario 2	1.09E-01	4.78E-04	--
7972	642936.2	4169148.9	Worker	Scenario 2	1.06E-01	4.58E-04	--
7973	643036.2	4169148.9	Worker	Scenario 2	1.03E-01	4.40E-04	--
7974	643136.2	4169148.9	Worker	Scenario 2	1.01E-01	4.24E-04	--
7975	643236.2	4169148.9	Worker	Scenario 2	9.82E-02	4.09E-04	--
7976	643336.2	4169148.9	Worker	Scenario 2	9.56E-02	3.94E-04	--
7977	643436.2	4169148.9	Worker	Scenario 2	9.27E-02	3.79E-04	--
7978	643536.2	4169148.9	Worker	Scenario 2	8.93E-02	3.64E-04	--
7979	643636.2	4169148.9	Worker	Scenario 2	8.58E-02	3.48E-04	--
7980	643736.2	4169148.9	Worker	Scenario 2	8.27E-02	3.33E-04	--
7981	643836.2	4169148.9	Worker	Scenario 2	8.07E-02	3.22E-04	--
7982	643936.2	4169148.9	Worker	Scenario 2	7.95E-02	3.13E-04	--
7983	644036.2	4169148.9	Worker	Scenario 2	7.87E-02	3.05E-04	--
7984	644136.2	4169148.9	Worker	Scenario 2	7.76E-02	2.98E-04	--
7985	644636.2	4169148.9	Worker	Scenario 2	6.86E-02	2.56E-04	--
7986	644736.2	4169148.9	Worker	Scenario 2	6.71E-02	2.49E-04	--
7987	644836.2	4169148.9	Worker	Scenario 2	6.56E-02	2.42E-04	--
7988	644936.2	4169148.9	Worker	Scenario 2	6.42E-02	2.36E-04	--
7989	645036.2	4169148.9	Worker	Scenario 2	6.28E-02	2.30E-04	--
7990	645136.2	4169148.9	Worker	Scenario 2	6.13E-02	2.24E-04	--
7991	645236.2	4169148.9	Worker	Scenario 2	5.99E-02	2.19E-04	--
7992	645336.2	4169148.9	Worker	Scenario 2	5.86E-02	2.13E-04	--
7993	645436.2	4169148.9	Worker	Scenario 2	5.75E-02	2.08E-04	--
7994	645536.2	4169148.9	Worker	Scenario 2	5.65E-02	2.04E-04	--
7995	645636.2	4169148.9	Worker	Scenario 2	5.57E-02	2.00E-04	--
7996	645736.2	4169148.9	Worker	Scenario 2	5.49E-02	1.96E-04	--
7997	645836.2	4169148.9	Worker	Scenario 2	5.42E-02	1.92E-04	--
7998	645936.2	4169148.9	Worker	Scenario 2	5.36E-02	1.89E-04	--
7999	646036.2	4169148.9	Worker	Scenario 2	5.30E-02	1.85E-04	--
8000	635636.2	4169248.9	Worker	Scenario 2	4.23E-03	3.07E-05	--
8001	635736.2	4169248.9	Worker	Scenario 2	4.52E-03	3.21E-05	--
8002	635836.2	4169248.9	Worker	Scenario 2	4.28E-03	3.15E-05	--
8003	635936.2	4169248.9	Worker	Scenario 2	4.19E-03	3.13E-05	--
8004	636036.2	4169248.9	Worker	Scenario 2	4.49E-03	3.27E-05	--
8005	636136.2	4169248.9	Worker	Scenario 2	4.75E-03	3.40E-05	--
8006	636236.2	4169248.9	Worker	Scenario 2	4.99E-03	3.53E-05	--
8007	636336.2	4169248.9	Worker	Scenario 2	5.33E-03	3.70E-05	--
8008	636436.2	4169248.9	Worker	Scenario 2	5.78E-03	3.90E-05	--
8009	636536.2	4169248.9	Worker	Scenario 2	6.22E-03	4.11E-05	--
8010	636636.2	4169248.9	Worker	Scenario 2	6.22E-03	4.14E-05	--
8011	636736.2	4169248.9	Worker	Scenario 2	6.48E-03	4.29E-05	--
8012	636836.2	4169248.9	Worker	Scenario 2	6.90E-03	4.49E-05	--
8013	636936.2	4169248.9	Worker	Scenario 2	7.21E-03	4.66E-05	--
8014	637036.2	4169248.9	Worker	Scenario 2	7.57E-03	4.86E-05	--
8015	637136.2	4169248.9	Worker	Scenario 2	7.90E-03	5.04E-05	--
8016	637236.2	4169248.9	Worker	Scenario 2	8.28E-03	5.26E-05	--
8017	637336.2	4169248.9	Worker	Scenario 2	8.79E-03	5.53E-05	--
8018	637436.2	4169248.9	Worker	Scenario 2	9.07E-03	5.71E-05	--
8019	637536.2	4169248.9	Worker	Scenario 2	9.50E-03	5.96E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8020	637636.2	4169248.9	Worker	Scenario 2	9.87E-03	6.19E-05	--
8021	637736.2	4169248.9	Worker	Scenario 2	1.03E-02	6.43E-05	--
8022	637936.2	4169248.9	Worker	Scenario 2	1.11E-02	6.95E-05	--
8023	640036.2	4169248.9	Worker	Scenario 2	3.53E-02	2.53E-04	--
8024	640136.2	4169248.9	Worker	Scenario 2	3.76E-02	2.76E-04	--
8025	640236.2	4169248.9	Worker	Scenario 2	4.03E-02	3.03E-04	--
8026	641636.2	4169248.9	Worker	Scenario 2	1.48E-01	1.01E-03	--
8027	641736.2	4169248.9	Worker	Scenario 2	1.33E-01	8.45E-04	--
8028	641836.2	4169248.9	Worker	Scenario 2	1.24E-01	7.47E-04	--
8029	641936.2	4169248.9	Worker	Scenario 2	1.19E-01	6.81E-04	--
8030	642036.2	4169248.9	Worker	Scenario 2	1.15E-01	6.33E-04	--
8031	642136.2	4169248.9	Worker	Scenario 2	1.13E-01	5.94E-04	--
8032	642236.2	4169248.9	Worker	Scenario 2	1.10E-01	5.62E-04	--
8033	642336.2	4169248.9	Worker	Scenario 2	1.08E-01	5.35E-04	--
8034	642436.2	4169248.9	Worker	Scenario 2	1.07E-01	5.13E-04	--
8035	642536.2	4169248.9	Worker	Scenario 2	1.06E-01	4.94E-04	--
8036	642636.2	4169248.9	Worker	Scenario 2	1.05E-01	4.77E-04	--
8037	642736.2	4169248.9	Worker	Scenario 2	1.04E-01	4.60E-04	--
8038	642836.2	4169248.9	Worker	Scenario 2	1.01E-01	4.42E-04	--
8039	642936.2	4169248.9	Worker	Scenario 2	9.84E-02	4.24E-04	--
8040	643036.2	4169248.9	Worker	Scenario 2	9.62E-02	4.09E-04	--
8041	643136.2	4169248.9	Worker	Scenario 2	9.41E-02	3.95E-04	--
8042	643236.2	4169248.9	Worker	Scenario 2	9.19E-02	3.81E-04	--
8043	643336.2	4169248.9	Worker	Scenario 2	8.96E-02	3.68E-04	--
8044	643436.2	4169248.9	Worker	Scenario 2	8.72E-02	3.56E-04	--
8045	643536.2	4169248.9	Worker	Scenario 2	8.43E-02	3.42E-04	--
8046	643636.2	4169248.9	Worker	Scenario 2	8.11E-02	3.28E-04	--
8047	643736.2	4169248.9	Worker	Scenario 2	7.81E-02	3.15E-04	--
8048	643836.2	4169248.9	Worker	Scenario 2	7.60E-02	3.04E-04	--
8049	643936.2	4169248.9	Worker	Scenario 2	7.47E-02	2.95E-04	--
8050	644036.2	4169248.9	Worker	Scenario 2	7.40E-02	2.88E-04	--
8051	644136.2	4169248.9	Worker	Scenario 2	7.30E-02	2.81E-04	--
8052	644236.2	4169248.9	Worker	Scenario 2	7.18E-02	2.74E-04	--
8053	644636.2	4169248.9	Worker	Scenario 2	6.51E-02	2.43E-04	--
8054	644736.2	4169248.9	Worker	Scenario 2	6.37E-02	2.37E-04	--
8055	644836.2	4169248.9	Worker	Scenario 2	6.24E-02	2.31E-04	--
8056	644936.2	4169248.9	Worker	Scenario 2	6.11E-02	2.25E-04	--
8057	645036.2	4169248.9	Worker	Scenario 2	5.98E-02	2.20E-04	--
8058	645136.2	4169248.9	Worker	Scenario 2	5.84E-02	2.14E-04	--
8059	645236.2	4169248.9	Worker	Scenario 2	5.71E-02	2.09E-04	--
8060	645336.2	4169248.9	Worker	Scenario 2	5.58E-02	2.04E-04	--
8061	645436.2	4169248.9	Worker	Scenario 2	5.46E-02	1.99E-04	--
8062	645536.2	4169248.9	Worker	Scenario 2	5.35E-02	1.94E-04	--
8063	645636.2	4169248.9	Worker	Scenario 2	5.26E-02	1.90E-04	--
8064	645736.2	4169248.9	Worker	Scenario 2	5.18E-02	1.87E-04	--
8065	645836.2	4169248.9	Worker	Scenario 2	5.10E-02	1.83E-04	--
8066	645936.2	4169248.9	Worker	Scenario 2	5.04E-02	1.80E-04	--
8067	646036.2	4169248.9	Worker	Scenario 2	4.98E-02	1.77E-04	--
8068	635636.2	4169348.9	Worker	Scenario 2	5.67E-03	3.61E-05	--
8069	635736.2	4169348.9	Worker	Scenario 2	4.89E-03	3.34E-05	--
8070	635836.2	4169348.9	Worker	Scenario 2	4.80E-03	3.34E-05	--
8071	635936.2	4169348.9	Worker	Scenario 2	4.80E-03	3.37E-05	--
8072	636036.2	4169348.9	Worker	Scenario 2	4.93E-03	3.44E-05	--
8073	636136.2	4169348.9	Worker	Scenario 2	5.04E-03	3.50E-05	--
8074	636236.2	4169348.9	Worker	Scenario 2	5.24E-03	3.61E-05	--
8075	636336.2	4169348.9	Worker	Scenario 2	5.57E-03	3.77E-05	--
8076	636436.2	4169348.9	Worker	Scenario 2	5.93E-03	3.94E-05	--
8077	636536.2	4169348.9	Worker	Scenario 2	6.23E-03	4.09E-05	--
8078	636636.2	4169348.9	Worker	Scenario 2	6.79E-03	4.35E-05	--
8079	636736.2	4169348.9	Worker	Scenario 2	6.83E-03	4.40E-05	--
8080	636836.2	4169348.9	Worker	Scenario 2	7.16E-03	4.58E-05	--
8081	636936.2	4169348.9	Worker	Scenario 2	7.65E-03	4.83E-05	--
8082	637036.2	4169348.9	Worker	Scenario 2	7.95E-03	5.00E-05	--
8083	637136.2	4169348.9	Worker	Scenario 2	8.39E-03	5.24E-05	--
8084	637236.2	4169348.9	Worker	Scenario 2	8.74E-03	5.44E-05	--
8085	637336.2	4169348.9	Worker	Scenario 2	9.06E-03	5.63E-05	--
8086	637436.2	4169348.9	Worker	Scenario 2	9.44E-03	5.85E-05	--
8087	637536.2	4169348.9	Worker	Scenario 2	9.80E-03	6.07E-05	--
8088	637636.2	4169348.9	Worker	Scenario 2	1.02E-02	6.30E-05	--
8089	637836.2	4169348.9	Worker	Scenario 2	1.09E-02	6.75E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8090	639736.2	4169348.9	Worker	Scenario 2	2.95E-02	1.99E-04	--
8091	639836.2	4169348.9	Worker	Scenario 2	3.13E-02	2.14E-04	--
8092	639936.2	4169348.9	Worker	Scenario 2	3.32E-02	2.32E-04	--
8093	640036.2	4169348.9	Worker	Scenario 2	3.53E-02	2.52E-04	--
8094	640136.2	4169348.9	Worker	Scenario 2	3.75E-02	2.74E-04	--
8095	640236.2	4169348.9	Worker	Scenario 2	4.01E-02	2.99E-04	--
8096	641636.2	4169348.9	Worker	Scenario 2	1.42E-01	8.36E-04	--
8097	641736.2	4169348.9	Worker	Scenario 2	1.27E-01	7.30E-04	--
8098	641836.2	4169348.9	Worker	Scenario 2	1.18E-01	6.59E-04	--
8099	641936.2	4169348.9	Worker	Scenario 2	1.13E-01	6.09E-04	--
8100	642036.2	4169348.9	Worker	Scenario 2	1.09E-01	5.71E-04	--
8101	642136.2	4169348.9	Worker	Scenario 2	1.06E-01	5.40E-04	--
8102	642236.2	4169348.9	Worker	Scenario 2	1.03E-01	5.13E-04	--
8103	642336.2	4169348.9	Worker	Scenario 2	1.02E-01	4.91E-04	--
8104	642436.2	4169348.9	Worker	Scenario 2	1.00E-01	4.72E-04	--
8105	642536.2	4169348.9	Worker	Scenario 2	9.96E-02	4.56E-04	--
8106	642636.2	4169348.9	Worker	Scenario 2	9.86E-02	4.42E-04	--
8107	642736.2	4169348.9	Worker	Scenario 2	9.69E-02	4.26E-04	--
8108	642836.2	4169348.9	Worker	Scenario 2	9.45E-02	4.10E-04	--
8109	642936.2	4169348.9	Worker	Scenario 2	9.20E-02	3.94E-04	--
8110	643036.2	4169348.9	Worker	Scenario 2	9.00E-02	3.81E-04	--
8111	643136.2	4169348.9	Worker	Scenario 2	8.82E-02	3.68E-04	--
8112	643236.2	4169348.9	Worker	Scenario 2	8.62E-02	3.56E-04	--
8113	643336.2	4169348.9	Worker	Scenario 2	8.42E-02	3.45E-04	--
8114	643436.2	4169348.9	Worker	Scenario 2	8.21E-02	3.34E-04	--
8115	643536.2	4169348.9	Worker	Scenario 2	7.96E-02	3.22E-04	--
8116	643636.2	4169348.9	Worker	Scenario 2	7.68E-02	3.10E-04	--
8117	643736.2	4169348.9	Worker	Scenario 2	7.41E-02	2.99E-04	--
8118	643836.2	4169348.9	Worker	Scenario 2	7.18E-02	2.88E-04	--
8119	643936.2	4169348.9	Worker	Scenario 2	7.02E-02	2.79E-04	--
8120	644036.2	4169348.9	Worker	Scenario 2	6.94E-02	2.72E-04	--
8121	644136.2	4169348.9	Worker	Scenario 2	6.88E-02	2.66E-04	--
8122	644236.2	4169348.9	Worker	Scenario 2	6.80E-02	2.60E-04	--
8123	644336.2	4169348.9	Worker	Scenario 2	6.68E-02	2.53E-04	--
8124	644636.2	4169348.9	Worker	Scenario 2	6.21E-02	2.32E-04	--
8125	644736.2	4169348.9	Worker	Scenario 2	6.07E-02	2.26E-04	--
8126	644836.2	4169348.9	Worker	Scenario 2	5.94E-02	2.21E-04	--
8127	644936.2	4169348.9	Worker	Scenario 2	5.82E-02	2.15E-04	--
8128	645036.2	4169348.9	Worker	Scenario 2	5.71E-02	2.10E-04	--
8129	645136.2	4169348.9	Worker	Scenario 2	5.59E-02	2.05E-04	--
8130	645236.2	4169348.9	Worker	Scenario 2	5.46E-02	2.00E-04	--
8131	645336.2	4169348.9	Worker	Scenario 2	5.34E-02	1.95E-04	--
8132	645436.2	4169348.9	Worker	Scenario 2	5.21E-02	1.91E-04	--
8133	645536.2	4169348.9	Worker	Scenario 2	5.10E-02	1.86E-04	--
8134	645636.2	4169348.9	Worker	Scenario 2	5.00E-02	1.82E-04	--
8135	645736.2	4169348.9	Worker	Scenario 2	4.91E-02	1.78E-04	--
8136	645836.2	4169348.9	Worker	Scenario 2	4.83E-02	1.75E-04	--
8137	645936.2	4169348.9	Worker	Scenario 2	4.76E-02	1.72E-04	--
8138	635636.2	4169448.9	Worker	Scenario 2	5.95E-03	3.70E-05	--
8139	635736.2	4169448.9	Worker	Scenario 2	5.93E-03	3.72E-05	--
8140	635836.2	4169448.9	Worker	Scenario 2	5.46E-03	3.56E-05	--
8141	635936.2	4169448.9	Worker	Scenario 2	5.49E-03	3.61E-05	--
8142	636036.2	4169448.9	Worker	Scenario 2	5.48E-03	3.63E-05	--
8143	636136.2	4169448.9	Worker	Scenario 2	5.51E-03	3.67E-05	--
8144	636236.2	4169448.9	Worker	Scenario 2	5.60E-03	3.73E-05	--
8145	636336.2	4169448.9	Worker	Scenario 2	5.81E-03	3.84E-05	--
8146	636436.2	4169448.9	Worker	Scenario 2	6.12E-03	3.99E-05	--
8147	636536.2	4169448.9	Worker	Scenario 2	6.47E-03	4.17E-05	--
8148	636636.2	4169448.9	Worker	Scenario 2	6.87E-03	4.36E-05	--
8149	636736.2	4169448.9	Worker	Scenario 2	7.32E-03	4.58E-05	--
8150	636836.2	4169448.9	Worker	Scenario 2	7.54E-03	4.71E-05	--
8151	636936.2	4169448.9	Worker	Scenario 2	7.95E-03	4.93E-05	--
8152	637036.2	4169448.9	Worker	Scenario 2	8.15E-03	5.06E-05	--
8153	637136.2	4169448.9	Worker	Scenario 2	8.42E-03	5.22E-05	--
8154	637236.2	4169448.9	Worker	Scenario 2	8.78E-03	5.42E-05	--
8155	637336.2	4169448.9	Worker	Scenario 2	9.14E-03	5.63E-05	--
8156	637436.2	4169448.9	Worker	Scenario 2	9.58E-03	5.88E-05	--
8157	637736.2	4169448.9	Worker	Scenario 2	1.08E-02	6.60E-05	--
8158	637836.2	4169448.9	Worker	Scenario 2	1.12E-02	6.85E-05	--
8159	639736.2	4169448.9	Worker	Scenario 2	2.96E-02	1.99E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8160	639836.2	4169448.9	Worker	Scenario 2	3.13E-02	2.14E-04	--
8161	639936.2	4169448.9	Worker	Scenario 2	3.31E-02	2.31E-04	--
8162	640036.2	4169448.9	Worker	Scenario 2	3.52E-02	2.49E-04	--
8163	640136.2	4169448.9	Worker	Scenario 2	3.74E-02	2.70E-04	--
8164	640236.2	4169448.9	Worker	Scenario 2	3.99E-02	2.94E-04	--
8165	641636.2	4169448.9	Worker	Scenario 2	1.37E-01	7.23E-04	--
8166	641736.2	4169448.9	Worker	Scenario 2	1.22E-01	6.46E-04	--
8167	641836.2	4169448.9	Worker	Scenario 2	1.13E-01	5.92E-04	--
8168	641936.2	4169448.9	Worker	Scenario 2	1.07E-01	5.52E-04	--
8169	642036.2	4169448.9	Worker	Scenario 2	1.03E-01	5.20E-04	--
8170	642136.2	4169448.9	Worker	Scenario 2	9.98E-02	4.93E-04	--
8171	642236.2	4169448.9	Worker	Scenario 2	9.73E-02	4.70E-04	--
8172	642336.2	4169448.9	Worker	Scenario 2	9.56E-02	4.52E-04	--
8173	642436.2	4169448.9	Worker	Scenario 2	9.45E-02	4.36E-04	--
8174	642536.2	4169448.9	Worker	Scenario 2	9.37E-02	4.23E-04	--
8175	642636.2	4169448.9	Worker	Scenario 2	9.26E-02	4.10E-04	--
8176	642736.2	4169448.9	Worker	Scenario 2	9.08E-02	3.96E-04	--
8177	642836.2	4169448.9	Worker	Scenario 2	8.85E-02	3.82E-04	--
8178	642936.2	4169448.9	Worker	Scenario 2	8.63E-02	3.68E-04	--
8179	643036.2	4169448.9	Worker	Scenario 2	8.44E-02	3.56E-04	--
8180	643136.2	4169448.9	Worker	Scenario 2	8.28E-02	3.45E-04	--
8181	643236.2	4169448.9	Worker	Scenario 2	8.11E-02	3.34E-04	--
8182	643336.2	4169448.9	Worker	Scenario 2	7.93E-02	3.24E-04	--
8183	643436.2	4169448.9	Worker	Scenario 2	7.74E-02	3.14E-04	--
8184	643536.2	4169448.9	Worker	Scenario 2	7.54E-02	3.05E-04	--
8185	643636.2	4169448.9	Worker	Scenario 2	7.28E-02	2.93E-04	--
8186	643736.2	4169448.9	Worker	Scenario 2	7.03E-02	2.83E-04	--
8187	643836.2	4169448.9	Worker	Scenario 2	6.79E-02	2.72E-04	--
8188	643936.2	4169448.9	Worker	Scenario 2	6.63E-02	2.64E-04	--
8189	644036.2	4169448.9	Worker	Scenario 2	6.54E-02	2.57E-04	--
8190	644136.2	4169448.9	Worker	Scenario 2	6.49E-02	2.52E-04	--
8191	644236.2	4169448.9	Worker	Scenario 2	6.43E-02	2.47E-04	--
8192	644336.2	4169448.9	Worker	Scenario 2	6.34E-02	2.41E-04	--
8193	644636.2	4169448.9	Worker	Scenario 2	5.94E-02	2.22E-04	--
8194	644736.2	4169448.9	Worker	Scenario 2	5.79E-02	2.16E-04	--
8195	644836.2	4169448.9	Worker	Scenario 2	5.66E-02	2.11E-04	--
8196	644936.2	4169448.9	Worker	Scenario 2	5.55E-02	2.06E-04	--
8197	645036.2	4169448.9	Worker	Scenario 2	5.44E-02	2.01E-04	--
8198	645136.2	4169448.9	Worker	Scenario 2	5.33E-02	1.96E-04	--
8199	645236.2	4169448.9	Worker	Scenario 2	5.22E-02	1.92E-04	--
8200	645336.2	4169448.9	Worker	Scenario 2	5.11E-02	1.87E-04	--
8201	645436.2	4169448.9	Worker	Scenario 2	4.99E-02	1.83E-04	--
8202	645536.2	4169448.9	Worker	Scenario 2	4.88E-02	1.79E-04	--
8203	645636.2	4169448.9	Worker	Scenario 2	4.77E-02	1.74E-04	--
8204	645736.2	4169448.9	Worker	Scenario 2	4.67E-02	1.71E-04	--
8205	635636.2	4169548.9	Worker	Scenario 2	6.06E-03	3.73E-05	--
8206	635736.2	4169548.9	Worker	Scenario 2	6.19E-03	3.81E-05	--
8207	635836.2	4169548.9	Worker	Scenario 2	6.28E-03	3.87E-05	--
8208	635936.2	4169548.9	Worker	Scenario 2	6.22E-03	3.86E-05	--
8209	636036.2	4169548.9	Worker	Scenario 2	5.76E-03	3.71E-05	--
8210	636136.2	4169548.9	Worker	Scenario 2	5.91E-03	3.80E-05	--
8211	636236.2	4169548.9	Worker	Scenario 2	6.07E-03	3.89E-05	--
8212	636336.2	4169548.9	Worker	Scenario 2	6.18E-03	3.96E-05	--
8213	636436.2	4169548.9	Worker	Scenario 2	6.40E-03	4.08E-05	--
8214	636536.2	4169548.9	Worker	Scenario 2	6.72E-03	4.24E-05	--
8215	636636.2	4169548.9	Worker	Scenario 2	7.09E-03	4.43E-05	--
8216	636736.2	4169548.9	Worker	Scenario 2	7.38E-03	4.58E-05	--
8217	636836.2	4169548.9	Worker	Scenario 2	7.64E-03	4.73E-05	--
8218	636936.2	4169548.9	Worker	Scenario 2	7.92E-03	4.89E-05	--
8219	637036.2	4169548.9	Worker	Scenario 2	8.25E-03	5.07E-05	--
8220	637136.2	4169548.9	Worker	Scenario 2	8.61E-03	5.27E-05	--
8221	637236.2	4169548.9	Worker	Scenario 2	8.94E-03	5.46E-05	--
8222	637336.2	4169548.9	Worker	Scenario 2	9.33E-03	5.68E-05	--
8223	637536.2	4169548.9	Worker	Scenario 2	1.03E-02	6.21E-05	--
8224	637636.2	4169548.9	Worker	Scenario 2	1.07E-02	6.45E-05	--
8225	637736.2	4169548.9	Worker	Scenario 2	1.10E-02	6.68E-05	--
8226	639636.2	4169548.9	Worker	Scenario 2	2.82E-02	1.85E-04	--
8227	639736.2	4169548.9	Worker	Scenario 2	2.96E-02	1.98E-04	--
8228	639836.2	4169548.9	Worker	Scenario 2	3.13E-02	2.13E-04	--
8229	639936.2	4169548.9	Worker	Scenario 2	3.30E-02	2.28E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8230	640036.2	4169548.9	Worker	Scenario 2	3.50E-02	2.46E-04	--
8231	640136.2	4169548.9	Worker	Scenario 2	3.71E-02	2.66E-04	--
8232	640236.2	4169548.9	Worker	Scenario 2	3.95E-02	2.88E-04	--
8233	641536.2	4169548.9	Worker	Scenario 2	1.59E-01	7.35E-04	--
8234	641636.2	4169548.9	Worker	Scenario 2	1.31E-01	6.42E-04	--
8235	641736.2	4169548.9	Worker	Scenario 2	1.16E-01	5.81E-04	--
8236	641836.2	4169548.9	Worker	Scenario 2	1.07E-01	5.37E-04	--
8237	641936.2	4169548.9	Worker	Scenario 2	1.02E-01	5.04E-04	--
8238	642036.2	4169548.9	Worker	Scenario 2	9.74E-02	4.77E-04	--
8239	642136.2	4169548.9	Worker	Scenario 2	9.41E-02	4.54E-04	--
8240	642236.2	4169548.9	Worker	Scenario 2	9.17E-02	4.34E-04	--
8241	642336.2	4169548.9	Worker	Scenario 2	9.00E-02	4.18E-04	--
8242	642436.2	4169548.9	Worker	Scenario 2	8.90E-02	4.05E-04	--
8243	642536.2	4169548.9	Worker	Scenario 2	8.82E-02	3.94E-04	--
8244	642636.2	4169548.9	Worker	Scenario 2	8.71E-02	3.82E-04	--
8245	642736.2	4169548.9	Worker	Scenario 2	8.53E-02	3.70E-04	--
8246	642836.2	4169548.9	Worker	Scenario 2	8.32E-02	3.57E-04	--
8247	642936.2	4169548.9	Worker	Scenario 2	8.11E-02	3.45E-04	--
8248	643036.2	4169548.9	Worker	Scenario 2	7.94E-02	3.34E-04	--
8249	643136.2	4169548.9	Worker	Scenario 2	7.79E-02	3.24E-04	--
8250	643236.2	4169548.9	Worker	Scenario 2	7.65E-02	3.15E-04	--
8251	643336.2	4169548.9	Worker	Scenario 2	7.48E-02	3.05E-04	--
8252	643436.2	4169548.9	Worker	Scenario 2	7.30E-02	2.96E-04	--
8253	643536.2	4169548.9	Worker	Scenario 2	7.12E-02	2.87E-04	--
8254	643636.2	4169548.9	Worker	Scenario 2	6.91E-02	2.78E-04	--
8255	643736.2	4169548.9	Worker	Scenario 2	6.68E-02	2.69E-04	--
8256	643836.2	4169548.9	Worker	Scenario 2	6.46E-02	2.59E-04	--
8257	643936.2	4169548.9	Worker	Scenario 2	6.28E-02	2.51E-04	--
8258	644036.2	4169548.9	Worker	Scenario 2	6.18E-02	2.44E-04	--
8259	644136.2	4169548.9	Worker	Scenario 2	6.12E-02	2.39E-04	--
8260	644236.2	4169548.9	Worker	Scenario 2	6.08E-02	2.34E-04	--
8261	644336.2	4169548.9	Worker	Scenario 2	6.02E-02	2.30E-04	--
8262	644436.2	4169548.9	Worker	Scenario 2	5.94E-02	2.25E-04	--
8263	644636.2	4169548.9	Worker	Scenario 2	5.69E-02	2.13E-04	--
8264	644736.2	4169548.9	Worker	Scenario 2	5.54E-02	2.07E-04	--
8265	644836.2	4169548.9	Worker	Scenario 2	5.41E-02	2.02E-04	--
8266	644936.2	4169548.9	Worker	Scenario 2	5.30E-02	1.97E-04	--
8267	645036.2	4169548.9	Worker	Scenario 2	5.20E-02	1.92E-04	--
8268	645136.2	4169548.9	Worker	Scenario 2	5.10E-02	1.88E-04	--
8269	645236.2	4169548.9	Worker	Scenario 2	5.00E-02	1.84E-04	--
8270	645336.2	4169548.9	Worker	Scenario 2	4.91E-02	1.80E-04	--
8271	645436.2	4169548.9	Worker	Scenario 2	4.80E-02	1.76E-04	--
8272	645536.2	4169548.9	Worker	Scenario 2	4.69E-02	1.72E-04	--
8273	635636.2	4169648.9	Worker	Scenario 2	6.12E-03	3.74E-05	--
8274	635736.2	4169648.9	Worker	Scenario 2	6.25E-03	3.81E-05	--
8275	635836.2	4169648.9	Worker	Scenario 2	6.42E-03	3.90E-05	--
8276	635936.2	4169648.9	Worker	Scenario 2	6.49E-03	3.96E-05	--
8277	636036.2	4169648.9	Worker	Scenario 2	6.58E-03	4.02E-05	--
8278	636136.2	4169648.9	Worker	Scenario 2	6.59E-03	4.04E-05	--
8279	636236.2	4169648.9	Worker	Scenario 2	6.49E-03	4.03E-05	--
8280	636336.2	4169648.9	Worker	Scenario 2	6.57E-03	4.09E-05	--
8281	636436.2	4169648.9	Worker	Scenario 2	6.66E-03	4.16E-05	--
8282	636536.2	4169648.9	Worker	Scenario 2	6.90E-03	4.29E-05	--
8283	636636.2	4169648.9	Worker	Scenario 2	7.17E-03	4.43E-05	--
8284	636736.2	4169648.9	Worker	Scenario 2	7.49E-03	4.60E-05	--
8285	636836.2	4169648.9	Worker	Scenario 2	7.80E-03	4.77E-05	--
8286	636936.2	4169648.9	Worker	Scenario 2	8.13E-03	4.95E-05	--
8287	637036.2	4169648.9	Worker	Scenario 2	8.46E-03	5.13E-05	--
8288	637136.2	4169648.9	Worker	Scenario 2	8.80E-03	5.32E-05	--
8289	637436.2	4169648.9	Worker	Scenario 2	1.03E-02	6.15E-05	--
8290	637536.2	4169648.9	Worker	Scenario 2	1.06E-02	6.34E-05	--
8291	637636.2	4169648.9	Worker	Scenario 2	1.10E-02	6.54E-05	--
8292	637736.2	4169648.9	Worker	Scenario 2	1.13E-02	6.74E-05	--
8293	639536.2	4169648.9	Worker	Scenario 2	2.68E-02	1.73E-04	--
8294	639636.2	4169648.9	Worker	Scenario 2	2.81E-02	1.85E-04	--
8295	639736.2	4169648.9	Worker	Scenario 2	2.96E-02	1.97E-04	--
8296	639836.2	4169648.9	Worker	Scenario 2	3.12E-02	2.11E-04	--
8297	639936.2	4169648.9	Worker	Scenario 2	3.29E-02	2.26E-04	--
8298	640036.2	4169648.9	Worker	Scenario 2	3.47E-02	2.42E-04	--
8299	640136.2	4169648.9	Worker	Scenario 2	3.68E-02	2.61E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8300	640236.2	4169648.9	Worker	Scenario 2	3.91E-02	2.82E-04	--
8301	640336.2	4169648.9	Worker	Scenario 2	4.17E-02	3.06E-04	--
8302	640836.2	4169648.9	Worker	Scenario 2	6.21E-02	4.61E-04	--
8303	640936.2	4169648.9	Worker	Scenario 2	6.94E-02	5.00E-04	--
8304	641036.2	4169648.9	Worker	Scenario 2	8.00E-02	5.39E-04	--
8305	641136.2	4169648.9	Worker	Scenario 2	9.87E-02	5.90E-04	--
8306	641236.2	4169648.9	Worker	Scenario 2	1.49E-01	7.02E-04	--
8307	641336.2	4169648.9	Worker	Scenario 2	6.45E-01	1.87E-03	--
8308	641436.2	4169648.9	Worker	Scenario 2	2.24E-01	8.49E-04	--
8309	641536.2	4169648.9	Worker	Scenario 2	1.54E-01	6.59E-04	--
8310	641636.2	4169648.9	Worker	Scenario 2	1.25E-01	5.77E-04	--
8311	641736.2	4169648.9	Worker	Scenario 2	1.11E-01	5.28E-04	--
8312	641836.2	4169648.9	Worker	Scenario 2	1.02E-01	4.91E-04	--
8313	641936.2	4169648.9	Worker	Scenario 2	9.62E-02	4.63E-04	--
8314	642036.2	4169648.9	Worker	Scenario 2	9.21E-02	4.39E-04	--
8315	642136.2	4169648.9	Worker	Scenario 2	8.89E-02	4.19E-04	--
8316	642236.2	4169648.9	Worker	Scenario 2	8.65E-02	4.02E-04	--
8317	642336.2	4169648.9	Worker	Scenario 2	8.49E-02	3.88E-04	--
8318	642436.2	4169648.9	Worker	Scenario 2	8.39E-02	3.76E-04	--
8319	642536.2	4169648.9	Worker	Scenario 2	8.30E-02	3.66E-04	--
8320	642636.2	4169648.9	Worker	Scenario 2	8.19E-02	3.56E-04	--
8321	642736.2	4169648.9	Worker	Scenario 2	8.02E-02	3.46E-04	--
8322	642836.2	4169648.9	Worker	Scenario 2	7.82E-02	3.35E-04	--
8323	642936.2	4169648.9	Worker	Scenario 2	7.62E-02	3.24E-04	--
8324	643036.2	4169648.9	Worker	Scenario 2	7.46E-02	3.14E-04	--
8325	643136.2	4169648.9	Worker	Scenario 2	7.33E-02	3.05E-04	--
8326	643236.2	4169648.9	Worker	Scenario 2	7.20E-02	2.97E-04	--
8327	643336.2	4169648.9	Worker	Scenario 2	7.06E-02	2.88E-04	--
8328	643436.2	4169648.9	Worker	Scenario 2	6.91E-02	2.80E-04	--
8329	643536.2	4169648.9	Worker	Scenario 2	6.75E-02	2.73E-04	--
8330	643636.2	4169648.9	Worker	Scenario 2	6.57E-02	2.64E-04	--
8331	643736.2	4169648.9	Worker	Scenario 2	6.36E-02	2.56E-04	--
8332	643836.2	4169648.9	Worker	Scenario 2	6.15E-02	2.47E-04	--
8333	643936.2	4169648.9	Worker	Scenario 2	5.97E-02	2.39E-04	--
8334	644036.2	4169648.9	Worker	Scenario 2	5.85E-02	2.32E-04	--
8335	644136.2	4169648.9	Worker	Scenario 2	5.78E-02	2.27E-04	--
8336	644236.2	4169648.9	Worker	Scenario 2	5.74E-02	2.23E-04	--
8337	644336.2	4169648.9	Worker	Scenario 2	5.71E-02	2.19E-04	--
8338	644436.2	4169648.9	Worker	Scenario 2	5.65E-02	2.15E-04	--
8339	644636.2	4169648.9	Worker	Scenario 2	5.45E-02	2.05E-04	--
8340	644736.2	4169648.9	Worker	Scenario 2	5.32E-02	1.99E-04	--
8341	644836.2	4169648.9	Worker	Scenario 2	5.19E-02	1.94E-04	--
8342	644936.2	4169648.9	Worker	Scenario 2	5.08E-02	1.89E-04	--
8343	645036.2	4169648.9	Worker	Scenario 2	4.97E-02	1.85E-04	--
8344	645136.2	4169648.9	Worker	Scenario 2	4.88E-02	1.80E-04	--
8345	645236.2	4169648.9	Worker	Scenario 2	4.80E-02	1.77E-04	--
8346	635636.2	4169748.9	Worker	Scenario 2	6.31E-03	3.79E-05	--
8347	635736.2	4169748.9	Worker	Scenario 2	6.47E-03	3.88E-05	--
8348	635836.2	4169748.9	Worker	Scenario 2	6.60E-03	3.96E-05	--
8349	635936.2	4169748.9	Worker	Scenario 2	6.65E-03	4.00E-05	--
8350	636036.2	4169748.9	Worker	Scenario 2	6.80E-03	4.09E-05	--
8351	636136.2	4169748.9	Worker	Scenario 2	6.91E-03	4.16E-05	--
8352	636236.2	4169748.9	Worker	Scenario 2	6.97E-03	4.21E-05	--
8353	636336.2	4169748.9	Worker	Scenario 2	6.79E-03	4.16E-05	--
8354	636436.2	4169748.9	Worker	Scenario 2	7.03E-03	4.29E-05	--
8355	636536.2	4169748.9	Worker	Scenario 2	7.22E-03	4.40E-05	--
8356	636636.2	4169748.9	Worker	Scenario 2	7.41E-03	4.50E-05	--
8357	636736.2	4169748.9	Worker	Scenario 2	7.68E-03	4.65E-05	--
8358	636836.2	4169748.9	Worker	Scenario 2	7.99E-03	4.82E-05	--
8359	636936.2	4169748.9	Worker	Scenario 2	8.32E-03	5.00E-05	--
8360	637036.2	4169748.9	Worker	Scenario 2	8.64E-03	5.18E-05	--
8361	637236.2	4169748.9	Worker	Scenario 2	9.37E-03	5.59E-05	--
8362	637336.2	4169748.9	Worker	Scenario 2	1.06E-02	6.16E-05	--
8363	637436.2	4169748.9	Worker	Scenario 2	1.07E-02	6.26E-05	--
8364	637536.2	4169748.9	Worker	Scenario 2	1.09E-02	6.44E-05	--
8365	637636.2	4169748.9	Worker	Scenario 2	1.12E-02	6.63E-05	--
8366	637836.2	4169748.9	Worker	Scenario 2	1.20E-02	7.10E-05	--
8367	639336.2	4169748.9	Worker	Scenario 2	2.44E-02	1.53E-04	--
8368	639436.2	4169748.9	Worker	Scenario 2	2.55E-02	1.63E-04	--
8369	639536.2	4169748.9	Worker	Scenario 2	2.67E-02	1.73E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8370	639636.2	4169748.9	Worker	Scenario 2	2.81E-02	1.84E-04	--
8371	639736.2	4169748.9	Worker	Scenario 2	2.95E-02	1.96E-04	--
8372	639836.2	4169748.9	Worker	Scenario 2	3.10E-02	2.09E-04	--
8373	639936.2	4169748.9	Worker	Scenario 2	3.26E-02	2.23E-04	--
8374	640036.2	4169748.9	Worker	Scenario 2	3.44E-02	2.38E-04	--
8375	640136.2	4169748.9	Worker	Scenario 2	3.64E-02	2.55E-04	--
8376	640236.2	4169748.9	Worker	Scenario 2	3.87E-02	2.74E-04	--
8377	640336.2	4169748.9	Worker	Scenario 2	4.12E-02	2.95E-04	--
8378	640436.2	4169748.9	Worker	Scenario 2	4.40E-02	3.17E-04	--
8379	640536.2	4169748.9	Worker	Scenario 2	4.72E-02	3.40E-04	--
8380	640636.2	4169748.9	Worker	Scenario 2	5.08E-02	3.65E-04	--
8381	640736.2	4169748.9	Worker	Scenario 2	5.51E-02	3.91E-04	--
8382	640836.2	4169748.9	Worker	Scenario 2	6.03E-02	4.18E-04	--
8383	640936.2	4169748.9	Worker	Scenario 2	6.72E-02	4.46E-04	--
8384	641036.2	4169748.9	Worker	Scenario 2	7.74E-02	4.77E-04	--
8385	641136.2	4169748.9	Worker	Scenario 2	9.58E-02	5.21E-04	--
8386	641236.2	4169748.9	Worker	Scenario 2	1.48E-01	6.38E-04	--
8387	641336.2	4169748.9	Worker	Scenario 2	6.13E-01	1.74E-03	--
8388	641436.2	4169748.9	Worker	Scenario 2	2.16E-01	7.83E-04	--
8389	641536.2	4169748.9	Worker	Scenario 2	1.47E-01	6.03E-04	--
8390	641636.2	4169748.9	Worker	Scenario 2	1.20E-01	5.25E-04	--
8391	641736.2	4169748.9	Worker	Scenario 2	1.05E-01	4.82E-04	--
8392	641836.2	4169748.9	Worker	Scenario 2	9.66E-02	4.52E-04	--
8393	641936.2	4169748.9	Worker	Scenario 2	9.09E-02	4.27E-04	--
8394	642036.2	4169748.9	Worker	Scenario 2	8.68E-02	4.06E-04	--
8395	642136.2	4169748.9	Worker	Scenario 2	8.38E-02	3.89E-04	--
8396	642236.2	4169748.9	Worker	Scenario 2	8.16E-02	3.74E-04	--
8397	642336.2	4169748.9	Worker	Scenario 2	8.03E-02	3.62E-04	--
8398	642436.2	4169748.9	Worker	Scenario 2	7.92E-02	3.51E-04	--
8399	642536.2	4169748.9	Worker	Scenario 2	7.83E-02	3.42E-04	--
8400	642636.2	4169748.9	Worker	Scenario 2	7.70E-02	3.33E-04	--
8401	642736.2	4169748.9	Worker	Scenario 2	7.54E-02	3.23E-04	--
8402	642836.2	4169748.9	Worker	Scenario 2	7.34E-02	3.13E-04	--
8403	642936.2	4169748.9	Worker	Scenario 2	7.17E-02	3.04E-04	--
8404	643036.2	4169748.9	Worker	Scenario 2	7.04E-02	2.96E-04	--
8405	643136.2	4169748.9	Worker	Scenario 2	6.92E-02	2.88E-04	--
8406	643236.2	4169748.9	Worker	Scenario 2	6.80E-02	2.80E-04	--
8407	643336.2	4169748.9	Worker	Scenario 2	6.67E-02	2.73E-04	--
8408	643436.2	4169748.9	Worker	Scenario 2	6.54E-02	2.66E-04	--
8409	643536.2	4169748.9	Worker	Scenario 2	6.40E-02	2.59E-04	--
8410	643636.2	4169748.9	Worker	Scenario 2	6.24E-02	2.51E-04	--
8411	643736.2	4169748.9	Worker	Scenario 2	6.06E-02	2.44E-04	--
8412	643836.2	4169748.9	Worker	Scenario 2	5.87E-02	2.36E-04	--
8413	643936.2	4169748.9	Worker	Scenario 2	5.69E-02	2.28E-04	--
8414	644036.2	4169748.9	Worker	Scenario 2	5.56E-02	2.22E-04	--
8415	644136.2	4169748.9	Worker	Scenario 2	5.48E-02	2.17E-04	--
8416	644236.2	4169748.9	Worker	Scenario 2	5.43E-02	2.12E-04	--
8417	644336.2	4169748.9	Worker	Scenario 2	5.41E-02	2.09E-04	--
8418	644436.2	4169748.9	Worker	Scenario 2	5.37E-02	2.05E-04	--
8419	644636.2	4169748.9	Worker	Scenario 2	5.21E-02	1.96E-04	--
8420	644736.2	4169748.9	Worker	Scenario 2	5.10E-02	1.91E-04	--
8421	644836.2	4169748.9	Worker	Scenario 2	4.99E-02	1.87E-04	--
8422	644936.2	4169748.9	Worker	Scenario 2	4.87E-02	1.82E-04	--
8423	635636.2	4169848.9	Worker	Scenario 2	6.38E-03	3.80E-05	--
8424	635736.2	4169848.9	Worker	Scenario 2	6.53E-03	3.89E-05	--
8425	635836.2	4169848.9	Worker	Scenario 2	6.72E-03	3.99E-05	--
8426	635936.2	4169848.9	Worker	Scenario 2	6.94E-03	4.11E-05	--
8427	636036.2	4169848.9	Worker	Scenario 2	6.99E-03	4.15E-05	--
8428	636136.2	4169848.9	Worker	Scenario 2	7.11E-03	4.23E-05	--
8429	636236.2	4169848.9	Worker	Scenario 2	7.27E-03	4.32E-05	--
8430	636336.2	4169848.9	Worker	Scenario 2	7.34E-03	4.38E-05	--
8431	636436.2	4169848.9	Worker	Scenario 2	7.18E-03	4.32E-05	--
8432	636536.2	4169848.9	Worker	Scenario 2	7.45E-03	4.47E-05	--
8433	636636.2	4169848.9	Worker	Scenario 2	7.61E-03	4.56E-05	--
8434	636736.2	4169848.9	Worker	Scenario 2	7.88E-03	4.71E-05	--
8435	636836.2	4169848.9	Worker	Scenario 2	8.17E-03	4.87E-05	--
8436	636936.2	4169848.9	Worker	Scenario 2	8.48E-03	5.04E-05	--
8437	637136.2	4169848.9	Worker	Scenario 2	9.17E-03	5.42E-05	--
8438	637236.2	4169848.9	Worker	Scenario 2	9.54E-03	5.63E-05	--
8439	637336.2	4169848.9	Worker	Scenario 2	1.11E-02	6.33E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8440	637436.2	4169848.9	Worker	Scenario 2	1.12E-02	6.43E-05	--
8441	637536.2	4169848.9	Worker	Scenario 2	1.12E-02	6.50E-05	--
8442	637836.2	4169848.9	Worker	Scenario 2	1.23E-02	7.19E-05	--
8443	639236.2	4169848.9	Worker	Scenario 2	2.33E-02	1.45E-04	--
8444	639336.2	4169848.9	Worker	Scenario 2	2.44E-02	1.53E-04	--
8445	639436.2	4169848.9	Worker	Scenario 2	2.55E-02	1.62E-04	--
8446	639536.2	4169848.9	Worker	Scenario 2	2.67E-02	1.72E-04	--
8447	639636.2	4169848.9	Worker	Scenario 2	2.79E-02	1.82E-04	--
8448	639736.2	4169848.9	Worker	Scenario 2	2.94E-02	1.94E-04	--
8449	639836.2	4169848.9	Worker	Scenario 2	3.08E-02	2.06E-04	--
8450	639936.2	4169848.9	Worker	Scenario 2	3.24E-02	2.19E-04	--
8451	640036.2	4169848.9	Worker	Scenario 2	3.41E-02	2.33E-04	--
8452	640136.2	4169848.9	Worker	Scenario 2	3.61E-02	2.49E-04	--
8453	640236.2	4169848.9	Worker	Scenario 2	3.82E-02	2.65E-04	--
8454	640336.2	4169848.9	Worker	Scenario 2	4.06E-02	2.83E-04	--
8455	640436.2	4169848.9	Worker	Scenario 2	4.32E-02	3.01E-04	--
8456	640536.2	4169848.9	Worker	Scenario 2	4.61E-02	3.20E-04	--
8457	640636.2	4169848.9	Worker	Scenario 2	4.95E-02	3.39E-04	--
8458	640736.2	4169848.9	Worker	Scenario 2	5.35E-02	3.60E-04	--
8459	640836.2	4169848.9	Worker	Scenario 2	5.84E-02	3.80E-04	--
8460	640936.2	4169848.9	Worker	Scenario 2	6.49E-02	4.03E-04	--
8461	641036.2	4169848.9	Worker	Scenario 2	7.47E-02	4.30E-04	--
8462	641136.2	4169848.9	Worker	Scenario 2	9.27E-02	4.71E-04	--
8463	641236.2	4169848.9	Worker	Scenario 2	1.45E-01	5.90E-04	--
8464	641336.2	4169848.9	Worker	Scenario 2	5.80E-01	1.62E-03	--
8465	641436.2	4169848.9	Worker	Scenario 2	2.07E-01	7.26E-04	--
8466	641536.2	4169848.9	Worker	Scenario 2	1.39E-01	5.54E-04	--
8467	641636.2	4169848.9	Worker	Scenario 2	1.13E-01	4.80E-04	--
8468	641736.2	4169848.9	Worker	Scenario 2	9.90E-02	4.40E-04	--
8469	641836.2	4169848.9	Worker	Scenario 2	9.07E-02	4.15E-04	--
8470	641936.2	4169848.9	Worker	Scenario 2	8.53E-02	3.94E-04	--
8471	642036.2	4169848.9	Worker	Scenario 2	8.14E-02	3.76E-04	--
8472	642136.2	4169848.9	Worker	Scenario 2	7.87E-02	3.61E-04	--
8473	642236.2	4169848.9	Worker	Scenario 2	7.67E-02	3.48E-04	--
8474	642336.2	4169848.9	Worker	Scenario 2	7.55E-02	3.37E-04	--
8475	642436.2	4169848.9	Worker	Scenario 2	7.46E-02	3.28E-04	--
8476	642536.2	4169848.9	Worker	Scenario 2	7.36E-02	3.19E-04	--
8477	642636.2	4169848.9	Worker	Scenario 2	7.23E-02	3.11E-04	--
8478	642736.2	4169848.9	Worker	Scenario 2	7.07E-02	3.02E-04	--
8479	642836.2	4169848.9	Worker	Scenario 2	6.91E-02	2.93E-04	--
8480	642936.2	4169848.9	Worker	Scenario 2	6.76E-02	2.85E-04	--
8481	643036.2	4169848.9	Worker	Scenario 2	6.64E-02	2.78E-04	--
8482	643136.2	4169848.9	Worker	Scenario 2	6.53E-02	2.72E-04	--
8483	643236.2	4169848.9	Worker	Scenario 2	6.42E-02	2.65E-04	--
8484	643336.2	4169848.9	Worker	Scenario 2	6.30E-02	2.58E-04	--
8485	643436.2	4169848.9	Worker	Scenario 2	6.19E-02	2.52E-04	--
8486	643536.2	4169848.9	Worker	Scenario 2	6.07E-02	2.46E-04	--
8487	643636.2	4169848.9	Worker	Scenario 2	5.93E-02	2.39E-04	--
8488	643736.2	4169848.9	Worker	Scenario 2	5.78E-02	2.33E-04	--
8489	643836.2	4169848.9	Worker	Scenario 2	5.60E-02	2.25E-04	--
8490	643936.2	4169848.9	Worker	Scenario 2	5.43E-02	2.18E-04	--
8491	644036.2	4169848.9	Worker	Scenario 2	5.29E-02	2.12E-04	--
8492	644136.2	4169848.9	Worker	Scenario 2	5.20E-02	2.07E-04	--
8493	644236.2	4169848.9	Worker	Scenario 2	5.15E-02	2.03E-04	--
8494	644336.2	4169848.9	Worker	Scenario 2	5.12E-02	1.99E-04	--
8495	644436.2	4169848.9	Worker	Scenario 2	5.10E-02	1.96E-04	--
8496	635636.2	4169948.9	Worker	Scenario 2	6.51E-03	3.84E-05	--
8497	635736.2	4169948.9	Worker	Scenario 2	6.70E-03	3.94E-05	--
8498	635836.2	4169948.9	Worker	Scenario 2	6.76E-03	3.99E-05	--
8499	635936.2	4169948.9	Worker	Scenario 2	7.00E-03	4.11E-05	--
8500	636036.2	4169948.9	Worker	Scenario 2	7.16E-03	4.20E-05	--
8501	636136.2	4169948.9	Worker	Scenario 2	7.27E-03	4.27E-05	--
8502	636236.2	4169948.9	Worker	Scenario 2	7.41E-03	4.36E-05	--
8503	636336.2	4169948.9	Worker	Scenario 2	7.56E-03	4.45E-05	--
8504	636436.2	4169948.9	Worker	Scenario 2	7.67E-03	4.52E-05	--
8505	636536.2	4169948.9	Worker	Scenario 2	7.56E-03	4.49E-05	--
8506	636636.2	4169948.9	Worker	Scenario 2	7.80E-03	4.62E-05	--
8507	636736.2	4169948.9	Worker	Scenario 2	8.02E-03	4.74E-05	--
8508	637036.2	4169948.9	Worker	Scenario 2	8.96E-03	5.26E-05	--
8509	637136.2	4169948.9	Worker	Scenario 2	9.29E-03	5.45E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8510	637236.2	4169948.9	Worker	Scenario 2	9.67E-03	5.66E-05	--
8511	637336.2	4169948.9	Worker	Scenario 2	1.11E-02	6.29E-05	--
8512	637436.2	4169948.9	Worker	Scenario 2	1.12E-02	6.41E-05	--
8513	637536.2	4169948.9	Worker	Scenario 2	1.10E-02	6.43E-05	--
8514	637736.2	4169948.9	Worker	Scenario 2	1.20E-02	7.00E-05	--
8515	637836.2	4169948.9	Worker	Scenario 2	1.25E-02	7.28E-05	--
8516	639136.2	4169948.9	Worker	Scenario 2	2.24E-02	1.38E-04	--
8517	639236.2	4169948.9	Worker	Scenario 2	2.33E-02	1.45E-04	--
8518	639336.2	4169948.9	Worker	Scenario 2	2.43E-02	1.53E-04	--
8519	639436.2	4169948.9	Worker	Scenario 2	2.54E-02	1.61E-04	--
8520	639536.2	4169948.9	Worker	Scenario 2	2.65E-02	1.71E-04	--
8521	639736.2	4169948.9	Worker	Scenario 2	2.91E-02	1.91E-04	--
8522	639836.2	4169948.9	Worker	Scenario 2	3.05E-02	2.02E-04	--
8523	639936.2	4169948.9	Worker	Scenario 2	3.21E-02	2.15E-04	--
8524	640036.2	4169948.9	Worker	Scenario 2	3.38E-02	2.28E-04	--
8525	640136.2	4169948.9	Worker	Scenario 2	3.57E-02	2.41E-04	--
8526	640236.2	4169948.9	Worker	Scenario 2	3.77E-02	2.55E-04	--
8527	640336.2	4169948.9	Worker	Scenario 2	3.99E-02	2.70E-04	--
8528	640436.2	4169948.9	Worker	Scenario 2	4.23E-02	2.85E-04	--
8529	640536.2	4169948.9	Worker	Scenario 2	4.51E-02	3.00E-04	--
8530	640636.2	4169948.9	Worker	Scenario 2	4.82E-02	3.16E-04	--
8531	640736.2	4169948.9	Worker	Scenario 2	5.19E-02	3.31E-04	--
8532	640836.2	4169948.9	Worker	Scenario 2	5.64E-02	3.49E-04	--
8533	640936.2	4169948.9	Worker	Scenario 2	6.24E-02	3.68E-04	--
8534	641036.2	4169948.9	Worker	Scenario 2	7.15E-02	3.91E-04	--
8535	641136.2	4169948.9	Worker	Scenario 2	8.85E-02	4.30E-04	--
8536	641236.2	4169948.9	Worker	Scenario 2	1.41E-01	5.49E-04	--
8537	641336.2	4169948.9	Worker	Scenario 2	5.47E-01	1.51E-03	--
8538	641436.2	4169948.9	Worker	Scenario 2	1.93E-01	6.65E-04	--
8539	641536.2	4169948.9	Worker	Scenario 2	1.29E-01	5.05E-04	--
8540	641636.2	4169948.9	Worker	Scenario 2	1.04E-01	4.37E-04	--
8541	641736.2	4169948.9	Worker	Scenario 2	9.16E-02	4.01E-04	--
8542	641836.2	4169948.9	Worker	Scenario 2	8.39E-02	3.79E-04	--
8543	641936.2	4169948.9	Worker	Scenario 2	7.91E-02	3.62E-04	--
8544	642036.2	4169948.9	Worker	Scenario 2	7.60E-02	3.49E-04	--
8545	642136.2	4169948.9	Worker	Scenario 2	7.35E-02	3.35E-04	--
8546	642236.2	4169948.9	Worker	Scenario 2	7.19E-02	3.24E-04	--
8547	643236.2	4169948.9	Worker	Scenario 2	6.07E-02	2.50E-04	--
8548	643336.2	4169948.9	Worker	Scenario 2	5.96E-02	2.45E-04	--
8549	643436.2	4169948.9	Worker	Scenario 2	5.87E-02	2.39E-04	--
8550	643536.2	4169948.9	Worker	Scenario 2	5.76E-02	2.34E-04	--
8551	643636.2	4169948.9	Worker	Scenario 2	5.64E-02	2.28E-04	--
8552	643736.2	4169948.9	Worker	Scenario 2	5.50E-02	2.22E-04	--
8553	643836.2	4169948.9	Worker	Scenario 2	5.34E-02	2.15E-04	--
8554	643936.2	4169948.9	Worker	Scenario 2	5.19E-02	2.09E-04	--
8555	644036.2	4169948.9	Worker	Scenario 2	5.05E-02	2.03E-04	--
8556	644236.2	4169948.9	Worker	Scenario 2	4.89E-02	1.94E-04	--
8557	635636.2	4170048.9	Worker	Scenario 2	6.58E-03	3.85E-05	--
8558	635736.2	4170048.9	Worker	Scenario 2	6.34E-03	3.76E-05	--
8559	635836.2	4170048.9	Worker	Scenario 2	6.57E-03	3.88E-05	--
8560	635936.2	4170048.9	Worker	Scenario 2	6.97E-03	4.08E-05	--
8561	636036.2	4170048.9	Worker	Scenario 2	7.25E-03	4.22E-05	--
8562	636136.2	4170048.9	Worker	Scenario 2	7.44E-03	4.33E-05	--
8563	636236.2	4170048.9	Worker	Scenario 2	7.57E-03	4.41E-05	--
8564	636336.2	4170048.9	Worker	Scenario 2	7.74E-03	4.51E-05	--
8565	636436.2	4170048.9	Worker	Scenario 2	7.98E-03	4.64E-05	--
8566	636536.2	4170048.9	Worker	Scenario 2	8.09E-03	4.71E-05	--
8567	636636.2	4170048.9	Worker	Scenario 2	8.00E-03	4.69E-05	--
8568	636936.2	4170048.9	Worker	Scenario 2	9.43E-03	5.42E-05	--
8569	637036.2	4170048.9	Worker	Scenario 2	9.73E-03	5.59E-05	--
8570	637136.2	4170048.9	Worker	Scenario 2	1.01E-02	5.78E-05	--
8571	637236.2	4170048.9	Worker	Scenario 2	1.04E-02	5.97E-05	--
8572	637336.2	4170048.9	Worker	Scenario 2	1.07E-02	6.16E-05	--
8573	637436.2	4170048.9	Worker	Scenario 2	1.09E-02	6.31E-05	--
8574	637636.2	4170048.9	Worker	Scenario 2	1.22E-02	6.94E-05	--
8575	637736.2	4170048.9	Worker	Scenario 2	1.29E-02	7.31E-05	--
8576	637836.2	4170048.9	Worker	Scenario 2	1.32E-02	7.53E-05	--
8577	639036.2	4170048.9	Worker	Scenario 2	2.15E-02	1.31E-04	--
8578	639136.2	4170048.9	Worker	Scenario 2	2.24E-02	1.38E-04	--
8579	639236.2	4170048.9	Worker	Scenario 2	2.33E-02	1.45E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8580	639336.2	4170048.9	Worker	Scenario 2	2.43E-02	1.52E-04	--
8581	639436.2	4170048.9	Worker	Scenario 2	2.53E-02	1.60E-04	--
8582	639536.2	4170048.9	Worker	Scenario 2	2.64E-02	1.69E-04	--
8583	639636.2	4170048.9	Worker	Scenario 2	2.76E-02	1.78E-04	--
8584	639736.2	4170048.9	Worker	Scenario 2	2.89E-02	1.88E-04	--
8585	639836.2	4170048.9	Worker	Scenario 2	3.03E-02	1.99E-04	--
8586	639936.2	4170048.9	Worker	Scenario 2	3.18E-02	2.10E-04	--
8587	640036.2	4170048.9	Worker	Scenario 2	3.34E-02	2.21E-04	--
8588	640136.2	4170048.9	Worker	Scenario 2	3.52E-02	2.33E-04	--
8589	640236.2	4170048.9	Worker	Scenario 2	3.71E-02	2.45E-04	--
8590	640336.2	4170048.9	Worker	Scenario 2	3.91E-02	2.57E-04	--
8591	640436.2	4170048.9	Worker	Scenario 2	4.14E-02	2.69E-04	--
8592	640536.2	4170048.9	Worker	Scenario 2	4.39E-02	2.81E-04	--
8593	640636.2	4170048.9	Worker	Scenario 2	4.68E-02	2.94E-04	--
8594	640736.2	4170048.9	Worker	Scenario 2	5.02E-02	3.07E-04	--
8595	640836.2	4170048.9	Worker	Scenario 2	5.43E-02	3.22E-04	--
8596	640936.2	4170048.9	Worker	Scenario 2	5.97E-02	3.38E-04	--
8597	641036.2	4170048.9	Worker	Scenario 2	6.77E-02	3.58E-04	--
8598	641136.2	4170048.9	Worker	Scenario 2	8.25E-02	3.91E-04	--
8599	641236.2	4170048.9	Worker	Scenario 2	1.29E-01	4.97E-04	--
8600	641336.2	4170048.9	Worker	Scenario 2	4.88E-01	1.35E-03	--
8601	641436.2	4170048.9	Worker	Scenario 2	1.61E-01	5.68E-04	--
8602	641536.2	4170048.9	Worker	Scenario 2	1.10E-01	4.40E-04	--
8603	641636.2	4170048.9	Worker	Scenario 2	9.10E-02	3.89E-04	--
8604	641736.2	4170048.9	Worker	Scenario 2	8.16E-02	3.60E-04	--
8605	641836.2	4170048.9	Worker	Scenario 2	7.60E-02	3.43E-04	--
8606	641936.2	4170048.9	Worker	Scenario 2	7.23E-02	3.31E-04	--
8607	642036.2	4170048.9	Worker	Scenario 2	6.98E-02	3.20E-04	--
8608	642136.2	4170048.9	Worker	Scenario 2	6.81E-02	3.10E-04	--
8609	635736.2	4170148.9	Worker	Scenario 2	6.45E-03	3.79E-05	--
8610	635836.2	4170148.9	Worker	Scenario 2	6.26E-03	3.73E-05	--
8611	635936.2	4170148.9	Worker	Scenario 2	6.68E-03	3.93E-05	--
8612	636036.2	4170148.9	Worker	Scenario 2	7.19E-03	4.18E-05	--
8613	636136.2	4170148.9	Worker	Scenario 2	7.55E-03	4.36E-05	--
8614	636236.2	4170148.9	Worker	Scenario 2	7.67E-03	4.44E-05	--
8615	636336.2	4170148.9	Worker	Scenario 2	7.92E-03	4.57E-05	--
8616	636436.2	4170148.9	Worker	Scenario 2	8.15E-03	4.70E-05	--
8617	636536.2	4170148.9	Worker	Scenario 2	8.37E-03	4.82E-05	--
8618	636736.2	4170148.9	Worker	Scenario 2	8.51E-03	4.93E-05	--
8619	636836.2	4170148.9	Worker	Scenario 2	9.48E-03	5.38E-05	--
8620	636936.2	4170148.9	Worker	Scenario 2	9.85E-03	5.56E-05	--
8621	637036.2	4170148.9	Worker	Scenario 2	1.01E-02	5.73E-05	--
8622	637136.2	4170148.9	Worker	Scenario 2	1.05E-02	5.93E-05	--
8623	637236.2	4170148.9	Worker	Scenario 2	1.09E-02	6.15E-05	--
8624	637336.2	4170148.9	Worker	Scenario 2	1.09E-02	6.23E-05	--
8625	637636.2	4170148.9	Worker	Scenario 2	1.29E-02	7.20E-05	--
8626	637736.2	4170148.9	Worker	Scenario 2	1.33E-02	7.45E-05	--
8627	637836.2	4170148.9	Worker	Scenario 2	1.35E-02	7.67E-05	--
8628	639036.2	4170148.9	Worker	Scenario 2	2.15E-02	1.31E-04	--
8629	639136.2	4170148.9	Worker	Scenario 2	2.23E-02	1.37E-04	--
8630	639236.2	4170148.9	Worker	Scenario 2	2.32E-02	1.44E-04	--
8631	639336.2	4170148.9	Worker	Scenario 2	2.42E-02	1.51E-04	--
8632	639436.2	4170148.9	Worker	Scenario 2	2.52E-02	1.59E-04	--
8633	639536.2	4170148.9	Worker	Scenario 2	2.62E-02	1.67E-04	--
8634	639636.2	4170148.9	Worker	Scenario 2	2.74E-02	1.75E-04	--
8635	639736.2	4170148.9	Worker	Scenario 2	2.86E-02	1.85E-04	--
8636	639836.2	4170148.9	Worker	Scenario 2	3.00E-02	1.94E-04	--
8637	639936.2	4170148.9	Worker	Scenario 2	3.14E-02	2.04E-04	--
8638	640036.2	4170148.9	Worker	Scenario 2	3.30E-02	2.14E-04	--
8639	640136.2	4170148.9	Worker	Scenario 2	3.46E-02	2.24E-04	--
8640	640236.2	4170148.9	Worker	Scenario 2	3.64E-02	2.34E-04	--
8641	640336.2	4170148.9	Worker	Scenario 2	3.84E-02	2.44E-04	--
8642	640436.2	4170148.9	Worker	Scenario 2	4.04E-02	2.54E-04	--
8643	640536.2	4170148.9	Worker	Scenario 2	4.27E-02	2.64E-04	--
8644	640636.2	4170148.9	Worker	Scenario 2	4.53E-02	2.74E-04	--
8645	640736.2	4170148.9	Worker	Scenario 2	4.84E-02	2.86E-04	--
8646	640836.2	4170148.9	Worker	Scenario 2	5.20E-02	2.98E-04	--
8647	640936.2	4170148.9	Worker	Scenario 2	5.66E-02	3.11E-04	--
8648	641036.2	4170148.9	Worker	Scenario 2	6.32E-02	3.27E-04	--
8649	641136.2	4170148.9	Worker	Scenario 2	7.42E-02	3.51E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8650	641236.2	4170148.9	Worker	Scenario 2	9.84E-02	4.05E-04	--
8651	641336.2	4170148.9	Worker	Scenario 2	1.15E-01	4.43E-04	--
8652	641436.2	4170148.9	Worker	Scenario 2	9.40E-02	3.92E-04	--
8653	641536.2	4170148.9	Worker	Scenario 2	8.23E-02	3.60E-04	--
8654	641636.2	4170148.9	Worker	Scenario 2	7.53E-02	3.37E-04	--
8655	641736.2	4170148.9	Worker	Scenario 2	7.08E-02	3.21E-04	--
8656	641836.2	4170148.9	Worker	Scenario 2	6.77E-02	3.09E-04	--
8657	641936.2	4170148.9	Worker	Scenario 2	6.54E-02	3.01E-04	--
8658	642036.2	4170148.9	Worker	Scenario 2	6.37E-02	2.93E-04	--
8659	642436.2	4170148.9	Worker	Scenario 2	6.14E-02	2.69E-04	--
8660	642536.2	4170148.9	Worker	Scenario 2	6.07E-02	2.63E-04	--
8661	642636.2	4170148.9	Worker	Scenario 2	5.97E-02	2.56E-04	--
8662	642736.2	4170148.9	Worker	Scenario 2	5.85E-02	2.49E-04	--
8663	642836.2	4170148.9	Worker	Scenario 2	5.73E-02	2.43E-04	--
8664	642936.2	4170148.9	Worker	Scenario 2	5.65E-02	2.38E-04	--
8665	643036.2	4170148.9	Worker	Scenario 2	5.57E-02	2.33E-04	--
8666	643136.2	4170148.9	Worker	Scenario 2	5.50E-02	2.28E-04	--
8667	643236.2	4170148.9	Worker	Scenario 2	5.43E-02	2.24E-04	--
8668	643336.2	4170148.9	Worker	Scenario 2	5.35E-02	2.19E-04	--
8669	635836.2	4170248.9	Worker	Scenario 2	6.41E-03	3.77E-05	--
8670	635936.2	4170248.9	Worker	Scenario 2	6.39E-03	3.78E-05	--
8671	636036.2	4170248.9	Worker	Scenario 2	6.81E-03	3.99E-05	--
8672	636136.2	4170248.9	Worker	Scenario 2	7.33E-03	4.24E-05	--
8673	636236.2	4170248.9	Worker	Scenario 2	8.10E-03	4.60E-05	--
8674	636336.2	4170248.9	Worker	Scenario 2	8.07E-03	4.62E-05	--
8675	636636.2	4170248.9	Worker	Scenario 2	8.49E-03	4.88E-05	--
8676	636736.2	4170248.9	Worker	Scenario 2	9.11E-03	5.18E-05	--
8677	636836.2	4170248.9	Worker	Scenario 2	9.67E-03	5.44E-05	--
8678	636936.2	4170248.9	Worker	Scenario 2	1.02E-02	5.70E-05	--
8679	637036.2	4170248.9	Worker	Scenario 2	1.05E-02	5.85E-05	--
8680	637136.2	4170248.9	Worker	Scenario 2	1.08E-02	6.04E-05	--
8681	637236.2	4170248.9	Worker	Scenario 2	1.08E-02	6.12E-05	--
8682	637536.2	4170248.9	Worker	Scenario 2	1.26E-02	7.00E-05	--
8683	637636.2	4170248.9	Worker	Scenario 2	1.31E-02	7.29E-05	--
8684	637736.2	4170248.9	Worker	Scenario 2	1.33E-02	7.46E-05	--
8685	637836.2	4170248.9	Worker	Scenario 2	1.34E-02	7.60E-05	--
8686	637936.2	4170248.9	Worker	Scenario 2	1.40E-02	7.99E-05	--
8687	638036.2	4170248.9	Worker	Scenario 2	1.43E-02	8.19E-05	--
8688	638936.2	4170248.9	Worker	Scenario 2	2.07E-02	1.24E-04	--
8689	639036.2	4170248.9	Worker	Scenario 2	2.14E-02	1.30E-04	--
8690	639136.2	4170248.9	Worker	Scenario 2	2.23E-02	1.36E-04	--
8691	639236.2	4170248.9	Worker	Scenario 2	2.31E-02	1.43E-04	--
8692	639336.2	4170248.9	Worker	Scenario 2	2.40E-02	1.50E-04	--
8693	639436.2	4170248.9	Worker	Scenario 2	2.46E-02	1.55E-04	--
8694	639536.2	4170248.9	Worker	Scenario 2	2.61E-02	1.65E-04	--
8695	639636.2	4170248.9	Worker	Scenario 2	2.72E-02	1.73E-04	--
8696	639736.2	4170248.9	Worker	Scenario 2	2.84E-02	1.81E-04	--
8697	639836.2	4170248.9	Worker	Scenario 2	2.97E-02	1.89E-04	--
8698	639936.2	4170248.9	Worker	Scenario 2	3.11E-02	1.98E-04	--
8699	640036.2	4170248.9	Worker	Scenario 2	3.25E-02	2.06E-04	--
8700	640136.2	4170248.9	Worker	Scenario 2	3.41E-02	2.15E-04	--
8701	640236.2	4170248.9	Worker	Scenario 2	3.58E-02	2.23E-04	--
8702	640336.2	4170248.9	Worker	Scenario 2	3.75E-02	2.32E-04	--
8703	640436.2	4170248.9	Worker	Scenario 2	3.95E-02	2.40E-04	--
8704	640536.2	4170248.9	Worker	Scenario 2	4.16E-02	2.48E-04	--
8705	640636.2	4170248.9	Worker	Scenario 2	4.39E-02	2.57E-04	--
8706	640736.2	4170248.9	Worker	Scenario 2	4.66E-02	2.67E-04	--
8707	640836.2	4170248.9	Worker	Scenario 2	4.98E-02	2.78E-04	--
8708	640936.2	4170248.9	Worker	Scenario 2	5.36E-02	2.89E-04	--
8709	641036.2	4170248.9	Worker	Scenario 2	5.86E-02	3.00E-04	--
8710	641136.2	4170248.9	Worker	Scenario 2	6.50E-02	3.12E-04	--
8711	641236.2	4170248.9	Worker	Scenario 2	7.15E-02	3.26E-04	--
8712	641336.2	4170248.9	Worker	Scenario 2	7.26E-02	3.28E-04	--
8713	641436.2	4170248.9	Worker	Scenario 2	6.94E-02	3.19E-04	--
8714	641536.2	4170248.9	Worker	Scenario 2	6.63E-02	3.08E-04	--
8715	641636.2	4170248.9	Worker	Scenario 2	6.40E-02	2.98E-04	--
8716	641736.2	4170248.9	Worker	Scenario 2	6.21E-02	2.89E-04	--
8717	641836.2	4170248.9	Worker	Scenario 2	6.06E-02	2.81E-04	--
8718	641936.2	4170248.9	Worker	Scenario 2	5.94E-02	2.75E-04	--
8719	642036.2	4170248.9	Worker	Scenario 2	5.86E-02	2.70E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8720	642136.2	4170248.9	Worker	Scenario 2	5.81E-02	2.66E-04	--
8721	642236.2	4170248.9	Worker	Scenario 2	5.80E-02	2.62E-04	--
8722	642336.2	4170248.9	Worker	Scenario 2	5.79E-02	2.57E-04	--
8723	642436.2	4170248.9	Worker	Scenario 2	5.76E-02	2.52E-04	--
8724	642536.2	4170248.9	Worker	Scenario 2	5.70E-02	2.47E-04	--
8725	642636.2	4170248.9	Worker	Scenario 2	5.61E-02	2.41E-04	--
8726	642736.2	4170248.9	Worker	Scenario 2	5.50E-02	2.35E-04	--
8727	642836.2	4170248.9	Worker	Scenario 2	5.40E-02	2.29E-04	--
8728	642936.2	4170248.9	Worker	Scenario 2	5.33E-02	2.25E-04	--
8729	643036.2	4170248.9	Worker	Scenario 2	5.27E-02	2.20E-04	--
8730	643136.2	4170248.9	Worker	Scenario 2	5.21E-02	2.16E-04	--
8731	643236.2	4170248.9	Worker	Scenario 2	5.14E-02	2.12E-04	--
8732	643336.2	4170248.9	Worker	Scenario 2	5.07E-02	2.08E-04	--
8733	635636.2	4170348.9	Worker	Scenario 2	6.34E-03	3.70E-05	--
8734	635936.2	4170348.9	Worker	Scenario 2	6.68E-03	3.90E-05	--
8735	636036.2	4170348.9	Worker	Scenario 2	6.60E-03	3.88E-05	--
8736	636136.2	4170348.9	Worker	Scenario 2	7.16E-03	4.15E-05	--
8737	636236.2	4170348.9	Worker	Scenario 2	7.84E-03	4.48E-05	--
8738	636536.2	4170348.9	Worker	Scenario 2	8.56E-03	4.87E-05	--
8739	636636.2	4170348.9	Worker	Scenario 2	8.84E-03	5.02E-05	--
8740	636736.2	4170348.9	Worker	Scenario 2	9.21E-03	5.21E-05	--
8741	636836.2	4170348.9	Worker	Scenario 2	9.62E-03	5.41E-05	--
8742	636936.2	4170348.9	Worker	Scenario 2	1.02E-02	5.68E-05	--
8743	637036.2	4170348.9	Worker	Scenario 2	1.07E-02	5.93E-05	--
8744	637136.2	4170348.9	Worker	Scenario 2	1.08E-02	6.04E-05	--
8745	637236.2	4170348.9	Worker	Scenario 2	1.08E-02	6.11E-05	--
8746	637436.2	4170348.9	Worker	Scenario 2	1.13E-02	6.44E-05	--
8747	637536.2	4170348.9	Worker	Scenario 2	1.27E-02	7.05E-05	--
8748	637636.2	4170348.9	Worker	Scenario 2	1.29E-02	7.24E-05	--
8749	637736.2	4170348.9	Worker	Scenario 2	1.32E-02	7.47E-05	--
8750	637836.2	4170348.9	Worker	Scenario 2	1.37E-02	7.76E-05	--
8751	637936.2	4170348.9	Worker	Scenario 2	1.41E-02	8.02E-05	--
8752	638036.2	4170348.9	Worker	Scenario 2	1.45E-02	8.28E-05	--
8753	638136.2	4170348.9	Worker	Scenario 2	1.56E-02	8.82E-05	--
8754	638236.2	4170348.9	Worker	Scenario 2	1.57E-02	9.05E-05	--
8755	638336.2	4170348.9	Worker	Scenario 2	1.65E-02	9.52E-05	--
8756	638436.2	4170348.9	Worker	Scenario 2	1.71E-02	9.92E-05	--
8757	638736.2	4170348.9	Worker	Scenario 2	1.93E-02	1.14E-04	--
8758	638836.2	4170348.9	Worker	Scenario 2	1.99E-02	1.19E-04	--
8759	638936.2	4170348.9	Worker	Scenario 2	2.06E-02	1.24E-04	--
8760	639036.2	4170348.9	Worker	Scenario 2	2.14E-02	1.30E-04	--
8761	639136.2	4170348.9	Worker	Scenario 2	2.21E-02	1.35E-04	--
8762	639236.2	4170348.9	Worker	Scenario 2	2.26E-02	1.40E-04	--
8763	639336.2	4170348.9	Worker	Scenario 2	2.34E-02	1.46E-04	--
8764	639436.2	4170348.9	Worker	Scenario 2	2.43E-02	1.53E-04	--
8765	639536.2	4170348.9	Worker	Scenario 2	2.59E-02	1.62E-04	--
8766	639636.2	4170348.9	Worker	Scenario 2	2.70E-02	1.69E-04	--
8767	639736.2	4170348.9	Worker	Scenario 2	2.81E-02	1.76E-04	--
8768	639836.2	4170348.9	Worker	Scenario 2	2.94E-02	1.84E-04	--
8769	639936.2	4170348.9	Worker	Scenario 2	3.07E-02	1.91E-04	--
8770	640036.2	4170348.9	Worker	Scenario 2	3.20E-02	1.99E-04	--
8771	640136.2	4170348.9	Worker	Scenario 2	3.35E-02	2.06E-04	--
8772	640236.2	4170348.9	Worker	Scenario 2	3.50E-02	2.13E-04	--
8773	640336.2	4170348.9	Worker	Scenario 2	3.67E-02	2.20E-04	--
8774	640436.2	4170348.9	Worker	Scenario 2	3.85E-02	2.27E-04	--
8775	640536.2	4170348.9	Worker	Scenario 2	4.04E-02	2.34E-04	--
8776	640636.2	4170348.9	Worker	Scenario 2	4.25E-02	2.42E-04	--
8777	640736.2	4170348.9	Worker	Scenario 2	4.48E-02	2.51E-04	--
8778	640836.2	4170348.9	Worker	Scenario 2	4.75E-02	2.60E-04	--
8779	640936.2	4170348.9	Worker	Scenario 2	5.05E-02	2.68E-04	--
8780	641036.2	4170348.9	Worker	Scenario 2	5.38E-02	2.75E-04	--
8781	641136.2	4170348.9	Worker	Scenario 2	5.71E-02	2.80E-04	--
8782	641236.2	4170348.9	Worker	Scenario 2	5.94E-02	2.84E-04	--
8783	641336.2	4170348.9	Worker	Scenario 2	6.00E-02	2.86E-04	--
8784	641436.2	4170348.9	Worker	Scenario 2	5.93E-02	2.83E-04	--
8785	641536.2	4170348.9	Worker	Scenario 2	5.83E-02	2.77E-04	--
8786	641636.2	4170348.9	Worker	Scenario 2	5.72E-02	2.71E-04	--
8787	641736.2	4170348.9	Worker	Scenario 2	5.62E-02	2.65E-04	--
8788	641836.2	4170348.9	Worker	Scenario 2	5.53E-02	2.59E-04	--
8789	641936.2	4170348.9	Worker	Scenario 2	5.48E-02	2.54E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8790	642036.2	4170348.9	Worker	Scenario 2	5.43E-02	2.50E-04	--
8791	642136.2	4170348.9	Worker	Scenario 2	5.42E-02	2.48E-04	--
8792	642236.2	4170348.9	Worker	Scenario 2	5.43E-02	2.45E-04	--
8793	642336.2	4170348.9	Worker	Scenario 2	5.44E-02	2.42E-04	--
8794	642436.2	4170348.9	Worker	Scenario 2	5.43E-02	2.38E-04	--
8795	642536.2	4170348.9	Worker	Scenario 2	5.37E-02	2.33E-04	--
8796	642636.2	4170348.9	Worker	Scenario 2	5.29E-02	2.28E-04	--
8797	642736.2	4170348.9	Worker	Scenario 2	5.20E-02	2.22E-04	--
8798	642836.2	4170348.9	Worker	Scenario 2	5.10E-02	2.17E-04	--
8799	642936.2	4170348.9	Worker	Scenario 2	5.04E-02	2.13E-04	--
8800	643036.2	4170348.9	Worker	Scenario 2	4.98E-02	2.09E-04	--
8801	643136.2	4170348.9	Worker	Scenario 2	4.93E-02	2.05E-04	--
8802	643236.2	4170348.9	Worker	Scenario 2	4.88E-02	2.02E-04	--
8803	643336.2	4170348.9	Worker	Scenario 2	4.82E-02	1.98E-04	--
8804	643436.2	4170348.9	Worker	Scenario 2	4.76E-02	1.94E-04	--
8805	643536.2	4170348.9	Worker	Scenario 2	4.69E-02	1.91E-04	--
8806	643636.2	4170348.9	Worker	Scenario 2	4.63E-02	1.87E-04	--
8807	635636.2	4170448.9	Worker	Scenario 2	6.42E-03	3.72E-05	--
8808	635836.2	4170448.9	Worker	Scenario 2	6.75E-03	3.90E-05	--
8809	636036.2	4170448.9	Worker	Scenario 2	7.11E-03	4.09E-05	--
8810	636336.2	4170448.9	Worker	Scenario 2	8.08E-03	4.59E-05	--
8811	636436.2	4170448.9	Worker	Scenario 2	8.53E-03	4.82E-05	--
8812	636536.2	4170448.9	Worker	Scenario 2	8.77E-03	4.95E-05	--
8813	636636.2	4170448.9	Worker	Scenario 2	8.97E-03	5.06E-05	--
8814	636736.2	4170448.9	Worker	Scenario 2	9.28E-03	5.23E-05	--
8815	636836.2	4170448.9	Worker	Scenario 2	9.68E-03	5.44E-05	--
8816	636936.2	4170448.9	Worker	Scenario 2	1.01E-02	5.66E-05	--
8817	637036.2	4170448.9	Worker	Scenario 2	1.05E-02	5.87E-05	--
8818	637136.2	4170448.9	Worker	Scenario 2	1.11E-02	6.13E-05	--
8819	637436.2	4170448.9	Worker	Scenario 2	1.24E-02	6.85E-05	--
8820	637536.2	4170448.9	Worker	Scenario 2	1.26E-02	7.04E-05	--
8821	637636.2	4170448.9	Worker	Scenario 2	1.29E-02	7.22E-05	--
8822	637736.2	4170448.9	Worker	Scenario 2	1.34E-02	7.53E-05	--
8823	637836.2	4170448.9	Worker	Scenario 2	1.39E-02	7.82E-05	--
8824	637936.2	4170448.9	Worker	Scenario 2	1.43E-02	8.10E-05	--
8825	638036.2	4170448.9	Worker	Scenario 2	1.46E-02	8.34E-05	--
8826	638136.2	4170448.9	Worker	Scenario 2	1.52E-02	8.70E-05	--
8827	638236.2	4170448.9	Worker	Scenario 2	1.53E-02	8.89E-05	--
8828	638336.2	4170448.9	Worker	Scenario 2	1.65E-02	9.51E-05	--
8829	638636.2	4170448.9	Worker	Scenario 2	1.86E-02	1.09E-04	--
8830	638736.2	4170448.9	Worker	Scenario 2	1.87E-02	1.12E-04	--
8831	638836.2	4170448.9	Worker	Scenario 2	1.93E-02	1.16E-04	--
8832	638936.2	4170448.9	Worker	Scenario 2	1.94E-02	1.19E-04	--
8833	639036.2	4170448.9	Worker	Scenario 2	2.01E-02	1.24E-04	--
8834	639136.2	4170448.9	Worker	Scenario 2	2.09E-02	1.30E-04	--
8835	639236.2	4170448.9	Worker	Scenario 2	2.18E-02	1.36E-04	--
8836	639336.2	4170448.9	Worker	Scenario 2	2.23E-02	1.40E-04	--
8837	639436.2	4170448.9	Worker	Scenario 2	2.37E-02	1.48E-04	--
8838	639536.2	4170448.9	Worker	Scenario 2	2.57E-02	1.59E-04	--
8839	639636.2	4170448.9	Worker	Scenario 2	2.68E-02	1.65E-04	--
8840	639736.2	4170448.9	Worker	Scenario 2	2.79E-02	1.72E-04	--
8841	639836.2	4170448.9	Worker	Scenario 2	2.90E-02	1.78E-04	--
8842	639936.2	4170448.9	Worker	Scenario 2	3.03E-02	1.85E-04	--
8843	640036.2	4170448.9	Worker	Scenario 2	3.15E-02	1.91E-04	--
8844	640136.2	4170448.9	Worker	Scenario 2	3.29E-02	1.97E-04	--
8845	640236.2	4170448.9	Worker	Scenario 2	3.43E-02	2.03E-04	--
8846	640336.2	4170448.9	Worker	Scenario 2	3.58E-02	2.09E-04	--
8847	640436.2	4170448.9	Worker	Scenario 2	3.74E-02	2.15E-04	--
8848	640536.2	4170448.9	Worker	Scenario 2	3.91E-02	2.22E-04	--
8849	640636.2	4170448.9	Worker	Scenario 2	4.10E-02	2.29E-04	--
8850	640736.2	4170448.9	Worker	Scenario 2	4.30E-02	2.36E-04	--
8851	640836.2	4170448.9	Worker	Scenario 2	4.52E-02	2.44E-04	--
8852	640936.2	4170448.9	Worker	Scenario 2	4.74E-02	2.50E-04	--
8853	641036.2	4170448.9	Worker	Scenario 2	4.96E-02	2.53E-04	--
8854	641136.2	4170448.9	Worker	Scenario 2	5.14E-02	2.55E-04	--
8855	641236.2	4170448.9	Worker	Scenario 2	5.26E-02	2.57E-04	--
8856	641336.2	4170448.9	Worker	Scenario 2	5.32E-02	2.59E-04	--
8857	641436.2	4170448.9	Worker	Scenario 2	5.32E-02	2.58E-04	--
8858	641536.2	4170448.9	Worker	Scenario 2	5.28E-02	2.55E-04	--
8859	641636.2	4170448.9	Worker	Scenario 2	5.24E-02	2.51E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8860	641736.2	4170448.9	Worker	Scenario 2	5.18E-02	2.46E-04	--
8861	641836.2	4170448.9	Worker	Scenario 2	5.13E-02	2.41E-04	--
8862	641936.2	4170448.9	Worker	Scenario 2	5.10E-02	2.36E-04	--
8863	642036.2	4170448.9	Worker	Scenario 2	5.09E-02	2.34E-04	--
8864	642136.2	4170448.9	Worker	Scenario 2	5.10E-02	2.32E-04	--
8865	642236.2	4170448.9	Worker	Scenario 2	5.12E-02	2.31E-04	--
8866	642336.2	4170448.9	Worker	Scenario 2	5.14E-02	2.28E-04	--
8867	642436.2	4170448.9	Worker	Scenario 2	5.12E-02	2.25E-04	--
8868	642536.2	4170448.9	Worker	Scenario 2	5.07E-02	2.21E-04	--
8869	642636.2	4170448.9	Worker	Scenario 2	5.00E-02	2.16E-04	--
8870	642736.2	4170448.9	Worker	Scenario 2	4.92E-02	2.11E-04	--
8871	642836.2	4170448.9	Worker	Scenario 2	4.84E-02	2.06E-04	--
8872	642936.2	4170448.9	Worker	Scenario 2	4.77E-02	2.02E-04	--
8873	643036.2	4170448.9	Worker	Scenario 2	4.72E-02	1.98E-04	--
8874	643136.2	4170448.9	Worker	Scenario 2	4.69E-02	1.95E-04	--
8875	643236.2	4170448.9	Worker	Scenario 2	4.64E-02	1.92E-04	--
8876	643336.2	4170448.9	Worker	Scenario 2	4.59E-02	1.89E-04	--
8877	643436.2	4170448.9	Worker	Scenario 2	4.53E-02	1.85E-04	--
8878	643536.2	4170448.9	Worker	Scenario 2	4.48E-02	1.82E-04	--
8879	635836.2	4170548.9	Worker	Scenario 2	6.83E-03	3.92E-05	--
8880	635936.2	4170548.9	Worker	Scenario 2	7.03E-03	4.02E-05	--
8881	636236.2	4170548.9	Worker	Scenario 2	7.88E-03	4.46E-05	--
8882	636336.2	4170548.9	Worker	Scenario 2	8.19E-03	4.63E-05	--
8883	636436.2	4170548.9	Worker	Scenario 2	8.37E-03	4.73E-05	--
8884	636536.2	4170548.9	Worker	Scenario 2	8.78E-03	4.94E-05	--
8885	636636.2	4170548.9	Worker	Scenario 2	9.10E-03	5.11E-05	--
8886	636736.2	4170548.9	Worker	Scenario 2	9.29E-03	5.23E-05	--
8887	636836.2	4170548.9	Worker	Scenario 2	9.80E-03	5.48E-05	--
8888	636936.2	4170548.9	Worker	Scenario 2	1.02E-02	5.70E-05	--
8889	637036.2	4170548.9	Worker	Scenario 2	1.07E-02	5.94E-05	--
8890	637136.2	4170548.9	Worker	Scenario 2	1.07E-02	6.01E-05	--
8891	637336.2	4170548.9	Worker	Scenario 2	1.12E-02	6.35E-05	--
8892	637436.2	4170548.9	Worker	Scenario 2	1.24E-02	6.86E-05	--
8893	637536.2	4170548.9	Worker	Scenario 2	1.25E-02	7.00E-05	--
8894	637636.2	4170548.9	Worker	Scenario 2	1.29E-02	7.23E-05	--
8895	637736.2	4170548.9	Worker	Scenario 2	1.34E-02	7.52E-05	--
8896	637836.2	4170548.9	Worker	Scenario 2	1.39E-02	7.81E-05	--
8897	637936.2	4170548.9	Worker	Scenario 2	1.42E-02	8.08E-05	--
8898	638036.2	4170548.9	Worker	Scenario 2	1.46E-02	8.36E-05	--
8899	638136.2	4170548.9	Worker	Scenario 2	1.50E-02	8.65E-05	--
8900	638236.2	4170548.9	Worker	Scenario 2	1.53E-02	8.93E-05	--
8901	638336.2	4170548.9	Worker	Scenario 2	1.65E-02	9.53E-05	--
8902	638536.2	4170548.9	Worker	Scenario 2	1.77E-02	1.04E-04	--
8903	638636.2	4170548.9	Worker	Scenario 2	1.81E-02	1.07E-04	--
8904	638736.2	4170548.9	Worker	Scenario 2	1.86E-02	1.11E-04	--
8905	638836.2	4170548.9	Worker	Scenario 2	1.93E-02	1.16E-04	--
8906	638936.2	4170548.9	Worker	Scenario 2	1.93E-02	1.18E-04	--
8907	639036.2	4170548.9	Worker	Scenario 2	2.00E-02	1.23E-04	--
8908	639136.2	4170548.9	Worker	Scenario 2	2.08E-02	1.28E-04	--
8909	639236.2	4170548.9	Worker	Scenario 2	2.12E-02	1.32E-04	--
8910	639336.2	4170548.9	Worker	Scenario 2	2.23E-02	1.39E-04	--
8911	639436.2	4170548.9	Worker	Scenario 2	2.45E-02	1.50E-04	--
8912	639536.2	4170548.9	Worker	Scenario 2	2.55E-02	1.56E-04	--
8913	639636.2	4170548.9	Worker	Scenario 2	2.65E-02	1.61E-04	--
8914	639736.2	4170548.9	Worker	Scenario 2	2.75E-02	1.67E-04	--
8915	639836.2	4170548.9	Worker	Scenario 2	2.87E-02	1.72E-04	--
8916	639936.2	4170548.9	Worker	Scenario 2	2.98E-02	1.78E-04	--
8917	640036.2	4170548.9	Worker	Scenario 2	3.10E-02	1.83E-04	--
8918	640136.2	4170548.9	Worker	Scenario 2	3.23E-02	1.88E-04	--
8919	640236.2	4170548.9	Worker	Scenario 2	3.35E-02	1.94E-04	--
8920	640336.2	4170548.9	Worker	Scenario 2	3.49E-02	1.99E-04	--
8921	640436.2	4170548.9	Worker	Scenario 2	3.63E-02	2.04E-04	--
8922	640536.2	4170548.9	Worker	Scenario 2	3.79E-02	2.10E-04	--
8923	640636.2	4170548.9	Worker	Scenario 2	3.95E-02	2.16E-04	--
8924	640736.2	4170548.9	Worker	Scenario 2	4.12E-02	2.23E-04	--
8925	640836.2	4170548.9	Worker	Scenario 2	4.29E-02	2.29E-04	--
8926	640936.2	4170548.9	Worker	Scenario 2	4.45E-02	2.33E-04	--
8927	641036.2	4170548.9	Worker	Scenario 2	4.60E-02	2.34E-04	--
8928	641136.2	4170548.9	Worker	Scenario 2	4.72E-02	2.35E-04	--
8929	641236.2	4170548.9	Worker	Scenario 2	4.80E-02	2.36E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8930	641336.2	4170548.9	Worker	Scenario 2	4.86E-02	2.38E-04	--
8931	641436.2	4170548.9	Worker	Scenario 2	4.89E-02	2.38E-04	--
8932	641536.2	4170548.9	Worker	Scenario 2	4.87E-02	2.36E-04	--
8933	641636.2	4170548.9	Worker	Scenario 2	4.86E-02	2.33E-04	--
8934	641736.2	4170548.9	Worker	Scenario 2	4.83E-02	2.30E-04	--
8935	641836.2	4170548.9	Worker	Scenario 2	4.81E-02	2.26E-04	--
8936	641936.2	4170548.9	Worker	Scenario 2	4.79E-02	2.22E-04	--
8937	642036.2	4170548.9	Worker	Scenario 2	4.80E-02	2.20E-04	--
8938	642136.2	4170548.9	Worker	Scenario 2	4.82E-02	2.18E-04	--
8939	642236.2	4170548.9	Worker	Scenario 2	4.85E-02	2.17E-04	--
8940	642336.2	4170548.9	Worker	Scenario 2	4.87E-02	2.16E-04	--
8941	642436.2	4170548.9	Worker	Scenario 2	4.85E-02	2.13E-04	--
8942	642536.2	4170548.9	Worker	Scenario 2	4.81E-02	2.09E-04	--
8943	642636.2	4170548.9	Worker	Scenario 2	4.74E-02	2.05E-04	--
8944	642736.2	4170548.9	Worker	Scenario 2	4.67E-02	2.00E-04	--
8945	642836.2	4170548.9	Worker	Scenario 2	4.60E-02	1.96E-04	--
8946	642936.2	4170548.9	Worker	Scenario 2	4.53E-02	1.92E-04	--
8947	643036.2	4170548.9	Worker	Scenario 2	4.49E-02	1.89E-04	--
8948	643136.2	4170548.9	Worker	Scenario 2	4.46E-02	1.86E-04	--
8949	643236.2	4170548.9	Worker	Scenario 2	4.42E-02	1.83E-04	--
8950	643336.2	4170548.9	Worker	Scenario 2	4.37E-02	1.80E-04	--
8951	643436.2	4170548.9	Worker	Scenario 2	4.32E-02	1.77E-04	--
8952	643536.2	4170548.9	Worker	Scenario 2	4.27E-02	1.74E-04	--
8953	635736.2	4170648.9	Worker	Scenario 2	6.75E-03	3.86E-05	--
8954	635836.2	4170648.9	Worker	Scenario 2	6.93E-03	3.95E-05	--
8955	636236.2	4170648.9	Worker	Scenario 2	7.90E-03	4.46E-05	--
8956	636336.2	4170648.9	Worker	Scenario 2	8.18E-03	4.61E-05	--
8957	636436.2	4170648.9	Worker	Scenario 2	8.45E-03	4.76E-05	--
8958	636536.2	4170648.9	Worker	Scenario 2	9.52E-03	5.23E-05	--
8959	636636.2	4170648.9	Worker	Scenario 2	9.67E-03	5.33E-05	--
8960	636736.2	4170648.9	Worker	Scenario 2	9.39E-03	5.27E-05	--
8961	636836.2	4170648.9	Worker	Scenario 2	9.90E-03	5.53E-05	--
8962	636936.2	4170648.9	Worker	Scenario 2	1.01E-02	5.64E-05	--
8963	637036.2	4170648.9	Worker	Scenario 2	1.06E-02	5.89E-05	--
8964	637336.2	4170648.9	Worker	Scenario 2	1.21E-02	6.66E-05	--
8965	637436.2	4170648.9	Worker	Scenario 2	1.23E-02	6.86E-05	--
8966	637536.2	4170648.9	Worker	Scenario 2	1.29E-02	7.13E-05	--
8967	637636.2	4170648.9	Worker	Scenario 2	1.28E-02	7.22E-05	--
8968	637736.2	4170648.9	Worker	Scenario 2	1.34E-02	7.52E-05	--
8969	637836.2	4170648.9	Worker	Scenario 2	1.38E-02	7.79E-05	--
8970	637936.2	4170648.9	Worker	Scenario 2	1.42E-02	8.08E-05	--
8971	638036.2	4170648.9	Worker	Scenario 2	1.46E-02	8.38E-05	--
8972	638136.2	4170648.9	Worker	Scenario 2	1.52E-02	8.74E-05	--
8973	638236.2	4170648.9	Worker	Scenario 2	1.56E-02	9.06E-05	--
8974	638336.2	4170648.9	Worker	Scenario 2	1.64E-02	9.52E-05	--
8975	638536.2	4170648.9	Worker	Scenario 2	1.77E-02	1.04E-04	--
8976	638636.2	4170648.9	Worker	Scenario 2	1.82E-02	1.07E-04	--
8977	638736.2	4170648.9	Worker	Scenario 2	1.87E-02	1.11E-04	--
8978	638836.2	4170648.9	Worker	Scenario 2	1.93E-02	1.16E-04	--
8979	638936.2	4170648.9	Worker	Scenario 2	1.92E-02	1.17E-04	--
8980	639036.2	4170648.9	Worker	Scenario 2	2.00E-02	1.22E-04	--
8981	639136.2	4170648.9	Worker	Scenario 2	2.08E-02	1.27E-04	--
8982	639236.2	4170648.9	Worker	Scenario 2	2.09E-02	1.29E-04	--
8983	639336.2	4170648.9	Worker	Scenario 2	2.29E-02	1.39E-04	--
8984	639436.2	4170648.9	Worker	Scenario 2	2.43E-02	1.47E-04	--
8985	639536.2	4170648.9	Worker	Scenario 2	2.53E-02	1.52E-04	--
8986	639636.2	4170648.9	Worker	Scenario 2	2.62E-02	1.57E-04	--
8987	639736.2	4170648.9	Worker	Scenario 2	2.72E-02	1.62E-04	--
8988	639836.2	4170648.9	Worker	Scenario 2	2.83E-02	1.66E-04	--
8989	639936.2	4170648.9	Worker	Scenario 2	2.93E-02	1.71E-04	--
8990	640036.2	4170648.9	Worker	Scenario 2	3.04E-02	1.76E-04	--
8991	640136.2	4170648.9	Worker	Scenario 2	3.16E-02	1.80E-04	--
8992	640236.2	4170648.9	Worker	Scenario 2	3.28E-02	1.85E-04	--
8993	640336.2	4170648.9	Worker	Scenario 2	3.40E-02	1.90E-04	--
8994	640436.2	4170648.9	Worker	Scenario 2	3.53E-02	1.95E-04	--
8995	640536.2	4170648.9	Worker	Scenario 2	3.67E-02	2.00E-04	--
8996	640636.2	4170648.9	Worker	Scenario 2	3.81E-02	2.05E-04	--
8997	640736.2	4170648.9	Worker	Scenario 2	3.95E-02	2.11E-04	--
8998	640836.2	4170648.9	Worker	Scenario 2	4.08E-02	2.15E-04	--
8999	640936.2	4170648.9	Worker	Scenario 2	4.20E-02	2.18E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9000	641036.2	4170648.9	Worker	Scenario 2	4.31E-02	2.18E-04	--
9001	641136.2	4170648.9	Worker	Scenario 2	4.40E-02	2.18E-04	--
9002	641236.2	4170648.9	Worker	Scenario 2	4.46E-02	2.20E-04	--
9003	641336.2	4170648.9	Worker	Scenario 2	4.51E-02	2.22E-04	--
9004	641436.2	4170648.9	Worker	Scenario 2	4.55E-02	2.22E-04	--
9005	641536.2	4170648.9	Worker	Scenario 2	4.55E-02	2.20E-04	--
9006	641636.2	4170648.9	Worker	Scenario 2	4.54E-02	2.18E-04	--
9007	641736.2	4170648.9	Worker	Scenario 2	4.53E-02	2.16E-04	--
9008	641836.2	4170648.9	Worker	Scenario 2	4.53E-02	2.13E-04	--
9009	641936.2	4170648.9	Worker	Scenario 2	4.53E-02	2.10E-04	--
9010	642036.2	4170648.9	Worker	Scenario 2	4.55E-02	2.07E-04	--
9011	642136.2	4170648.9	Worker	Scenario 2	4.58E-02	2.06E-04	--
9012	642236.2	4170648.9	Worker	Scenario 2	4.62E-02	2.05E-04	--
9013	642336.2	4170648.9	Worker	Scenario 2	4.63E-02	2.04E-04	--
9014	642436.2	4170648.9	Worker	Scenario 2	4.61E-02	2.02E-04	--
9015	642536.2	4170648.9	Worker	Scenario 2	4.57E-02	1.99E-04	--
9016	642636.2	4170648.9	Worker	Scenario 2	4.51E-02	1.95E-04	--
9017	642736.2	4170648.9	Worker	Scenario 2	4.44E-02	1.90E-04	--
9018	642836.2	4170648.9	Worker	Scenario 2	4.37E-02	1.86E-04	--
9019	642936.2	4170648.9	Worker	Scenario 2	4.32E-02	1.83E-04	--
9020	643036.2	4170648.9	Worker	Scenario 2	4.28E-02	1.80E-04	--
9021	643136.2	4170648.9	Worker	Scenario 2	4.25E-02	1.77E-04	--
9022	643236.2	4170648.9	Worker	Scenario 2	4.21E-02	1.75E-04	--
9023	643336.2	4170648.9	Worker	Scenario 2	4.17E-02	1.72E-04	--
9024	643436.2	4170648.9	Worker	Scenario 2	4.13E-02	1.69E-04	--
9025	635736.2	4170748.9	Worker	Scenario 2	6.84E-03	3.89E-05	--
9026	636336.2	4170748.9	Worker	Scenario 2	8.25E-03	4.64E-05	--
9027	636436.2	4170748.9	Worker	Scenario 2	8.55E-03	4.80E-05	--
9028	636536.2	4170748.9	Worker	Scenario 2	9.44E-03	5.20E-05	--
9029	636636.2	4170748.9	Worker	Scenario 2	9.83E-03	5.39E-05	--
9030	636736.2	4170748.9	Worker	Scenario 2	1.02E-02	5.60E-05	--
9031	636836.2	4170748.9	Worker	Scenario 2	1.06E-02	5.78E-05	--
9032	636936.2	4170748.9	Worker	Scenario 2	1.06E-02	5.84E-05	--
9033	637236.2	4170748.9	Worker	Scenario 2	1.12E-02	6.27E-05	--
9034	637336.2	4170748.9	Worker	Scenario 2	1.21E-02	6.67E-05	--
9035	637436.2	4170748.9	Worker	Scenario 2	1.24E-02	6.90E-05	--
9036	637536.2	4170748.9	Worker	Scenario 2	1.28E-02	7.11E-05	--
9037	637636.2	4170748.9	Worker	Scenario 2	1.33E-02	7.41E-05	--
9038	637736.2	4170748.9	Worker	Scenario 2	1.34E-02	7.53E-05	--
9039	637836.2	4170748.9	Worker	Scenario 2	1.38E-02	7.81E-05	--
9040	637936.2	4170748.9	Worker	Scenario 2	1.42E-02	8.10E-05	--
9041	638036.2	4170748.9	Worker	Scenario 2	1.45E-02	8.35E-05	--
9042	638136.2	4170748.9	Worker	Scenario 2	1.57E-02	8.92E-05	--
9043	638236.2	4170748.9	Worker	Scenario 2	1.58E-02	9.13E-05	--
9044	638336.2	4170748.9	Worker	Scenario 2	1.64E-02	9.53E-05	--
9045	638636.2	4170748.9	Worker	Scenario 2	1.82E-02	1.07E-04	--
9046	638736.2	4170748.9	Worker	Scenario 2	1.88E-02	1.11E-04	--
9047	638836.2	4170748.9	Worker	Scenario 2	1.97E-02	1.16E-04	--
9048	638936.2	4170748.9	Worker	Scenario 2	1.91E-02	1.16E-04	--
9049	639036.2	4170748.9	Worker	Scenario 2	1.99E-02	1.21E-04	--
9050	639136.2	4170748.9	Worker	Scenario 2	2.07E-02	1.26E-04	--
9051	639236.2	4170748.9	Worker	Scenario 2	2.08E-02	1.27E-04	--
9052	639336.2	4170748.9	Worker	Scenario 2	2.26E-02	1.36E-04	--
9053	639436.2	4170748.9	Worker	Scenario 2	2.41E-02	1.43E-04	--
9054	639536.2	4170748.9	Worker	Scenario 2	2.50E-02	1.48E-04	--
9055	639636.2	4170748.9	Worker	Scenario 2	2.59E-02	1.52E-04	--
9056	639736.2	4170748.9	Worker	Scenario 2	2.68E-02	1.56E-04	--
9057	639836.2	4170748.9	Worker	Scenario 2	2.78E-02	1.61E-04	--
9058	639936.2	4170748.9	Worker	Scenario 2	2.88E-02	1.65E-04	--
9059	640036.2	4170748.9	Worker	Scenario 2	2.98E-02	1.69E-04	--
9060	640136.2	4170748.9	Worker	Scenario 2	3.09E-02	1.73E-04	--
9061	640236.2	4170748.9	Worker	Scenario 2	3.20E-02	1.77E-04	--
9062	640336.2	4170748.9	Worker	Scenario 2	3.31E-02	1.81E-04	--
9063	640436.2	4170748.9	Worker	Scenario 2	3.43E-02	1.86E-04	--
9064	640536.2	4170748.9	Worker	Scenario 2	3.54E-02	1.90E-04	--
9065	640636.2	4170748.9	Worker	Scenario 2	3.66E-02	1.95E-04	--
9066	640736.2	4170748.9	Worker	Scenario 2	3.78E-02	2.00E-04	--
9067	640836.2	4170748.9	Worker	Scenario 2	3.88E-02	2.04E-04	--
9068	640936.2	4170748.9	Worker	Scenario 2	3.98E-02	2.05E-04	--
9069	641036.2	4170748.9	Worker	Scenario 2	4.06E-02	2.05E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9070	641136.2	4170748.9	Worker	Scenario 2	4.13E-02	2.05E-04	--
9071	641236.2	4170748.9	Worker	Scenario 2	4.18E-02	2.06E-04	--
9072	641336.2	4170748.9	Worker	Scenario 2	4.23E-02	2.08E-04	--
9073	641436.2	4170748.9	Worker	Scenario 2	4.26E-02	2.08E-04	--
9074	641536.2	4170748.9	Worker	Scenario 2	4.27E-02	2.07E-04	--
9075	641636.2	4170748.9	Worker	Scenario 2	4.26E-02	2.05E-04	--
9076	641736.2	4170748.9	Worker	Scenario 2	4.27E-02	2.03E-04	--
9077	641836.2	4170748.9	Worker	Scenario 2	4.29E-02	2.01E-04	--
9078	641936.2	4170748.9	Worker	Scenario 2	4.30E-02	1.99E-04	--
9079	642036.2	4170748.9	Worker	Scenario 2	4.34E-02	1.97E-04	--
9080	642136.2	4170748.9	Worker	Scenario 2	4.37E-02	1.96E-04	--
9081	642236.2	4170748.9	Worker	Scenario 2	4.40E-02	1.95E-04	--
9082	642336.2	4170748.9	Worker	Scenario 2	4.41E-02	1.94E-04	--
9083	642436.2	4170748.9	Worker	Scenario 2	4.40E-02	1.92E-04	--
9084	642536.2	4170748.9	Worker	Scenario 2	4.35E-02	1.89E-04	--
9085	642636.2	4170748.9	Worker	Scenario 2	4.29E-02	1.86E-04	--
9086	642736.2	4170748.9	Worker	Scenario 2	4.23E-02	1.82E-04	--
9087	642836.2	4170748.9	Worker	Scenario 2	4.17E-02	1.78E-04	--
9088	642936.2	4170748.9	Worker	Scenario 2	4.12E-02	1.75E-04	--
9089	643036.2	4170748.9	Worker	Scenario 2	4.09E-02	1.72E-04	--
9090	643136.2	4170748.9	Worker	Scenario 2	4.05E-02	1.69E-04	--
9091	643236.2	4170748.9	Worker	Scenario 2	4.02E-02	1.67E-04	--
9092	643336.2	4170748.9	Worker	Scenario 2	3.99E-02	1.65E-04	--
9093	636436.2	4170848.9	Worker	Scenario 2	8.65E-03	4.84E-05	--
9094	636536.2	4170848.9	Worker	Scenario 2	8.96E-03	5.00E-05	--
9095	636936.2	4170848.9	Worker	Scenario 2	1.02E-02	5.68E-05	--
9096	637336.2	4170848.9	Worker	Scenario 2	1.18E-02	6.56E-05	--
9097	637436.2	4170848.9	Worker	Scenario 2	1.22E-02	6.82E-05	--
9098	637536.2	4170848.9	Worker	Scenario 2	1.27E-02	7.08E-05	--
9099	637636.2	4170848.9	Worker	Scenario 2	1.35E-02	7.46E-05	--
9100	637736.2	4170848.9	Worker	Scenario 2	1.39E-02	7.73E-05	--
9101	637836.2	4170848.9	Worker	Scenario 2	1.44E-02	8.02E-05	--
9102	637936.2	4170848.9	Worker	Scenario 2	1.48E-02	8.30E-05	--
9103	638036.2	4170848.9	Worker	Scenario 2	1.46E-02	8.40E-05	--
9104	638136.2	4170848.9	Worker	Scenario 2	1.52E-02	8.77E-05	--
9105	638236.2	4170848.9	Worker	Scenario 2	1.58E-02	9.14E-05	--
9106	638336.2	4170848.9	Worker	Scenario 2	1.64E-02	9.51E-05	--
9107	638536.2	4170848.9	Worker	Scenario 2	1.77E-02	1.03E-04	--
9108	638636.2	4170848.9	Worker	Scenario 2	1.83E-02	1.07E-04	--
9109	638736.2	4170848.9	Worker	Scenario 2	1.89E-02	1.11E-04	--
9110	638836.2	4170848.9	Worker	Scenario 2	1.93E-02	1.14E-04	--
9111	638936.2	4170848.9	Worker	Scenario 2	1.90E-02	1.15E-04	--
9112	639036.2	4170848.9	Worker	Scenario 2	1.98E-02	1.19E-04	--
9113	639136.2	4170848.9	Worker	Scenario 2	2.05E-02	1.23E-04	--
9114	639236.2	4170848.9	Worker	Scenario 2	2.07E-02	1.25E-04	--
9115	639336.2	4170848.9	Worker	Scenario 2	2.24E-02	1.33E-04	--
9116	639436.2	4170848.9	Worker	Scenario 2	2.37E-02	1.39E-04	--
9117	639536.2	4170848.9	Worker	Scenario 2	2.45E-02	1.43E-04	--
9118	639636.2	4170848.9	Worker	Scenario 2	2.55E-02	1.47E-04	--
9119	639736.2	4170848.9	Worker	Scenario 2	2.64E-02	1.51E-04	--
9120	639836.2	4170848.9	Worker	Scenario 2	2.73E-02	1.55E-04	--
9121	639936.2	4170848.9	Worker	Scenario 2	2.82E-02	1.58E-04	--
9122	640036.2	4170848.9	Worker	Scenario 2	2.92E-02	1.62E-04	--
9123	640136.2	4170848.9	Worker	Scenario 2	3.02E-02	1.66E-04	--
9124	640236.2	4170848.9	Worker	Scenario 2	3.12E-02	1.70E-04	--
9125	640336.2	4170848.9	Worker	Scenario 2	3.22E-02	1.74E-04	--
9126	640436.2	4170848.9	Worker	Scenario 2	3.32E-02	1.77E-04	--
9127	640536.2	4170848.9	Worker	Scenario 2	3.42E-02	1.82E-04	--
9128	640636.2	4170848.9	Worker	Scenario 2	3.53E-02	1.86E-04	--
9129	640736.2	4170848.9	Worker	Scenario 2	3.62E-02	1.90E-04	--
9130	640836.2	4170848.9	Worker	Scenario 2	3.71E-02	1.93E-04	--
9131	640936.2	4170848.9	Worker	Scenario 2	3.78E-02	1.93E-04	--
9132	641036.2	4170848.9	Worker	Scenario 2	3.85E-02	1.93E-04	--
9133	641136.2	4170848.9	Worker	Scenario 2	3.91E-02	1.93E-04	--
9134	641236.2	4170848.9	Worker	Scenario 2	3.95E-02	1.94E-04	--
9135	641336.2	4170848.9	Worker	Scenario 2	3.99E-02	1.96E-04	--
9136	641436.2	4170848.9	Worker	Scenario 2	4.02E-02	1.96E-04	--
9137	641536.2	4170848.9	Worker	Scenario 2	4.03E-02	1.95E-04	--
9138	641636.2	4170848.9	Worker	Scenario 2	4.04E-02	1.93E-04	--
9139	641736.2	4170848.9	Worker	Scenario 2	4.05E-02	1.92E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million) Receptor Risk	Chronic Hazard Index Receptor Risk	Acute Hazard Index Receptor Risk
9140	641836.2	4170848.9	Worker	Scenario 2	4.07E-02	1.91E-04	--
9141	641936.2	4170848.9	Worker	Scenario 2	4.10E-02	1.89E-04	--
9142	642036.2	4170848.9	Worker	Scenario 2	4.14E-02	1.87E-04	--
9143	642136.2	4170848.9	Worker	Scenario 2	4.18E-02	1.86E-04	--
9144	642236.2	4170848.9	Worker	Scenario 2	4.21E-02	1.85E-04	--
9145	642336.2	4170848.9	Worker	Scenario 2	4.22E-02	1.84E-04	--
9146	642436.2	4170848.9	Worker	Scenario 2	4.20E-02	1.83E-04	--
9147	642536.2	4170848.9	Worker	Scenario 2	4.16E-02	1.80E-04	--
9148	642636.2	4170848.9	Worker	Scenario 2	4.10E-02	1.77E-04	--
9149	642736.2	4170848.9	Worker	Scenario 2	4.04E-02	1.74E-04	--
9150	642836.2	4170848.9	Worker	Scenario 2	3.99E-02	1.70E-04	--
9151	642936.2	4170848.9	Worker	Scenario 2	3.94E-02	1.67E-04	--
9152	643036.2	4170848.9	Worker	Scenario 2	3.91E-02	1.65E-04	--
9153	643136.2	4170848.9	Worker	Scenario 2	3.88E-02	1.62E-04	--
9154	643236.2	4170848.9	Worker	Scenario 2	3.85E-02	1.60E-04	--
9155	643336.2	4170848.9	Worker	Scenario 2	3.81E-02	1.57E-04	--
9156	637336.2	4170948.9	Worker	Scenario 2	1.18E-02	6.60E-05	--
9157	637436.2	4170948.9	Worker	Scenario 2	1.22E-02	6.82E-05	--
9158	637536.2	4170948.9	Worker	Scenario 2	1.32E-02	7.26E-05	--
9159	637636.2	4170948.9	Worker	Scenario 2	1.30E-02	7.31E-05	--
9160	637736.2	4170948.9	Worker	Scenario 2	1.34E-02	7.55E-05	--
9161	637836.2	4170948.9	Worker	Scenario 2	1.39E-02	7.86E-05	--
9162	637936.2	4170948.9	Worker	Scenario 2	1.45E-02	8.24E-05	--
9163	638036.2	4170948.9	Worker	Scenario 2	1.46E-02	8.41E-05	--
9164	638136.2	4170948.9	Worker	Scenario 2	1.52E-02	8.79E-05	--
9165	638236.2	4170948.9	Worker	Scenario 2	1.57E-02	9.12E-05	--
9166	638536.2	4170948.9	Worker	Scenario 2	1.76E-02	1.03E-04	--
9167	638636.2	4170948.9	Worker	Scenario 2	1.82E-02	1.06E-04	--
9168	638736.2	4170948.9	Worker	Scenario 2	1.88E-02	1.10E-04	--
9169	638836.2	4170948.9	Worker	Scenario 2	1.86E-02	1.11E-04	--
9170	638936.2	4170948.9	Worker	Scenario 2	1.89E-02	1.13E-04	--
9171	639036.2	4170948.9	Worker	Scenario 2	1.96E-02	1.17E-04	--
9172	639136.2	4170948.9	Worker	Scenario 2	1.96E-02	1.18E-04	--
9173	639236.2	4170948.9	Worker	Scenario 2	2.03E-02	1.21E-04	--
9174	639336.2	4170948.9	Worker	Scenario 2	2.23E-02	1.30E-04	--
9175	639436.2	4170948.9	Worker	Scenario 2	2.33E-02	1.35E-04	--
9176	639536.2	4170948.9	Worker	Scenario 2	2.42E-02	1.39E-04	--
9177	639636.2	4170948.9	Worker	Scenario 2	2.50E-02	1.42E-04	--
9178	639736.2	4170948.9	Worker	Scenario 2	2.60E-02	1.46E-04	--
9179	639836.2	4170948.9	Worker	Scenario 2	2.68E-02	1.49E-04	--
9180	639936.2	4170948.9	Worker	Scenario 2	2.77E-02	1.53E-04	--
9181	640036.2	4170948.9	Worker	Scenario 2	2.85E-02	1.56E-04	--
9182	640136.2	4170948.9	Worker	Scenario 2	2.94E-02	1.59E-04	--
9183	640236.2	4170948.9	Worker	Scenario 2	3.04E-02	1.63E-04	--
9184	640336.2	4170948.9	Worker	Scenario 2	3.13E-02	1.66E-04	--
9185	640436.2	4170948.9	Worker	Scenario 2	3.22E-02	1.70E-04	--
9186	640536.2	4170948.9	Worker	Scenario 2	3.31E-02	1.74E-04	--
9187	640636.2	4170948.9	Worker	Scenario 2	3.39E-02	1.78E-04	--
9188	640736.2	4170948.9	Worker	Scenario 2	3.47E-02	1.81E-04	--
9189	640836.2	4170948.9	Worker	Scenario 2	3.55E-02	1.83E-04	--
9190	640936.2	4170948.9	Worker	Scenario 2	3.61E-02	1.83E-04	--
9191	641036.2	4170948.9	Worker	Scenario 2	3.67E-02	1.82E-04	--
9192	641136.2	4170948.9	Worker	Scenario 2	3.71E-02	1.82E-04	--
9193	641236.2	4170948.9	Worker	Scenario 2	3.74E-02	1.83E-04	--
9194	641336.2	4170948.9	Worker	Scenario 2	3.77E-02	1.84E-04	--
9195	641436.2	4170948.9	Worker	Scenario 2	3.81E-02	1.85E-04	--
9196	641536.2	4170948.9	Worker	Scenario 2	3.82E-02	1.84E-04	--
9197	641636.2	4170948.9	Worker	Scenario 2	3.83E-02	1.83E-04	--
9198	641736.2	4170948.9	Worker	Scenario 2	3.84E-02	1.82E-04	--
9199	641836.2	4170948.9	Worker	Scenario 2	3.87E-02	1.81E-04	--
9200	641936.2	4170948.9	Worker	Scenario 2	3.92E-02	1.80E-04	--
9201	642036.2	4170948.9	Worker	Scenario 2	3.96E-02	1.79E-04	--
9202	642136.2	4170948.9	Worker	Scenario 2	4.00E-02	1.78E-04	--
9203	642236.2	4170948.9	Worker	Scenario 2	4.03E-02	1.77E-04	--
9204	642336.2	4170948.9	Worker	Scenario 2	4.03E-02	1.75E-04	--
9205	642436.2	4170948.9	Worker	Scenario 2	4.01E-02	1.74E-04	--
9206	642536.2	4170948.9	Worker	Scenario 2	3.97E-02	1.72E-04	--
9207	642636.2	4170948.9	Worker	Scenario 2	3.92E-02	1.69E-04	--
9208	642736.2	4170948.9	Worker	Scenario 2	3.87E-02	1.66E-04	--
9209	642836.2	4170948.9	Worker	Scenario 2	3.82E-02	1.63E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9210	642936.2	4170948.9	Worker	Scenario 2	3.78E-02	1.60E-04	--
9211	643036.2	4170948.9	Worker	Scenario 2	3.75E-02	1.58E-04	--
9212	643136.2	4170948.9	Worker	Scenario 2	3.72E-02	1.56E-04	--
9213	643236.2	4170948.9	Worker	Scenario 2	3.69E-02	1.53E-04	--
9214	636836.2	4171048.9	Worker	Scenario 2	1.01E-02	5.58E-05	--
9215	637036.2	4171048.9	Worker	Scenario 2	1.08E-02	5.98E-05	--
9216	637136.2	4171048.9	Worker	Scenario 2	1.17E-02	6.37E-05	--
9217	637236.2	4171048.9	Worker	Scenario 2	1.21E-02	6.60E-05	--
9218	637336.2	4171048.9	Worker	Scenario 2	1.20E-02	6.66E-05	--
9219	637436.2	4171048.9	Worker	Scenario 2	1.26E-02	6.98E-05	--
9220	637536.2	4171048.9	Worker	Scenario 2	1.26E-02	7.09E-05	--
9221	637636.2	4171048.9	Worker	Scenario 2	1.31E-02	7.37E-05	--
9222	637736.2	4171048.9	Worker	Scenario 2	1.34E-02	7.57E-05	--
9223	637836.2	4171048.9	Worker	Scenario 2	1.37E-02	7.83E-05	--
9224	637936.2	4171048.9	Worker	Scenario 2	1.43E-02	8.19E-05	--
9225	638036.2	4171048.9	Worker	Scenario 2	1.51E-02	8.58E-05	--
9226	638136.2	4171048.9	Worker	Scenario 2	1.52E-02	8.78E-05	--
9227	638236.2	4171048.9	Worker	Scenario 2	1.57E-02	9.10E-05	--
9228	638436.2	4171048.9	Worker	Scenario 2	1.70E-02	9.82E-05	--
9229	638536.2	4171048.9	Worker	Scenario 2	1.76E-02	1.02E-04	--
9230	638636.2	4171048.9	Worker	Scenario 2	1.78E-02	1.04E-04	--
9231	638736.2	4171048.9	Worker	Scenario 2	1.87E-02	1.09E-04	--
9232	638836.2	4171048.9	Worker	Scenario 2	1.83E-02	1.08E-04	--
9233	638936.2	4171048.9	Worker	Scenario 2	1.88E-02	1.11E-04	--
9234	639036.2	4171048.9	Worker	Scenario 2	1.96E-02	1.16E-04	--
9235	639136.2	4171048.9	Worker	Scenario 2	2.02E-02	1.19E-04	--
9236	639236.2	4171048.9	Worker	Scenario 2	2.08E-02	1.22E-04	--
9237	639336.2	4171048.9	Worker	Scenario 2	2.22E-02	1.28E-04	--
9238	639436.2	4171048.9	Worker	Scenario 2	2.25E-02	1.29E-04	--
9239	639536.2	4171048.9	Worker	Scenario 2	2.33E-02	1.32E-04	--
9240	639636.2	4171048.9	Worker	Scenario 2	2.46E-02	1.38E-04	--
9241	639736.2	4171048.9	Worker	Scenario 2	2.55E-02	1.41E-04	--
9242	639836.2	4171048.9	Worker	Scenario 2	2.63E-02	1.44E-04	--
9243	639936.2	4171048.9	Worker	Scenario 2	2.71E-02	1.47E-04	--
9244	640036.2	4171048.9	Worker	Scenario 2	2.79E-02	1.50E-04	--
9245	640136.2	4171048.9	Worker	Scenario 2	2.87E-02	1.53E-04	--
9246	640236.2	4171048.9	Worker	Scenario 2	2.95E-02	1.56E-04	--
9247	640336.2	4171048.9	Worker	Scenario 2	3.04E-02	1.59E-04	--
9248	640436.2	4171048.9	Worker	Scenario 2	3.12E-02	1.63E-04	--
9249	640536.2	4171048.9	Worker	Scenario 2	3.19E-02	1.66E-04	--
9250	640636.2	4171048.9	Worker	Scenario 2	3.27E-02	1.70E-04	--
9251	640736.2	4171048.9	Worker	Scenario 2	3.34E-02	1.73E-04	--
9252	640836.2	4171048.9	Worker	Scenario 2	3.40E-02	1.74E-04	--
9253	640936.2	4171048.9	Worker	Scenario 2	3.45E-02	1.74E-04	--
9254	641036.2	4171048.9	Worker	Scenario 2	3.50E-02	1.73E-04	--
9255	641136.2	4171048.9	Worker	Scenario 2	3.54E-02	1.73E-04	--
9256	641236.2	4171048.9	Worker	Scenario 2	3.57E-02	1.74E-04	--
9257	641336.2	4171048.9	Worker	Scenario 2	3.60E-02	1.75E-04	--
9258	641436.2	4171048.9	Worker	Scenario 2	3.62E-02	1.75E-04	--
9259	641536.2	4171048.9	Worker	Scenario 2	3.64E-02	1.75E-04	--
9260	641636.2	4171048.9	Worker	Scenario 2	3.65E-02	1.74E-04	--
9261	641736.2	4171048.9	Worker	Scenario 2	3.67E-02	1.73E-04	--
9262	641836.2	4171048.9	Worker	Scenario 2	3.70E-02	1.73E-04	--
9263	641936.2	4171048.9	Worker	Scenario 2	3.75E-02	1.72E-04	--
9264	642036.2	4171048.9	Worker	Scenario 2	3.80E-02	1.71E-04	--
9265	642136.2	4171048.9	Worker	Scenario 2	3.83E-02	1.70E-04	--
9266	642236.2	4171048.9	Worker	Scenario 2	3.86E-02	1.69E-04	--
9267	642336.2	4171048.9	Worker	Scenario 2	3.86E-02	1.67E-04	--
9268	642436.2	4171048.9	Worker	Scenario 2	3.84E-02	1.66E-04	--
9269	642536.2	4171048.9	Worker	Scenario 2	3.80E-02	1.64E-04	--
9270	642636.2	4171048.9	Worker	Scenario 2	3.75E-02	1.62E-04	--
9271	642736.2	4171048.9	Worker	Scenario 2	3.70E-02	1.59E-04	--
9272	642836.2	4171048.9	Worker	Scenario 2	3.66E-02	1.56E-04	--
9273	642936.2	4171048.9	Worker	Scenario 2	3.63E-02	1.54E-04	--
9274	643036.2	4171048.9	Worker	Scenario 2	3.60E-02	1.52E-04	--
9275	643136.2	4171048.9	Worker	Scenario 2	3.57E-02	1.49E-04	--
9276	636936.2	4171148.9	Worker	Scenario 2	1.07E-02	5.89E-05	--
9277	637036.2	4171148.9	Worker	Scenario 2	1.13E-02	6.17E-05	--
9278	637136.2	4171148.9	Worker	Scenario 2	1.16E-02	6.34E-05	--
9279	637236.2	4171148.9	Worker	Scenario 2	1.19E-02	6.54E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9280	637336.2	4171148.9	Worker	Scenario 2	1.18E-02	6.58E-05	--
9281	637436.2	4171148.9	Worker	Scenario 2	1.21E-02	6.79E-05	--
9282	637536.2	4171148.9	Worker	Scenario 2	1.25E-02	7.03E-05	--
9283	637636.2	4171148.9	Worker	Scenario 2	1.30E-02	7.34E-05	--
9284	637736.2	4171148.9	Worker	Scenario 2	1.35E-02	7.63E-05	--
9285	637836.2	4171148.9	Worker	Scenario 2	1.37E-02	7.84E-05	--
9286	637936.2	4171148.9	Worker	Scenario 2	1.39E-02	8.03E-05	--
9287	638036.2	4171148.9	Worker	Scenario 2	1.47E-02	8.46E-05	--
9288	638136.2	4171148.9	Worker	Scenario 2	1.52E-02	8.76E-05	--
9289	638436.2	4171148.9	Worker	Scenario 2	1.68E-02	9.72E-05	--
9290	638536.2	4171148.9	Worker	Scenario 2	1.72E-02	1.00E-04	--
9291	638636.2	4171148.9	Worker	Scenario 2	1.77E-02	1.03E-04	--
9292	638736.2	4171148.9	Worker	Scenario 2	1.84E-02	1.07E-04	--
9293	638836.2	4171148.9	Worker	Scenario 2	1.80E-02	1.06E-04	--
9294	638936.2	4171148.9	Worker	Scenario 2	1.88E-02	1.10E-04	--
9295	639036.2	4171148.9	Worker	Scenario 2	1.94E-02	1.13E-04	--
9296	639136.2	4171148.9	Worker	Scenario 2	1.98E-02	1.15E-04	--
9297	639236.2	4171148.9	Worker	Scenario 2	2.04E-02	1.18E-04	--
9298	639336.2	4171148.9	Worker	Scenario 2	2.22E-02	1.25E-04	--
9299	639436.2	4171148.9	Worker	Scenario 2	2.23E-02	1.26E-04	--
9300	639536.2	4171148.9	Worker	Scenario 2	2.29E-02	1.28E-04	--
9301	639636.2	4171148.9	Worker	Scenario 2	2.42E-02	1.33E-04	--
9302	639736.2	4171148.9	Worker	Scenario 2	2.51E-02	1.36E-04	--
9303	639836.2	4171148.9	Worker	Scenario 2	2.58E-02	1.39E-04	--
9304	639936.2	4171148.9	Worker	Scenario 2	2.65E-02	1.42E-04	--
9305	640036.2	4171148.9	Worker	Scenario 2	2.72E-02	1.45E-04	--
9306	640136.2	4171148.9	Worker	Scenario 2	2.80E-02	1.47E-04	--
9307	640236.2	4171148.9	Worker	Scenario 2	2.87E-02	1.50E-04	--
9308	640336.2	4171148.9	Worker	Scenario 2	2.95E-02	1.53E-04	--
9309	640436.2	4171148.9	Worker	Scenario 2	3.02E-02	1.56E-04	--
9310	640536.2	4171148.9	Worker	Scenario 2	3.08E-02	1.59E-04	--
9311	640636.2	4171148.9	Worker	Scenario 2	3.15E-02	1.63E-04	--
9312	640736.2	4171148.9	Worker	Scenario 2	3.21E-02	1.65E-04	--
9313	640836.2	4171148.9	Worker	Scenario 2	3.26E-02	1.66E-04	--
9314	640936.2	4171148.9	Worker	Scenario 2	3.31E-02	1.65E-04	--
9315	641036.2	4171148.9	Worker	Scenario 2	3.36E-02	1.64E-04	--
9316	641136.2	4171148.9	Worker	Scenario 2	3.38E-02	1.65E-04	--
9317	641236.2	4171148.9	Worker	Scenario 2	3.41E-02	1.66E-04	--
9318	641336.2	4171148.9	Worker	Scenario 2	3.44E-02	1.67E-04	--
9319	641436.2	4171148.9	Worker	Scenario 2	3.47E-02	1.67E-04	--
9320	641536.2	4171148.9	Worker	Scenario 2	3.48E-02	1.66E-04	--
9321	641636.2	4171148.9	Worker	Scenario 2	3.50E-02	1.66E-04	--
9322	641736.2	4171148.9	Worker	Scenario 2	3.52E-02	1.65E-04	--
9323	641836.2	4171148.9	Worker	Scenario 2	3.55E-02	1.65E-04	--
9324	641936.2	4171148.9	Worker	Scenario 2	3.60E-02	1.64E-04	--
9325	642036.2	4171148.9	Worker	Scenario 2	3.65E-02	1.64E-04	--
9326	642136.2	4171148.9	Worker	Scenario 2	3.68E-02	1.63E-04	--
9327	642236.2	4171148.9	Worker	Scenario 2	3.70E-02	1.61E-04	--
9328	642336.2	4171148.9	Worker	Scenario 2	3.70E-02	1.60E-04	--
9329	642436.2	4171148.9	Worker	Scenario 2	3.68E-02	1.58E-04	--
9330	642536.2	4171148.9	Worker	Scenario 2	3.64E-02	1.57E-04	--
9331	642636.2	4171148.9	Worker	Scenario 2	3.60E-02	1.55E-04	--
9332	642736.2	4171148.9	Worker	Scenario 2	3.55E-02	1.52E-04	--
9333	642836.2	4171148.9	Worker	Scenario 2	3.51E-02	1.50E-04	--
9334	642936.2	4171148.9	Worker	Scenario 2	3.49E-02	1.48E-04	--
9335	643036.2	4171148.9	Worker	Scenario 2	3.45E-02	1.46E-04	--
9336	636836.2	4171248.9	Worker	Scenario 2	1.02E-02	5.62E-05	--
9337	636936.2	4171248.9	Worker	Scenario 2	1.10E-02	5.99E-05	--
9338	637036.2	4171248.9	Worker	Scenario 2	1.12E-02	6.15E-05	--
9339	637136.2	4171248.9	Worker	Scenario 2	1.15E-02	6.32E-05	--
9340	637236.2	4171248.9	Worker	Scenario 2	1.18E-02	6.53E-05	--
9341	637336.2	4171248.9	Worker	Scenario 2	1.17E-02	6.55E-05	--
9342	637436.2	4171248.9	Worker	Scenario 2	1.20E-02	6.75E-05	--
9343	637536.2	4171248.9	Worker	Scenario 2	1.23E-02	6.97E-05	--
9344	637636.2	4171248.9	Worker	Scenario 2	1.30E-02	7.34E-05	--
9345	637736.2	4171248.9	Worker	Scenario 2	1.33E-02	7.57E-05	--
9346	637836.2	4171248.9	Worker	Scenario 2	1.37E-02	7.84E-05	--
9347	637936.2	4171248.9	Worker	Scenario 2	1.43E-02	8.18E-05	--
9348	638336.2	4171248.9	Worker	Scenario 2	1.61E-02	9.32E-05	--
9349	638436.2	4171248.9	Worker	Scenario 2	1.66E-02	9.62E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9350	638536.2	4171248.9	Worker	Scenario 2	1.70E-02	9.90E-05	--
9351	638636.2	4171248.9	Worker	Scenario 2	1.75E-02	1.02E-04	--
9352	638736.2	4171248.9	Worker	Scenario 2	1.86E-02	1.06E-04	--
9353	638836.2	4171248.9	Worker	Scenario 2	1.80E-02	1.05E-04	--
9354	638936.2	4171248.9	Worker	Scenario 2	1.92E-02	1.10E-04	--
9355	639036.2	4171248.9	Worker	Scenario 2	1.91E-02	1.10E-04	--
9356	639136.2	4171248.9	Worker	Scenario 2	1.96E-02	1.13E-04	--
9357	639236.2	4171248.9	Worker	Scenario 2	2.02E-02	1.15E-04	--
9358	639336.2	4171248.9	Worker	Scenario 2	2.21E-02	1.22E-04	--
9359	639436.2	4171248.9	Worker	Scenario 2	2.19E-02	1.22E-04	--
9360	639536.2	4171248.9	Worker	Scenario 2	2.26E-02	1.24E-04	--
9361	639636.2	4171248.9	Worker	Scenario 2	2.38E-02	1.29E-04	--
9362	639736.2	4171248.9	Worker	Scenario 2	2.46E-02	1.32E-04	--
9363	639836.2	4171248.9	Worker	Scenario 2	2.52E-02	1.34E-04	--
9364	639936.2	4171248.9	Worker	Scenario 2	2.59E-02	1.37E-04	--
9365	640036.2	4171248.9	Worker	Scenario 2	2.66E-02	1.39E-04	--
9366	640136.2	4171248.9	Worker	Scenario 2	2.73E-02	1.42E-04	--
9367	640236.2	4171248.9	Worker	Scenario 2	2.79E-02	1.44E-04	--
9368	640336.2	4171248.9	Worker	Scenario 2	2.86E-02	1.47E-04	--
9369	640436.2	4171248.9	Worker	Scenario 2	2.92E-02	1.50E-04	--
9370	640536.2	4171248.9	Worker	Scenario 2	2.98E-02	1.53E-04	--
9371	640636.2	4171248.9	Worker	Scenario 2	3.03E-02	1.56E-04	--
9372	640736.2	4171248.9	Worker	Scenario 2	3.09E-02	1.58E-04	--
9373	640836.2	4171248.9	Worker	Scenario 2	3.14E-02	1.58E-04	--
9374	640936.2	4171248.9	Worker	Scenario 2	3.18E-02	1.57E-04	--
9375	641036.2	4171248.9	Worker	Scenario 2	3.22E-02	1.57E-04	--
9376	641136.2	4171248.9	Worker	Scenario 2	3.24E-02	1.57E-04	--
9377	641236.2	4171248.9	Worker	Scenario 2	3.27E-02	1.58E-04	--
9378	641336.2	4171248.9	Worker	Scenario 2	3.30E-02	1.59E-04	--
9379	641436.2	4171248.9	Worker	Scenario 2	3.32E-02	1.60E-04	--
9380	641536.2	4171248.9	Worker	Scenario 2	3.33E-02	1.59E-04	--
9381	641636.2	4171248.9	Worker	Scenario 2	3.35E-02	1.58E-04	--
9382	641736.2	4171248.9	Worker	Scenario 2	3.38E-02	1.58E-04	--
9383	641836.2	4171248.9	Worker	Scenario 2	3.42E-02	1.58E-04	--
9384	641936.2	4171248.9	Worker	Scenario 2	3.46E-02	1.58E-04	--
9385	642036.2	4171248.9	Worker	Scenario 2	3.51E-02	1.57E-04	--
9386	642136.2	4171248.9	Worker	Scenario 2	3.54E-02	1.56E-04	--
9387	642236.2	4171248.9	Worker	Scenario 2	3.55E-02	1.55E-04	--
9388	642336.2	4171248.9	Worker	Scenario 2	3.55E-02	1.53E-04	--
9389	642436.2	4171248.9	Worker	Scenario 2	3.53E-02	1.52E-04	--
9390	642536.2	4171248.9	Worker	Scenario 2	3.49E-02	1.50E-04	--
9391	642636.2	4171248.9	Worker	Scenario 2	3.45E-02	1.48E-04	--
9392	642736.2	4171248.9	Worker	Scenario 2	3.41E-02	1.46E-04	--
9393	642836.2	4171248.9	Worker	Scenario 2	3.37E-02	1.44E-04	--
9394	642936.2	4171248.9	Worker	Scenario 2	3.34E-02	1.42E-04	--
9395	636736.2	4171348.9	Worker	Scenario 2	9.95E-03	5.49E-05	--
9396	636836.2	4171348.9	Worker	Scenario 2	1.10E-02	5.92E-05	--
9397	636936.2	4171348.9	Worker	Scenario 2	1.10E-02	5.98E-05	--
9398	637036.2	4171348.9	Worker	Scenario 2	1.11E-02	6.12E-05	--
9399	637136.2	4171348.9	Worker	Scenario 2	1.14E-02	6.31E-05	--
9400	637236.2	4171348.9	Worker	Scenario 2	1.17E-02	6.48E-05	--
9401	637336.2	4171348.9	Worker	Scenario 2	1.16E-02	6.53E-05	--
9402	637436.2	4171348.9	Worker	Scenario 2	1.19E-02	6.75E-05	--
9403	637536.2	4171348.9	Worker	Scenario 2	1.28E-02	7.16E-05	--
9404	637636.2	4171348.9	Worker	Scenario 2	1.29E-02	7.33E-05	--
9405	637736.2	4171348.9	Worker	Scenario 2	1.38E-02	7.73E-05	--
9406	637836.2	4171348.9	Worker	Scenario 2	1.40E-02	7.95E-05	--
9407	638136.2	4171348.9	Worker	Scenario 2	1.51E-02	8.68E-05	--
9408	638236.2	4171348.9	Worker	Scenario 2	1.56E-02	8.96E-05	--
9409	638336.2	4171348.9	Worker	Scenario 2	1.62E-02	9.30E-05	--
9410	638436.2	4171348.9	Worker	Scenario 2	1.68E-02	9.59E-05	--
9411	638536.2	4171348.9	Worker	Scenario 2	1.69E-02	9.78E-05	--
9412	638636.2	4171348.9	Worker	Scenario 2	1.77E-02	1.01E-04	--
9413	638736.2	4171348.9	Worker	Scenario 2	1.83E-02	1.04E-04	--
9414	638836.2	4171348.9	Worker	Scenario 2	1.89E-02	1.07E-04	--
9415	638936.2	4171348.9	Worker	Scenario 2	1.91E-02	1.08E-04	--
9416	639036.2	4171348.9	Worker	Scenario 2	1.89E-02	1.08E-04	--
9417	639136.2	4171348.9	Worker	Scenario 2	1.94E-02	1.10E-04	--
9418	639236.2	4171348.9	Worker	Scenario 2	2.00E-02	1.12E-04	--
9419	639336.2	4171348.9	Worker	Scenario 2	2.17E-02	1.19E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9420	639436.2	4171348.9	Worker	Scenario 2	2.15E-02	1.18E-04	--
9421	639536.2	4171348.9	Worker	Scenario 2	2.21E-02	1.20E-04	--
9422	639636.2	4171348.9	Worker	Scenario 2	2.34E-02	1.25E-04	--
9423	639736.2	4171348.9	Worker	Scenario 2	2.41E-02	1.28E-04	--
9424	639836.2	4171348.9	Worker	Scenario 2	2.47E-02	1.30E-04	--
9425	639936.2	4171348.9	Worker	Scenario 2	2.53E-02	1.32E-04	--
9426	640036.2	4171348.9	Worker	Scenario 2	2.60E-02	1.34E-04	--
9427	640136.2	4171348.9	Worker	Scenario 2	2.66E-02	1.37E-04	--
9428	640236.2	4171348.9	Worker	Scenario 2	2.72E-02	1.39E-04	--
9429	640336.2	4171348.9	Worker	Scenario 2	2.77E-02	1.41E-04	--
9430	640436.2	4171348.9	Worker	Scenario 2	2.83E-02	1.44E-04	--
9431	640536.2	4171348.9	Worker	Scenario 2	2.88E-02	1.47E-04	--
9432	640636.2	4171348.9	Worker	Scenario 2	2.93E-02	1.50E-04	--
9433	640736.2	4171348.9	Worker	Scenario 2	2.98E-02	1.51E-04	--
9434	640836.2	4171348.9	Worker	Scenario 2	3.02E-02	1.51E-04	--
9435	640936.2	4171348.9	Worker	Scenario 2	3.06E-02	1.50E-04	--
9436	641036.2	4171348.9	Worker	Scenario 2	3.09E-02	1.50E-04	--
9437	641136.2	4171348.9	Worker	Scenario 2	3.11E-02	1.50E-04	--
9438	641236.2	4171348.9	Worker	Scenario 2	3.14E-02	1.51E-04	--
9439	641336.2	4171348.9	Worker	Scenario 2	3.16E-02	1.52E-04	--
9440	641436.2	4171348.9	Worker	Scenario 2	3.19E-02	1.53E-04	--
9441	641536.2	4171348.9	Worker	Scenario 2	3.20E-02	1.52E-04	--
9442	641636.2	4171348.9	Worker	Scenario 2	3.23E-02	1.52E-04	--
9443	641736.2	4171348.9	Worker	Scenario 2	3.26E-02	1.51E-04	--
9444	641836.2	4171348.9	Worker	Scenario 2	3.30E-02	1.51E-04	--
9445	641936.2	4171348.9	Worker	Scenario 2	3.35E-02	1.52E-04	--
9446	642036.2	4171348.9	Worker	Scenario 2	3.39E-02	1.51E-04	--
9447	642136.2	4171348.9	Worker	Scenario 2	3.40E-02	1.50E-04	--
9448	642236.2	4171348.9	Worker	Scenario 2	3.42E-02	1.49E-04	--
9449	642336.2	4171348.9	Worker	Scenario 2	3.41E-02	1.47E-04	--
9450	642436.2	4171348.9	Worker	Scenario 2	3.39E-02	1.45E-04	--
9451	642536.2	4171348.9	Worker	Scenario 2	3.35E-02	1.44E-04	--
9452	642636.2	4171348.9	Worker	Scenario 2	3.31E-02	1.42E-04	--
9453	642736.2	4171348.9	Worker	Scenario 2	3.28E-02	1.40E-04	--
9454	642836.2	4171348.9	Worker	Scenario 2	3.25E-02	1.38E-04	--
9455	636236.2	4171448.9	Worker	Scenario 2	8.72E-03	4.78E-05	--
9456	636636.2	4171448.9	Worker	Scenario 2	1.02E-02	5.52E-05	--
9457	636736.2	4171448.9	Worker	Scenario 2	1.08E-02	5.78E-05	--
9458	636836.2	4171448.9	Worker	Scenario 2	1.07E-02	5.84E-05	--
9459	636936.2	4171448.9	Worker	Scenario 2	1.10E-02	6.00E-05	--
9460	637036.2	4171448.9	Worker	Scenario 2	1.11E-02	6.10E-05	--
9461	637136.2	4171448.9	Worker	Scenario 2	1.15E-02	6.33E-05	--
9462	637236.2	4171448.9	Worker	Scenario 2	1.19E-02	6.58E-05	--
9463	637336.2	4171448.9	Worker	Scenario 2	1.19E-02	6.67E-05	--
9464	638036.2	4171448.9	Worker	Scenario 2	1.46E-02	8.36E-05	--
9465	638136.2	4171448.9	Worker	Scenario 2	1.49E-02	8.60E-05	--
9466	638236.2	4171448.9	Worker	Scenario 2	1.57E-02	8.95E-05	--
9467	638336.2	4171448.9	Worker	Scenario 2	1.62E-02	9.21E-05	--
9468	638436.2	4171448.9	Worker	Scenario 2	1.67E-02	9.49E-05	--
9469	638536.2	4171448.9	Worker	Scenario 2	1.72E-02	9.75E-05	--
9470	638636.2	4171448.9	Worker	Scenario 2	1.78E-02	1.00E-04	--
9471	638736.2	4171448.9	Worker	Scenario 2	1.82E-02	1.02E-04	--
9472	638836.2	4171448.9	Worker	Scenario 2	1.88E-02	1.05E-04	--
9473	638936.2	4171448.9	Worker	Scenario 2	1.93E-02	1.07E-04	--
9474	639036.2	4171448.9	Worker	Scenario 2	1.97E-02	1.09E-04	--
9475	639136.2	4171448.9	Worker	Scenario 2	2.02E-02	1.11E-04	--
9476	639236.2	4171448.9	Worker	Scenario 2	2.08E-02	1.13E-04	--
9477	639336.2	4171448.9	Worker	Scenario 2	2.14E-02	1.15E-04	--
9478	639436.2	4171448.9	Worker	Scenario 2	2.19E-02	1.17E-04	--
9479	639536.2	4171448.9	Worker	Scenario 2	2.24E-02	1.19E-04	--
9480	639636.2	4171448.9	Worker	Scenario 2	2.31E-02	1.22E-04	--
9481	639736.2	4171448.9	Worker	Scenario 2	2.36E-02	1.24E-04	--
9482	639836.2	4171448.9	Worker	Scenario 2	2.42E-02	1.26E-04	--
9483	639936.2	4171448.9	Worker	Scenario 2	2.48E-02	1.28E-04	--
9484	640036.2	4171448.9	Worker	Scenario 2	2.53E-02	1.30E-04	--
9485	640136.2	4171448.9	Worker	Scenario 2	2.59E-02	1.32E-04	--
9486	640236.2	4171448.9	Worker	Scenario 2	2.64E-02	1.34E-04	--
9487	640336.2	4171448.9	Worker	Scenario 2	2.69E-02	1.36E-04	--
9488	640436.2	4171448.9	Worker	Scenario 2	2.74E-02	1.39E-04	--
9489	640536.2	4171448.9	Worker	Scenario 2	2.79E-02	1.42E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9490	640636.2	4171448.9	Worker	Scenario 2	2.83E-02	1.44E-04	--
9491	640736.2	4171448.9	Worker	Scenario 2	2.88E-02	1.45E-04	--
9492	640836.2	4171448.9	Worker	Scenario 2	2.92E-02	1.44E-04	--
9493	640936.2	4171448.9	Worker	Scenario 2	2.95E-02	1.44E-04	--
9494	641036.2	4171448.9	Worker	Scenario 2	2.98E-02	1.43E-04	--
9495	641136.2	4171448.9	Worker	Scenario 2	2.99E-02	1.44E-04	--
9496	641236.2	4171448.9	Worker	Scenario 2	3.02E-02	1.45E-04	--
9497	641336.2	4171448.9	Worker	Scenario 2	3.04E-02	1.46E-04	--
9498	641436.2	4171448.9	Worker	Scenario 2	3.06E-02	1.46E-04	--
9499	641536.2	4171448.9	Worker	Scenario 2	3.08E-02	1.46E-04	--
9500	641636.2	4171448.9	Worker	Scenario 2	3.11E-02	1.45E-04	--
9501	641736.2	4171448.9	Worker	Scenario 2	3.15E-02	1.45E-04	--
9502	641836.2	4171448.9	Worker	Scenario 2	3.19E-02	1.45E-04	--
9503	641936.2	4171448.9	Worker	Scenario 2	3.23E-02	1.46E-04	--
9504	642036.2	4171448.9	Worker	Scenario 2	3.27E-02	1.46E-04	--
9505	642136.2	4171448.9	Worker	Scenario 2	3.30E-02	1.45E-04	--
9506	642236.2	4171448.9	Worker	Scenario 2	3.30E-02	1.44E-04	--
9507	642336.2	4171448.9	Worker	Scenario 2	3.29E-02	1.42E-04	--
9508	642436.2	4171448.9	Worker	Scenario 2	3.26E-02	1.40E-04	--
9509	642536.2	4171448.9	Worker	Scenario 2	3.22E-02	1.38E-04	--
9510	642636.2	4171448.9	Worker	Scenario 2	3.19E-02	1.36E-04	--
9511	636536.2	4171548.9	Worker	Scenario 2	1.03E-02	5.49E-05	--
9512	636636.2	4171548.9	Worker	Scenario 2	1.05E-02	5.64E-05	--
9513	636736.2	4171548.9	Worker	Scenario 2	1.07E-02	5.78E-05	--
9514	636836.2	4171548.9	Worker	Scenario 2	1.10E-02	5.93E-05	--
9515	636936.2	4171548.9	Worker	Scenario 2	1.10E-02	6.03E-05	--
9516	637036.2	4171548.9	Worker	Scenario 2	1.14E-02	6.25E-05	--
9517	637136.2	4171548.9	Worker	Scenario 2	1.14E-02	6.33E-05	--
9518	637236.2	4171548.9	Worker	Scenario 2	1.16E-02	6.48E-05	--
9519	637936.2	4171548.9	Worker	Scenario 2	1.41E-02	8.08E-05	--
9520	638036.2	4171548.9	Worker	Scenario 2	1.46E-02	8.33E-05	--
9521	638136.2	4171548.9	Worker	Scenario 2	1.46E-02	8.42E-05	--
9522	638236.2	4171548.9	Worker	Scenario 2	1.57E-02	8.87E-05	--
9523	638336.2	4171548.9	Worker	Scenario 2	1.62E-02	9.13E-05	--
9524	638436.2	4171548.9	Worker	Scenario 2	1.66E-02	9.37E-05	--
9525	638536.2	4171548.9	Worker	Scenario 2	1.60E-02	9.20E-05	--
9526	638636.2	4171548.9	Worker	Scenario 2	1.74E-02	9.78E-05	--
9527	638736.2	4171548.9	Worker	Scenario 2	1.81E-02	1.01E-04	--
9528	638836.2	4171548.9	Worker	Scenario 2	1.85E-02	1.02E-04	--
9529	638936.2	4171548.9	Worker	Scenario 2	1.90E-02	1.04E-04	--
9530	639036.2	4171548.9	Worker	Scenario 2	1.94E-02	1.06E-04	--
9531	639136.2	4171548.9	Worker	Scenario 2	1.99E-02	1.08E-04	--
9532	639236.2	4171548.9	Worker	Scenario 2	2.03E-02	1.09E-04	--
9533	639336.2	4171548.9	Worker	Scenario 2	2.11E-02	1.12E-04	--
9534	639436.2	4171548.9	Worker	Scenario 2	2.16E-02	1.14E-04	--
9535	639536.2	4171548.9	Worker	Scenario 2	2.21E-02	1.16E-04	--
9536	639636.2	4171548.9	Worker	Scenario 2	2.26E-02	1.18E-04	--
9537	639736.2	4171548.9	Worker	Scenario 2	2.32E-02	1.20E-04	--
9538	639836.2	4171548.9	Worker	Scenario 2	2.37E-02	1.22E-04	--
9539	639936.2	4171548.9	Worker	Scenario 2	2.42E-02	1.24E-04	--
9540	640036.2	4171548.9	Worker	Scenario 2	2.47E-02	1.25E-04	--
9541	640136.2	4171548.9	Worker	Scenario 2	2.52E-02	1.27E-04	--
9542	640236.2	4171548.9	Worker	Scenario 2	2.57E-02	1.29E-04	--
9543	640336.2	4171548.9	Worker	Scenario 2	2.61E-02	1.32E-04	--
9544	640436.2	4171548.9	Worker	Scenario 2	2.66E-02	1.34E-04	--
9545	640536.2	4171548.9	Worker	Scenario 2	2.70E-02	1.37E-04	--
9546	640636.2	4171548.9	Worker	Scenario 2	2.74E-02	1.38E-04	--
9547	640736.2	4171548.9	Worker	Scenario 2	2.78E-02	1.39E-04	--
9548	640836.2	4171548.9	Worker	Scenario 2	2.82E-02	1.38E-04	--
9549	640936.2	4171548.9	Worker	Scenario 2	2.85E-02	1.38E-04	--
9550	641036.2	4171548.9	Worker	Scenario 2	2.87E-02	1.38E-04	--
9551	641136.2	4171548.9	Worker	Scenario 2	2.88E-02	1.38E-04	--
9552	641236.2	4171548.9	Worker	Scenario 2	2.91E-02	1.39E-04	--
9553	641336.2	4171548.9	Worker	Scenario 2	2.92E-02	1.40E-04	--
9554	641436.2	4171548.9	Worker	Scenario 2	2.95E-02	1.40E-04	--
9555	641536.2	4171548.9	Worker	Scenario 2	2.97E-02	1.40E-04	--
9556	641636.2	4171548.9	Worker	Scenario 2	3.00E-02	1.40E-04	--
9557	641736.2	4171548.9	Worker	Scenario 2	3.04E-02	1.40E-04	--
9558	641836.2	4171548.9	Worker	Scenario 2	3.09E-02	1.40E-04	--
9559	641936.2	4171548.9	Worker	Scenario 2	3.13E-02	1.40E-04	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9560	642036.2	4171548.9	Worker	Scenario 2	3.16E-02	1.40E-04	--
9561	642136.2	4171548.9	Worker	Scenario 2	3.18E-02	1.40E-04	--
9562	642236.2	4171548.9	Worker	Scenario 2	3.18E-02	1.38E-04	--
9563	642336.2	4171548.9	Worker	Scenario 2	3.17E-02	1.37E-04	--
9564	642436.2	4171548.9	Worker	Scenario 2	3.15E-02	1.35E-04	--
9565	642536.2	4171548.9	Worker	Scenario 2	3.12E-02	1.33E-04	--
9566	636336.2	4171648.9	Worker	Scenario 2	9.11E-03	4.98E-05	--
9567	636536.2	4171648.9	Worker	Scenario 2	1.02E-02	5.48E-05	--
9568	636636.2	4171648.9	Worker	Scenario 2	1.05E-02	5.63E-05	--
9569	636736.2	4171648.9	Worker	Scenario 2	1.06E-02	5.76E-05	--
9570	636836.2	4171648.9	Worker	Scenario 2	1.09E-02	5.93E-05	--
9571	636936.2	4171648.9	Worker	Scenario 2	1.11E-02	6.08E-05	--
9572	637036.2	4171648.9	Worker	Scenario 2	1.12E-02	6.16E-05	--
9573	637136.2	4171648.9	Worker	Scenario 2	1.14E-02	6.34E-05	--
9574	637236.2	4171648.9	Worker	Scenario 2	1.15E-02	6.48E-05	--
9575	637536.2	4171648.9	Worker	Scenario 2	1.24E-02	7.08E-05	--
9576	637636.2	4171648.9	Worker	Scenario 2	1.29E-02	7.33E-05	--
9577	637736.2	4171648.9	Worker	Scenario 2	1.33E-02	7.56E-05	--
9578	637836.2	4171648.9	Worker	Scenario 2	1.37E-02	7.81E-05	--
9579	637936.2	4171648.9	Worker	Scenario 2	1.42E-02	8.05E-05	--
9580	638036.2	4171648.9	Worker	Scenario 2	1.46E-02	8.29E-05	--
9581	638136.2	4171648.9	Worker	Scenario 2	1.44E-02	8.27E-05	--
9582	638236.2	4171648.9	Worker	Scenario 2	1.48E-02	8.50E-05	--
9583	638336.2	4171648.9	Worker	Scenario 2	1.60E-02	8.98E-05	--
9584	638436.2	4171648.9	Worker	Scenario 2	1.64E-02	9.19E-05	--
9585	638536.2	4171648.9	Worker	Scenario 2	1.59E-02	9.05E-05	--
9586	638636.2	4171648.9	Worker	Scenario 2	1.66E-02	9.33E-05	--
9587	638736.2	4171648.9	Worker	Scenario 2	1.69E-02	9.47E-05	--
9588	638836.2	4171648.9	Worker	Scenario 2	1.83E-02	9.98E-05	--
9589	638936.2	4171648.9	Worker	Scenario 2	1.87E-02	1.01E-04	--
9590	639036.2	4171648.9	Worker	Scenario 2	1.92E-02	1.03E-04	--
9591	639136.2	4171648.9	Worker	Scenario 2	1.98E-02	1.05E-04	--
9592	639236.2	4171648.9	Worker	Scenario 2	2.03E-02	1.07E-04	--
9593	639336.2	4171648.9	Worker	Scenario 2	2.07E-02	1.09E-04	--
9594	639436.2	4171648.9	Worker	Scenario 2	2.12E-02	1.11E-04	--
9595	639536.2	4171648.9	Worker	Scenario 2	2.17E-02	1.13E-04	--
9596	639636.2	4171648.9	Worker	Scenario 2	2.22E-02	1.14E-04	--
9597	639736.2	4171648.9	Worker	Scenario 2	2.27E-02	1.16E-04	--
9598	639836.2	4171648.9	Worker	Scenario 2	2.31E-02	1.18E-04	--
9599	639936.2	4171648.9	Worker	Scenario 2	2.36E-02	1.20E-04	--
9600	640036.2	4171648.9	Worker	Scenario 2	2.41E-02	1.21E-04	--
9601	640136.2	4171648.9	Worker	Scenario 2	2.45E-02	1.23E-04	--
9602	640236.2	4171648.9	Worker	Scenario 2	2.50E-02	1.25E-04	--
9603	640336.2	4171648.9	Worker	Scenario 2	2.54E-02	1.27E-04	--
9604	640436.2	4171648.9	Worker	Scenario 2	2.58E-02	1.30E-04	--
9605	640536.2	4171648.9	Worker	Scenario 2	2.62E-02	1.32E-04	--
9606	640636.2	4171648.9	Worker	Scenario 2	2.66E-02	1.33E-04	--
9607	640736.2	4171648.9	Worker	Scenario 2	2.69E-02	1.33E-04	--
9608	640836.2	4171648.9	Worker	Scenario 2	2.72E-02	1.33E-04	--
9609	640936.2	4171648.9	Worker	Scenario 2	2.75E-02	1.32E-04	--
9610	641036.2	4171648.9	Worker	Scenario 2	2.76E-02	1.32E-04	--
9611	641136.2	4171648.9	Worker	Scenario 2	2.78E-02	1.33E-04	--
9612	641236.2	4171648.9	Worker	Scenario 2	2.80E-02	1.34E-04	--
9613	641336.2	4171648.9	Worker	Scenario 2	2.82E-02	1.34E-04	--
9614	641436.2	4171648.9	Worker	Scenario 2	2.85E-02	1.35E-04	--
9615	641536.2	4171648.9	Worker	Scenario 2	2.87E-02	1.34E-04	--
9616	641636.2	4171648.9	Worker	Scenario 2	2.90E-02	1.34E-04	--
9617	641736.2	4171648.9	Worker	Scenario 2	2.94E-02	1.34E-04	--
9618	641836.2	4171648.9	Worker	Scenario 2	2.99E-02	1.35E-04	--
9619	641936.2	4171648.9	Worker	Scenario 2	3.03E-02	1.35E-04	--
9620	642036.2	4171648.9	Worker	Scenario 2	3.05E-02	1.35E-04	--
9621	642136.2	4171648.9	Worker	Scenario 2	3.07E-02	1.35E-04	--
9622	642236.2	4171648.9	Worker	Scenario 2	3.07E-02	1.34E-04	--
9623	642336.2	4171648.9	Worker	Scenario 2	3.06E-02	1.32E-04	--
9624	636336.2	4171748.9	Worker	Scenario 2	9.17E-03	5.01E-05	--
9625	636536.2	4171748.9	Worker	Scenario 2	1.02E-02	5.47E-05	--
9626	636636.2	4171748.9	Worker	Scenario 2	1.04E-02	5.61E-05	--
9627	636736.2	4171748.9	Worker	Scenario 2	1.06E-02	5.75E-05	--
9628	636836.2	4171748.9	Worker	Scenario 2	1.09E-02	5.92E-05	--
9629	636936.2	4171748.9	Worker	Scenario 2	1.11E-02	6.06E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9630	637036.2	4171748.9	Worker	Scenario 2	1.13E-02	6.21E-05	--
9631	637136.2	4171748.9	Worker	Scenario 2	1.14E-02	6.34E-05	--
9632	637336.2	4171748.9	Worker	Scenario 2	1.19E-02	6.69E-05	--
9633	637436.2	4171748.9	Worker	Scenario 2	1.21E-02	6.86E-05	--
9634	637536.2	4171748.9	Worker	Scenario 2	1.25E-02	7.10E-05	--
9635	637636.2	4171748.9	Worker	Scenario 2	1.29E-02	7.31E-05	--
9636	637736.2	4171748.9	Worker	Scenario 2	1.32E-02	7.53E-05	--
9637	637836.2	4171748.9	Worker	Scenario 2	1.37E-02	7.77E-05	--
9638	637936.2	4171748.9	Worker	Scenario 2	1.42E-02	8.02E-05	--
9639	638036.2	4171748.9	Worker	Scenario 2	1.47E-02	8.25E-05	--
9640	638136.2	4171748.9	Worker	Scenario 2	1.43E-02	8.17E-05	--
9641	638236.2	4171748.9	Worker	Scenario 2	1.47E-02	8.39E-05	--
9642	638336.2	4171748.9	Worker	Scenario 2	1.51E-02	8.59E-05	--
9643	638436.2	4171748.9	Worker	Scenario 2	1.63E-02	9.03E-05	--
9644	638536.2	4171748.9	Worker	Scenario 2	1.63E-02	9.07E-05	--
9645	638636.2	4171748.9	Worker	Scenario 2	1.64E-02	9.14E-05	--
9646	638736.2	4171748.9	Worker	Scenario 2	1.68E-02	9.28E-05	--
9647	638836.2	4171748.9	Worker	Scenario 2	1.81E-02	9.76E-05	--
9648	638936.2	4171748.9	Worker	Scenario 2	1.81E-02	9.78E-05	--
9649	639036.2	4171748.9	Worker	Scenario 2	1.83E-02	9.85E-05	--
9650	639136.2	4171748.9	Worker	Scenario 2	1.89E-02	1.01E-04	--
9651	639236.2	4171748.9	Worker	Scenario 2	1.91E-02	1.01E-04	--
9652	639336.2	4171748.9	Worker	Scenario 2	2.03E-02	1.06E-04	--
9653	639436.2	4171748.9	Worker	Scenario 2	2.07E-02	1.07E-04	--
9654	639536.2	4171748.9	Worker	Scenario 2	2.11E-02	1.09E-04	--
9655	639636.2	4171748.9	Worker	Scenario 2	2.17E-02	1.11E-04	--
9656	639736.2	4171748.9	Worker	Scenario 2	2.22E-02	1.13E-04	--
9657	639836.2	4171748.9	Worker	Scenario 2	2.25E-02	1.14E-04	--
9658	639936.2	4171748.9	Worker	Scenario 2	2.29E-02	1.15E-04	--
9659	640036.2	4171748.9	Worker	Scenario 2	2.33E-02	1.17E-04	--
9660	640136.2	4171748.9	Worker	Scenario 2	2.36E-02	1.18E-04	--
9661	640236.2	4171748.9	Worker	Scenario 2	2.39E-02	1.19E-04	--
9662	640336.2	4171748.9	Worker	Scenario 2	2.42E-02	1.22E-04	--
9663	640436.2	4171748.9	Worker	Scenario 2	2.51E-02	1.26E-04	--
9664	640536.2	4171748.9	Worker	Scenario 2	2.54E-02	1.27E-04	--
9665	640636.2	4171748.9	Worker	Scenario 2	2.57E-02	1.28E-04	--
9666	640736.2	4171748.9	Worker	Scenario 2	2.61E-02	1.28E-04	--
9667	640836.2	4171748.9	Worker	Scenario 2	2.63E-02	1.28E-04	--
9668	640936.2	4171748.9	Worker	Scenario 2	2.65E-02	1.27E-04	--
9669	641036.2	4171748.9	Worker	Scenario 2	2.67E-02	1.27E-04	--
9670	641136.2	4171748.9	Worker	Scenario 2	2.68E-02	1.27E-04	--
9671	641236.2	4171748.9	Worker	Scenario 2	2.70E-02	1.28E-04	--
9672	641336.2	4171748.9	Worker	Scenario 2	2.72E-02	1.29E-04	--
9673	641436.2	4171748.9	Worker	Scenario 2	2.75E-02	1.29E-04	--
9674	641536.2	4171748.9	Worker	Scenario 2	2.78E-02	1.29E-04	--
9675	641636.2	4171748.9	Worker	Scenario 2	2.81E-02	1.29E-04	--
9676	641736.2	4171748.9	Worker	Scenario 2	2.85E-02	1.30E-04	--
9677	641836.2	4171748.9	Worker	Scenario 2	2.90E-02	1.30E-04	--
9678	641936.2	4171748.9	Worker	Scenario 2	2.93E-02	1.30E-04	--
9679	642036.2	4171748.9	Worker	Scenario 2	2.96E-02	1.30E-04	--
9680	636536.2	4171848.9	Worker	Scenario 2	1.02E-02	5.47E-05	--
9681	636636.2	4171848.9	Worker	Scenario 2	1.04E-02	5.61E-05	--
9682	636736.2	4171848.9	Worker	Scenario 2	1.05E-02	5.72E-05	--
9683	636836.2	4171848.9	Worker	Scenario 2	1.07E-02	5.88E-05	--
9684	636936.2	4171848.9	Worker	Scenario 2	1.11E-02	6.08E-05	--
9685	637036.2	4171848.9	Worker	Scenario 2	1.09E-02	6.12E-05	--
9686	637236.2	4171848.9	Worker	Scenario 2	1.15E-02	6.50E-05	--
9687	637336.2	4171848.9	Worker	Scenario 2	1.19E-02	6.70E-05	--
9688	637436.2	4171848.9	Worker	Scenario 2	1.22E-02	6.90E-05	--
9689	637536.2	4171848.9	Worker	Scenario 2	1.25E-02	7.10E-05	--
9690	637636.2	4171848.9	Worker	Scenario 2	1.29E-02	7.30E-05	--
9691	637736.2	4171848.9	Worker	Scenario 2	1.33E-02	7.52E-05	--
9692	637836.2	4171848.9	Worker	Scenario 2	1.39E-02	7.77E-05	--
9693	637936.2	4171848.9	Worker	Scenario 2	1.43E-02	7.98E-05	--
9694	638036.2	4171848.9	Worker	Scenario 2	1.46E-02	8.17E-05	--
9695	638136.2	4171848.9	Worker	Scenario 2	1.42E-02	8.07E-05	--
9696	638236.2	4171848.9	Worker	Scenario 2	1.47E-02	8.29E-05	--
9697	638336.2	4171848.9	Worker	Scenario 2	1.52E-02	8.50E-05	--
9698	638436.2	4171848.9	Worker	Scenario 2	1.55E-02	8.65E-05	--
9699	638536.2	4171848.9	Worker	Scenario 2	1.65E-02	9.01E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9700	638636.2	4171848.9	Worker	Scenario 2	1.65E-02	9.04E-05	--
9701	638736.2	4171848.9	Worker	Scenario 2	1.68E-02	9.12E-05	--
9702	638836.2	4171848.9	Worker	Scenario 2	1.79E-02	9.53E-05	--
9703	638936.2	4171848.9	Worker	Scenario 2	1.81E-02	9.60E-05	--
9704	639036.2	4171848.9	Worker	Scenario 2	1.83E-02	9.68E-05	--
9705	639136.2	4171848.9	Worker	Scenario 2	1.86E-02	9.79E-05	--
9706	639236.2	4171848.9	Worker	Scenario 2	1.89E-02	9.89E-05	--
9707	639336.2	4171848.9	Worker	Scenario 2	1.97E-02	1.02E-04	--
9708	639436.2	4171848.9	Worker	Scenario 2	2.02E-02	1.04E-04	--
9709	639536.2	4171848.9	Worker	Scenario 2	2.07E-02	1.06E-04	--
9710	639636.2	4171848.9	Worker	Scenario 2	2.13E-02	1.08E-04	--
9711	639736.2	4171848.9	Worker	Scenario 2	2.17E-02	1.09E-04	--
9712	639836.2	4171848.9	Worker	Scenario 2	2.13E-02	1.08E-04	--
9713	639936.2	4171848.9	Worker	Scenario 2	2.17E-02	1.09E-04	--
9714	640036.2	4171848.9	Worker	Scenario 2	2.21E-02	1.11E-04	--
9715	640136.2	4171848.9	Worker	Scenario 2	2.25E-02	1.12E-04	--
9716	640236.2	4171848.9	Worker	Scenario 2	2.29E-02	1.14E-04	--
9717	640336.2	4171848.9	Worker	Scenario 2	2.32E-02	1.17E-04	--
9718	640436.2	4171848.9	Worker	Scenario 2	2.43E-02	1.22E-04	--
9719	640536.2	4171848.9	Worker	Scenario 2	2.46E-02	1.23E-04	--
9720	640636.2	4171848.9	Worker	Scenario 2	2.50E-02	1.24E-04	--
9721	640736.2	4171848.9	Worker	Scenario 2	2.53E-02	1.23E-04	--
9722	640836.2	4171848.9	Worker	Scenario 2	2.55E-02	1.23E-04	--
9723	640936.2	4171848.9	Worker	Scenario 2	2.56E-02	1.22E-04	--
9724	641036.2	4171848.9	Worker	Scenario 2	2.58E-02	1.22E-04	--
9725	641136.2	4171848.9	Worker	Scenario 2	2.59E-02	1.23E-04	--
9726	641236.2	4171848.9	Worker	Scenario 2	2.61E-02	1.24E-04	--
9727	641336.2	4171848.9	Worker	Scenario 2	2.63E-02	1.24E-04	--
9728	641436.2	4171848.9	Worker	Scenario 2	2.65E-02	1.25E-04	--
9729	641536.2	4171848.9	Worker	Scenario 2	2.69E-02	1.25E-04	--
9730	641636.2	4171848.9	Worker	Scenario 2	2.72E-02	1.25E-04	--
9731	636536.2	4171948.9	Worker	Scenario 2	1.01E-02	5.46E-05	--
9732	636636.2	4171948.9	Worker	Scenario 2	1.02E-02	5.57E-05	--
9733	636736.2	4171948.9	Worker	Scenario 2	1.04E-02	5.70E-05	--
9734	636836.2	4171948.9	Worker	Scenario 2	1.07E-02	5.88E-05	--
9735	636936.2	4171948.9	Worker	Scenario 2	1.07E-02	5.96E-05	--
9736	637236.2	4171948.9	Worker	Scenario 2	1.16E-02	6.52E-05	--
9737	637336.2	4171948.9	Worker	Scenario 2	1.19E-02	6.70E-05	--
9738	637436.2	4171948.9	Worker	Scenario 2	1.22E-02	6.89E-05	--
9739	637536.2	4171948.9	Worker	Scenario 2	1.26E-02	7.09E-05	--
9740	637636.2	4171948.9	Worker	Scenario 2	1.30E-02	7.29E-05	--
9741	637736.2	4171948.9	Worker	Scenario 2	1.34E-02	7.51E-05	--
9742	637836.2	4171948.9	Worker	Scenario 2	1.38E-02	7.70E-05	--
9743	637936.2	4171948.9	Worker	Scenario 2	1.42E-02	7.90E-05	--
9744	638136.2	4171948.9	Worker	Scenario 2	1.41E-02	7.96E-05	--
9745	638236.2	4171948.9	Worker	Scenario 2	1.46E-02	8.15E-05	--
9746	638336.2	4171948.9	Worker	Scenario 2	1.51E-02	8.35E-05	--
9747	638436.2	4171948.9	Worker	Scenario 2	1.55E-02	8.53E-05	--
9748	638536.2	4171948.9	Worker	Scenario 2	1.58E-02	8.63E-05	--
9749	638636.2	4171948.9	Worker	Scenario 2	1.64E-02	8.87E-05	--
9750	638736.2	4171948.9	Worker	Scenario 2	1.69E-02	9.03E-05	--
9751	638836.2	4171948.9	Worker	Scenario 2	1.76E-02	9.29E-05	--
9752	638936.2	4171948.9	Worker	Scenario 2	1.75E-02	9.24E-05	--
9753	639036.2	4171948.9	Worker	Scenario 2	1.75E-02	9.24E-05	--
9754	639136.2	4171948.9	Worker	Scenario 2	1.79E-02	9.38E-05	--
9755	639236.2	4171948.9	Worker	Scenario 2	1.86E-02	9.65E-05	--
9756	639336.2	4171948.9	Worker	Scenario 2	1.94E-02	9.93E-05	--
9757	639436.2	4171948.9	Worker	Scenario 2	1.98E-02	1.01E-04	--
9758	639536.2	4171948.9	Worker	Scenario 2	2.02E-02	1.02E-04	--
9759	639636.2	4171948.9	Worker	Scenario 2	2.09E-02	1.05E-04	--
9760	639736.2	4171948.9	Worker	Scenario 2	2.12E-02	1.06E-04	--
9761	639836.2	4171948.9	Worker	Scenario 2	2.08E-02	1.05E-04	--
9762	639936.2	4171948.9	Worker	Scenario 2	2.12E-02	1.06E-04	--
9763	640036.2	4171948.9	Worker	Scenario 2	2.16E-02	1.07E-04	--
9764	640136.2	4171948.9	Worker	Scenario 2	2.19E-02	1.09E-04	--
9765	640236.2	4171948.9	Worker	Scenario 2	2.23E-02	1.11E-04	--
9766	640336.2	4171948.9	Worker	Scenario 2	2.26E-02	1.13E-04	--
9767	636736.2	4172048.9	Worker	Scenario 2	1.03E-02	5.68E-05	--
9768	636836.2	4172048.9	Worker	Scenario 2	1.08E-02	5.93E-05	--
9769	637236.2	4172048.9	Worker	Scenario 2	1.17E-02	6.53E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9770	637336.2	4172048.9	Worker	Scenario 2	1.20E-02	6.71E-05	--
9771	637436.2	4172048.9	Worker	Scenario 2	1.23E-02	6.89E-05	--
9772	637536.2	4172048.9	Worker	Scenario 2	1.26E-02	7.07E-05	--
9773	637636.2	4172048.9	Worker	Scenario 2	1.30E-02	7.27E-05	--
9774	637736.2	4172048.9	Worker	Scenario 2	1.34E-02	7.45E-05	--
9775	637836.2	4172048.9	Worker	Scenario 2	1.38E-02	7.63E-05	--
9776	637936.2	4172048.9	Worker	Scenario 2	1.41E-02	7.80E-05	--
9777	638136.2	4172048.9	Worker	Scenario 2	1.40E-02	7.84E-05	--
9778	638236.2	4172048.9	Worker	Scenario 2	1.45E-02	8.01E-05	--
9779	638336.2	4172048.9	Worker	Scenario 2	1.49E-02	8.19E-05	--
9780	638436.2	4172048.9	Worker	Scenario 2	1.53E-02	8.35E-05	--
9781	638536.2	4172048.9	Worker	Scenario 2	1.57E-02	8.47E-05	--
9782	638636.2	4172048.9	Worker	Scenario 2	1.61E-02	8.60E-05	--
9783	638736.2	4172048.9	Worker	Scenario 2	1.65E-02	8.74E-05	--
9784	638836.2	4172048.9	Worker	Scenario 2	1.73E-02	9.05E-05	--
9785	638936.2	4172048.9	Worker	Scenario 2	1.67E-02	8.82E-05	--
9786	639036.2	4172048.9	Worker	Scenario 2	1.77E-02	9.17E-05	--
9787	639136.2	4172048.9	Worker	Scenario 2	1.76E-02	9.15E-05	--
9788	639236.2	4172048.9	Worker	Scenario 2	1.89E-02	9.63E-05	--
9789	639336.2	4172048.9	Worker	Scenario 2	1.90E-02	9.66E-05	--
9790	639436.2	4172048.9	Worker	Scenario 2	1.94E-02	9.80E-05	--
9791	639536.2	4172048.9	Worker	Scenario 2	1.98E-02	9.95E-05	--
9792	639636.2	4172048.9	Worker	Scenario 2	2.04E-02	1.02E-04	--
9793	639736.2	4172048.9	Worker	Scenario 2	2.08E-02	1.03E-04	--
9794	639836.2	4172048.9	Worker	Scenario 2	2.04E-02	1.01E-04	--
9795	639936.2	4172048.9	Worker	Scenario 2	2.07E-02	1.03E-04	--
9796	640036.2	4172048.9	Worker	Scenario 2	2.10E-02	1.04E-04	--
9797	640136.2	4172048.9	Worker	Scenario 2	2.14E-02	1.06E-04	--
9798	637136.2	4172148.9	Worker	Scenario 2	1.15E-02	6.38E-05	--
9799	637236.2	4172148.9	Worker	Scenario 2	1.18E-02	6.56E-05	--
9800	637336.2	4172148.9	Worker	Scenario 2	1.19E-02	6.68E-05	--
9801	637436.2	4172148.9	Worker	Scenario 2	1.24E-02	6.89E-05	--
9802	637536.2	4172148.9	Worker	Scenario 2	1.27E-02	7.05E-05	--
9803	637636.2	4172148.9	Worker	Scenario 2	1.30E-02	7.22E-05	--
9804	637736.2	4172148.9	Worker	Scenario 2	1.33E-02	7.39E-05	--
9805	637836.2	4172148.9	Worker	Scenario 2	1.36E-02	7.54E-05	--
9806	637936.2	4172148.9	Worker	Scenario 2	1.40E-02	7.69E-05	--
9807	638136.2	4172148.9	Worker	Scenario 2	1.39E-02	7.69E-05	--
9808	638236.2	4172148.9	Worker	Scenario 2	1.43E-02	7.85E-05	--
9809	638336.2	4172148.9	Worker	Scenario 2	1.48E-02	8.01E-05	--
9810	638436.2	4172148.9	Worker	Scenario 2	1.52E-02	8.17E-05	--
9811	638536.2	4172148.9	Worker	Scenario 2	1.56E-02	8.31E-05	--
9812	638636.2	4172148.9	Worker	Scenario 2	1.60E-02	8.44E-05	--
9813	638736.2	4172148.9	Worker	Scenario 2	1.64E-02	8.59E-05	--
9814	638836.2	4172148.9	Worker	Scenario 2	1.70E-02	8.79E-05	--
9815	638936.2	4172148.9	Worker	Scenario 2	1.74E-02	8.96E-05	--
9816	639036.2	4172148.9	Worker	Scenario 2	1.70E-02	8.80E-05	--
9817	639136.2	4172148.9	Worker	Scenario 2	1.80E-02	9.16E-05	--
9818	639236.2	4172148.9	Worker	Scenario 2	1.83E-02	9.27E-05	--
9819	639336.2	4172148.9	Worker	Scenario 2	1.86E-02	9.41E-05	--
9820	639436.2	4172148.9	Worker	Scenario 2	1.90E-02	9.53E-05	--
9821	639536.2	4172148.9	Worker	Scenario 2	1.93E-02	9.66E-05	--
9822	639636.2	4172148.9	Worker	Scenario 2	2.00E-02	9.89E-05	--
9823	639736.2	4172148.9	Worker	Scenario 2	2.03E-02	9.99E-05	--
9824	639836.2	4172148.9	Worker	Scenario 2	1.99E-02	9.84E-05	--
9825	639936.2	4172148.9	Worker	Scenario 2	2.02E-02	9.96E-05	--
9826	640036.2	4172148.9	Worker	Scenario 2	2.05E-02	1.01E-04	--
9827	637036.2	4172248.9	Worker	Scenario 2	1.11E-02	6.18E-05	--
9828	637136.2	4172248.9	Worker	Scenario 2	1.15E-02	6.37E-05	--
9829	637236.2	4172248.9	Worker	Scenario 2	1.18E-02	6.52E-05	--
9830	637336.2	4172248.9	Worker	Scenario 2	1.20E-02	6.68E-05	--
9831	637436.2	4172248.9	Worker	Scenario 2	1.23E-02	6.84E-05	--
9832	637536.2	4172248.9	Worker	Scenario 2	1.27E-02	7.00E-05	--
9833	637636.2	4172248.9	Worker	Scenario 2	1.30E-02	7.15E-05	--
9834	637736.2	4172248.9	Worker	Scenario 2	1.33E-02	7.30E-05	--
9835	637836.2	4172248.9	Worker	Scenario 2	1.36E-02	7.44E-05	--
9836	637936.2	4172248.9	Worker	Scenario 2	1.39E-02	7.57E-05	--
9837	638136.2	4172248.9	Worker	Scenario 2	1.38E-02	7.55E-05	--
9838	638236.2	4172248.9	Worker	Scenario 2	1.42E-02	7.71E-05	--
9839	638336.2	4172248.9	Worker	Scenario 2	1.46E-02	7.85E-05	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9840	638436.2	4172248.9	Worker	Scenario 2	1.50E-02	8.00E-05	--
9841	638536.2	4172248.9	Worker	Scenario 2	1.54E-02	8.14E-05	--
9842	638636.2	4172248.9	Worker	Scenario 2	1.61E-02	8.37E-05	--
9843	638736.2	4172248.9	Worker	Scenario 2	1.61E-02	8.35E-05	--
9844	638836.2	4172248.9	Worker	Scenario 2	1.64E-02	8.49E-05	--
9845	638936.2	4172248.9	Worker	Scenario 2	1.69E-02	8.67E-05	--
9846	639036.2	4172248.9	Worker	Scenario 2	1.76E-02	8.89E-05	--
9847	639136.2	4172248.9	Worker	Scenario 2	1.79E-02	9.01E-05	--
9848	639236.2	4172248.9	Worker	Scenario 2	1.82E-02	9.14E-05	--
9849	639336.2	4172248.9	Worker	Scenario 2	1.85E-02	9.25E-05	--
9850	639436.2	4172248.9	Worker	Scenario 2	1.88E-02	9.36E-05	--
9851	639536.2	4172248.9	Worker	Scenario 2	1.91E-02	9.46E-05	--
9852	639736.2	4172248.9	Worker	Scenario 2	1.97E-02	9.67E-05	--
9853	639836.2	4172248.9	Worker	Scenario 2	1.95E-02	9.56E-05	--
9854	637236.2	4172348.9	Worker	Scenario 2	1.17E-02	6.48E-05	--
9855	637336.2	4172348.9	Worker	Scenario 2	1.20E-02	6.63E-05	--
9856	637436.2	4172348.9	Worker	Scenario 2	1.23E-02	6.78E-05	--
9857	637536.2	4172348.9	Worker	Scenario 2	1.26E-02	6.93E-05	--
9858	637636.2	4172348.9	Worker	Scenario 2	1.29E-02	7.07E-05	--
9859	637736.2	4172348.9	Worker	Scenario 2	1.32E-02	7.20E-05	--
9860	637836.2	4172348.9	Worker	Scenario 2	1.35E-02	7.32E-05	--
9861	637936.2	4172348.9	Worker	Scenario 2	1.37E-02	7.44E-05	--
9862	638136.2	4172348.9	Worker	Scenario 2	1.35E-02	7.34E-05	--
9863	638236.2	4172348.9	Worker	Scenario 2	1.41E-02	7.58E-05	--
9864	638336.2	4172348.9	Worker	Scenario 2	1.45E-02	7.69E-05	--
9865	638436.2	4172348.9	Worker	Scenario 2	1.47E-02	7.76E-05	--
9866	638536.2	4172348.9	Worker	Scenario 2	1.56E-02	8.07E-05	--
9867	638636.2	4172348.9	Worker	Scenario 2	1.55E-02	8.05E-05	--
9868	638736.2	4172348.9	Worker	Scenario 2	1.58E-02	8.16E-05	--
9869	638836.2	4172348.9	Worker	Scenario 2	1.62E-02	8.28E-05	--
9870	638936.2	4172348.9	Worker	Scenario 2	1.67E-02	8.47E-05	--
9871	639036.2	4172348.9	Worker	Scenario 2	1.72E-02	8.67E-05	--
9872	639136.2	4172348.9	Worker	Scenario 2	1.76E-02	8.81E-05	--
9873	639236.2	4172348.9	Worker	Scenario 2	1.80E-02	8.96E-05	--
9874	639336.2	4172348.9	Worker	Scenario 2	1.81E-02	9.00E-05	--
9875	639436.2	4172348.9	Worker	Scenario 2	1.83E-02	9.06E-05	--
9876	639536.2	4172348.9	Worker	Scenario 2	1.86E-02	9.16E-05	--
9877	637636.2	4172448.9	Worker	Scenario 2	1.28E-02	6.97E-05	--
9878	637736.2	4172448.9	Worker	Scenario 2	1.30E-02	7.09E-05	--
9879	637836.2	4172448.9	Worker	Scenario 2	1.33E-02	7.20E-05	--
9880	637936.2	4172448.9	Worker	Scenario 2	1.36E-02	7.30E-05	--
9881	638136.2	4172448.9	Worker	Scenario 2	1.32E-02	7.15E-05	--
9882	638236.2	4172448.9	Worker	Scenario 2	1.36E-02	7.27E-05	--
9883	638336.2	4172448.9	Worker	Scenario 2	1.40E-02	7.42E-05	--
9884	638436.2	4172448.9	Worker	Scenario 2	1.51E-02	7.80E-05	--
9885	638536.2	4172448.9	Worker	Scenario 2	1.50E-02	7.77E-05	--
9886	638636.2	4172448.9	Worker	Scenario 2	1.53E-02	7.88E-05	--
9887	638736.2	4172448.9	Worker	Scenario 2	1.57E-02	8.00E-05	--
9888	638836.2	4172448.9	Worker	Scenario 2	1.60E-02	8.12E-05	--
9889	638936.2	4172448.9	Worker	Scenario 2	1.64E-02	8.26E-05	--
9890	639036.2	4172448.9	Worker	Scenario 2	1.69E-02	8.44E-05	--
9891	639136.2	4172448.9	Worker	Scenario 2	1.73E-02	8.60E-05	--
9892	639236.2	4172448.9	Worker	Scenario 2	1.76E-02	8.72E-05	--
9893	639336.2	4172448.9	Worker	Scenario 2	1.79E-02	8.81E-05	--
9894	639657.4	4168449.3	Resident	Scenario 2	1.98E-01	1.66E-04	--
9895	639682.4	4168449.8	Resident	Scenario 2	2.01E-01	1.70E-04	--
9896	639707.4	4168450.2	Resident	Scenario 2	2.05E-01	1.73E-04	--
9897	639719.4	4168437.2	Resident	Scenario 2	2.06E-01	1.75E-04	--
9898	639719.8	4168412.2	Resident	Scenario 2	2.04E-01	1.74E-04	--
9899	639720.3	4168387.2	Resident	Scenario 2	2.03E-01	1.73E-04	--
9900	639720.7	4168362.2	Resident	Scenario 2	2.01E-01	1.72E-04	--
9901	639721.2	4168337.2	Resident	Scenario 2	2.00E-01	1.71E-04	--
9902	639721.6	4168312.2	Resident	Scenario 2	1.98E-01	1.71E-04	--
9903	639722.1	4168287.2	Resident	Scenario 2	1.97E-01	1.70E-04	--
9904	639722.5	4168262.2	Resident	Scenario 2	1.96E-01	1.69E-04	--
9905	641271.3	4168602.3	Resident	Scenario 2	2.81E+00	4.07E-03	--
9906	641272.0	4168577.4	Resident	Scenario 2	2.81E+00	4.04E-03	--
9907	641272.7	4168552.4	Resident	Scenario 2	2.81E+00	4.03E-03	--
9908	641273.4	4168527.4	Resident	Scenario 2	2.81E+00	4.03E-03	--
9909	641274.1	4168502.4	Resident	Scenario 2	2.81E+00	4.03E-03	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9910	641288.1	4168491.5	Resident	Scenario 2	3.28E+00	4.79E-03	--
9911	641313.1	4168492.2	Resident	Scenario 2	4.81E+00	7.38E-03	--
9912	641329.9	4168500.8	Resident	Scenario 2	7.36E+00	1.18E-02	--
9913	641329.4	4168525.7	Resident	Scenario 2	7.32E+00	1.17E-02	--
9914	641328.8	4168550.7	Resident	Scenario 2	7.25E+00	1.16E-02	--
9915	641328.3	4168575.7	Resident	Scenario 2	7.19E+00	1.15E-02	--
9916	641327.8	4168600.7	Resident	Scenario 2	7.14E+00	1.14E-02	--
9917	641327.3	4168625.7	Resident	Scenario 2	7.11E+00	1.14E-02	--
9918	644628.2	4167344.9	Resident	Scenario 2	2.89E+00	1.12E-03	--
9919	644603.2	4167344.6	Resident	Scenario 2	2.97E+00	1.14E-03	--
9920	644595.5	4167361.9	Resident	Scenario 2	2.99E+00	1.15E-03	--
9921	644608.1	4167373.7	Resident	Scenario 2	2.95E+00	1.14E-03	--
9922	644633.0	4167372.9	Resident	Scenario 2	2.88E+00	1.11E-03	--
9923	644644.0	4167386.8	Resident	Scenario 2	2.86E+00	1.10E-03	--
9924	644641.0	4167411.5	Resident	Scenario 2	2.87E+00	1.11E-03	--
9925	644572.2	4167547.1	Resident	Scenario 2	2.97E+00	1.14E-03	--
9926	644564.9	4167529.8	Resident	Scenario 2	3.02E+00	1.16E-03	--
9927	644585.7	4167544.7	Resident	Scenario 2	2.94E+00	1.13E-03	--
9928	644607.0	4167541.3	Resident	Scenario 2	2.88E+00	1.11E-03	--
9929	644631.9	4167541.8	Resident	Scenario 2	2.81E+00	1.08E-03	--
9930	644656.9	4167542.4	Resident	Scenario 2	2.75E+00	1.06E-03	--
9931	644681.9	4167543.0	Resident	Scenario 2	2.68E+00	1.04E-03	--
9932	643875.3	4167591.4	Resident	Scenario 2	6.69E+00	2.49E-03	--
9933	643900.3	4167591.5	Resident	Scenario 2	6.44E+00	2.40E-03	--
9934	643925.3	4167591.5	Resident	Scenario 2	6.20E+00	2.31E-03	--
9935	640593.1	4166856.1	Resident	Scenario 2	2.43E-01	2.32E-04	--
9936	640618.1	4166856.5	Resident	Scenario 2	2.48E-01	2.38E-04	--
9937	640643.1	4166856.9	Resident	Scenario 2	2.55E-01	2.45E-04	--
9938	640668.1	4166857.3	Resident	Scenario 2	2.62E-01	2.53E-04	--
9939	640693.1	4166857.7	Resident	Scenario 2	2.69E-01	2.61E-04	--
9940	640718.1	4166858.1	Resident	Scenario 2	2.77E-01	2.70E-04	--
9941	640743.1	4166858.4	Resident	Scenario 2	2.84E-01	2.78E-04	--
9942	640768.1	4166858.8	Resident	Scenario 2	2.90E-01	2.85E-04	--
9943	640793.1	4166859.2	Resident	Scenario 2	2.98E-01	2.94E-04	--
9944	640818.1	4166859.6	Resident	Scenario 2	3.07E-01	3.05E-04	--
9945	640843.1	4166860.0	Resident	Scenario 2	3.16E-01	3.16E-04	--
9946	640868.1	4166860.3	Resident	Scenario 2	3.27E-01	3.29E-04	--
9947	640893.1	4166860.7	Resident	Scenario 2	3.39E-01	3.42E-04	--
9948	640918.1	4166861.1	Resident	Scenario 2	3.52E-01	3.58E-04	--
9949	640943.1	4166861.5	Resident	Scenario 2	3.66E-01	3.75E-04	--
9950	640968.0	4166861.4	Resident	Scenario 2	3.82E-01	3.94E-04	--
9951	640992.8	4166858.1	Resident	Scenario 2	3.98E-01	4.13E-04	--
9952	641015.9	4166849.2	Resident	Scenario 2	4.13E-01	4.32E-04	--
9953	641038.0	4166837.5	Resident	Scenario 2	4.28E-01	4.50E-04	--
9954	641058.4	4166823.1	Resident	Scenario 2	4.42E-01	4.67E-04	--
9955	641078.8	4166808.7	Resident	Scenario 2	4.58E-01	4.87E-04	--
9956	641099.0	4166793.9	Resident	Scenario 2	4.75E-01	5.08E-04	--
9957	641117.9	4166777.7	Resident	Scenario 2	4.92E-01	5.30E-04	--
9958	641136.9	4166761.4	Resident	Scenario 2	5.12E-01	5.56E-04	--
9959	641155.9	4166745.1	Resident	Scenario 2	5.33E-01	5.84E-04	--
9960	641174.9	4166728.9	Resident	Scenario 2	5.59E-01	6.19E-04	--
9961	641193.9	4166712.6	Resident	Scenario 2	5.89E-01	6.61E-04	--
9962	641210.2	4166693.8	Resident	Scenario 2	6.15E-01	6.96E-04	--
9963	641225.7	4166674.2	Resident	Scenario 2	6.41E-01	7.33E-04	--
9964	641241.2	4166654.5	Resident	Scenario 2	6.71E-01	7.75E-04	--
9965	641256.7	4166634.9	Resident	Scenario 2	7.01E-01	8.21E-04	--
9966	641272.2	4166615.3	Resident	Scenario 2	7.37E-01	8.73E-04	--
9967	641287.7	4166595.7	Resident	Scenario 2	7.71E-01	9.24E-04	--
9968	641302.9	4166575.9	Resident	Scenario 2	8.06E-01	9.67E-04	--
9969	641317.9	4166555.9	Resident	Scenario 2	8.10E-01	9.79E-04	--
9970	641330.9	4166534.8	Resident	Scenario 2	7.64E-01	9.18E-04	--
9971	641338.1	4166510.9	Resident	Scenario 2	6.58E-01	7.74E-04	--
1	639723.5	4168261.2	Resident	Scenario 3	8.22E+00	1.56E-03	4.07E-03
2	639698.5	4168286.2	Resident	Scenario 3	7.79E+00	1.48E-03	3.88E-03
3	639723.5	4168286.2	Resident	Scenario 3	1.02E+01	1.92E-03	3.82E-03
4	639648.5	4168311.2	Resident	Scenario 3	6.32E+00	1.21E-03	3.75E-03
5	639673.5	4168311.2	Resident	Scenario 3	7.32E+00	1.40E-03	3.69E-03
6	639698.5	4168311.2	Resident	Scenario 3	9.13E+00	1.73E-03	3.63E-03
7	639648.5	4168336.2	Resident	Scenario 3	6.95E+00	1.33E-03	3.50E-03
8	639673.5	4168336.2	Resident	Scenario 3	8.23E+00	1.56E-03	3.67E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9	639698.5	4168336.2	Resident	Scenario 3	1.09E+01	2.05E-03	3.88E-03
10	639648.5	4168361.2	Resident	Scenario 3	7.65E+00	1.45E-03	3.70E-03
11	639673.5	4168361.2	Resident	Scenario 3	9.20E+00	1.74E-03	3.89E-03
12	639698.5	4168361.2	Resident	Scenario 3	1.26E+01	2.36E-03	4.06E-03
13	639648.5	4168386.2	Resident	Scenario 3	8.41E+00	1.59E-03	3.88E-03
14	639673.5	4168386.2	Resident	Scenario 3	1.01E+01	1.91E-03	4.02E-03
15	639698.5	4168386.2	Resident	Scenario 3	1.37E+01	2.56E-03	4.13E-03
16	639648.5	4168411.2	Resident	Scenario 3	9.32E+00	1.76E-03	3.97E-03
17	639673.5	4168411.2	Resident	Scenario 3	1.11E+01	2.08E-03	4.05E-03
18	639698.5	4168411.2	Resident	Scenario 3	1.47E+01	2.75E-03	4.10E-03
19	639648.5	4168436.2	Resident	Scenario 3	1.06E+01	1.99E-03	3.96E-03
20	639673.5	4168436.2	Resident	Scenario 3	1.23E+01	2.31E-03	3.98E-03
21	639698.5	4168436.2	Resident	Scenario 3	1.60E+01	2.99E-03	3.97E-03
22	641298.5	4168511.2	Resident	Scenario 3	3.19E+01	6.05E-03	9.54E-03
23	641323.5	4168511.2	Resident	Scenario 3	3.85E+01	7.24E-03	9.33E-03
24	641298.5	4168536.2	Resident	Scenario 3	3.17E+01	6.00E-03	9.21E-03
25	641323.5	4168536.2	Resident	Scenario 3	3.83E+01	7.19E-03	9.16E-03
26	641298.5	4168561.2	Resident	Scenario 3	3.13E+01	5.92E-03	8.85E-03
27	641323.5	4168561.2	Resident	Scenario 3	3.76E+01	7.05E-03	8.95E-03
28	641298.5	4168586.2	Resident	Scenario 3	3.09E+01	5.83E-03	8.50E-03
29	641323.5	4168586.2	Resident	Scenario 3	3.66E+01	6.87E-03	8.76E-03
30	641298.5	4168611.2	Resident	Scenario 3	3.04E+01	5.73E-03	8.19E-03
31	641323.5	4168611.2	Resident	Scenario 3	3.54E+01	6.64E-03	8.57E-03
32	641298.5	4168636.2	Resident	Scenario 3	2.95E+01	5.56E-03	7.85E-03
33	641323.5	4168636.2	Resident	Scenario 3	3.39E+01	6.36E-03	8.38E-03
34	641298.5	4168661.2	Resident	Scenario 3	2.82E+01	5.32E-03	7.68E-03
35	641323.5	4168661.2	Resident	Scenario 3	3.21E+01	6.03E-03	8.19E-03
36	642036.2	4165948.9	Resident	Scenario 3	1.94E+00	4.31E-04	1.13E-02
37	640636.2	4166448.9	Resident	Scenario 3	1.48E+00	3.27E-04	1.12E-02
38	640836.2	4166448.9	Resident	Scenario 3	1.63E+00	3.65E-04	1.63E-02
39	640936.2	4166448.9	Resident	Scenario 3	1.74E+00	3.94E-04	1.76E-02
40	641036.2	4166448.9	Resident	Scenario 3	1.86E+00	4.26E-04	1.84E-02
41	641136.2	4166448.9	Resident	Scenario 3	2.08E+00	4.74E-04	1.83E-02
42	641236.2	4166448.9	Resident	Scenario 3	2.31E+00	5.23E-04	1.94E-02
43	640636.2	4166548.9	Resident	Scenario 3	1.65E+00	3.67E-04	1.26E-02
44	640736.2	4166548.9	Resident	Scenario 3	1.77E+00	3.96E-04	1.35E-02
45	640836.2	4166548.9	Resident	Scenario 3	1.88E+00	4.24E-04	1.54E-02
46	641036.2	4166548.9	Resident	Scenario 3	2.17E+00	5.00E-04	2.36E-02
47	641136.2	4166548.9	Resident	Scenario 3	2.43E+00	5.61E-04	2.05E-02
48	641236.2	4166548.9	Resident	Scenario 3	2.83E+00	6.48E-04	2.08E-02
49	640636.2	4166648.9	Resident	Scenario 3	1.86E+00	4.17E-04	1.51E-02
50	640736.2	4166648.9	Resident	Scenario 3	2.03E+00	4.56E-04	1.55E-02
51	640836.2	4166648.9	Resident	Scenario 3	2.17E+00	4.91E-04	1.65E-02
52	640936.2	4166648.9	Resident	Scenario 3	2.32E+00	5.32E-04	1.93E-02
53	641036.2	4166648.9	Resident	Scenario 3	2.56E+00	5.92E-04	2.52E-02
54	641136.2	4166648.9	Resident	Scenario 3	2.89E+00	6.75E-04	2.69E-02
55	641236.2	4166648.9	Resident	Scenario 3	3.42E+00	7.90E-04	2.59E-02
56	640636.2	4166748.9	Resident	Scenario 3	2.06E+00	4.65E-04	1.50E-02
57	640736.2	4166748.9	Resident	Scenario 3	2.33E+00	5.31E-04	1.55E-02
58	640836.2	4166748.9	Resident	Scenario 3	2.46E+00	5.64E-04	1.95E-02
59	640936.2	4166748.9	Resident	Scenario 3	2.71E+00	6.27E-04	2.05E-02
60	641036.2	4166748.9	Resident	Scenario 3	3.02E+00	7.06E-04	2.62E-02
61	641136.2	4166748.9	Resident	Scenario 3	3.47E+00	8.19E-04	3.28E-02
62	640636.2	4166848.9	Resident	Scenario 3	2.31E+00	5.27E-04	1.79E-02
63	640736.2	4166848.9	Resident	Scenario 3	2.63E+00	6.09E-04	1.82E-02
64	640836.2	4166848.9	Resident	Scenario 3	2.83E+00	6.58E-04	1.68E-02
65	640936.2	4166848.9	Resident	Scenario 3	3.16E+00	7.42E-04	2.46E-02
66	644636.2	4167548.9	Resident	Scenario 3	8.48E+00	1.67E-03	2.24E-03
67	644636.2	4167648.9	Resident	Scenario 3	8.12E+00	1.60E-03	2.33E-03
68	644736.2	4167648.9	Resident	Scenario 3	7.59E+00	1.50E-03	2.25E-03
69	644836.2	4167648.9	Resident	Scenario 3	7.12E+00	1.41E-03	2.17E-03
70	644936.2	4167648.9	Resident	Scenario 3	6.69E+00	1.33E-03	2.09E-03
71	645036.2	4167648.9	Resident	Scenario 3	6.31E+00	1.25E-03	2.04E-03
72	645236.2	4167648.9	Resident	Scenario 3	5.67E+00	1.13E-03	1.95E-03
73	644536.2	4167748.9	Resident	Scenario 3	8.11E+00	1.60E-03	2.45E-03
74	644636.2	4168848.9	Resident	Scenario 3	3.51E+00	6.90E-04	2.64E-03
75	644736.2	4168848.9	Resident	Scenario 3	3.41E+00	6.69E-04	2.20E-03
76	644636.2	4168948.9	Resident	Scenario 3	3.33E+00	6.53E-04	3.20E-03
77	644536.2	4169048.9	Resident	Scenario 3	3.24E+00	6.34E-04	3.16E-03
78	644636.2	4169048.9	Resident	Scenario 3	3.14E+00	6.17E-04	3.26E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
79	644736.2	4169048.9	Resident	Scenario 3	3.06E+00	6.00E-04	3.20E-03
80	644336.2	4169148.9	Resident	Scenario 3	3.25E+00	6.36E-04	2.24E-03
81	644436.2	4169148.9	Resident	Scenario 3	3.15E+00	6.17E-04	2.24E-03
82	644536.2	4169148.9	Resident	Scenario 3	3.06E+00	6.00E-04	2.51E-03
83	644336.2	4169248.9	Resident	Scenario 3	3.07E+00	6.02E-04	2.19E-03
84	644436.2	4169248.9	Resident	Scenario 3	2.99E+00	5.85E-04	2.13E-03
85	644436.2	4169348.9	Resident	Scenario 3	2.84E+00	5.56E-04	2.08E-03
86	642336.2	4169948.9	Resident	Scenario 3	3.54E+00	6.97E-04	5.04E-03
87	642436.2	4169948.9	Resident	Scenario 3	3.45E+00	6.77E-04	3.12E-03
88	642536.2	4169948.9	Resident	Scenario 3	3.36E+00	6.58E-04	2.76E-03
89	642636.2	4169948.9	Resident	Scenario 3	3.26E+00	6.40E-04	2.67E-03
90	642736.2	4169948.9	Resident	Scenario 3	3.17E+00	6.22E-04	2.74E-03
91	642836.2	4169948.9	Resident	Scenario 3	3.08E+00	6.07E-04	3.02E-03
92	642936.2	4169948.9	Resident	Scenario 3	3.00E+00	5.92E-04	3.18E-03
93	643036.2	4169948.9	Resident	Scenario 3	2.93E+00	5.79E-04	2.77E-03
94	643136.2	4169948.9	Resident	Scenario 3	2.86E+00	5.67E-04	2.47E-03
95	644136.2	4169948.9	Resident	Scenario 3	2.21E+00	4.37E-04	1.93E-03
96	642236.2	4170048.9	Resident	Scenario 3	3.38E+00	6.66E-04	6.13E-03
97	642336.2	4170048.9	Resident	Scenario 3	3.30E+00	6.50E-04	5.40E-03
98	642436.2	4170048.9	Resident	Scenario 3	3.23E+00	6.34E-04	3.57E-03
99	642536.2	4170048.9	Resident	Scenario 3	3.15E+00	6.18E-04	2.50E-03
100	642636.2	4170048.9	Resident	Scenario 3	3.06E+00	6.01E-04	2.67E-03
101	642736.2	4170048.9	Resident	Scenario 3	2.98E+00	5.85E-04	2.63E-03
102	642836.2	4170048.9	Resident	Scenario 3	2.90E+00	5.71E-04	2.65E-03
103	642936.2	4170048.9	Resident	Scenario 3	2.83E+00	5.58E-04	3.07E-03
104	643036.2	4170048.9	Resident	Scenario 3	2.76E+00	5.46E-04	2.97E-03
105	643136.2	4170048.9	Resident	Scenario 3	2.70E+00	5.35E-04	2.46E-03
106	643236.2	4170048.9	Resident	Scenario 3	2.64E+00	5.24E-04	2.28E-03
107	643336.2	4170048.9	Resident	Scenario 3	2.58E+00	5.13E-04	2.28E-03
108	643436.2	4170048.9	Resident	Scenario 3	2.52E+00	5.01E-04	2.25E-03
109	643536.2	4170048.9	Resident	Scenario 3	2.47E+00	4.89E-04	2.19E-03
110	643636.2	4170048.9	Resident	Scenario 3	2.41E+00	4.77E-04	2.18E-03
111	643736.2	4170048.9	Resident	Scenario 3	2.34E+00	4.63E-04	2.06E-03
112	643836.2	4170048.9	Resident	Scenario 3	2.27E+00	4.50E-04	1.95E-03
113	643936.2	4170048.9	Resident	Scenario 3	2.21E+00	4.37E-04	1.99E-03
114	644036.2	4170048.9	Resident	Scenario 3	2.16E+00	4.27E-04	1.93E-03
115	642136.2	4170148.9	Resident	Scenario 3	3.20E+00	6.31E-04	4.45E-03
116	642236.2	4170148.9	Resident	Scenario 3	3.13E+00	6.17E-04	5.79E-03
117	642336.2	4170148.9	Resident	Scenario 3	3.07E+00	6.06E-04	5.61E-03
118	643436.2	4170148.9	Resident	Scenario 3	2.39E+00	4.75E-04	2.18E-03
119	643536.2	4170148.9	Resident	Scenario 3	2.34E+00	4.65E-04	2.12E-03
120	643636.2	4170148.9	Resident	Scenario 3	2.29E+00	4.54E-04	2.06E-03
121	643736.2	4170148.9	Resident	Scenario 3	2.23E+00	4.42E-04	2.07E-03
122	643836.2	4170148.9	Resident	Scenario 3	2.17E+00	4.30E-04	1.91E-03
123	643936.2	4170148.9	Resident	Scenario 3	2.11E+00	4.18E-04	1.87E-03
124	643436.2	4170248.9	Resident	Scenario 3	2.28E+00	4.52E-04	2.11E-03
125	643536.2	4170248.9	Resident	Scenario 3	2.23E+00	4.43E-04	2.05E-03
126	643636.2	4170248.9	Resident	Scenario 3	2.18E+00	4.33E-04	2.00E-03
127	643736.2	4170248.9	Resident	Scenario 3	2.13E+00	4.23E-04	1.97E-03
128	643836.2	4170248.9	Resident	Scenario 3	2.08E+00	4.12E-04	1.96E-03
129	635936.2	4170748.9	Resident	Scenario 3	4.98E-01	1.01E-04	1.26E-03
130	636036.2	4170748.9	Resident	Scenario 3	5.18E-01	1.05E-04	1.19E-03
131	636136.2	4170748.9	Resident	Scenario 3	5.43E-01	1.10E-04	1.03E-03
132	635936.2	4170848.9	Resident	Scenario 3	5.04E-01	1.02E-04	1.08E-03
133	636036.2	4170848.9	Resident	Scenario 3	5.26E-01	1.06E-04	1.05E-03
134	636136.2	4170848.9	Resident	Scenario 3	5.50E-01	1.11E-04	1.13E-03
135	636236.2	4170848.9	Resident	Scenario 3	5.76E-01	1.16E-04	1.12E-03
136	636836.2	4170848.9	Resident	Scenario 3	7.86E-01	1.56E-04	9.08E-04
137	636036.2	4170948.9	Resident	Scenario 3	5.32E-01	1.07E-04	1.14E-03
138	636136.2	4170948.9	Resident	Scenario 3	5.56E-01	1.12E-04	1.12E-03
139	636236.2	4170948.9	Resident	Scenario 3	5.82E-01	1.17E-04	1.02E-03
140	636336.2	4170948.9	Resident	Scenario 3	6.12E-01	1.23E-04	7.77E-04
141	636636.2	4170948.9	Resident	Scenario 3	7.12E-01	1.42E-04	8.13E-04
142	636736.2	4170948.9	Resident	Scenario 3	7.49E-01	1.49E-04	8.93E-04
143	636836.2	4170948.9	Resident	Scenario 3	7.87E-01	1.56E-04	9.38E-04
144	635936.2	4171048.9	Resident	Scenario 3	5.19E-01	1.05E-04	1.08E-03
145	636036.2	4171048.9	Resident	Scenario 3	5.39E-01	1.08E-04	1.06E-03
146	636136.2	4171048.9	Resident	Scenario 3	5.64E-01	1.13E-04	9.69E-04
147	636236.2	4171048.9	Resident	Scenario 3	5.89E-01	1.18E-04	7.25E-04
148	636336.2	4171048.9	Resident	Scenario 3	6.15E-01	1.23E-04	7.00E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
149	636536.2	4171048.9	Resident	Scenario 3	6.74E-01	1.35E-04	8.09E-04
150	636636.2	4171048.9	Resident	Scenario 3	7.10E-01	1.41E-04	8.75E-04
151	636736.2	4171048.9	Resident	Scenario 3	7.51E-01	1.49E-04	9.05E-04
152	635936.2	4171148.9	Resident	Scenario 3	5.25E-01	1.06E-04	9.58E-04
153	636036.2	4171148.9	Resident	Scenario 3	5.46E-01	1.10E-04	9.18E-04
154	636136.2	4171148.9	Resident	Scenario 3	5.69E-01	1.14E-04	6.86E-04
155	636236.2	4171148.9	Resident	Scenario 3	5.91E-01	1.18E-04	6.64E-04
156	636336.2	4171148.9	Resident	Scenario 3	6.17E-01	1.23E-04	7.20E-04
157	636536.2	4171148.9	Resident	Scenario 3	6.78E-01	1.35E-04	8.54E-04
158	636636.2	4171148.9	Resident	Scenario 3	7.09E-01	1.41E-04	8.72E-04
159	636136.2	4171248.9	Resident	Scenario 3	5.72E-01	1.15E-04	6.37E-04
160	636236.2	4171248.9	Resident	Scenario 3	5.96E-01	1.19E-04	7.20E-04
161	636336.2	4171248.9	Resident	Scenario 3	6.21E-01	1.24E-04	7.90E-04
162	636536.2	4171248.9	Resident	Scenario 3	6.79E-01	1.35E-04	8.37E-04
163	636036.2	4171348.9	Resident	Scenario 3	5.55E-01	1.11E-04	6.39E-04
164	636136.2	4171348.9	Resident	Scenario 3	5.76E-01	1.15E-04	7.18E-04
165	636236.2	4171348.9	Resident	Scenario 3	5.99E-01	1.20E-04	7.76E-04
166	636336.2	4171348.9	Resident	Scenario 3	6.25E-01	1.25E-04	8.06E-04
167	636136.2	4171448.9	Resident	Scenario 3	5.79E-01	1.16E-04	7.60E-04
168	642573.5	4166836.2	Roadway/Waterway	Scenario 3	--	--	--
169	644323.5	4166836.2	Roadway/Waterway	Scenario 3	--	--	--
170	641523.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
171	641548.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
172	641573.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
173	642048.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
174	642073.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
175	642098.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
176	642198.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
177	642223.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
178	642248.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
179	642273.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
180	642548.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
181	642573.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
182	642598.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
183	642623.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
184	642648.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
185	642673.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
186	642698.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
187	642723.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
188	642748.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
189	642773.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
190	642798.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
191	642823.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
192	642848.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
193	642873.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
194	642898.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
195	642923.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
196	642948.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
197	642973.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
198	642998.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
199	643023.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
200	643048.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
201	643073.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
202	643098.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
203	643123.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
204	643148.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
205	643173.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
206	643198.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
207	643223.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
208	643248.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
209	643273.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
210	643298.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
211	643323.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
212	643348.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
213	643373.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
214	643398.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
215	643423.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
216	643448.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
217	643473.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
218	643498.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
219	643523.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
220	643548.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
221	643573.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
222	643598.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
223	643623.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
224	643648.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
225	643673.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
226	643698.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
227	643723.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
228	643748.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
229	643773.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
230	643798.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
231	643823.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
232	643848.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
233	643873.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
234	643898.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
235	643923.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
236	643948.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
237	643973.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
238	643998.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
239	644023.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
240	644048.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
241	644073.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
242	644098.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
243	644123.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
244	644148.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
245	644173.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
246	644198.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
247	644223.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
248	644248.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
249	644273.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
250	644298.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
251	644323.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
252	644348.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
253	644373.5	4166861.2	Roadway/Waterway	Scenario 3	--	--	--
254	641423.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
255	641448.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
256	641473.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
257	641498.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
258	641523.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
259	641548.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
260	641573.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
261	641598.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
262	641623.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
263	641648.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
264	641673.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
265	641698.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
266	641723.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
267	641748.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
268	641773.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
269	641798.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
270	641823.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
271	641848.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
272	641873.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
273	641898.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
274	641923.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
275	641948.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
276	641973.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
277	641998.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
278	642023.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
279	642048.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
280	642073.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
281	642098.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
282	642123.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
283	642148.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
284	642173.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
285	642198.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
286	642223.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
287	642248.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
288	642273.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
289	642298.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
290	642323.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
291	642348.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
292	642373.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
293	642398.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
294	642423.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
295	642448.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
296	642473.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
297	642498.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
298	642523.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
299	642548.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
300	642573.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
301	642598.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
302	642623.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
303	642648.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
304	642673.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
305	642698.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
306	642723.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
307	642748.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
308	642773.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
309	642798.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
310	642823.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
311	642848.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
312	642873.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
313	642898.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
314	642923.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
315	642948.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
316	642973.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
317	642998.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
318	643023.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
319	643048.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
320	643073.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
321	643098.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
322	643123.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
323	643148.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
324	643173.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
325	643198.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
326	643223.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
327	643248.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
328	643273.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
329	643298.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
330	643323.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
331	643348.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
332	643373.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
333	643398.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
334	643423.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
335	643448.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
336	643473.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
337	643498.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
338	643523.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
339	643548.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
340	643573.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
341	643598.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
342	643623.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
343	643648.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
344	643673.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
345	643698.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
346	643723.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
347	643748.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
348	643773.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
349	643798.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
350	643823.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
351	643848.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
352	643873.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
353	643898.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
354	643923.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
355	643948.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
356	643973.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
357	643998.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
358	644023.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
359	644048.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
360	644073.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
361	644098.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
362	644123.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
363	644148.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
364	644173.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
365	644198.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
366	644223.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
367	644248.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
368	644273.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
369	644298.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
370	644323.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
371	644348.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
372	644373.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
373	644398.5	4166886.2	Roadway/Waterway	Scenario 3	--	--	--
374	641348.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
375	641373.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
376	641398.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
377	641423.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
378	641448.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
379	641473.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
380	641498.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
381	641523.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
382	641548.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
383	641573.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
384	641598.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
385	641623.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
386	641648.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
387	641673.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
388	641698.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
389	641723.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
390	641748.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
391	641773.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
392	641798.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
393	641823.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
394	641848.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
395	641873.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
396	641898.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
397	641923.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
398	641948.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
399	641973.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
400	641998.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
401	642023.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
402	642048.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
403	642073.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
404	642098.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
405	642123.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
406	642148.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
407	642173.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
408	642198.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
409	642223.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
410	642248.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
411	642273.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
412	642298.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
413	642323.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
414	642348.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
415	642373.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
416	642398.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
417	642423.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
418	642448.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
419	642473.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
420	642498.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
421	642523.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
422	642548.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
423	642573.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
424	642598.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
425	642623.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
426	642648.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
427	642673.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
428	642698.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
429	642723.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
430	642748.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
431	642773.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
432	643548.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
433	643573.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
434	643598.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
435	643623.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
436	643648.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
437	643673.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
438	643698.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
439	643723.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
440	643748.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
441	643773.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
442	643798.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
443	643823.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
444	643848.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
445	643873.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
446	643898.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
447	643923.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
448	643948.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
449	643973.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
450	643998.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
451	644023.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
452	644048.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
453	644073.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
454	644098.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
455	644123.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
456	644148.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
457	644173.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
458	644198.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
459	644223.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
460	644248.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
461	644273.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
462	644298.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
463	644323.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
464	644348.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
465	644373.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
466	644398.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
467	644423.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
468	644448.5	4166911.2	Roadway/Waterway	Scenario 3	--	--	--
469	641323.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
470	641348.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
471	641373.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
472	641398.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
473	641423.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
474	641448.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
475	641473.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
476	641498.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
477	641523.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
478	641548.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
479	641573.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
480	641598.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
481	641623.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
482	641648.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
483	641673.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
484	641698.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
485	641723.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
486	641748.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
487	641773.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
488	641798.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
489	641823.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
490	641848.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
491	641873.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
492	641898.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
493	641923.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
494	641948.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
495	642223.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
496	642248.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
497	642273.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
498	642298.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
499	642323.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
500	642348.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
501	642373.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
502	642398.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
503	642423.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
504	642448.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
505	642473.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
506	642498.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
507	642523.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
508	642548.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
509	642573.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
510	644323.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
511	644348.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
512	644373.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
513	644398.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
514	644423.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
515	644448.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
516	644473.5	4166936.2	Roadway/Waterway	Scenario 3	--	--	--
517	641323.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
518	641348.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
519	641373.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
520	641398.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
521	641423.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
522	641448.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
523	641473.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
524	641498.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
525	641523.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
526	642198.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
527	642223.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
528	642248.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
529	642273.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
530	642298.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
531	642323.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
532	642348.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
533	642373.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
534	642398.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
535	642423.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
536	642448.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
537	642473.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
538	642498.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
539	642523.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
540	642548.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
541	644373.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
542	644398.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
543	644423.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
544	644448.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
545	644473.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
546	644498.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
547	644523.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
548	644548.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
549	644573.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
550	644598.5	4166961.2	Roadway/Waterway	Scenario 3	--	--	--
551	641298.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
552	641323.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
553	641348.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
554	641373.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
555	641398.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
556	641423.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
557	642173.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
558	642198.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
559	642223.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
560	642248.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
561	642273.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
562	642298.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
563	642323.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
564	642348.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
565	644398.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
566	644423.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
567	644448.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
568	644473.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
569	644498.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
570	644523.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
571	644548.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
572	644573.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
573	644598.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
574	644623.5	4166986.2	Roadway/Waterway	Scenario 3	--	--	--
575	641348.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
576	641373.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
577	642148.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
578	642173.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
579	642198.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
580	642223.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
581	642248.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
582	642273.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
583	642298.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
584	642323.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
585	644423.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
586	644448.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
587	644473.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
588	644498.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
589	644523.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
590	644548.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
591	644573.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
592	644598.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
593	644623.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
594	644648.5	4167011.2	Roadway/Waterway	Scenario 3	--	--	--
595	641348.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
596	641373.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
597	642123.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
598	642148.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
599	642173.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
600	642198.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
601	642223.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
602	642248.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
603	642273.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
604	642298.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
605	644473.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
606	644498.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
607	644523.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
608	644548.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
609	644573.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
610	644598.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
611	644623.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
612	644648.5	4167036.2	Roadway/Waterway	Scenario 3	--	--	--
613	641373.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
614	642098.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
615	642123.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
616	642148.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
617	642173.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
618	642198.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
619	642223.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
620	642248.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
621	642273.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
622	644573.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
623	644598.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
624	644623.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
625	644648.5	4167061.2	Roadway/Waterway	Scenario 3	--	--	--
626	641373.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
627	642073.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
628	642098.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
629	642123.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
630	642148.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
631	642173.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
632	642198.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
633	642223.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
634	642248.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
635	644598.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
636	644623.5	4167086.2	Roadway/Waterway	Scenario 3	--	--	--
637	641373.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
638	642048.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
639	642073.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
640	642098.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
641	642123.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
642	642148.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
643	642173.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
644	642198.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
645	642223.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
646	644598.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
647	644623.5	4167111.2	Roadway/Waterway	Scenario 3	--	--	--
648	641373.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
649	642023.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
650	642048.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
651	642073.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
652	642098.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
653	642123.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
654	642148.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
655	642173.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
656	642198.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
657	644598.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
658	644623.5	4167136.2	Roadway/Waterway	Scenario 3	--	--	--
659	641373.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
660	641998.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
661	642023.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
662	642048.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
663	642073.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
664	642098.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
665	642123.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
666	642148.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
667	644598.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
668	644623.5	4167161.2	Roadway/Waterway	Scenario 3	--	--	--
669	641373.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
670	641948.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
671	641973.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
672	641998.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
673	642023.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
674	642048.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
675	642073.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
676	642098.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
677	642123.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
678	644598.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
679	644623.5	4167186.2	Roadway/Waterway	Scenario 3	--	--	--
680	641373.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
681	641923.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
682	641948.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
683	641973.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
684	641998.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
685	642023.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
686	642048.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
687	642073.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
688	642098.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
689	644598.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
690	644623.5	4167211.2	Roadway/Waterway	Scenario 3	--	--	--
691	641373.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
692	641898.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
693	641923.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
694	641948.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
695	641973.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
696	641998.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
697	642023.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
698	642048.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
699	642073.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
700	644598.5	4167236.2	Roadway/Waterway	Scenario 3	--	--	--
701	641373.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
702	641873.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
703	641898.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
704	641923.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
705	641948.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
706	641973.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
707	641998.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
708	642023.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
709	642048.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
710	644548.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
711	644573.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
712	644598.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
713	644623.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
714	644648.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
715	644673.5	4167261.2	Roadway/Waterway	Scenario 3	--	--	--
716	641373.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
717	641823.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
718	641848.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
719	641873.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
720	641898.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
721	641923.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
722	641948.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
723	641973.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
724	641998.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
725	642023.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
726	644448.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
727	644473.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
728	644498.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
729	644523.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
730	644548.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
731	644573.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
732	644598.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
733	644623.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
734	644648.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
735	644673.5	4167286.2	Roadway/Waterway	Scenario 3	--	--	--
736	641373.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
737	641748.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
738	641773.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
739	641798.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
740	641823.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
741	641848.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
742	641873.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
743	641898.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
744	641923.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
745	641948.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
746	641973.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
747	641998.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
748	644373.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
749	644398.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
750	644423.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
751	644448.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
752	644473.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
753	644498.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
754	644523.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
755	644548.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
756	644573.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
757	644598.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
758	644623.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
759	644648.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
760	641373.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
761	641673.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
762	641698.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
763	641723.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
764	641748.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
765	641773.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
766	641798.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
767	641823.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
768	641848.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
769	641873.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
770	641898.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
771	641923.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
772	641948.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
773	641973.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
774	644298.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
775	644323.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
776	644348.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
777	644373.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
778	644398.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
779	644423.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
780	644448.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
781	644473.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
782	644498.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
783	644523.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
784	644548.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
785	644573.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
786	644598.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
787	644623.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
788	641373.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
789	641573.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
790	641598.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
791	641623.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
792	641648.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
793	641673.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
794	641698.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
795	641723.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
796	641748.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
797	641773.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
798	641798.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
799	641823.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
800	641848.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
801	641873.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
802	641898.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
803	641923.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
804	643348.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
805	643373.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
806	643398.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
807	643423.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
808	643448.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
809	643473.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
810	643498.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
811	643523.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
812	643548.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
813	643573.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
814	643598.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
815	643623.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
816	643648.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
817	643673.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
818	643698.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
819	643723.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
820	643748.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
821	643773.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
822	643798.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
823	643823.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
824	643848.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
825	643873.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
826	644248.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
827	644273.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
828	644298.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
829	644323.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
830	644348.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
831	644373.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
832	644398.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
833	644423.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
834	644448.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
835	644473.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
836	644498.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
837	641373.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
838	641498.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
839	641523.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
840	641548.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
841	641573.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
842	641598.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
843	641623.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
844	641648.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
845	641673.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
846	641698.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
847	641723.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
848	641748.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
849	641773.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
850	641798.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
851	641823.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
852	641848.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
853	641873.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
854	643323.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
855	643348.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
856	643373.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
857	643398.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
858	643423.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
859	643448.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
860	643473.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
861	643498.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
862	643523.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
863	643548.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
864	643573.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
865	643598.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
866	643623.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
867	643648.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
868	643673.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
869	643698.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
870	643723.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
871	643748.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
872	643773.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
873	643798.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
874	643823.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
875	643848.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
876	643873.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
877	643898.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
878	643923.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
879	643948.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
880	643973.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
881	643998.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
882	644023.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
883	644048.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
884	644073.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
885	644148.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
886	644173.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
887	644198.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
888	644223.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
889	644248.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
890	644273.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
891	644298.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
892	644323.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
893	644348.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
894	644373.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
895	644398.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
896	644423.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
897	641373.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
898	641398.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
899	641423.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
900	641448.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
901	641473.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
902	641498.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
903	641523.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
904	641548.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
905	641573.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
906	641598.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
907	641623.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
908	641648.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
909	641673.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
910	641698.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
911	641723.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
912	641748.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
913	641773.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
914	641798.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
915	641823.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
916	641848.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
917	643298.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
918	643323.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
919	643348.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
920	643373.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
921	643398.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
922	643423.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
923	643448.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
924	643473.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
925	643498.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
926	643523.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
927	643548.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
928	643573.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
929	643598.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
930	643623.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
931	643648.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
932	643673.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
933	643698.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
934	643723.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
935	643748.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
936	643773.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
937	643798.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
938	643823.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
939	643848.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
940	643873.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
941	643898.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
942	643923.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
943	643948.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
944	643973.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
945	643998.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
946	644023.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
947	644048.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
948	644073.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
949	644098.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
950	644123.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
951	644148.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
952	644173.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
953	644198.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
954	644223.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
955	644248.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
956	644273.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
957	644298.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
958	644323.5	4167411.2	Roadway/Waterway	Scenario 3	--	--	--
959	641298.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
960	641323.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
961	641348.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
962	641373.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
963	641398.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
964	641423.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
965	641448.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
966	641473.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
967	641498.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
968	641523.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
969	641548.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
970	641573.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
971	641598.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
972	641623.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
973	641648.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
974	641673.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
975	641698.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
976	641723.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
977	641748.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
978	641773.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
979	643273.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
980	643298.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
981	643323.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
982	643773.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
983	643798.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
984	643823.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
985	643848.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
986	643873.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
987	643898.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
988	643923.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
989	643948.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
990	643973.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
991	643998.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
992	644023.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
993	644048.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
994	644073.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
995	644098.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
996	644123.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
997	644148.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
998	644173.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
999	644198.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
1000	644223.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
1001	644248.5	4167436.2	Roadway/Waterway	Scenario 3	--	--	--
1002	641323.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1003	641348.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1004	641373.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1005	641398.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1006	641423.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1007	641448.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1008	641473.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1009	641498.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1010	641523.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1011	641548.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1012	641573.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1013	641598.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1014	641623.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1015	641648.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1016	641673.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1017	641698.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1018	643248.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1019	643273.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1020	643298.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1021	643923.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1022	643948.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1023	643973.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1024	643998.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1025	644023.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1026	644048.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1027	644073.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1028	644098.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1029	644123.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1030	644148.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1031	644173.5	4167461.2	Roadway/Waterway	Scenario 3	--	--	--
1032	641273.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1033	641298.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1034	641323.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1035	641348.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1036	641373.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1037	641398.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1038	641423.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1039	641448.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1040	641473.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1041	641498.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1042	641523.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1043	641548.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1044	641573.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1045	641598.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1046	643223.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1047	643248.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1048	643273.5	4167486.2	Roadway/Waterway	Scenario 3	--	--	--
1049	641198.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1050	641223.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1051	641248.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1052	641273.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1053	641298.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1054	641323.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1055	641348.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1056	641373.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1057	641398.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1058	641423.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1059	641448.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1060	641473.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1061	641498.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1062	641523.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1063	643223.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1064	643248.5	4167511.2	Roadway/Waterway	Scenario 3	--	--	--
1065	641098.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1066	641123.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1067	641148.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1068	641173.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1069	641198.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1070	641223.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1071	641248.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1072	641273.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1073	641298.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1074	641323.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1075	641348.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1076	641373.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1077	641398.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1078	641423.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1079	643198.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1080	643223.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1081	643248.5	4167536.2	Roadway/Waterway	Scenario 3	--	--	--
1082	641023.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1083	641048.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1084	641073.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1085	641098.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1086	641123.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1087	641148.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1088	641173.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1089	641198.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1090	641223.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1091	641248.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1092	641273.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1093	641298.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1094	641323.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1095	641348.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1096	643173.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1097	643198.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1098	643223.5	4167561.2	Roadway/Waterway	Scenario 3	--	--	--
1099	640923.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1100	640948.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1101	640973.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1102	640998.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1103	641023.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1104	641048.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1105	641073.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1106	641098.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1107	641123.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1108	641148.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1109	641173.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1110	641198.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1111	641223.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1112	641248.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1113	641273.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1114	643148.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1115	643173.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1116	643198.5	4167586.2	Roadway/Waterway	Scenario 3	--	--	--
1117	640823.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1118	640848.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1119	640873.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1120	640898.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1121	640923.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1122	640948.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1123	640973.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1124	640998.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1125	641023.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1126	641048.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1127	641073.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1128	641098.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1129	641123.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1130	641148.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1131	641173.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1132	643123.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1133	643148.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1134	643173.5	4167611.2	Roadway/Waterway	Scenario 3	--	--	--
1135	640723.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1136	640748.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1137	640773.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1138	640798.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1139	640823.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1140	640848.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1141	640873.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1142	640898.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1143	640923.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1144	640948.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1145	640973.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1146	640998.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1147	641023.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1148	641048.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1149	641073.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1150	641098.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1151	643123.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1152	643148.5	4167636.2	Roadway/Waterway	Scenario 3	--	--	--
1153	640623.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1154	640648.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1155	640673.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1156	640698.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1157	640723.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1158	640748.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1159	640773.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1160	640798.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1161	640823.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1162	640848.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1163	640873.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1164	640898.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1165	640923.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1166	640948.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1167	640973.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1168	640998.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1169	643098.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1170	643123.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1171	643148.5	4167661.2	Roadway/Waterway	Scenario 3	--	--	--
1172	640523.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1173	640548.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1174	640573.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1175	640598.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1176	640623.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1177	640648.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1178	640673.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1179	640698.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1180	640723.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1181	640748.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1182	640773.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1183	640798.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1184	640823.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1185	640848.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1186	640873.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1187	640898.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1188	643073.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1189	643098.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1190	643123.5	4167686.2	Roadway/Waterway	Scenario 3	--	--	--
1191	640423.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1192	640448.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1193	640473.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1194	640498.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1195	640523.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1196	640548.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1197	640573.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1198	640598.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1199	640623.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1200	640648.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1201	640673.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1202	640698.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1203	640723.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1204	640748.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1205	640773.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1206	640798.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1207	643048.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1208	643073.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1209	643098.5	4167711.2	Roadway/Waterway	Scenario 3	--	--	--
1210	640373.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1211	640398.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1212	640423.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1213	640448.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1214	640473.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1215	640498.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1216	640523.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1217	640548.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1218	640573.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1219	640598.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1220	640623.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1221	640648.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1222	640673.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1223	640698.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1224	640723.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1225	643023.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1226	643048.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1227	643073.5	4167736.2	Roadway/Waterway	Scenario 3	--	--	--
1228	640323.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1229	640348.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1230	640373.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1231	640398.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1232	640423.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1233	640448.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1234	640473.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1235	640498.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1236	640523.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1237	640548.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1238	640573.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1239	640598.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1240	640623.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1241	643023.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1242	643048.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1243	643073.5	4167761.2	Roadway/Waterway	Scenario 3	--	--	--
1244	640273.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1245	640298.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1246	640323.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1247	640348.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1248	640373.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1249	640398.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1250	640423.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1251	640448.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1252	640473.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1253	640498.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1254	640523.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1255	642998.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1256	643023.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1257	643048.5	4167786.2	Roadway/Waterway	Scenario 3	--	--	--
1258	640223.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1259	640248.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1260	640273.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1261	640298.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1262	640323.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1263	640348.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1264	640373.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1265	640398.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1266	640423.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1267	642973.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1268	642998.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1269	643023.5	4167811.2	Roadway/Waterway	Scenario 3	--	--	--
1270	640198.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1271	640223.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1272	640248.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1273	640273.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1274	640298.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1275	640323.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1276	640348.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1277	640373.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1278	642923.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1279	642948.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1280	642973.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1281	642998.5	4167836.2	Roadway/Waterway	Scenario 3	--	--	--
1282	640148.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1283	640173.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1284	640198.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1285	640223.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1286	640248.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1287	640273.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1288	640298.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1289	640323.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1290	642898.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1291	642923.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1292	642948.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1293	642973.5	4167861.2	Roadway/Waterway	Scenario 3	--	--	--
1294	640123.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1295	640148.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1296	640173.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1297	640198.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1298	640223.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1299	640248.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1300	640273.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1301	642848.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1302	642873.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1303	642898.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1304	642923.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1305	642948.5	4167886.2	Roadway/Waterway	Scenario 3	--	--	--
1306	640073.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1307	640098.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1308	640123.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1309	640148.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1310	640173.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1311	640198.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1312	640223.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1313	640248.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1314	642823.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1315	642848.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1316	642873.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1317	642898.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1318	642923.5	4167911.2	Roadway/Waterway	Scenario 3	--	--	--
1319	640048.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1320	640073.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1321	640098.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1322	640123.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1323	640148.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1324	640173.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1325	640198.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1326	642773.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1327	642798.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1328	642823.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1329	642848.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1330	642873.5	4167936.2	Roadway/Waterway	Scenario 3	--	--	--
1331	639998.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1332	640023.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1333	640048.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1334	640073.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1335	640098.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1336	640123.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1337	640148.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1338	640173.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1339	642748.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1340	642773.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1341	642798.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1342	642823.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1343	642848.5	4167961.2	Roadway/Waterway	Scenario 3	--	--	--
1344	639973.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1345	639998.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1346	640023.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1347	640048.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1348	640073.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1349	640098.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1350	640123.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1351	642698.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1352	642723.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1353	642748.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1354	642773.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1355	642798.5	4167986.2	Roadway/Waterway	Scenario 3	--	--	--
1356	639923.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1357	639948.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1358	639973.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1359	639998.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1360	640023.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1361	640048.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1362	640073.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1363	640098.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1364	642648.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1365	642673.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1366	642698.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1367	642723.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1368	642748.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1369	642773.5	4168011.2	Roadway/Waterway	Scenario 3	--	--	--
1370	639898.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1371	639923.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1372	639948.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1373	639973.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1374	639998.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1375	640023.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1376	640048.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1377	642623.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1378	642648.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1379	642673.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1380	642698.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1381	642723.5	4168036.2	Roadway/Waterway	Scenario 3	--	--	--
1382	639848.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1383	639873.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1384	639898.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1385	639923.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1386	639948.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1387	639973.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1388	639998.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1389	642573.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1390	642598.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1391	642623.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1392	642648.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1393	642673.5	4168061.2	Roadway/Waterway	Scenario 3	--	--	--
1394	639823.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1395	639848.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1396	639873.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1397	639898.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1398	639923.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1399	639948.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1400	639973.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1401	642548.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1402	642573.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1403	642598.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1404	642623.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1405	642648.5	4168086.2	Roadway/Waterway	Scenario 3	--	--	--
1406	639773.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1407	639798.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1408	639823.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1409	639848.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1410	639873.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1411	639898.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1412	639923.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1413	642498.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1414	642523.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1415	642548.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1416	642573.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1417	642598.5	4168111.2	Roadway/Waterway	Scenario 3	--	--	--
1418	639748.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1419	639773.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1420	639798.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1421	639823.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1422	639848.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1423	639873.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1424	639898.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1425	642473.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1426	642498.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1427	642523.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1428	642548.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1429	642573.5	4168136.2	Roadway/Waterway	Scenario 3	--	--	--
1430	639698.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1431	639723.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1432	639748.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1433	639773.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1434	639798.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1435	639823.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1436	639848.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1437	642448.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1438	642473.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1439	642498.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1440	642523.5	4168161.2	Roadway/Waterway	Scenario 3	--	--	--
1441	639673.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1442	639698.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1443	639723.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1444	639748.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1445	639773.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1446	639798.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1447	639823.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1448	642423.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1449	642448.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1450	642473.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1451	642498.5	4168186.2	Roadway/Waterway	Scenario 3	--	--	--
1452	639648.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1453	639673.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1454	639698.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1455	639723.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1456	639748.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1457	639773.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1458	642398.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1459	642423.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1460	642448.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1461	642473.5	4168211.2	Roadway/Waterway	Scenario 3	--	--	--
1462	639648.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1463	639673.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1464	639698.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1465	639723.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1466	639748.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1467	642373.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1468	642398.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1469	642423.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1470	642448.5	4168236.2	Roadway/Waterway	Scenario 3	--	--	--
1471	639648.5	4168261.2	Roadway/Waterway	Scenario 3	--	--	--
1472	639673.5	4168261.2	Roadway/Waterway	Scenario 3	--	--	--
1473	639698.5	4168261.2	Roadway/Waterway	Scenario 3	--	--	--
1474	642348.5	4168261.2	Roadway/Waterway	Scenario 3	--	--	--
1475	642373.5	4168261.2	Roadway/Waterway	Scenario 3	--	--	--
1476	642398.5	4168261.2	Roadway/Waterway	Scenario 3	--	--	--
1477	642423.5	4168261.2	Roadway/Waterway	Scenario 3	--	--	--
1478	639648.5	4168286.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1479	639673.5	4168286.2	Roadway/Waterway	Scenario 3	--	--	--
1480	642298.5	4168286.2	Roadway/Waterway	Scenario 3	--	--	--
1481	642323.5	4168286.2	Roadway/Waterway	Scenario 3	--	--	--
1482	642348.5	4168286.2	Roadway/Waterway	Scenario 3	--	--	--
1483	642373.5	4168286.2	Roadway/Waterway	Scenario 3	--	--	--
1484	642398.5	4168286.2	Roadway/Waterway	Scenario 3	--	--	--
1485	639723.5	4168311.2	Roadway/Waterway	Scenario 3	--	--	--
1486	642248.5	4168311.2	Roadway/Waterway	Scenario 3	--	--	--
1487	642273.5	4168311.2	Roadway/Waterway	Scenario 3	--	--	--
1488	642298.5	4168311.2	Roadway/Waterway	Scenario 3	--	--	--
1489	642323.5	4168311.2	Roadway/Waterway	Scenario 3	--	--	--
1490	642348.5	4168311.2	Roadway/Waterway	Scenario 3	--	--	--
1491	642373.5	4168311.2	Roadway/Waterway	Scenario 3	--	--	--
1492	639723.5	4168336.2	Roadway/Waterway	Scenario 3	--	--	--
1493	642198.5	4168336.2	Roadway/Waterway	Scenario 3	--	--	--
1494	642223.5	4168336.2	Roadway/Waterway	Scenario 3	--	--	--
1495	642248.5	4168336.2	Roadway/Waterway	Scenario 3	--	--	--
1496	642273.5	4168336.2	Roadway/Waterway	Scenario 3	--	--	--
1497	642298.5	4168336.2	Roadway/Waterway	Scenario 3	--	--	--
1498	642323.5	4168336.2	Roadway/Waterway	Scenario 3	--	--	--
1499	639373.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1500	639398.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1501	639423.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1502	639448.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1503	639473.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1504	639498.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1505	639523.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1506	639548.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1507	639723.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1508	642148.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1509	642173.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1510	642198.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1511	642223.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1512	642248.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1513	642273.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1514	642298.5	4168361.2	Roadway/Waterway	Scenario 3	--	--	--
1515	639323.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1516	639348.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1517	639373.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1518	639398.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1519	639423.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1520	639448.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1521	639473.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1522	639498.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1523	639723.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1524	642098.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1525	642123.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1526	642148.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1527	642173.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1528	642198.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1529	642223.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1530	642248.5	4168386.2	Roadway/Waterway	Scenario 3	--	--	--
1531	639298.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1532	639323.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1533	639348.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1534	639373.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1535	639398.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1536	639423.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1537	639448.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1538	639473.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1539	639723.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1540	642023.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1541	642048.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1542	642073.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1543	642098.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1544	642123.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1545	642148.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1546	642173.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1547	642198.5	4168411.2	Roadway/Waterway	Scenario 3	--	--	--
1548	639248.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1549	639273.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1550	639298.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1551	639323.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1552	639348.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1553	639373.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1554	639398.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1555	639423.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1556	639723.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1557	641973.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1558	641998.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1559	642023.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1560	642048.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1561	642073.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1562	642098.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1563	642123.5	4168436.2	Roadway/Waterway	Scenario 3	--	--	--
1564	639198.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1565	639223.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1566	639248.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1567	639273.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1568	639298.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1569	639323.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1570	639348.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1571	639373.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1572	641923.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1573	641948.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1574	641973.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1575	641998.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1576	642023.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1577	642048.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1578	642073.5	4168461.2	Roadway/Waterway	Scenario 3	--	--	--
1579	639173.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1580	639198.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1581	639223.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1582	639248.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1583	639273.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1584	639298.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1585	639323.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1586	641848.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1587	641873.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1588	641898.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1589	641923.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1590	641948.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1591	641973.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1592	641998.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1593	642023.5	4168486.2	Roadway/Waterway	Scenario 3	--	--	--
1594	639123.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1595	639148.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1596	639173.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1597	639198.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1598	639223.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1599	639248.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1600	639273.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1601	639298.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1602	641348.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1603	641798.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1604	641823.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1605	641848.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1606	641873.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1607	641898.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1608	641923.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1609	641948.5	4168511.2	Roadway/Waterway	Scenario 3	--	--	--
1610	639073.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1611	639098.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1612	639123.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1613	639148.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1614	639173.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1615	639198.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1616	639223.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1617	639248.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1618	641348.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1619	641723.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1620	641748.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1621	641773.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1622	641798.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1623	641823.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1624	641848.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1625	641873.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1626	641898.5	4168536.2	Roadway/Waterway	Scenario 3	--	--	--
1627	639048.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1628	639073.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1629	639098.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1630	639123.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1631	639148.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1632	639173.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1633	639198.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1634	641348.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1635	641648.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1636	641673.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1637	641698.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1638	641723.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1639	641748.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1640	641773.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1641	641798.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1642	641823.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1643	641848.5	4168561.2	Roadway/Waterway	Scenario 3	--	--	--
1644	638998.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1645	639023.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1646	639048.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1647	639073.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1648	639098.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1649	639123.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1650	639148.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1651	639173.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1652	641348.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1653	641573.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1654	641598.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1655	641623.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1656	641648.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1657	641673.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1658	641698.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1659	641723.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1660	641748.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1661	641773.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1662	641798.5	4168586.2	Roadway/Waterway	Scenario 3	--	--	--
1663	638948.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1664	638973.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1665	638998.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1666	639023.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1667	639048.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1668	639073.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1669	639098.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1670	639123.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1671	641348.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1672	641498.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1673	641523.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1674	641548.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1675	641573.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1676	641598.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1677	641623.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1678	641648.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1679	641673.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1680	641698.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1681	641723.5	4168611.2	Roadway/Waterway	Scenario 3	--	--	--
1682	638923.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1683	638948.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1684	638973.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1685	638998.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1686	639023.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1687	639048.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1688	639073.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1689	641348.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1690	641423.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1691	641448.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1692	641473.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1693	641498.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1694	641523.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1695	641548.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1696	641573.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1697	641598.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1698	641623.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1699	641648.5	4168636.2	Roadway/Waterway	Scenario 3	--	--	--
1700	638873.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1701	638898.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1702	638923.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1703	638948.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1704	638973.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1705	638998.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1706	639023.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1707	639048.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1708	641348.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1709	641373.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1710	641398.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1711	641423.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1712	641448.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1713	641473.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1714	641498.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1715	641523.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1716	641548.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1717	641573.5	4168661.2	Roadway/Waterway	Scenario 3	--	--	--
1718	638823.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1719	638848.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1720	638873.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1721	638898.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1722	638923.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1723	638948.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1724	638973.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1725	638998.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1726	641273.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1727	641298.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1728	641323.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1729	641348.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1730	641373.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1731	641398.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1732	641423.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1733	641448.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1734	641473.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1735	641498.5	4168686.2	Roadway/Waterway	Scenario 3	--	--	--
1736	638773.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1737	638798.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1738	638823.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1739	638848.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1740	638873.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1741	638898.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1742	638923.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1743	638948.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1744	641198.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1745	641223.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1746	641248.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1747	641273.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1748	641298.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1749	641323.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1750	641348.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1751	641373.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1752	641398.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1753	641423.5	4168711.2	Roadway/Waterway	Scenario 3	--	--	--
1754	638748.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1755	638773.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1756	638798.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1757	638823.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1758	638848.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1759	638873.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1760	638898.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1761	638923.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1762	640123.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1763	640148.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1764	640173.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1765	640198.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1766	640223.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1767	640248.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1768	640273.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1769	640298.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1770	641123.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1771	641148.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1772	641173.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1773	641198.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1774	641223.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1775	641248.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1776	641273.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1777	641298.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1778	641323.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1779	641348.5	4168736.2	Roadway/Waterway	Scenario 3	--	--	--
1780	638698.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1781	638723.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1782	638748.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1783	638773.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1784	638798.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1785	638823.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1786	638848.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1787	638873.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1788	640098.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1789	640123.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1790	640148.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1791	640173.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1792	640198.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1793	640223.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1794	640248.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1795	640273.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1796	640298.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1797	640323.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1798	640348.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1799	641048.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1800	641073.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1801	641098.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1802	641123.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1803	641148.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1804	641173.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1805	641198.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1806	641223.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1807	641248.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1808	641273.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
1809	638673.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1810	638698.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1811	638723.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1812	638748.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1813	638773.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1814	638798.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1815	638823.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1816	640048.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1817	640073.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1818	640098.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1819	640123.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1820	640148.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1821	640173.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1822	640198.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1823	640223.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1824	640248.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1825	640273.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1826	640298.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1827	640323.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1828	640348.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1829	640373.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1830	640398.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1831	640973.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1832	640998.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1833	641023.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1834	641048.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1835	641073.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1836	641098.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1837	641123.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1838	641148.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1839	641173.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1840	641198.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1841	641223.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
1842	638648.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1843	638673.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1844	638698.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1845	638723.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1846	638748.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1847	638773.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1848	638798.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1849	640048.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1850	640073.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1851	640098.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1852	640123.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1853	640148.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1854	640173.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1855	640198.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1856	640223.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1857	640248.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1858	640273.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1859	640298.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1860	640323.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1861	640348.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1862	640373.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1863	640398.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1864	640423.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1865	640448.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1866	640898.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1867	640923.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1868	640948.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1869	640973.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1870	640998.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1871	641023.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1872	641048.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1873	641073.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1874	641098.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1875	641123.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1876	641148.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
1877	638598.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1878	638623.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1879	638648.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1880	638673.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1881	638698.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1882	638723.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1883	638748.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1884	640023.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1885	640048.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1886	640073.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1887	640098.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1888	640123.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1889	640148.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1890	640298.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1891	640323.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1892	640348.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1893	640373.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1894	640398.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1895	640423.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1896	640448.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1897	640473.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1898	640498.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1899	640823.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1900	640848.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1901	640873.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1902	640898.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1903	640923.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1904	640948.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1905	640973.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1906	640998.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1907	641023.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1908	641048.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1909	641073.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
1910	638573.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1911	638598.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1912	638623.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1913	638648.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1914	638673.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1915	638698.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1916	638723.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1917	639998.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1918	640023.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1919	640048.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1920	640073.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1921	640098.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1922	640348.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1923	640373.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1924	640398.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1925	640423.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1926	640448.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1927	640473.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1928	640498.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1929	640523.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1930	640548.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1931	640748.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1932	640773.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1933	640798.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1934	640823.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1935	640848.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1936	640873.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1937	640898.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1938	640923.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1939	640948.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1940	640973.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1941	640998.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
1942	638548.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1943	638573.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1944	638598.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1945	638623.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1946	638648.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1947	638673.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1948	639973.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1949	639998.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1950	640023.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1951	640048.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1952	640073.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1953	640398.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1954	640423.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1955	640448.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1956	640473.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1957	640498.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1958	640523.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1959	640548.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1960	640573.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1961	640598.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1962	640623.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1963	640648.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1964	640673.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1965	640698.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1966	640723.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1967	640748.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1968	640773.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1969	640798.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1970	640823.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1971	640848.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1972	640873.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1973	640898.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1974	640923.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
1975	638523.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1976	638548.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1977	638573.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1978	638598.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1979	638623.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1980	638648.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1981	639948.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1982	639973.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1983	639998.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1984	640023.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1985	640048.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1986	640448.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1987	640473.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1988	640498.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1989	640523.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1990	640548.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1991	640573.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1992	640598.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1993	640623.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1994	640648.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1995	640673.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1996	640698.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1997	640723.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1998	640748.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
1999	640773.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
2000	640798.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
2001	640823.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
2002	640848.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
2003	638473.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2004	638498.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2005	638523.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2006	638548.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2007	638573.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2008	638598.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2009	638623.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2010	639923.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2011	639948.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2012	639973.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2013	639998.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2014	640023.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2015	640448.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2016	640473.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2017	640498.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2018	640523.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2019	640548.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2020	640573.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2021	640598.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2022	640623.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2023	640648.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2024	640673.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2025	640698.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2026	640723.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2027	640748.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
2028	638448.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2029	638473.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2030	638498.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2031	638523.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2032	638548.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2033	638573.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2034	639898.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2035	639923.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2036	639948.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2037	639973.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2038	639998.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2039	640023.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2040	640448.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2041	640473.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2042	640498.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2043	640523.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2044	640598.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2045	640623.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2046	640648.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2047	640673.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
2048	638423.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2049	638448.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2050	638473.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2051	638498.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2052	638523.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2053	638548.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2054	639873.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2055	639898.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2056	639923.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2057	639948.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2058	639973.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2059	639998.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2060	640448.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2061	640473.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2062	640498.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2063	640523.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
2064	638398.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2065	638423.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2066	638448.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2067	638473.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2068	638498.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2069	638523.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2070	639848.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2071	639873.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2072	639898.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2073	639923.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2074	639948.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2075	639973.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2076	640473.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2077	640498.5	4169011.2	Roadway/Waterway	Scenario 3	--	--	--
2078	638373.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2079	638398.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2080	638423.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2081	638448.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2082	638473.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2083	638498.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2084	639823.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2085	639848.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2086	639873.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2087	639898.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2088	639923.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2089	639948.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2090	640498.5	4169036.2	Roadway/Waterway	Scenario 3	--	--	--
2091	638348.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2092	638373.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2093	638398.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2094	638423.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2095	638448.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2096	639823.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2097	639848.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2098	639873.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2099	639898.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2100	639923.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2101	640498.5	4169061.2	Roadway/Waterway	Scenario 3	--	--	--
2102	638323.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2103	638348.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2104	638373.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2105	638398.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2106	638423.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2107	638448.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2108	639648.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2109	639673.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2110	639698.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2111	639723.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2112	639748.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2113	639773.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2114	639798.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2115	639823.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2116	639848.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2117	639873.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2118	639898.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2119	640498.5	4169086.2	Roadway/Waterway	Scenario 3	--	--	--
2120	638298.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2121	638323.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2122	638348.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2123	638373.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2124	638398.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2125	638423.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2126	639598.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2127	639623.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2128	639648.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2129	639673.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2130	639698.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2131	639723.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2132	639748.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2133	639773.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2134	639798.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2135	639823.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2136	639848.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2137	639873.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2138	640498.5	4169111.2	Roadway/Waterway	Scenario 3	--	--	--
2139	638273.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2140	638298.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2141	638323.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2142	638348.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2143	638373.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2144	638398.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2145	639573.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2146	639598.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2147	639623.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2148	639648.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2149	639673.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2150	639698.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2151	639723.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2152	639748.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2153	639773.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2154	639798.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2155	639823.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2156	639848.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2157	640498.5	4169136.2	Roadway/Waterway	Scenario 3	--	--	--
2158	638248.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2159	638273.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2160	638298.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2161	638323.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2162	638348.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2163	638373.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2164	639548.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2165	639573.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2166	639598.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2167	639623.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2168	639648.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2169	639673.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2170	639698.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2171	639723.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2172	639748.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2173	639773.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2174	639798.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2175	639823.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2176	640498.5	4169161.2	Roadway/Waterway	Scenario 3	--	--	--
2177	638223.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2178	638248.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2179	638273.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2180	638298.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2181	638323.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2182	638348.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2183	639548.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2184	639573.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2185	639598.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2186	639623.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2187	639648.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2188	640498.5	4169186.2	Roadway/Waterway	Scenario 3	--	--	--
2189	638198.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2190	638223.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2191	638248.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2192	638273.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2193	638298.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2194	638323.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2195	639523.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2196	639548.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2197	639573.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2198	639598.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2199	639623.5	4169211.2	Roadway/Waterway	Scenario 3	--	--	--
2200	638173.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2201	638198.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2202	638223.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2203	638248.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2204	638273.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2205	638298.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2206	639523.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2207	639548.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2208	639573.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2209	639598.5	4169236.2	Roadway/Waterway	Scenario 3	--	--	--
2210	638148.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2211	638173.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2212	638198.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2213	638223.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2214	638248.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2215	638273.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2216	639498.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2217	639523.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2218	639548.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2219	639573.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2220	639598.5	4169261.2	Roadway/Waterway	Scenario 3	--	--	--
2221	638123.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2222	638148.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2223	638173.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2224	638198.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2225	638223.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2226	638248.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2227	639473.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2228	639498.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2229	639523.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2230	639548.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2231	639573.5	4169286.2	Roadway/Waterway	Scenario 3	--	--	--
2232	638098.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2233	638123.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2234	638148.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2235	638173.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2236	638198.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2237	638223.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2238	639473.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2239	639498.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2240	639523.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2241	639548.5	4169311.2	Roadway/Waterway	Scenario 3	--	--	--
2242	638073.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2243	638098.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2244	638123.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2245	638148.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2246	638173.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2247	638198.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2248	639448.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2249	639473.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2250	639498.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2251	639523.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2252	639548.5	4169336.2	Roadway/Waterway	Scenario 3	--	--	--
2253	638048.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2254	638073.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2255	638098.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2256	638123.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2257	638148.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2258	638173.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2259	639398.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2260	639423.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2261	639448.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2262	639473.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2263	639498.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2264	639523.5	4169361.2	Roadway/Waterway	Scenario 3	--	--	--
2265	638023.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2266	638048.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2267	638073.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2268	638098.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2269	638123.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2270	638148.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2271	639373.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2272	639398.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2273	639423.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2274	639448.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2275	639473.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2276	639498.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2277	641323.5	4169386.2	Roadway/Waterway	Scenario 3	--	--	--
2278	638023.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2279	638048.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2280	638073.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2281	638098.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2282	638123.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2283	639348.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2284	639373.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2285	639398.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2286	639423.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2287	639448.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2288	639473.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2289	641323.5	4169411.2	Roadway/Waterway	Scenario 3	--	--	--
2290	637998.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2291	638023.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2292	638048.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2293	638073.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2294	638098.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2295	639323.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2296	639348.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2297	639373.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2298	639398.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2299	639423.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2300	639448.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2301	641323.5	4169436.2	Roadway/Waterway	Scenario 3	--	--	--
2302	637998.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2303	638023.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2304	638048.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2305	638073.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2306	639298.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2307	639323.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2308	639348.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2309	639373.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2310	639398.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2311	639423.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2312	641323.5	4169461.2	Roadway/Waterway	Scenario 3	--	--	--
2313	637998.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--
2314	638023.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--
2315	638048.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--
2316	639248.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--
2317	639273.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--
2318	639298.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2319	639323.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--
2320	639348.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--
2321	639373.5	4169486.2	Roadway/Waterway	Scenario 3	--	--	--
2322	637998.5	4169511.2	Roadway/Waterway	Scenario 3	--	--	--
2323	638023.5	4169511.2	Roadway/Waterway	Scenario 3	--	--	--
2324	639223.5	4169511.2	Roadway/Waterway	Scenario 3	--	--	--
2325	639248.5	4169511.2	Roadway/Waterway	Scenario 3	--	--	--
2326	639273.5	4169511.2	Roadway/Waterway	Scenario 3	--	--	--
2327	639298.5	4169511.2	Roadway/Waterway	Scenario 3	--	--	--
2328	639323.5	4169511.2	Roadway/Waterway	Scenario 3	--	--	--
2329	639348.5	4169511.2	Roadway/Waterway	Scenario 3	--	--	--
2330	637998.5	4169536.2	Roadway/Waterway	Scenario 3	--	--	--
2331	639198.5	4169536.2	Roadway/Waterway	Scenario 3	--	--	--
2332	639223.5	4169536.2	Roadway/Waterway	Scenario 3	--	--	--
2333	639248.5	4169536.2	Roadway/Waterway	Scenario 3	--	--	--
2334	639273.5	4169536.2	Roadway/Waterway	Scenario 3	--	--	--
2335	639298.5	4169536.2	Roadway/Waterway	Scenario 3	--	--	--
2336	639323.5	4169536.2	Roadway/Waterway	Scenario 3	--	--	--
2337	639173.5	4169561.2	Roadway/Waterway	Scenario 3	--	--	--
2338	639198.5	4169561.2	Roadway/Waterway	Scenario 3	--	--	--
2339	639223.5	4169561.2	Roadway/Waterway	Scenario 3	--	--	--
2340	639248.5	4169561.2	Roadway/Waterway	Scenario 3	--	--	--
2341	639273.5	4169561.2	Roadway/Waterway	Scenario 3	--	--	--
2342	639298.5	4169561.2	Roadway/Waterway	Scenario 3	--	--	--
2343	639123.5	4169586.2	Roadway/Waterway	Scenario 3	--	--	--
2344	639148.5	4169586.2	Roadway/Waterway	Scenario 3	--	--	--
2345	639173.5	4169586.2	Roadway/Waterway	Scenario 3	--	--	--
2346	639198.5	4169586.2	Roadway/Waterway	Scenario 3	--	--	--
2347	639223.5	4169586.2	Roadway/Waterway	Scenario 3	--	--	--
2348	639248.5	4169586.2	Roadway/Waterway	Scenario 3	--	--	--
2349	639273.5	4169586.2	Roadway/Waterway	Scenario 3	--	--	--
2350	639098.5	4169611.2	Roadway/Waterway	Scenario 3	--	--	--
2351	639123.5	4169611.2	Roadway/Waterway	Scenario 3	--	--	--
2352	639148.5	4169611.2	Roadway/Waterway	Scenario 3	--	--	--
2353	639173.5	4169611.2	Roadway/Waterway	Scenario 3	--	--	--
2354	639198.5	4169611.2	Roadway/Waterway	Scenario 3	--	--	--
2355	639223.5	4169611.2	Roadway/Waterway	Scenario 3	--	--	--
2356	639073.5	4169636.2	Roadway/Waterway	Scenario 3	--	--	--
2357	639098.5	4169636.2	Roadway/Waterway	Scenario 3	--	--	--
2358	639123.5	4169636.2	Roadway/Waterway	Scenario 3	--	--	--
2359	639148.5	4169636.2	Roadway/Waterway	Scenario 3	--	--	--
2360	639173.5	4169636.2	Roadway/Waterway	Scenario 3	--	--	--
2361	639198.5	4169636.2	Roadway/Waterway	Scenario 3	--	--	--
2362	639048.5	4169661.2	Roadway/Waterway	Scenario 3	--	--	--
2363	639073.5	4169661.2	Roadway/Waterway	Scenario 3	--	--	--
2364	639098.5	4169661.2	Roadway/Waterway	Scenario 3	--	--	--
2365	639123.5	4169661.2	Roadway/Waterway	Scenario 3	--	--	--
2366	639148.5	4169661.2	Roadway/Waterway	Scenario 3	--	--	--
2367	639173.5	4169661.2	Roadway/Waterway	Scenario 3	--	--	--
2368	639023.5	4169686.2	Roadway/Waterway	Scenario 3	--	--	--
2369	639048.5	4169686.2	Roadway/Waterway	Scenario 3	--	--	--
2370	639073.5	4169686.2	Roadway/Waterway	Scenario 3	--	--	--
2371	639098.5	4169686.2	Roadway/Waterway	Scenario 3	--	--	--
2372	639123.5	4169686.2	Roadway/Waterway	Scenario 3	--	--	--
2373	639148.5	4169686.2	Roadway/Waterway	Scenario 3	--	--	--
2374	638998.5	4169711.2	Roadway/Waterway	Scenario 3	--	--	--
2375	639023.5	4169711.2	Roadway/Waterway	Scenario 3	--	--	--
2376	639048.5	4169711.2	Roadway/Waterway	Scenario 3	--	--	--
2377	639073.5	4169711.2	Roadway/Waterway	Scenario 3	--	--	--
2378	639098.5	4169711.2	Roadway/Waterway	Scenario 3	--	--	--
2379	639123.5	4169711.2	Roadway/Waterway	Scenario 3	--	--	--
2380	638973.5	4169736.2	Roadway/Waterway	Scenario 3	--	--	--
2381	638998.5	4169736.2	Roadway/Waterway	Scenario 3	--	--	--
2382	639023.5	4169736.2	Roadway/Waterway	Scenario 3	--	--	--
2383	639048.5	4169736.2	Roadway/Waterway	Scenario 3	--	--	--
2384	639073.5	4169736.2	Roadway/Waterway	Scenario 3	--	--	--
2385	638948.5	4169761.2	Roadway/Waterway	Scenario 3	--	--	--
2386	638973.5	4169761.2	Roadway/Waterway	Scenario 3	--	--	--
2387	638998.5	4169761.2	Roadway/Waterway	Scenario 3	--	--	--
2388	639023.5	4169761.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2389	639048.5	4169761.2	Roadway/Waterway	Scenario 3	--	--	--
2390	638948.5	4169786.2	Roadway/Waterway	Scenario 3	--	--	--
2391	638973.5	4169786.2	Roadway/Waterway	Scenario 3	--	--	--
2392	638998.5	4169786.2	Roadway/Waterway	Scenario 3	--	--	--
2393	639023.5	4169786.2	Roadway/Waterway	Scenario 3	--	--	--
2394	638923.5	4169811.2	Roadway/Waterway	Scenario 3	--	--	--
2395	638948.5	4169811.2	Roadway/Waterway	Scenario 3	--	--	--
2396	638973.5	4169811.2	Roadway/Waterway	Scenario 3	--	--	--
2397	638998.5	4169811.2	Roadway/Waterway	Scenario 3	--	--	--
2398	639023.5	4169811.2	Roadway/Waterway	Scenario 3	--	--	--
2399	638898.5	4169836.2	Roadway/Waterway	Scenario 3	--	--	--
2400	638923.5	4169836.2	Roadway/Waterway	Scenario 3	--	--	--
2401	638948.5	4169836.2	Roadway/Waterway	Scenario 3	--	--	--
2402	638973.5	4169836.2	Roadway/Waterway	Scenario 3	--	--	--
2403	638998.5	4169836.2	Roadway/Waterway	Scenario 3	--	--	--
2404	638873.5	4169861.2	Roadway/Waterway	Scenario 3	--	--	--
2405	638898.5	4169861.2	Roadway/Waterway	Scenario 3	--	--	--
2406	638923.5	4169861.2	Roadway/Waterway	Scenario 3	--	--	--
2407	638948.5	4169861.2	Roadway/Waterway	Scenario 3	--	--	--
2408	638973.5	4169861.2	Roadway/Waterway	Scenario 3	--	--	--
2409	638848.5	4169886.2	Roadway/Waterway	Scenario 3	--	--	--
2410	638873.5	4169886.2	Roadway/Waterway	Scenario 3	--	--	--
2411	638898.5	4169886.2	Roadway/Waterway	Scenario 3	--	--	--
2412	638923.5	4169886.2	Roadway/Waterway	Scenario 3	--	--	--
2413	638948.5	4169886.2	Roadway/Waterway	Scenario 3	--	--	--
2414	638823.5	4169911.2	Roadway/Waterway	Scenario 3	--	--	--
2415	638848.5	4169911.2	Roadway/Waterway	Scenario 3	--	--	--
2416	638873.5	4169911.2	Roadway/Waterway	Scenario 3	--	--	--
2417	638898.5	4169911.2	Roadway/Waterway	Scenario 3	--	--	--
2418	638923.5	4169911.2	Roadway/Waterway	Scenario 3	--	--	--
2419	638798.5	4169936.2	Roadway/Waterway	Scenario 3	--	--	--
2420	638823.5	4169936.2	Roadway/Waterway	Scenario 3	--	--	--
2421	638848.5	4169936.2	Roadway/Waterway	Scenario 3	--	--	--
2422	638873.5	4169936.2	Roadway/Waterway	Scenario 3	--	--	--
2423	638898.5	4169936.2	Roadway/Waterway	Scenario 3	--	--	--
2424	638798.5	4169961.2	Roadway/Waterway	Scenario 3	--	--	--
2425	638823.5	4169961.2	Roadway/Waterway	Scenario 3	--	--	--
2426	638848.5	4169961.2	Roadway/Waterway	Scenario 3	--	--	--
2427	638873.5	4169961.2	Roadway/Waterway	Scenario 3	--	--	--
2428	638798.5	4169986.2	Roadway/Waterway	Scenario 3	--	--	--
2429	638823.5	4169986.2	Roadway/Waterway	Scenario 3	--	--	--
2430	638848.5	4169986.2	Roadway/Waterway	Scenario 3	--	--	--
2431	638873.5	4169986.2	Roadway/Waterway	Scenario 3	--	--	--
2432	638098.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2433	638123.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2434	638148.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2435	638173.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2436	638198.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2437	638223.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2438	638248.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2439	638273.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2440	638298.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2441	638773.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2442	638798.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2443	638823.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2444	638848.5	4170011.2	Roadway/Waterway	Scenario 3	--	--	--
2445	638773.5	4170036.2	Roadway/Waterway	Scenario 3	--	--	--
2446	638798.5	4170036.2	Roadway/Waterway	Scenario 3	--	--	--
2447	638823.5	4170036.2	Roadway/Waterway	Scenario 3	--	--	--
2448	638848.5	4170036.2	Roadway/Waterway	Scenario 3	--	--	--
2449	638773.5	4170061.2	Roadway/Waterway	Scenario 3	--	--	--
2450	638798.5	4170061.2	Roadway/Waterway	Scenario 3	--	--	--
2451	638823.5	4170061.2	Roadway/Waterway	Scenario 3	--	--	--
2452	638848.5	4170061.2	Roadway/Waterway	Scenario 3	--	--	--
2453	638748.5	4170086.2	Roadway/Waterway	Scenario 3	--	--	--
2454	638773.5	4170086.2	Roadway/Waterway	Scenario 3	--	--	--
2455	638798.5	4170086.2	Roadway/Waterway	Scenario 3	--	--	--
2456	638823.5	4170086.2	Roadway/Waterway	Scenario 3	--	--	--
2457	638723.5	4170111.2	Roadway/Waterway	Scenario 3	--	--	--
2458	638748.5	4170111.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2459	638773.5	4170111.2	Roadway/Waterway	Scenario 3	--	--	--
2460	638798.5	4170111.2	Roadway/Waterway	Scenario 3	--	--	--
2461	642611.0	4166673.7	Roadway/Waterway	Scenario 3	--	--	--
2462	642661.0	4166673.7	Roadway/Waterway	Scenario 3	--	--	--
2463	642461.0	4166723.7	Roadway/Waterway	Scenario 3	--	--	--
2464	642511.0	4166723.7	Roadway/Waterway	Scenario 3	--	--	--
2465	642561.0	4166723.7	Roadway/Waterway	Scenario 3	--	--	--
2466	642611.0	4166723.7	Roadway/Waterway	Scenario 3	--	--	--
2467	641311.0	4166773.7	Roadway/Waterway	Scenario 3	--	--	--
2468	641361.0	4166773.7	Roadway/Waterway	Scenario 3	--	--	--
2469	641411.0	4166773.7	Roadway/Waterway	Scenario 3	--	--	--
2470	642411.0	4166773.7	Roadway/Waterway	Scenario 3	--	--	--
2471	642461.0	4166773.7	Roadway/Waterway	Scenario 3	--	--	--
2472	642511.0	4166773.7	Roadway/Waterway	Scenario 3	--	--	--
2473	642561.0	4166773.7	Roadway/Waterway	Scenario 3	--	--	--
2474	641261.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2475	641311.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2476	641361.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2477	641411.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2478	641461.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2479	642361.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2480	642411.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2481	642461.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2482	642511.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2483	642561.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2484	644361.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2485	644561.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2486	644611.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2487	644661.0	4166823.7	Roadway/Waterway	Scenario 3	--	--	--
2488	641211.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2489	641261.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2490	641311.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2491	641361.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2492	641411.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2493	641461.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2494	642311.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2495	644411.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2496	644461.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2497	644511.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2498	644561.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2499	644611.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2500	644661.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2501	644711.0	4166873.7	Roadway/Waterway	Scenario 3	--	--	--
2502	641161.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2503	641211.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2504	641261.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2505	641311.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2506	644511.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2507	644561.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2508	644611.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2509	644661.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2510	644711.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2511	644761.0	4166923.7	Roadway/Waterway	Scenario 3	--	--	--
2512	641161.0	4166973.7	Roadway/Waterway	Scenario 3	--	--	--
2513	641211.0	4166973.7	Roadway/Waterway	Scenario 3	--	--	--
2514	641261.0	4166973.7	Roadway/Waterway	Scenario 3	--	--	--
2515	644661.0	4166973.7	Roadway/Waterway	Scenario 3	--	--	--
2516	644711.0	4167273.7	Roadway/Waterway	Scenario 3	--	--	--
2517	644761.0	4167273.7	Roadway/Waterway	Scenario 3	--	--	--
2518	644811.0	4167273.7	Roadway/Waterway	Scenario 3	--	--	--
2519	644711.0	4167323.7	Roadway/Waterway	Scenario 3	--	--	--
2520	644761.0	4167323.7	Roadway/Waterway	Scenario 3	--	--	--
2521	644811.0	4167323.7	Roadway/Waterway	Scenario 3	--	--	--
2522	641161.0	4167473.7	Roadway/Waterway	Scenario 3	--	--	--
2523	641211.0	4167473.7	Roadway/Waterway	Scenario 3	--	--	--
2524	641261.0	4167473.7	Roadway/Waterway	Scenario 3	--	--	--
2525	641011.0	4167523.7	Roadway/Waterway	Scenario 3	--	--	--
2526	641061.0	4167523.7	Roadway/Waterway	Scenario 3	--	--	--
2527	641111.0	4167523.7	Roadway/Waterway	Scenario 3	--	--	--
2528	640861.0	4167573.7	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2529	640911.0	4167573.7	Roadway/Waterway	Scenario 3	--	--	--
2530	640711.0	4167623.7	Roadway/Waterway	Scenario 3	--	--	--
2531	640561.0	4167673.7	Roadway/Waterway	Scenario 3	--	--	--
2532	640111.0	4167873.7	Roadway/Waterway	Scenario 3	--	--	--
2533	639961.0	4167973.7	Roadway/Waterway	Scenario 3	--	--	--
2534	639861.0	4168023.7	Roadway/Waterway	Scenario 3	--	--	--
2535	639811.0	4168073.7	Roadway/Waterway	Scenario 3	--	--	--
2536	639711.0	4168123.7	Roadway/Waterway	Scenario 3	--	--	--
2537	639611.0	4168173.7	Roadway/Waterway	Scenario 3	--	--	--
2538	639661.0	4168173.7	Roadway/Waterway	Scenario 3	--	--	--
2539	639561.0	4168223.7	Roadway/Waterway	Scenario 3	--	--	--
2540	639611.0	4168223.7	Roadway/Waterway	Scenario 3	--	--	--
2541	639461.0	4168273.7	Roadway/Waterway	Scenario 3	--	--	--
2542	639511.0	4168273.7	Roadway/Waterway	Scenario 3	--	--	--
2543	639561.0	4168273.7	Roadway/Waterway	Scenario 3	--	--	--
2544	639611.0	4168273.7	Roadway/Waterway	Scenario 3	--	--	--
2545	639161.0	4168323.7	Roadway/Waterway	Scenario 3	--	--	--
2546	639411.0	4168323.7	Roadway/Waterway	Scenario 3	--	--	--
2547	639461.0	4168323.7	Roadway/Waterway	Scenario 3	--	--	--
2548	639511.0	4168323.7	Roadway/Waterway	Scenario 3	--	--	--
2549	639561.0	4168323.7	Roadway/Waterway	Scenario 3	--	--	--
2550	639611.0	4168323.7	Roadway/Waterway	Scenario 3	--	--	--
2551	639061.0	4168373.7	Roadway/Waterway	Scenario 3	--	--	--
2552	639311.0	4168373.7	Roadway/Waterway	Scenario 3	--	--	--
2553	639011.0	4168423.7	Roadway/Waterway	Scenario 3	--	--	--
2554	639211.0	4168423.7	Roadway/Waterway	Scenario 3	--	--	--
2555	638911.0	4168473.7	Roadway/Waterway	Scenario 3	--	--	--
2556	638961.0	4168473.7	Roadway/Waterway	Scenario 3	--	--	--
2557	639161.0	4168473.7	Roadway/Waterway	Scenario 3	--	--	--
2558	638811.0	4168523.7	Roadway/Waterway	Scenario 3	--	--	--
2559	638861.0	4168523.7	Roadway/Waterway	Scenario 3	--	--	--
2560	639061.0	4168523.7	Roadway/Waterway	Scenario 3	--	--	--
2561	638711.0	4168573.7	Roadway/Waterway	Scenario 3	--	--	--
2562	638761.0	4168573.7	Roadway/Waterway	Scenario 3	--	--	--
2563	638811.0	4168573.7	Roadway/Waterway	Scenario 3	--	--	--
2564	638661.0	4168623.7	Roadway/Waterway	Scenario 3	--	--	--
2565	638711.0	4168623.7	Roadway/Waterway	Scenario 3	--	--	--
2566	638761.0	4168623.7	Roadway/Waterway	Scenario 3	--	--	--
2567	638911.0	4168623.7	Roadway/Waterway	Scenario 3	--	--	--
2568	638561.0	4168673.7	Roadway/Waterway	Scenario 3	--	--	--
2569	638611.0	4168673.7	Roadway/Waterway	Scenario 3	--	--	--
2570	638661.0	4168673.7	Roadway/Waterway	Scenario 3	--	--	--
2571	638511.0	4168723.7	Roadway/Waterway	Scenario 3	--	--	--
2572	638561.0	4168723.7	Roadway/Waterway	Scenario 3	--	--	--
2573	638611.0	4168723.7	Roadway/Waterway	Scenario 3	--	--	--
2574	638461.0	4168773.7	Roadway/Waterway	Scenario 3	--	--	--
2575	638511.0	4168773.7	Roadway/Waterway	Scenario 3	--	--	--
2576	638411.0	4168823.7	Roadway/Waterway	Scenario 3	--	--	--
2577	638461.0	4168823.7	Roadway/Waterway	Scenario 3	--	--	--
2578	640211.0	4168823.7	Roadway/Waterway	Scenario 3	--	--	--
2579	638311.0	4168873.7	Roadway/Waterway	Scenario 3	--	--	--
2580	638361.0	4168873.7	Roadway/Waterway	Scenario 3	--	--	--
2581	638411.0	4168873.7	Roadway/Waterway	Scenario 3	--	--	--
2582	640111.0	4168873.7	Roadway/Waterway	Scenario 3	--	--	--
2583	640161.0	4168873.7	Roadway/Waterway	Scenario 3	--	--	--
2584	640261.0	4168873.7	Roadway/Waterway	Scenario 3	--	--	--
2585	640311.0	4168873.7	Roadway/Waterway	Scenario 3	--	--	--
2586	640361.0	4168873.7	Roadway/Waterway	Scenario 3	--	--	--
2587	638261.0	4168923.7	Roadway/Waterway	Scenario 3	--	--	--
2588	638311.0	4168923.7	Roadway/Waterway	Scenario 3	--	--	--
2589	640061.0	4168923.7	Roadway/Waterway	Scenario 3	--	--	--
2590	640411.0	4168923.7	Roadway/Waterway	Scenario 3	--	--	--
2591	638211.0	4168973.7	Roadway/Waterway	Scenario 3	--	--	--
2592	638261.0	4168973.7	Roadway/Waterway	Scenario 3	--	--	--
2593	638211.0	4169023.7	Roadway/Waterway	Scenario 3	--	--	--
2594	638311.0	4169073.7	Roadway/Waterway	Scenario 3	--	--	--
2595	638111.0	4169123.7	Roadway/Waterway	Scenario 3	--	--	--
2596	638261.0	4169123.7	Roadway/Waterway	Scenario 3	--	--	--
2597	638111.0	4169173.7	Roadway/Waterway	Scenario 3	--	--	--
2598	638211.0	4169173.7	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2599	638111.0	4169223.7	Roadway/Waterway	Scenario 3	--	--	--
2600	638161.0	4169223.7	Roadway/Waterway	Scenario 3	--	--	--
2601	639711.0	4169223.7	Roadway/Waterway	Scenario 3	--	--	--
2602	638111.0	4169273.7	Roadway/Waterway	Scenario 3	--	--	--
2603	639711.0	4169273.7	Roadway/Waterway	Scenario 3	--	--	--
2604	638061.0	4169323.7	Roadway/Waterway	Scenario 3	--	--	--
2605	639711.0	4169323.7	Roadway/Waterway	Scenario 3	--	--	--
2606	638011.0	4169373.7	Roadway/Waterway	Scenario 3	--	--	--
2607	637961.0	4169423.7	Roadway/Waterway	Scenario 3	--	--	--
2608	637911.0	4169473.7	Roadway/Waterway	Scenario 3	--	--	--
2609	637961.0	4169473.7	Roadway/Waterway	Scenario 3	--	--	--
2610	637861.0	4169523.7	Roadway/Waterway	Scenario 3	--	--	--
2611	637911.0	4169523.7	Roadway/Waterway	Scenario 3	--	--	--
2612	637961.0	4169523.7	Roadway/Waterway	Scenario 3	--	--	--
2613	641311.0	4169523.7	Roadway/Waterway	Scenario 3	--	--	--
2614	637861.0	4169573.7	Roadway/Waterway	Scenario 3	--	--	--
2615	637911.0	4169573.7	Roadway/Waterway	Scenario 3	--	--	--
2616	637961.0	4169573.7	Roadway/Waterway	Scenario 3	--	--	--
2617	641311.0	4169573.7	Roadway/Waterway	Scenario 3	--	--	--
2618	637861.0	4169623.7	Roadway/Waterway	Scenario 3	--	--	--
2619	637911.0	4169623.7	Roadway/Waterway	Scenario 3	--	--	--
2620	641311.0	4169623.7	Roadway/Waterway	Scenario 3	--	--	--
2621	637861.0	4169673.7	Roadway/Waterway	Scenario 3	--	--	--
2622	638861.0	4170073.7	Roadway/Waterway	Scenario 3	--	--	--
2623	638811.0	4170123.7	Roadway/Waterway	Scenario 3	--	--	--
2624	638861.0	4170123.7	Roadway/Waterway	Scenario 3	--	--	--
2625	638661.0	4170173.7	Roadway/Waterway	Scenario 3	--	--	--
2626	638711.0	4170173.7	Roadway/Waterway	Scenario 3	--	--	--
2627	638761.0	4170173.7	Roadway/Waterway	Scenario 3	--	--	--
2628	638811.0	4170173.7	Roadway/Waterway	Scenario 3	--	--	--
2629	638611.0	4170223.7	Roadway/Waterway	Scenario 3	--	--	--
2630	638661.0	4170223.7	Roadway/Waterway	Scenario 3	--	--	--
2631	638711.0	4170223.7	Roadway/Waterway	Scenario 3	--	--	--
2632	638761.0	4170223.7	Roadway/Waterway	Scenario 3	--	--	--
2633	638711.0	4170273.7	Roadway/Waterway	Scenario 3	--	--	--
2634	644236.2	4164448.9	Roadway/Waterway	Scenario 3	--	--	--
2635	644136.2	4164548.9	Roadway/Waterway	Scenario 3	--	--	--
2636	643936.2	4164648.9	Roadway/Waterway	Scenario 3	--	--	--
2637	644036.2	4164648.9	Roadway/Waterway	Scenario 3	--	--	--
2638	644636.2	4164648.9	Roadway/Waterway	Scenario 3	--	--	--
2639	643836.2	4164748.9	Roadway/Waterway	Scenario 3	--	--	--
2640	643936.2	4164748.9	Roadway/Waterway	Scenario 3	--	--	--
2641	644636.2	4164748.9	Roadway/Waterway	Scenario 3	--	--	--
2642	643736.2	4164848.9	Roadway/Waterway	Scenario 3	--	--	--
2643	643836.2	4164848.9	Roadway/Waterway	Scenario 3	--	--	--
2644	644636.2	4164848.9	Roadway/Waterway	Scenario 3	--	--	--
2645	643636.2	4164948.9	Roadway/Waterway	Scenario 3	--	--	--
2646	644636.2	4164948.9	Roadway/Waterway	Scenario 3	--	--	--
2647	643536.2	4165048.9	Roadway/Waterway	Scenario 3	--	--	--
2648	644636.2	4165048.9	Roadway/Waterway	Scenario 3	--	--	--
2649	645836.2	4165048.9	Roadway/Waterway	Scenario 3	--	--	--
2650	645936.2	4165048.9	Roadway/Waterway	Scenario 3	--	--	--
2651	643436.2	4165148.9	Roadway/Waterway	Scenario 3	--	--	--
2652	644636.2	4165148.9	Roadway/Waterway	Scenario 3	--	--	--
2653	645836.2	4165148.9	Roadway/Waterway	Scenario 3	--	--	--
2654	643236.2	4165248.9	Roadway/Waterway	Scenario 3	--	--	--
2655	643336.2	4165248.9	Roadway/Waterway	Scenario 3	--	--	--
2656	644636.2	4165248.9	Roadway/Waterway	Scenario 3	--	--	--
2657	645736.2	4165248.9	Roadway/Waterway	Scenario 3	--	--	--
2658	645836.2	4165248.9	Roadway/Waterway	Scenario 3	--	--	--
2659	646236.2	4165248.9	Roadway/Waterway	Scenario 3	--	--	--
2660	643136.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--
2661	644636.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--
2662	645736.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--
2663	645836.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--
2664	645936.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--
2665	646036.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--
2666	646136.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--
2667	646236.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--
2668	646336.2	4165348.9	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2669	643036.2	4165448.9	Roadway/Waterway	Scenario 3	--	--	--
2670	645736.2	4165448.9	Roadway/Waterway	Scenario 3	--	--	--
2671	645836.2	4165448.9	Roadway/Waterway	Scenario 3	--	--	--
2672	646236.2	4165448.9	Roadway/Waterway	Scenario 3	--	--	--
2673	642836.2	4165548.9	Roadway/Waterway	Scenario 3	--	--	--
2674	642936.2	4165548.9	Roadway/Waterway	Scenario 3	--	--	--
2675	645736.2	4165548.9	Roadway/Waterway	Scenario 3	--	--	--
2676	645836.2	4165548.9	Roadway/Waterway	Scenario 3	--	--	--
2677	646236.2	4165548.9	Roadway/Waterway	Scenario 3	--	--	--
2678	642736.2	4165648.9	Roadway/Waterway	Scenario 3	--	--	--
2679	645636.2	4165648.9	Roadway/Waterway	Scenario 3	--	--	--
2680	645736.2	4165648.9	Roadway/Waterway	Scenario 3	--	--	--
2681	646236.2	4165648.9	Roadway/Waterway	Scenario 3	--	--	--
2682	642636.2	4165748.9	Roadway/Waterway	Scenario 3	--	--	--
2683	645436.2	4165748.9	Roadway/Waterway	Scenario 3	--	--	--
2684	645536.2	4165748.9	Roadway/Waterway	Scenario 3	--	--	--
2685	645636.2	4165748.9	Roadway/Waterway	Scenario 3	--	--	--
2686	646236.2	4165748.9	Roadway/Waterway	Scenario 3	--	--	--
2687	642436.2	4165848.9	Roadway/Waterway	Scenario 3	--	--	--
2688	642536.2	4165848.9	Roadway/Waterway	Scenario 3	--	--	--
2689	645136.2	4165848.9	Roadway/Waterway	Scenario 3	--	--	--
2690	645236.2	4165848.9	Roadway/Waterway	Scenario 3	--	--	--
2691	645336.2	4165848.9	Roadway/Waterway	Scenario 3	--	--	--
2692	646236.2	4165848.9	Roadway/Waterway	Scenario 3	--	--	--
2693	641936.2	4165948.9	Roadway/Waterway	Scenario 3	--	--	--
2694	642336.2	4165948.9	Roadway/Waterway	Scenario 3	--	--	--
2695	644836.2	4165948.9	Roadway/Waterway	Scenario 3	--	--	--
2696	644936.2	4165948.9	Roadway/Waterway	Scenario 3	--	--	--
2697	645036.2	4165948.9	Roadway/Waterway	Scenario 3	--	--	--
2698	645136.2	4165948.9	Roadway/Waterway	Scenario 3	--	--	--
2699	646236.2	4165948.9	Roadway/Waterway	Scenario 3	--	--	--
2700	641536.2	4166048.9	Roadway/Waterway	Scenario 3	--	--	--
2701	642236.2	4166048.9	Roadway/Waterway	Scenario 3	--	--	--
2702	644436.2	4166048.9	Roadway/Waterway	Scenario 3	--	--	--
2703	644536.2	4166048.9	Roadway/Waterway	Scenario 3	--	--	--
2704	644636.2	4166048.9	Roadway/Waterway	Scenario 3	--	--	--
2705	644736.2	4166048.9	Roadway/Waterway	Scenario 3	--	--	--
2706	644836.2	4166048.9	Roadway/Waterway	Scenario 3	--	--	--
2707	646236.2	4166048.9	Roadway/Waterway	Scenario 3	--	--	--
2708	642036.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2709	642136.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2710	643136.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2711	643236.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2712	643336.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2713	643436.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2714	643536.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2715	643636.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2716	643736.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2717	643836.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2718	643936.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2719	644036.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2720	644136.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2721	644236.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2722	644336.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2723	644436.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2724	646236.2	4166148.9	Roadway/Waterway	Scenario 3	--	--	--
2725	643036.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2726	643136.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2727	643236.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2728	643336.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2729	643436.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2730	643536.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2731	643636.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2732	643736.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2733	643836.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2734	643936.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2735	644036.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2736	644136.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2737	646236.2	4166248.9	Roadway/Waterway	Scenario 3	--	--	--
2738	641736.2	4166348.9	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2739	641836.2	4166348.9	Roadway/Waterway	Scenario 3	--	--	--
2740	642936.2	4166348.9	Roadway/Waterway	Scenario 3	--	--	--
2741	646236.2	4166348.9	Roadway/Waterway	Scenario 3	--	--	--
2742	646936.2	4166348.9	Roadway/Waterway	Scenario 3	--	--	--
2743	640736.2	4166448.9	Roadway/Waterway	Scenario 3	--	--	--
2744	641336.2	4166448.9	Roadway/Waterway	Scenario 3	--	--	--
2745	641636.2	4166448.9	Roadway/Waterway	Scenario 3	--	--	--
2746	642736.2	4166448.9	Roadway/Waterway	Scenario 3	--	--	--
2747	642836.2	4166448.9	Roadway/Waterway	Scenario 3	--	--	--
2748	646236.2	4166448.9	Roadway/Waterway	Scenario 3	--	--	--
2749	646936.2	4166448.9	Roadway/Waterway	Scenario 3	--	--	--
2750	640936.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2751	641336.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2752	641436.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2753	641536.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2754	642636.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2755	642736.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2756	646236.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2757	646736.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2758	646836.2	4166548.9	Roadway/Waterway	Scenario 3	--	--	--
2759	641336.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2760	641436.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2761	642536.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2762	642636.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2763	645936.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2764	646036.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2765	646136.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2766	646236.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2767	646336.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2768	646436.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2769	646536.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2770	646636.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2771	646736.2	4166648.9	Roadway/Waterway	Scenario 3	--	--	--
2772	641236.2	4166748.9	Roadway/Waterway	Scenario 3	--	--	--
2773	641336.2	4166748.9	Roadway/Waterway	Scenario 3	--	--	--
2774	644736.2	4166748.9	Roadway/Waterway	Scenario 3	--	--	--
2775	645836.2	4166748.9	Roadway/Waterway	Scenario 3	--	--	--
2776	646136.2	4166748.9	Roadway/Waterway	Scenario 3	--	--	--
2777	646236.2	4166748.9	Roadway/Waterway	Scenario 3	--	--	--
2778	646336.2	4166748.9	Roadway/Waterway	Scenario 3	--	--	--
2779	639836.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2780	639936.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2781	640036.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2782	640136.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2783	640236.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2784	640336.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2785	640436.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2786	640536.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2787	641036.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2788	641136.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2789	644736.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2790	645736.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2791	646036.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2792	646136.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2793	646236.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2794	646336.2	4166848.9	Roadway/Waterway	Scenario 3	--	--	--
2795	640836.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2796	640936.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2797	641036.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2798	641136.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2799	644836.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2800	644936.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2801	645036.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2802	645136.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2803	645236.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2804	645336.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2805	645436.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2806	645536.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2807	645736.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2808	645836.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2809	645936.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2810	646036.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2811	646136.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2812	646236.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2813	646336.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2814	646436.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2815	646536.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2816	646636.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2817	646736.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2818	646836.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2819	646936.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2820	647036.2	4166948.9	Roadway/Waterway	Scenario 3	--	--	--
2821	640636.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2822	640736.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2823	640836.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2824	640936.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2825	645236.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2826	645336.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2827	645736.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2828	646036.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2829	646136.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2830	646236.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2831	646336.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2832	646836.2	4167048.9	Roadway/Waterway	Scenario 3	--	--	--
2833	640536.2	4167148.9	Roadway/Waterway	Scenario 3	--	--	--
2834	640636.2	4167148.9	Roadway/Waterway	Scenario 3	--	--	--
2835	640736.2	4167148.9	Roadway/Waterway	Scenario 3	--	--	--
2836	645236.2	4167148.9	Roadway/Waterway	Scenario 3	--	--	--
2837	645336.2	4167148.9	Roadway/Waterway	Scenario 3	--	--	--
2838	645736.2	4167148.9	Roadway/Waterway	Scenario 3	--	--	--
2839	646136.2	4167148.9	Roadway/Waterway	Scenario 3	--	--	--
2840	646236.2	4167148.9	Roadway/Waterway	Scenario 3	--	--	--
2841	640436.2	4167248.9	Roadway/Waterway	Scenario 3	--	--	--
2842	640536.2	4167248.9	Roadway/Waterway	Scenario 3	--	--	--
2843	644936.2	4167248.9	Roadway/Waterway	Scenario 3	--	--	--
2844	645236.2	4167248.9	Roadway/Waterway	Scenario 3	--	--	--
2845	646236.2	4167248.9	Roadway/Waterway	Scenario 3	--	--	--
2846	640336.2	4167348.9	Roadway/Waterway	Scenario 3	--	--	--
2847	640436.2	4167348.9	Roadway/Waterway	Scenario 3	--	--	--
2848	646136.2	4167348.9	Roadway/Waterway	Scenario 3	--	--	--
2849	646236.2	4167348.9	Roadway/Waterway	Scenario 3	--	--	--
2850	640236.2	4167448.9	Roadway/Waterway	Scenario 3	--	--	--
2851	640336.2	4167448.9	Roadway/Waterway	Scenario 3	--	--	--
2852	646036.2	4167448.9	Roadway/Waterway	Scenario 3	--	--	--
2853	646136.2	4167448.9	Roadway/Waterway	Scenario 3	--	--	--
2854	646236.2	4167448.9	Roadway/Waterway	Scenario 3	--	--	--
2855	640136.2	4167548.9	Roadway/Waterway	Scenario 3	--	--	--
2856	646136.2	4167548.9	Roadway/Waterway	Scenario 3	--	--	--
2857	640036.2	4167648.9	Roadway/Waterway	Scenario 3	--	--	--
2858	646136.2	4167648.9	Roadway/Waterway	Scenario 3	--	--	--
2859	639836.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2860	639936.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2861	644136.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2862	644236.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2863	645036.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2864	645136.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2865	645236.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2866	645336.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2867	645436.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2868	645536.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2869	645636.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2870	645736.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2871	645836.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2872	645936.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2873	646136.2	4167748.9	Roadway/Waterway	Scenario 3	--	--	--
2874	639736.2	4167848.9	Roadway/Waterway	Scenario 3	--	--	--
2875	646136.2	4167848.9	Roadway/Waterway	Scenario 3	--	--	--
2876	639636.2	4167948.9	Roadway/Waterway	Scenario 3	--	--	--
2877	646136.2	4167948.9	Roadway/Waterway	Scenario 3	--	--	--
2878	639436.2	4168048.9	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2879	639536.2	4168048.9	Roadway/Waterway	Scenario 3	--	--	--
2880	646136.2	4168048.9	Roadway/Waterway	Scenario 3	--	--	--
2881	639336.2	4168148.9	Roadway/Waterway	Scenario 3	--	--	--
2882	639436.2	4168148.9	Roadway/Waterway	Scenario 3	--	--	--
2883	646136.2	4168148.9	Roadway/Waterway	Scenario 3	--	--	--
2884	639236.2	4168248.9	Roadway/Waterway	Scenario 3	--	--	--
2885	646136.2	4168248.9	Roadway/Waterway	Scenario 3	--	--	--
2886	639036.2	4168348.9	Roadway/Waterway	Scenario 3	--	--	--
2887	646136.2	4168348.9	Roadway/Waterway	Scenario 3	--	--	--
2888	646136.2	4168448.9	Roadway/Waterway	Scenario 3	--	--	--
2889	644836.2	4168548.9	Roadway/Waterway	Scenario 3	--	--	--
2890	644936.2	4168548.9	Roadway/Waterway	Scenario 3	--	--	--
2891	645036.2	4168548.9	Roadway/Waterway	Scenario 3	--	--	--
2892	645136.2	4168548.9	Roadway/Waterway	Scenario 3	--	--	--
2893	645236.2	4168548.9	Roadway/Waterway	Scenario 3	--	--	--
2894	645336.2	4168548.9	Roadway/Waterway	Scenario 3	--	--	--
2895	646136.2	4168548.9	Roadway/Waterway	Scenario 3	--	--	--
2896	646136.2	4168648.9	Roadway/Waterway	Scenario 3	--	--	--
2897	646636.2	4168648.9	Roadway/Waterway	Scenario 3	--	--	--
2898	646136.2	4168748.9	Roadway/Waterway	Scenario 3	--	--	--
2899	646136.2	4168848.9	Roadway/Waterway	Scenario 3	--	--	--
2900	644736.2	4168948.9	Roadway/Waterway	Scenario 3	--	--	--
2901	645936.2	4168948.9	Roadway/Waterway	Scenario 3	--	--	--
2902	646136.2	4168948.9	Roadway/Waterway	Scenario 3	--	--	--
2903	638136.2	4169048.9	Roadway/Waterway	Scenario 3	--	--	--
2904	644136.2	4169048.9	Roadway/Waterway	Scenario 3	--	--	--
2905	646136.2	4169048.9	Roadway/Waterway	Scenario 3	--	--	--
2906	637936.2	4169148.9	Roadway/Waterway	Scenario 3	--	--	--
2907	638036.2	4169148.9	Roadway/Waterway	Scenario 3	--	--	--
2908	644236.2	4169148.9	Roadway/Waterway	Scenario 3	--	--	--
2909	646136.2	4169148.9	Roadway/Waterway	Scenario 3	--	--	--
2910	637836.2	4169248.9	Roadway/Waterway	Scenario 3	--	--	--
2911	644536.2	4169248.9	Roadway/Waterway	Scenario 3	--	--	--
2912	637736.2	4169348.9	Roadway/Waterway	Scenario 3	--	--	--
2913	644536.2	4169348.9	Roadway/Waterway	Scenario 3	--	--	--
2914	637536.2	4169448.9	Roadway/Waterway	Scenario 3	--	--	--
2915	637636.2	4169448.9	Roadway/Waterway	Scenario 3	--	--	--
2916	644436.2	4169448.9	Roadway/Waterway	Scenario 3	--	--	--
2917	644536.2	4169448.9	Roadway/Waterway	Scenario 3	--	--	--
2918	637436.2	4169548.9	Roadway/Waterway	Scenario 3	--	--	--
2919	637836.2	4169548.9	Roadway/Waterway	Scenario 3	--	--	--
2920	644536.2	4169548.9	Roadway/Waterway	Scenario 3	--	--	--
2921	637236.2	4169648.9	Roadway/Waterway	Scenario 3	--	--	--
2922	637336.2	4169648.9	Roadway/Waterway	Scenario 3	--	--	--
2923	637836.2	4169648.9	Roadway/Waterway	Scenario 3	--	--	--
2924	644536.2	4169648.9	Roadway/Waterway	Scenario 3	--	--	--
2925	637136.2	4169748.9	Roadway/Waterway	Scenario 3	--	--	--
2926	637736.2	4169748.9	Roadway/Waterway	Scenario 3	--	--	--
2927	644536.2	4169748.9	Roadway/Waterway	Scenario 3	--	--	--
2928	637036.2	4169848.9	Roadway/Waterway	Scenario 3	--	--	--
2929	637636.2	4169848.9	Roadway/Waterway	Scenario 3	--	--	--
2930	637736.2	4169848.9	Roadway/Waterway	Scenario 3	--	--	--
2931	644536.2	4169848.9	Roadway/Waterway	Scenario 3	--	--	--
2932	636836.2	4169948.9	Roadway/Waterway	Scenario 3	--	--	--
2933	636936.2	4169948.9	Roadway/Waterway	Scenario 3	--	--	--
2934	637636.2	4169948.9	Roadway/Waterway	Scenario 3	--	--	--
2935	639636.2	4169948.9	Roadway/Waterway	Scenario 3	--	--	--
2936	636736.2	4170048.9	Roadway/Waterway	Scenario 3	--	--	--
2937	636836.2	4170048.9	Roadway/Waterway	Scenario 3	--	--	--
2938	637536.2	4170048.9	Roadway/Waterway	Scenario 3	--	--	--
2939	635636.2	4170148.9	Roadway/Waterway	Scenario 3	--	--	--
2940	636636.2	4170148.9	Roadway/Waterway	Scenario 3	--	--	--
2941	637436.2	4170148.9	Roadway/Waterway	Scenario 3	--	--	--
2942	637536.2	4170148.9	Roadway/Waterway	Scenario 3	--	--	--
2943	635636.2	4170248.9	Roadway/Waterway	Scenario 3	--	--	--
2944	635736.2	4170248.9	Roadway/Waterway	Scenario 3	--	--	--
2945	636436.2	4170248.9	Roadway/Waterway	Scenario 3	--	--	--
2946	636536.2	4170248.9	Roadway/Waterway	Scenario 3	--	--	--
2947	637336.2	4170248.9	Roadway/Waterway	Scenario 3	--	--	--
2948	637436.2	4170248.9	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2949	635736.2	4170348.9	Roadway/Waterway	Scenario 3	--	--	--
2950	635836.2	4170348.9	Roadway/Waterway	Scenario 3	--	--	--
2951	636336.2	4170348.9	Roadway/Waterway	Scenario 3	--	--	--
2952	636436.2	4170348.9	Roadway/Waterway	Scenario 3	--	--	--
2953	637336.2	4170348.9	Roadway/Waterway	Scenario 3	--	--	--
2954	638536.2	4170348.9	Roadway/Waterway	Scenario 3	--	--	--
2955	638636.2	4170348.9	Roadway/Waterway	Scenario 3	--	--	--
2956	635736.2	4170448.9	Roadway/Waterway	Scenario 3	--	--	--
2957	635936.2	4170448.9	Roadway/Waterway	Scenario 3	--	--	--
2958	636136.2	4170448.9	Roadway/Waterway	Scenario 3	--	--	--
2959	636236.2	4170448.9	Roadway/Waterway	Scenario 3	--	--	--
2960	637236.2	4170448.9	Roadway/Waterway	Scenario 3	--	--	--
2961	637336.2	4170448.9	Roadway/Waterway	Scenario 3	--	--	--
2962	638436.2	4170448.9	Roadway/Waterway	Scenario 3	--	--	--
2963	638536.2	4170448.9	Roadway/Waterway	Scenario 3	--	--	--
2964	635736.2	4170548.9	Roadway/Waterway	Scenario 3	--	--	--
2965	636036.2	4170548.9	Roadway/Waterway	Scenario 3	--	--	--
2966	636136.2	4170548.9	Roadway/Waterway	Scenario 3	--	--	--
2967	637236.2	4170548.9	Roadway/Waterway	Scenario 3	--	--	--
2968	638436.2	4170548.9	Roadway/Waterway	Scenario 3	--	--	--
2969	635936.2	4170648.9	Roadway/Waterway	Scenario 3	--	--	--
2970	636036.2	4170648.9	Roadway/Waterway	Scenario 3	--	--	--
2971	636136.2	4170648.9	Roadway/Waterway	Scenario 3	--	--	--
2972	637136.2	4170648.9	Roadway/Waterway	Scenario 3	--	--	--
2973	637236.2	4170648.9	Roadway/Waterway	Scenario 3	--	--	--
2974	638436.2	4170648.9	Roadway/Waterway	Scenario 3	--	--	--
2975	635836.2	4170748.9	Roadway/Waterway	Scenario 3	--	--	--
2976	636236.2	4170748.9	Roadway/Waterway	Scenario 3	--	--	--
2977	637036.2	4170748.9	Roadway/Waterway	Scenario 3	--	--	--
2978	637136.2	4170748.9	Roadway/Waterway	Scenario 3	--	--	--
2979	638436.2	4170748.9	Roadway/Waterway	Scenario 3	--	--	--
2980	638536.2	4170748.9	Roadway/Waterway	Scenario 3	--	--	--
2981	635736.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2982	635836.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2983	636336.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2984	636636.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2985	636736.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2986	637036.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2987	637136.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2988	637236.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2989	638436.2	4170848.9	Roadway/Waterway	Scenario 3	--	--	--
2990	635836.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2991	635936.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2992	636436.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2993	636536.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2994	636936.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2995	637036.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2996	637136.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2997	637236.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2998	638336.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
2999	638436.2	4170948.9	Roadway/Waterway	Scenario 3	--	--	--
3000	635836.2	4171048.9	Roadway/Waterway	Scenario 3	--	--	--
3001	636436.2	4171048.9	Roadway/Waterway	Scenario 3	--	--	--
3002	636936.2	4171048.9	Roadway/Waterway	Scenario 3	--	--	--
3003	638336.2	4171048.9	Roadway/Waterway	Scenario 3	--	--	--
3004	636436.2	4171148.9	Roadway/Waterway	Scenario 3	--	--	--
3005	636736.2	4171148.9	Roadway/Waterway	Scenario 3	--	--	--
3006	636836.2	4171148.9	Roadway/Waterway	Scenario 3	--	--	--
3007	638236.2	4171148.9	Roadway/Waterway	Scenario 3	--	--	--
3008	638336.2	4171148.9	Roadway/Waterway	Scenario 3	--	--	--
3009	635936.2	4171248.9	Roadway/Waterway	Scenario 3	--	--	--
3010	636036.2	4171248.9	Roadway/Waterway	Scenario 3	--	--	--
3011	636436.2	4171248.9	Roadway/Waterway	Scenario 3	--	--	--
3012	636636.2	4171248.9	Roadway/Waterway	Scenario 3	--	--	--
3013	636736.2	4171248.9	Roadway/Waterway	Scenario 3	--	--	--
3014	638036.2	4171248.9	Roadway/Waterway	Scenario 3	--	--	--
3015	638136.2	4171248.9	Roadway/Waterway	Scenario 3	--	--	--
3016	638236.2	4171248.9	Roadway/Waterway	Scenario 3	--	--	--
3017	636436.2	4171348.9	Roadway/Waterway	Scenario 3	--	--	--
3018	636536.2	4171348.9	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3019	636636.2	4171348.9	Roadway/Waterway	Scenario 3	--	--	--
3020	637936.2	4171348.9	Roadway/Waterway	Scenario 3	--	--	--
3021	638036.2	4171348.9	Roadway/Waterway	Scenario 3	--	--	--
3022	636336.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3023	636436.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3024	636536.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3025	637436.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3026	637536.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3027	637636.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3028	637736.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3029	637836.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3030	637936.2	4171448.9	Roadway/Waterway	Scenario 3	--	--	--
3031	636136.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3032	636236.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3033	636336.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3034	636436.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3035	637336.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3036	637436.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3037	637536.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3038	637636.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3039	637736.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3040	637836.2	4171548.9	Roadway/Waterway	Scenario 3	--	--	--
3041	636236.2	4171648.9	Roadway/Waterway	Scenario 3	--	--	--
3042	636436.2	4171648.9	Roadway/Waterway	Scenario 3	--	--	--
3043	637336.2	4171648.9	Roadway/Waterway	Scenario 3	--	--	--
3044	637436.2	4171648.9	Roadway/Waterway	Scenario 3	--	--	--
3045	636436.2	4171748.9	Roadway/Waterway	Scenario 3	--	--	--
3046	637236.2	4171748.9	Roadway/Waterway	Scenario 3	--	--	--
3047	636436.2	4171848.9	Roadway/Waterway	Scenario 3	--	--	--
3048	637136.2	4171848.9	Roadway/Waterway	Scenario 3	--	--	--
3049	637036.2	4171948.9	Roadway/Waterway	Scenario 3	--	--	--
3050	637136.2	4171948.9	Roadway/Waterway	Scenario 3	--	--	--
3051	638036.2	4171948.9	Roadway/Waterway	Scenario 3	--	--	--
3052	636936.2	4172048.9	Roadway/Waterway	Scenario 3	--	--	--
3053	637036.2	4172048.9	Roadway/Waterway	Scenario 3	--	--	--
3054	637136.2	4172048.9	Roadway/Waterway	Scenario 3	--	--	--
3055	638036.2	4172048.9	Roadway/Waterway	Scenario 3	--	--	--
3056	636836.2	4172148.9	Roadway/Waterway	Scenario 3	--	--	--
3057	636936.2	4172148.9	Roadway/Waterway	Scenario 3	--	--	--
3058	637036.2	4172148.9	Roadway/Waterway	Scenario 3	--	--	--
3059	638036.2	4172148.9	Roadway/Waterway	Scenario 3	--	--	--
3060	638036.2	4172248.9	Roadway/Waterway	Scenario 3	--	--	--
3061	639636.2	4172248.9	Roadway/Waterway	Scenario 3	--	--	--
3062	638036.2	4172348.9	Roadway/Waterway	Scenario 3	--	--	--
3063	639636.2	4172348.9	Roadway/Waterway	Scenario 3	--	--	--
3064	638036.2	4172448.9	Roadway/Waterway	Scenario 3	--	--	--
3065	642798.5	4166811.2	Worker	Scenario 3	8.30E-01	1.96E-03	6.10E-03
3066	642823.5	4166811.2	Worker	Scenario 3	8.30E-01	1.96E-03	5.97E-03
3067	642848.5	4166811.2	Worker	Scenario 3	8.32E-01	1.96E-03	6.08E-03
3068	642873.5	4166811.2	Worker	Scenario 3	8.33E-01	1.96E-03	6.15E-03
3069	642898.5	4166811.2	Worker	Scenario 3	8.33E-01	1.95E-03	6.18E-03
3070	642923.5	4166811.2	Worker	Scenario 3	8.34E-01	1.95E-03	6.16E-03
3071	642948.5	4166811.2	Worker	Scenario 3	8.35E-01	1.95E-03	6.12E-03
3072	642973.5	4166811.2	Worker	Scenario 3	8.41E-01	1.96E-03	5.97E-03
3073	642998.5	4166811.2	Worker	Scenario 3	8.42E-01	1.95E-03	5.89E-03
3074	643023.5	4166811.2	Worker	Scenario 3	8.45E-01	1.96E-03	5.75E-03
3075	643048.5	4166811.2	Worker	Scenario 3	8.49E-01	1.96E-03	5.61E-03
3076	643073.5	4166811.2	Worker	Scenario 3	8.53E-01	1.97E-03	5.53E-03
3077	643098.5	4166811.2	Worker	Scenario 3	8.57E-01	1.97E-03	5.43E-03
3078	643123.5	4166811.2	Worker	Scenario 3	8.60E-01	1.97E-03	5.35E-03
3079	643148.5	4166811.2	Worker	Scenario 3	8.63E-01	1.98E-03	5.26E-03
3080	643173.5	4166811.2	Worker	Scenario 3	8.66E-01	1.98E-03	5.23E-03
3081	643198.5	4166811.2	Worker	Scenario 3	8.69E-01	1.98E-03	5.32E-03
3082	643223.5	4166811.2	Worker	Scenario 3	8.72E-01	1.98E-03	5.44E-03
3083	643248.5	4166811.2	Worker	Scenario 3	8.75E-01	1.99E-03	5.55E-03
3084	643273.5	4166811.2	Worker	Scenario 3	8.78E-01	1.99E-03	5.64E-03
3085	643298.5	4166811.2	Worker	Scenario 3	8.80E-01	1.99E-03	5.72E-03
3086	643323.5	4166811.2	Worker	Scenario 3	8.84E-01	2.00E-03	5.79E-03
3087	643348.5	4166811.2	Worker	Scenario 3	8.87E-01	2.00E-03	5.85E-03
3088	643373.5	4166811.2	Worker	Scenario 3	8.89E-01	2.00E-03	5.89E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3089	643398.5	4166811.2	Worker	Scenario 3	8.92E-01	2.00E-03	5.92E-03
3090	643423.5	4166811.2	Worker	Scenario 3	8.93E-01	2.00E-03	5.94E-03
3091	643448.5	4166811.2	Worker	Scenario 3	8.95E-01	2.00E-03	5.94E-03
3092	643473.5	4166811.2	Worker	Scenario 3	8.95E-01	2.00E-03	5.93E-03
3093	643498.5	4166811.2	Worker	Scenario 3	8.94E-01	2.00E-03	5.92E-03
3094	643523.5	4166811.2	Worker	Scenario 3	8.93E-01	1.99E-03	5.89E-03
3095	641973.5	4166836.2	Worker	Scenario 3	1.69E+00	4.02E-03	1.76E-02
3096	641998.5	4166836.2	Worker	Scenario 3	1.64E+00	3.91E-03	1.74E-02
3097	642023.5	4166836.2	Worker	Scenario 3	1.59E+00	3.78E-03	1.75E-02
3098	642048.5	4166836.2	Worker	Scenario 3	1.54E+00	3.65E-03	1.64E-02
3099	642073.5	4166836.2	Worker	Scenario 3	1.48E+00	3.53E-03	1.46E-02
3100	642098.5	4166836.2	Worker	Scenario 3	1.44E+00	3.41E-03	1.52E-02
3101	642123.5	4166836.2	Worker	Scenario 3	1.39E+00	3.30E-03	1.57E-02
3102	642148.5	4166836.2	Worker	Scenario 3	1.34E+00	3.20E-03	1.57E-02
3103	642173.5	4166836.2	Worker	Scenario 3	1.30E+00	3.10E-03	1.51E-02
3104	642198.5	4166836.2	Worker	Scenario 3	1.26E+00	3.01E-03	1.41E-02
3105	642223.5	4166836.2	Worker	Scenario 3	1.23E+00	2.92E-03	1.33E-02
3106	642248.5	4166836.2	Worker	Scenario 3	1.19E+00	2.85E-03	1.28E-02
3107	642598.5	4166836.2	Worker	Scenario 3	9.03E-01	2.16E-03	8.55E-03
3108	642623.5	4166836.2	Worker	Scenario 3	8.94E-01	2.14E-03	8.25E-03
3109	642648.5	4166836.2	Worker	Scenario 3	8.87E-01	2.12E-03	7.88E-03
3110	642673.5	4166836.2	Worker	Scenario 3	8.81E-01	2.10E-03	7.45E-03
3111	642698.5	4166836.2	Worker	Scenario 3	8.79E-01	2.09E-03	7.02E-03
3112	642723.5	4166836.2	Worker	Scenario 3	8.78E-01	2.09E-03	6.69E-03
3113	642748.5	4166836.2	Worker	Scenario 3	8.80E-01	2.09E-03	6.42E-03
3114	642773.5	4166836.2	Worker	Scenario 3	8.82E-01	2.09E-03	6.50E-03
3115	642798.5	4166836.2	Worker	Scenario 3	8.84E-01	2.09E-03	6.59E-03
3116	642823.5	4166836.2	Worker	Scenario 3	8.87E-01	2.09E-03	6.63E-03
3117	642848.5	4166836.2	Worker	Scenario 3	8.91E-01	2.09E-03	6.62E-03
3118	642873.5	4166836.2	Worker	Scenario 3	8.93E-01	2.09E-03	6.57E-03
3119	642898.5	4166836.2	Worker	Scenario 3	8.96E-01	2.09E-03	6.47E-03
3120	642923.5	4166836.2	Worker	Scenario 3	9.00E-01	2.09E-03	6.34E-03
3121	642948.5	4166836.2	Worker	Scenario 3	9.04E-01	2.10E-03	6.18E-03
3122	642973.5	4166836.2	Worker	Scenario 3	9.10E-01	2.11E-03	6.01E-03
3123	642998.5	4166836.2	Worker	Scenario 3	9.20E-01	2.12E-03	5.86E-03
3124	643023.5	4166836.2	Worker	Scenario 3	9.23E-01	2.13E-03	5.79E-03
3125	643048.5	4166836.2	Worker	Scenario 3	9.31E-01	2.14E-03	5.68E-03
3126	643073.5	4166836.2	Worker	Scenario 3	9.38E-01	2.15E-03	5.57E-03
3127	643098.5	4166836.2	Worker	Scenario 3	9.43E-01	2.15E-03	5.51E-03
3128	643123.5	4166836.2	Worker	Scenario 3	9.46E-01	2.16E-03	5.59E-03
3129	643148.5	4166836.2	Worker	Scenario 3	9.50E-01	2.16E-03	5.71E-03
3130	643173.5	4166836.2	Worker	Scenario 3	9.53E-01	2.16E-03	5.82E-03
3131	643198.5	4166836.2	Worker	Scenario 3	9.55E-01	2.16E-03	5.91E-03
3132	643223.5	4166836.2	Worker	Scenario 3	9.58E-01	2.17E-03	5.99E-03
3133	643248.5	4166836.2	Worker	Scenario 3	9.61E-01	2.17E-03	6.05E-03
3134	643273.5	4166836.2	Worker	Scenario 3	9.64E-01	2.17E-03	6.09E-03
3135	643298.5	4166836.2	Worker	Scenario 3	9.67E-01	2.17E-03	6.12E-03
3136	643323.5	4166836.2	Worker	Scenario 3	9.70E-01	2.18E-03	6.14E-03
3137	643348.5	4166836.2	Worker	Scenario 3	9.73E-01	2.18E-03	6.16E-03
3138	643373.5	4166836.2	Worker	Scenario 3	9.75E-01	2.18E-03	6.16E-03
3139	643398.5	4166836.2	Worker	Scenario 3	9.77E-01	2.18E-03	6.14E-03
3140	643423.5	4166836.2	Worker	Scenario 3	9.78E-01	2.18E-03	6.11E-03
3141	643448.5	4166836.2	Worker	Scenario 3	9.79E-01	2.18E-03	6.08E-03
3142	643473.5	4166836.2	Worker	Scenario 3	9.78E-01	2.18E-03	6.03E-03
3143	643498.5	4166836.2	Worker	Scenario 3	9.77E-01	2.17E-03	5.97E-03
3144	643523.5	4166836.2	Worker	Scenario 3	9.74E-01	2.16E-03	5.90E-03
3145	643548.5	4166836.2	Worker	Scenario 3	9.70E-01	2.15E-03	5.83E-03
3146	643573.5	4166836.2	Worker	Scenario 3	9.65E-01	2.14E-03	5.75E-03
3147	643598.5	4166836.2	Worker	Scenario 3	9.59E-01	2.12E-03	5.66E-03
3148	643623.5	4166836.2	Worker	Scenario 3	9.52E-01	2.11E-03	5.57E-03
3149	643648.5	4166836.2	Worker	Scenario 3	9.44E-01	2.09E-03	5.47E-03
3150	643673.5	4166836.2	Worker	Scenario 3	9.36E-01	2.07E-03	5.37E-03
3151	643698.5	4166836.2	Worker	Scenario 3	9.27E-01	2.05E-03	5.26E-03
3152	643723.5	4166836.2	Worker	Scenario 3	9.18E-01	2.03E-03	5.15E-03
3153	643748.5	4166836.2	Worker	Scenario 3	9.08E-01	2.01E-03	5.04E-03
3154	643773.5	4166836.2	Worker	Scenario 3	8.99E-01	1.98E-03	4.93E-03
3155	643798.5	4166836.2	Worker	Scenario 3	8.89E-01	1.96E-03	4.82E-03
3156	643823.5	4166836.2	Worker	Scenario 3	8.80E-01	1.94E-03	4.70E-03
3157	643848.5	4166836.2	Worker	Scenario 3	8.71E-01	1.92E-03	4.59E-03
3158	643873.5	4166836.2	Worker	Scenario 3	8.63E-01	1.90E-03	4.47E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3159	643898.5	4166836.2	Worker	Scenario 3	8.54E-01	1.88E-03	4.35E-03
3160	643923.5	4166836.2	Worker	Scenario 3	8.47E-01	1.87E-03	4.24E-03
3161	643948.5	4166836.2	Worker	Scenario 3	8.39E-01	1.85E-03	4.12E-03
3162	643973.5	4166836.2	Worker	Scenario 3	8.32E-01	1.83E-03	4.01E-03
3163	643998.5	4166836.2	Worker	Scenario 3	8.26E-01	1.82E-03	3.89E-03
3164	644023.5	4166836.2	Worker	Scenario 3	8.20E-01	1.80E-03	3.78E-03
3165	644048.5	4166836.2	Worker	Scenario 3	8.14E-01	1.79E-03	3.67E-03
3166	644073.5	4166836.2	Worker	Scenario 3	8.07E-01	1.78E-03	3.56E-03
3167	644098.5	4166836.2	Worker	Scenario 3	8.01E-01	1.76E-03	3.45E-03
3168	644123.5	4166836.2	Worker	Scenario 3	7.95E-01	1.75E-03	3.35E-03
3169	644148.5	4166836.2	Worker	Scenario 3	7.88E-01	1.73E-03	3.24E-03
3170	644173.5	4166836.2	Worker	Scenario 3	7.81E-01	1.72E-03	3.14E-03
3171	644198.5	4166836.2	Worker	Scenario 3	7.73E-01	1.70E-03	3.08E-03
3172	644223.5	4166836.2	Worker	Scenario 3	7.65E-01	1.68E-03	3.01E-03
3173	644248.5	4166836.2	Worker	Scenario 3	7.55E-01	1.66E-03	2.95E-03
3174	644273.5	4166836.2	Worker	Scenario 3	7.45E-01	1.64E-03	2.89E-03
3175	644298.5	4166836.2	Worker	Scenario 3	7.34E-01	1.61E-03	2.82E-03
3176	641598.5	4166861.2	Worker	Scenario 3	1.42E+00	3.46E-03	3.89E-02
3177	641623.5	4166861.2	Worker	Scenario 3	1.52E+00	3.69E-03	4.24E-02
3178	641648.5	4166861.2	Worker	Scenario 3	1.61E+00	3.92E-03	3.69E-02
3179	641673.5	4166861.2	Worker	Scenario 3	1.71E+00	4.14E-03	3.46E-02
3180	641698.5	4166861.2	Worker	Scenario 3	1.79E+00	4.33E-03	3.16E-02
3181	641723.5	4166861.2	Worker	Scenario 3	1.86E+00	4.52E-03	2.74E-02
3182	641748.5	4166861.2	Worker	Scenario 3	1.92E+00	4.65E-03	2.63E-02
3183	641773.5	4166861.2	Worker	Scenario 3	1.97E+00	4.76E-03	2.46E-02
3184	641798.5	4166861.2	Worker	Scenario 3	2.01E+00	4.85E-03	2.43E-02
3185	641823.5	4166861.2	Worker	Scenario 3	2.04E+00	4.91E-03	2.40E-02
3186	641848.5	4166861.2	Worker	Scenario 3	2.07E+00	4.94E-03	2.29E-02
3187	641873.5	4166861.2	Worker	Scenario 3	2.07E+00	4.94E-03	2.23E-02
3188	641898.5	4166861.2	Worker	Scenario 3	2.07E+00	4.90E-03	2.07E-02
3189	641923.5	4166861.2	Worker	Scenario 3	2.04E+00	4.82E-03	2.01E-02
3190	641948.5	4166861.2	Worker	Scenario 3	1.99E+00	4.70E-03	1.89E-02
3191	641973.5	4166861.2	Worker	Scenario 3	1.93E+00	4.55E-03	1.87E-02
3192	641998.5	4166861.2	Worker	Scenario 3	1.86E+00	4.38E-03	1.87E-02
3193	642023.5	4166861.2	Worker	Scenario 3	1.79E+00	4.21E-03	1.74E-02
3194	642123.5	4166861.2	Worker	Scenario 3	1.52E+00	3.61E-03	1.67E-02
3195	642148.5	4166861.2	Worker	Scenario 3	1.47E+00	3.48E-03	1.58E-02
3196	642173.5	4166861.2	Worker	Scenario 3	1.42E+00	3.36E-03	1.45E-02
3197	641298.5	4167011.2	Worker	Scenario 3	9.15E-01	2.48E-03	7.10E-02
3198	641323.5	4167011.2	Worker	Scenario 3	1.06E+00	2.82E-03	6.31E-02
3199	641298.5	4167036.2	Worker	Scenario 3	9.82E-01	2.70E-03	7.20E-02
3200	641323.5	4167036.2	Worker	Scenario 3	1.14E+00	3.09E-03	7.47E-02
3201	641298.5	4167061.2	Worker	Scenario 3	1.05E+00	2.94E-03	6.81E-02
3202	641323.5	4167061.2	Worker	Scenario 3	1.23E+00	3.38E-03	8.37E-02
3203	641348.5	4167061.2	Worker	Scenario 3	1.49E+00	4.00E-03	7.42E-02
3204	644673.5	4167061.2	Worker	Scenario 3	7.91E-01	1.72E-03	2.26E-03
3205	641298.5	4167086.2	Worker	Scenario 3	1.12E+00	3.20E-03	7.12E-02
3206	641323.5	4167086.2	Worker	Scenario 3	1.31E+00	3.70E-03	8.40E-02
3207	641348.5	4167086.2	Worker	Scenario 3	1.60E+00	4.40E-03	9.05E-02
3208	644648.5	4167086.2	Worker	Scenario 3	8.53E-01	1.85E-03	2.26E-03
3209	644673.5	4167086.2	Worker	Scenario 3	8.16E-01	1.77E-03	2.23E-03
3210	641298.5	4167111.2	Worker	Scenario 3	1.20E+00	3.49E-03	6.91E-02
3211	641323.5	4167111.2	Worker	Scenario 3	1.41E+00	4.18E-03	6.86E-02
3212	641348.5	4167111.2	Worker	Scenario 3	1.73E+00	4.97E-03	8.91E-02
3213	644648.5	4167111.2	Worker	Scenario 3	8.84E-01	1.91E-03	2.18E-03
3214	644673.5	4167111.2	Worker	Scenario 3	8.42E-01	1.82E-03	2.15E-03
3215	641298.5	4167136.2	Worker	Scenario 3	1.28E+00	3.93E-03	6.59E-02
3216	641323.5	4167136.2	Worker	Scenario 3	1.50E+00	4.56E-03	7.18E-02
3217	641348.5	4167136.2	Worker	Scenario 3	1.84E+00	5.45E-03	9.17E-02
3218	644648.5	4167136.2	Worker	Scenario 3	9.23E-01	1.99E-03	2.25E-03
3219	644673.5	4167136.2	Worker	Scenario 3	8.69E-01	1.88E-03	2.22E-03
3220	641298.5	4167161.2	Worker	Scenario 3	1.35E+00	4.27E-03	6.87E-02
3221	641323.5	4167161.2	Worker	Scenario 3	1.59E+00	4.98E-03	8.02E-02
3222	641348.5	4167161.2	Worker	Scenario 3	1.95E+00	5.99E-03	9.13E-02
3223	644648.5	4167161.2	Worker	Scenario 3	9.73E-01	2.09E-03	2.28E-03
3224	644673.5	4167161.2	Worker	Scenario 3	8.95E-01	1.93E-03	2.26E-03
3225	641298.5	4167186.2	Worker	Scenario 3	1.42E+00	4.65E-03	8.12E-02
3226	641323.5	4167186.2	Worker	Scenario 3	1.66E+00	5.43E-03	8.61E-02
3227	641348.5	4167186.2	Worker	Scenario 3	2.04E+00	6.58E-03	1.02E-01
3228	644648.5	4167186.2	Worker	Scenario 3	9.94E-01	2.14E-03	2.27E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3229	644673.5	4167186.2	Worker	Scenario 3	8.99E-01	1.94E-03	2.24E-03
3230	641298.5	4167211.2	Worker	Scenario 3	1.49E+00	5.06E-03	8.33E-02
3231	641323.5	4167211.2	Worker	Scenario 3	1.75E+00	5.99E-03	1.02E-01
3232	641348.5	4167211.2	Worker	Scenario 3	2.15E+00	7.31E-03	1.13E-01
3233	644648.5	4167211.2	Worker	Scenario 3	9.22E-01	1.99E-03	2.22E-03
3234	644673.5	4167211.2	Worker	Scenario 3	8.66E-01	1.87E-03	2.19E-03
3235	641298.5	4167236.2	Worker	Scenario 3	1.56E+00	5.51E-03	1.03E-01
3236	641323.5	4167236.2	Worker	Scenario 3	1.83E+00	6.59E-03	1.14E-01
3237	641348.5	4167236.2	Worker	Scenario 3	2.25E+00	8.15E-03	1.34E-01
3238	644623.5	4167236.2	Worker	Scenario 3	8.87E-01	1.92E-03	2.23E-03
3239	644648.5	4167236.2	Worker	Scenario 3	8.54E-01	1.85E-03	2.21E-03
3240	644673.5	4167236.2	Worker	Scenario 3	8.25E-01	1.79E-03	2.19E-03
3241	641298.5	4167261.2	Worker	Scenario 3	1.62E+00	5.98E-03	1.21E-01
3242	641323.5	4167261.2	Worker	Scenario 3	1.90E+00	7.26E-03	1.46E-01
3243	641348.5	4167261.2	Worker	Scenario 3	2.35E+00	9.19E-03	1.58E-01
3244	641298.5	4167286.2	Worker	Scenario 3	1.68E+00	6.44E-03	1.20E-01
3245	641323.5	4167286.2	Worker	Scenario 3	1.97E+00	7.96E-03	1.59E-01
3246	641348.5	4167286.2	Worker	Scenario 3	2.45E+00	1.03E-02	2.02E-01
3247	641298.5	4167311.2	Worker	Scenario 3	1.73E+00	6.82E-03	1.36E-01
3248	641323.5	4167311.2	Worker	Scenario 3	2.03E+00	8.54E-03	1.73E-01
3249	641348.5	4167311.2	Worker	Scenario 3	2.51E+00	1.13E-02	2.20E-01
3250	641723.5	4167311.2	Roadway/Waterway	Scenario 3	--	--	--
3251	641298.5	4167336.2	Worker	Scenario 3	1.77E+00	7.11E-03	1.39E-01
3252	641323.5	4167336.2	Worker	Scenario 3	2.07E+00	8.95E-03	1.73E-01
3253	641348.5	4167336.2	Worker	Scenario 3	2.53E+00	1.20E-02	2.24E-01
3254	641623.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
3255	641648.5	4167336.2	Roadway/Waterway	Scenario 3	--	--	--
3256	641298.5	4167361.2	Worker	Scenario 3	1.81E+00	7.31E-03	1.25E-01
3257	641323.5	4167361.2	Worker	Scenario 3	2.09E+00	9.22E-03	1.52E-01
3258	641348.5	4167361.2	Worker	Scenario 3	2.53E+00	1.23E-02	1.87E-01
3259	641548.5	4167361.2	Roadway/Waterway	Scenario 3	--	--	--
3260	644523.5	4167361.2	Worker	Scenario 3	8.78E-01	1.91E-03	2.38E-03
3261	641298.5	4167386.2	Worker	Scenario 3	1.84E+00	7.51E-03	1.14E-01
3262	641323.5	4167386.2	Worker	Scenario 3	2.11E+00	9.44E-03	1.47E-01
3263	641348.5	4167386.2	Worker	Scenario 3	2.53E+00	1.26E-02	1.84E-01
3264	641448.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
3265	641473.5	4167386.2	Roadway/Waterway	Scenario 3	--	--	--
3266	644448.5	4167386.2	Worker	Scenario 3	9.27E-01	2.01E-03	2.38E-03
3267	641298.5	4167411.2	Worker	Scenario 3	1.88E+00	7.67E-03	1.10E-01
3268	641323.5	4167411.2	Worker	Scenario 3	2.13E+00	9.55E-03	1.34E-01
3269	641348.5	4167411.2	Worker	Scenario 3	2.53E+00	1.25E-02	1.72E-01
3270	644348.5	4167411.2	Worker	Scenario 3	1.00E+00	2.17E-03	2.40E-03
3271	644373.5	4167411.2	Worker	Scenario 3	9.81E-01	2.13E-03	2.37E-03
3272	643348.5	4167436.2	Worker	Scenario 3	5.79E+00	1.20E-02	4.35E-03
3273	643373.5	4167436.2	Worker	Scenario 3	5.20E+00	1.08E-02	4.25E-03
3274	643398.5	4167436.2	Worker	Scenario 3	4.75E+00	9.87E-03	4.17E-03
3275	643423.5	4167436.2	Worker	Scenario 3	4.36E+00	9.07E-03	4.09E-03
3276	643448.5	4167436.2	Worker	Scenario 3	4.02E+00	8.38E-03	4.02E-03
3277	643473.5	4167436.2	Worker	Scenario 3	3.72E+00	7.77E-03	3.94E-03
3278	643498.5	4167436.2	Worker	Scenario 3	3.46E+00	7.24E-03	3.87E-03
3279	643523.5	4167436.2	Worker	Scenario 3	3.23E+00	6.78E-03	3.80E-03
3280	643548.5	4167436.2	Worker	Scenario 3	3.03E+00	6.36E-03	3.74E-03
3281	643573.5	4167436.2	Worker	Scenario 3	2.85E+00	6.00E-03	3.68E-03
3282	643598.5	4167436.2	Worker	Scenario 3	2.69E+00	5.67E-03	3.62E-03
3283	643623.5	4167436.2	Worker	Scenario 3	2.55E+00	5.38E-03	3.56E-03
3284	643648.5	4167436.2	Worker	Scenario 3	2.42E+00	5.11E-03	3.50E-03
3285	643673.5	4167436.2	Worker	Scenario 3	2.30E+00	4.87E-03	3.44E-03
3286	643698.5	4167436.2	Worker	Scenario 3	2.19E+00	4.65E-03	3.39E-03
3287	643723.5	4167436.2	Worker	Scenario 3	2.10E+00	4.45E-03	3.33E-03
3288	643748.5	4167436.2	Worker	Scenario 3	2.01E+00	4.27E-03	3.28E-03
3289	644273.5	4167436.2	Worker	Scenario 3	1.07E+00	2.31E-03	2.41E-03
3290	644298.5	4167436.2	Worker	Scenario 3	1.04E+00	2.26E-03	2.38E-03
3291	643323.5	4167461.2	Worker	Scenario 3	7.15E+00	1.47E-02	4.74E-03
3292	643348.5	4167461.2	Worker	Scenario 3	6.26E+00	1.29E-02	4.60E-03
3293	643873.5	4167461.2	Worker	Scenario 3	1.67E+00	3.57E-03	3.09E-03
3294	643898.5	4167461.2	Worker	Scenario 3	1.61E+00	3.45E-03	3.04E-03
3295	644198.5	4167461.2	Worker	Scenario 3	1.14E+00	2.46E-03	2.57E-03
3296	644223.5	4167461.2	Worker	Scenario 3	1.11E+00	2.40E-03	2.53E-03
3297	643298.5	4167486.2	Worker	Scenario 3	8.93E+00	1.83E-02	5.08E-03
3298	643323.5	4167486.2	Worker	Scenario 3	7.47E+00	1.54E-02	4.91E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3299	643348.5	4167486.2	Worker	Scenario 3	6.52E+00	1.34E-02	4.80E-03
3300	644098.5	4167486.2	Worker	Scenario 3	1.26E+00	2.71E-03	2.74E-03
3301	644123.5	4167486.2	Worker	Scenario 3	1.22E+00	2.64E-03	2.70E-03
3302	644148.5	4167486.2	Worker	Scenario 3	1.19E+00	2.57E-03	2.66E-03
3303	643273.5	4167511.2	Worker	Scenario 3	1.04E+01	2.12E-02	5.13E-03
3304	643298.5	4167511.2	Worker	Scenario 3	8.46E+00	1.74E-02	4.97E-03
3305	643323.5	4167511.2	Worker	Scenario 3	7.28E+00	1.50E-02	4.89E-03
3306	643273.5	4167536.2	Worker	Scenario 3	8.58E+00	1.76E-02	5.00E-03
3307	643298.5	4167536.2	Worker	Scenario 3	7.44E+00	1.53E-02	4.91E-03
3308	643248.5	4167561.2	Worker	Scenario 3	7.23E+00	1.49E-02	5.10E-03
3309	643273.5	4167561.2	Worker	Scenario 3	6.55E+00	1.35E-02	4.95E-03
3310	643223.5	4167586.2	Worker	Scenario 3	4.76E+00	9.90E-03	5.31E-03
3311	643248.5	4167586.2	Worker	Scenario 3	4.75E+00	9.86E-03	5.17E-03
3312	643198.5	4167611.2	Worker	Scenario 3	2.78E+00	5.89E-03	5.42E-03
3313	643223.5	4167611.2	Worker	Scenario 3	2.96E+00	6.24E-03	5.25E-03
3314	643248.5	4167611.2	Worker	Scenario 3	3.16E+00	6.65E-03	5.14E-03
3315	643173.5	4167636.2	Worker	Scenario 3	2.02E+00	4.35E-03	5.54E-03
3316	643198.5	4167636.2	Worker	Scenario 3	2.00E+00	4.31E-03	5.34E-03
3317	643223.5	4167636.2	Worker	Scenario 3	2.12E+00	4.54E-03	5.22E-03
3318	643173.5	4167661.2	Worker	Scenario 3	1.75E+00	3.79E-03	5.42E-03
3319	643198.5	4167661.2	Worker	Scenario 3	1.70E+00	3.69E-03	5.29E-03
3320	643148.5	4167686.2	Worker	Scenario 3	1.74E+00	3.77E-03	5.53E-03
3321	643173.5	4167686.2	Worker	Scenario 3	1.61E+00	3.50E-03	5.37E-03
3322	643123.5	4167711.2	Worker	Scenario 3	1.78E+00	3.86E-03	5.52E-03
3323	643148.5	4167711.2	Worker	Scenario 3	1.61E+00	3.50E-03	5.40E-03
3324	643098.5	4167736.2	Worker	Scenario 3	1.82E+00	3.93E-03	5.74E-03
3325	643123.5	4167736.2	Worker	Scenario 3	1.64E+00	3.55E-03	5.52E-03
3326	643098.5	4167761.2	Worker	Scenario 3	1.67E+00	3.61E-03	5.63E-03
3327	643123.5	4167761.2	Worker	Scenario 3	1.55E+00	3.36E-03	5.48E-03
3328	643073.5	4167786.2	Worker	Scenario 3	1.66E+00	3.59E-03	5.72E-03
3329	643098.5	4167786.2	Worker	Scenario 3	1.56E+00	3.38E-03	5.55E-03
3330	643048.5	4167811.2	Worker	Scenario 3	1.66E+00	3.58E-03	5.84E-03
3331	643073.5	4167811.2	Worker	Scenario 3	1.55E+00	3.36E-03	5.62E-03
3332	643023.5	4167836.2	Worker	Scenario 3	1.64E+00	3.53E-03	5.86E-03
3333	643048.5	4167836.2	Worker	Scenario 3	1.53E+00	3.32E-03	5.67E-03
3334	642998.5	4167861.2	Worker	Scenario 3	1.60E+00	3.46E-03	6.05E-03
3335	643023.5	4167861.2	Worker	Scenario 3	1.51E+00	3.27E-03	5.80E-03
3336	642973.5	4167886.2	Worker	Scenario 3	1.57E+00	3.38E-03	5.94E-03
3337	642998.5	4167886.2	Worker	Scenario 3	1.49E+00	3.21E-03	5.75E-03
3338	642948.5	4167911.2	Worker	Scenario 3	1.52E+00	3.28E-03	6.11E-03
3339	642973.5	4167911.2	Worker	Scenario 3	1.46E+00	3.16E-03	5.95E-03
3340	642898.5	4167936.2	Worker	Scenario 3	1.54E+00	3.31E-03	6.37E-03
3341	642923.5	4167936.2	Worker	Scenario 3	1.48E+00	3.19E-03	6.10E-03
3342	642873.5	4167961.2	Worker	Scenario 3	1.49E+00	3.21E-03	6.38E-03
3343	642898.5	4167961.2	Worker	Scenario 3	1.45E+00	3.13E-03	6.18E-03
3344	642823.5	4167986.2	Worker	Scenario 3	1.49E+00	3.22E-03	6.52E-03
3345	642848.5	4167986.2	Worker	Scenario 3	1.45E+00	3.13E-03	6.38E-03
3346	642798.5	4168011.2	Worker	Scenario 3	1.46E+00	3.14E-03	6.83E-03
3347	642823.5	4168011.2	Worker	Scenario 3	1.43E+00	3.08E-03	6.54E-03
3348	642748.5	4168036.2	Worker	Scenario 3	1.47E+00	3.16E-03	7.08E-03
3349	642773.5	4168036.2	Worker	Scenario 3	1.43E+00	3.09E-03	7.01E-03
3350	642698.5	4168061.2	Worker	Scenario 3	1.48E+00	3.18E-03	7.74E-03
3351	642723.5	4168061.2	Worker	Scenario 3	1.44E+00	3.10E-03	7.28E-03
3352	642748.5	4168061.2	Worker	Scenario 3	1.42E+00	3.05E-03	6.82E-03
3353	642673.5	4168086.2	Worker	Scenario 3	1.46E+00	3.14E-03	7.78E-03
3354	642698.5	4168086.2	Worker	Scenario 3	1.43E+00	3.07E-03	7.47E-03
3355	642623.5	4168111.2	Worker	Scenario 3	1.49E+00	3.19E-03	8.06E-03
3356	642648.5	4168111.2	Worker	Scenario 3	1.45E+00	3.11E-03	7.73E-03
3357	642673.5	4168111.2	Worker	Scenario 3	1.42E+00	3.05E-03	7.56E-03
3358	642598.5	4168136.2	Worker	Scenario 3	1.48E+00	3.18E-03	8.09E-03
3359	642623.5	4168136.2	Worker	Scenario 3	1.44E+00	3.09E-03	7.76E-03
3360	642548.5	4168161.2	Worker	Scenario 3	1.52E+00	3.26E-03	8.25E-03
3361	642573.5	4168161.2	Worker	Scenario 3	1.48E+00	3.17E-03	8.03E-03
3362	642523.5	4168186.2	Worker	Scenario 3	1.52E+00	3.27E-03	8.00E-03
3363	642548.5	4168186.2	Worker	Scenario 3	1.48E+00	3.17E-03	7.97E-03
3364	642498.5	4168211.2	Worker	Scenario 3	1.53E+00	3.28E-03	8.16E-03
3365	642473.5	4168236.2	Worker	Scenario 3	1.55E+00	3.31E-03	8.27E-03
3366	642448.5	4168261.2	Worker	Scenario 3	1.57E+00	3.35E-03	8.47E-03
3367	642423.5	4168286.2	Worker	Scenario 3	1.59E+00	3.38E-03	8.20E-03
3368	642398.5	4168311.2	Worker	Scenario 3	1.61E+00	3.43E-03	8.14E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3369	642423.5	4168311.2	Worker	Scenario 3	1.56E+00	3.32E-03	8.01E-03
3370	642348.5	4168336.2	Worker	Scenario 3	1.71E+00	3.63E-03	8.36E-03
3371	642373.5	4168336.2	Worker	Scenario 3	1.63E+00	3.47E-03	8.18E-03
3372	639573.5	4168361.2	Worker	Scenario 3	5.09E-01	1.08E-03	3.45E-03
3373	639598.5	4168361.2	Worker	Scenario 3	5.53E-01	1.17E-03	3.38E-03
3374	639623.5	4168361.2	Worker	Scenario 3	6.09E-01	1.29E-03	3.49E-03
3375	642323.5	4168361.2	Worker	Scenario 3	1.72E+00	3.66E-03	8.60E-03
3376	642348.5	4168361.2	Worker	Scenario 3	1.65E+00	3.51E-03	7.92E-03
3377	639523.5	4168386.2	Worker	Scenario 3	4.83E-01	1.03E-03	3.35E-03
3378	639548.5	4168386.2	Worker	Scenario 3	5.18E-01	1.10E-03	3.28E-03
3379	639573.5	4168386.2	Worker	Scenario 3	5.59E-01	1.18E-03	3.33E-03
3380	639598.5	4168386.2	Worker	Scenario 3	6.07E-01	1.28E-03	3.53E-03
3381	639623.5	4168386.2	Worker	Scenario 3	6.69E-01	1.41E-03	3.72E-03
3382	642273.5	4168386.2	Worker	Scenario 3	1.82E+00	3.85E-03	8.56E-03
3383	642298.5	4168386.2	Worker	Scenario 3	1.73E+00	3.68E-03	8.46E-03
3384	639498.5	4168411.2	Worker	Scenario 3	5.01E-01	1.06E-03	3.18E-03
3385	639523.5	4168411.2	Worker	Scenario 3	5.38E-01	1.14E-03	3.17E-03
3386	639548.5	4168411.2	Worker	Scenario 3	5.78E-01	1.22E-03	3.37E-03
3387	639573.5	4168411.2	Worker	Scenario 3	6.23E-01	1.31E-03	3.55E-03
3388	639598.5	4168411.2	Worker	Scenario 3	6.77E-01	1.42E-03	3.71E-03
3389	639623.5	4168411.2	Worker	Scenario 3	7.46E-01	1.56E-03	3.86E-03
3390	642223.5	4168411.2	Worker	Scenario 3	1.90E+00	4.03E-03	8.61E-03
3391	642248.5	4168411.2	Worker	Scenario 3	1.82E+00	3.85E-03	8.37E-03
3392	639448.5	4168436.2	Worker	Scenario 3	4.87E-01	1.03E-03	3.09E-03
3393	639473.5	4168436.2	Worker	Scenario 3	5.26E-01	1.11E-03	3.04E-03
3394	639498.5	4168436.2	Worker	Scenario 3	5.70E-01	1.20E-03	3.22E-03
3395	639523.5	4168436.2	Worker	Scenario 3	6.19E-01	1.30E-03	3.40E-03
3396	639548.5	4168436.2	Worker	Scenario 3	6.69E-01	1.40E-03	3.56E-03
3397	639573.5	4168436.2	Worker	Scenario 3	7.23E-01	1.51E-03	3.70E-03
3398	639598.5	4168436.2	Worker	Scenario 3	7.83E-01	1.64E-03	3.81E-03
3399	639623.5	4168436.2	Worker	Scenario 3	8.56E-01	1.78E-03	3.90E-03
3400	642148.5	4168436.2	Worker	Scenario 3	2.11E+00	4.44E-03	8.83E-03
3401	642173.5	4168436.2	Worker	Scenario 3	1.99E+00	4.21E-03	8.50E-03
3402	642198.5	4168436.2	Worker	Scenario 3	1.90E+00	4.01E-03	8.31E-03
3403	642098.5	4168461.2	Worker	Scenario 3	2.24E+00	4.70E-03	8.67E-03
3404	642123.5	4168461.2	Worker	Scenario 3	2.11E+00	4.43E-03	8.62E-03
3405	642148.5	4168461.2	Worker	Scenario 3	2.00E+00	4.21E-03	8.44E-03
3406	642048.5	4168486.2	Worker	Scenario 3	2.37E+00	4.97E-03	8.79E-03
3407	642073.5	4168486.2	Worker	Scenario 3	2.22E+00	4.65E-03	8.60E-03
3408	642098.5	4168486.2	Worker	Scenario 3	2.10E+00	4.42E-03	8.39E-03
3409	641973.5	4168511.2	Worker	Scenario 3	2.65E+00	5.53E-03	8.99E-03
3410	641998.5	4168511.2	Worker	Scenario 3	2.47E+00	5.15E-03	8.60E-03
3411	642023.5	4168511.2	Worker	Scenario 3	2.32E+00	4.85E-03	8.60E-03
3412	641923.5	4168536.2	Worker	Scenario 3	2.70E+00	5.61E-03	8.30E-03
3413	641948.5	4168536.2	Worker	Scenario 3	2.52E+00	5.25E-03	8.27E-03
3414	641973.5	4168536.2	Worker	Scenario 3	2.37E+00	4.94E-03	8.55E-03
3415	641873.5	4168561.2	Worker	Scenario 3	2.65E+00	5.53E-03	1.09E-02
3416	641898.5	4168561.2	Worker	Scenario 3	2.49E+00	5.19E-03	9.33E-03
3417	641823.5	4168586.2	Worker	Scenario 3	2.61E+00	5.44E-03	1.23E-02
3418	641848.5	4168586.2	Worker	Scenario 3	2.45E+00	5.11E-03	1.19E-02
3419	641748.5	4168611.2	Worker	Scenario 3	2.72E+00	5.66E-03	9.04E-03
3420	641773.5	4168611.2	Worker	Scenario 3	2.55E+00	5.33E-03	1.02E-02
3421	641798.5	4168611.2	Worker	Scenario 3	2.41E+00	5.04E-03	1.13E-02
3422	641673.5	4168636.2	Worker	Scenario 3	2.70E+00	5.63E-03	8.30E-03
3423	641698.5	4168636.2	Worker	Scenario 3	2.58E+00	5.38E-03	8.54E-03
3424	641723.5	4168636.2	Worker	Scenario 3	2.45E+00	5.11E-03	8.14E-03
3425	641598.5	4168661.2	Worker	Scenario 3	2.58E+00	5.38E-03	8.45E-03
3426	641623.5	4168661.2	Worker	Scenario 3	2.48E+00	5.17E-03	8.35E-03
3427	641648.5	4168661.2	Worker	Scenario 3	2.40E+00	5.01E-03	8.20E-03
3428	641523.5	4168686.2	Worker	Scenario 3	2.46E+00	5.14E-03	8.32E-03
3429	641548.5	4168686.2	Worker	Scenario 3	2.37E+00	4.95E-03	8.22E-03
3430	641573.5	4168686.2	Worker	Scenario 3	2.30E+00	4.80E-03	8.13E-03
3431	641448.5	4168711.2	Worker	Scenario 3	2.44E+00	5.08E-03	7.96E-03
3432	641473.5	4168711.2	Worker	Scenario 3	2.33E+00	4.86E-03	8.08E-03
3433	641498.5	4168711.2	Worker	Scenario 3	2.25E+00	4.69E-03	8.00E-03
3434	641373.5	4168736.2	Worker	Scenario 3	2.67E+00	5.55E-03	7.69E-03
3435	641398.5	4168736.2	Worker	Scenario 3	2.42E+00	5.03E-03	7.41E-03
3436	641423.5	4168736.2	Worker	Scenario 3	2.27E+00	4.74E-03	7.59E-03
3437	641298.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--
3438	641323.5	4168761.2	Roadway/Waterway	Scenario 3	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3439	641348.5	4168761.2	Worker	Scenario 3	2.70E+00	5.61E-03	7.46E-03
3440	641373.5	4168761.2	Worker	Scenario 3	2.45E+00	5.09E-03	7.39E-03
3441	641398.5	4168761.2	Worker	Scenario 3	2.24E+00	4.66E-03	7.20E-03
3442	641423.5	4168761.2	Worker	Scenario 3	2.11E+00	4.42E-03	7.40E-03
3443	641248.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
3444	641273.5	4168786.2	Roadway/Waterway	Scenario 3	--	--	--
3445	641348.5	4168786.2	Worker	Scenario 3	2.55E+00	5.30E-03	7.26E-03
3446	641373.5	4168786.2	Worker	Scenario 3	2.32E+00	4.82E-03	7.21E-03
3447	641398.5	4168786.2	Worker	Scenario 3	2.11E+00	4.40E-03	7.05E-03
3448	641423.5	4168786.2	Worker	Scenario 3	1.98E+00	4.15E-03	7.23E-03
3449	641173.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
3450	641198.5	4168811.2	Roadway/Waterway	Scenario 3	--	--	--
3451	641348.5	4168811.2	Worker	Scenario 3	2.58E+00	5.34E-03	7.07E-03
3452	641373.5	4168811.2	Worker	Scenario 3	2.21E+00	4.59E-03	7.03E-03
3453	641398.5	4168811.2	Worker	Scenario 3	1.99E+00	4.16E-03	6.91E-03
3454	641423.5	4168811.2	Worker	Scenario 3	1.87E+00	3.92E-03	7.05E-03
3455	641098.5	4168836.2	Roadway/Waterway	Scenario 3	--	--	--
3456	641348.5	4168836.2	Worker	Scenario 3	2.47E+00	5.12E-03	6.88E-03
3457	641373.5	4168836.2	Worker	Scenario 3	2.11E+00	4.39E-03	6.86E-03
3458	641398.5	4168836.2	Worker	Scenario 3	1.89E+00	3.96E-03	6.76E-03
3459	641423.5	4168836.2	Worker	Scenario 3	1.77E+00	3.71E-03	6.89E-03
3460	641023.5	4168861.2	Roadway/Waterway	Scenario 3	--	--	--
3461	641348.5	4168861.2	Worker	Scenario 3	2.50E+00	5.19E-03	6.70E-03
3462	641373.5	4168861.2	Worker	Scenario 3	2.02E+00	4.20E-03	6.69E-03
3463	641398.5	4168861.2	Worker	Scenario 3	1.81E+00	3.78E-03	6.62E-03
3464	641423.5	4168861.2	Worker	Scenario 3	1.69E+00	3.54E-03	6.73E-03
3465	640948.5	4168886.2	Roadway/Waterway	Scenario 3	--	--	--
3466	641348.5	4168886.2	Worker	Scenario 3	2.33E+00	4.84E-03	6.53E-03
3467	641373.5	4168886.2	Worker	Scenario 3	1.93E+00	4.03E-03	6.53E-03
3468	641398.5	4168886.2	Worker	Scenario 3	1.73E+00	3.62E-03	6.48E-03
3469	641423.5	4168886.2	Worker	Scenario 3	1.61E+00	3.38E-03	6.57E-03
3470	640873.5	4168911.2	Roadway/Waterway	Scenario 3	--	--	--
3471	641348.5	4168911.2	Worker	Scenario 3	2.34E+00	4.84E-03	6.39E-03
3472	641373.5	4168911.2	Worker	Scenario 3	1.88E+00	3.92E-03	6.38E-03
3473	641398.5	4168911.2	Worker	Scenario 3	1.67E+00	3.49E-03	6.35E-03
3474	641423.5	4168911.2	Worker	Scenario 3	1.55E+00	3.25E-03	6.42E-03
3475	640773.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
3476	640798.5	4168936.2	Roadway/Waterway	Scenario 3	--	--	--
3477	641348.5	4168936.2	Worker	Scenario 3	2.27E+00	4.71E-03	6.26E-03
3478	641373.5	4168936.2	Worker	Scenario 3	1.82E+00	3.80E-03	6.22E-03
3479	641398.5	4168936.2	Worker	Scenario 3	1.61E+00	3.37E-03	6.22E-03
3480	641423.5	4168936.2	Worker	Scenario 3	1.49E+00	3.13E-03	6.28E-03
3481	640548.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
3482	640573.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
3483	640698.5	4168961.2	Roadway/Waterway	Scenario 3	--	--	--
3484	641348.5	4168961.2	Worker	Scenario 3	2.21E+00	4.59E-03	6.13E-03
3485	641373.5	4168961.2	Worker	Scenario 3	1.77E+00	3.69E-03	6.08E-03
3486	641398.5	4168961.2	Worker	Scenario 3	1.56E+00	3.26E-03	6.10E-03
3487	641423.5	4168961.2	Worker	Scenario 3	1.44E+00	3.02E-03	6.14E-03
3488	640598.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
3489	640623.5	4168986.2	Roadway/Waterway	Scenario 3	--	--	--
3490	641348.5	4168986.2	Worker	Scenario 3	2.16E+00	4.48E-03	6.01E-03
3491	641373.5	4168986.2	Worker	Scenario 3	1.72E+00	3.59E-03	5.93E-03
3492	641398.5	4168986.2	Worker	Scenario 3	1.51E+00	3.16E-03	5.98E-03
3493	641423.5	4168986.2	Worker	Scenario 3	1.39E+00	2.92E-03	6.00E-03
3494	640448.5	4169011.2	Worker	Scenario 3	7.31E-01	1.57E-03	4.17E-03
3495	640523.5	4169011.2	Worker	Scenario 3	7.56E-01	1.62E-03	5.00E-03
3496	641348.5	4169011.2	Worker	Scenario 3	2.12E+00	4.39E-03	5.89E-03
3497	641373.5	4169011.2	Worker	Scenario 3	1.68E+00	3.49E-03	5.80E-03
3498	641398.5	4169011.2	Worker	Scenario 3	1.47E+00	3.07E-03	5.86E-03
3499	641423.5	4169011.2	Worker	Scenario 3	1.34E+00	2.83E-03	5.87E-03
3500	640448.5	4169036.2	Worker	Scenario 3	7.14E-01	1.53E-03	4.12E-03
3501	640473.5	4169036.2	Worker	Scenario 3	7.21E-01	1.55E-03	4.53E-03
3502	640523.5	4169036.2	Worker	Scenario 3	7.36E-01	1.58E-03	4.96E-03
3503	641348.5	4169036.2	Worker	Scenario 3	2.08E+00	4.31E-03	5.78E-03
3504	641373.5	4169036.2	Worker	Scenario 3	1.63E+00	3.41E-03	5.66E-03
3505	641398.5	4169036.2	Worker	Scenario 3	1.42E+00	2.99E-03	5.75E-03
3506	641423.5	4169036.2	Worker	Scenario 3	1.30E+00	2.74E-03	5.75E-03
3507	640448.5	4169061.2	Worker	Scenario 3	6.99E-01	1.50E-03	4.28E-03
3508	640473.5	4169061.2	Worker	Scenario 3	7.05E-01	1.51E-03	4.62E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3509	640523.5	4169061.2	Worker	Scenario 3	7.18E-01	1.54E-03	4.88E-03
3510	641348.5	4169061.2	Worker	Scenario 3	2.04E+00	4.23E-03	5.67E-03
3511	641373.5	4169061.2	Worker	Scenario 3	1.60E+00	3.34E-03	5.54E-03
3512	641398.5	4169061.2	Worker	Scenario 3	1.39E+00	2.90E-03	5.63E-03
3513	641423.5	4169061.2	Worker	Scenario 3	1.26E+00	2.65E-03	5.61E-03
3514	640448.5	4169086.2	Worker	Scenario 3	6.84E-01	1.47E-03	4.40E-03
3515	640473.5	4169086.2	Worker	Scenario 3	6.89E-01	1.48E-03	4.66E-03
3516	640523.5	4169086.2	Worker	Scenario 3	7.00E-01	1.50E-03	4.76E-03
3517	641348.5	4169086.2	Worker	Scenario 3	2.01E+00	4.16E-03	5.56E-03
3518	641373.5	4169086.2	Worker	Scenario 3	1.56E+00	3.25E-03	5.40E-03
3519	641398.5	4169086.2	Worker	Scenario 3	1.34E+00	2.82E-03	5.50E-03
3520	641423.5	4169086.2	Worker	Scenario 3	1.23E+00	2.58E-03	5.48E-03
3521	640448.5	4169111.2	Worker	Scenario 3	6.69E-01	1.44E-03	4.48E-03
3522	640473.5	4169111.2	Worker	Scenario 3	6.73E-01	1.45E-03	4.65E-03
3523	640523.5	4169111.2	Worker	Scenario 3	6.84E-01	1.47E-03	4.72E-03
3524	641348.5	4169111.2	Worker	Scenario 3	1.97E+00	4.08E-03	5.44E-03
3525	641373.5	4169111.2	Worker	Scenario 3	1.52E+00	3.17E-03	5.27E-03
3526	641398.5	4169111.2	Worker	Scenario 3	1.31E+00	2.76E-03	5.40E-03
3527	641423.5	4169111.2	Worker	Scenario 3	1.20E+00	2.52E-03	5.38E-03
3528	640448.5	4169136.2	Worker	Scenario 3	6.54E-01	1.40E-03	4.51E-03
3529	640473.5	4169136.2	Worker	Scenario 3	6.59E-01	1.41E-03	4.60E-03
3530	640523.5	4169136.2	Worker	Scenario 3	6.68E-01	1.44E-03	4.64E-03
3531	641348.5	4169136.2	Worker	Scenario 3	1.92E+00	3.98E-03	5.32E-03
3532	641373.5	4169136.2	Worker	Scenario 3	1.49E+00	3.11E-03	5.15E-03
3533	641398.5	4169136.2	Worker	Scenario 3	1.29E+00	2.70E-03	5.30E-03
3534	641423.5	4169136.2	Worker	Scenario 3	1.17E+00	2.46E-03	5.27E-03
3535	640448.5	4169161.2	Worker	Scenario 3	6.40E-01	1.38E-03	4.49E-03
3536	640473.5	4169161.2	Worker	Scenario 3	6.44E-01	1.38E-03	4.51E-03
3537	640523.5	4169161.2	Worker	Scenario 3	6.53E-01	1.40E-03	4.52E-03
3538	641348.5	4169161.2	Worker	Scenario 3	1.89E+00	3.91E-03	5.21E-03
3539	641373.5	4169161.2	Worker	Scenario 3	1.46E+00	3.05E-03	5.04E-03
3540	641398.5	4169161.2	Worker	Scenario 3	1.26E+00	2.64E-03	5.21E-03
3541	641423.5	4169161.2	Worker	Scenario 3	1.14E+00	2.40E-03	5.17E-03
3542	640448.5	4169186.2	Worker	Scenario 3	6.27E-01	1.35E-03	4.43E-03
3543	640473.5	4169186.2	Worker	Scenario 3	6.30E-01	1.35E-03	4.43E-03
3544	640523.5	4169186.2	Worker	Scenario 3	6.38E-01	1.37E-03	4.36E-03
3545	641348.5	4169186.2	Worker	Scenario 3	1.86E+00	3.84E-03	5.11E-03
3546	641373.5	4169186.2	Worker	Scenario 3	1.44E+00	3.00E-03	4.93E-03
3547	641398.5	4169186.2	Worker	Scenario 3	1.23E+00	2.59E-03	5.11E-03
3548	641423.5	4169186.2	Worker	Scenario 3	1.12E+00	2.35E-03	5.08E-03
3549	640448.5	4169211.2	Worker	Scenario 3	6.14E-01	1.32E-03	4.34E-03
3550	640473.5	4169211.2	Worker	Scenario 3	6.17E-01	1.33E-03	4.38E-03
3551	640498.5	4169211.2	Worker	Scenario 3	6.21E-01	1.33E-03	4.34E-03
3552	640523.5	4169211.2	Worker	Scenario 3	6.24E-01	1.34E-03	4.33E-03
3553	641348.5	4169211.2	Worker	Scenario 3	1.83E+00	3.78E-03	5.01E-03
3554	641373.5	4169211.2	Worker	Scenario 3	1.41E+00	2.94E-03	4.85E-03
3555	641398.5	4169211.2	Worker	Scenario 3	1.21E+00	2.53E-03	5.02E-03
3556	641423.5	4169211.2	Worker	Scenario 3	1.09E+00	2.30E-03	4.99E-03
3557	640448.5	4169236.2	Worker	Scenario 3	6.01E-01	1.29E-03	4.28E-03
3558	640473.5	4169236.2	Worker	Scenario 3	6.04E-01	1.30E-03	4.30E-03
3559	640498.5	4169236.2	Worker	Scenario 3	6.07E-01	1.31E-03	4.19E-03
3560	640523.5	4169236.2	Worker	Scenario 3	6.11E-01	1.31E-03	4.34E-03
3561	641348.5	4169236.2	Worker	Scenario 3	1.80E+00	3.72E-03	4.91E-03
3562	641373.5	4169236.2	Worker	Scenario 3	1.39E+00	2.89E-03	4.77E-03
3563	641398.5	4169236.2	Worker	Scenario 3	1.19E+00	2.48E-03	4.93E-03
3564	641423.5	4169236.2	Worker	Scenario 3	1.07E+00	2.25E-03	4.90E-03
3565	640448.5	4169261.2	Worker	Scenario 3	5.89E-01	1.27E-03	4.23E-03
3566	640473.5	4169261.2	Worker	Scenario 3	5.92E-01	1.27E-03	4.18E-03
3567	640498.5	4169261.2	Worker	Scenario 3	5.95E-01	1.28E-03	4.18E-03
3568	640523.5	4169261.2	Worker	Scenario 3	5.98E-01	1.29E-03	4.31E-03
3569	641348.5	4169261.2	Worker	Scenario 3	1.77E+00	3.66E-03	4.81E-03
3570	641373.5	4169261.2	Worker	Scenario 3	1.36E+00	2.84E-03	4.69E-03
3571	641398.5	4169261.2	Worker	Scenario 3	1.16E+00	2.44E-03	4.84E-03
3572	641423.5	4169261.2	Worker	Scenario 3	1.05E+00	2.21E-03	4.81E-03
3573	640448.5	4169286.2	Worker	Scenario 3	5.77E-01	1.24E-03	4.14E-03
3574	640473.5	4169286.2	Worker	Scenario 3	5.80E-01	1.25E-03	4.04E-03
3575	640498.5	4169286.2	Worker	Scenario 3	5.83E-01	1.25E-03	4.18E-03
3576	640523.5	4169286.2	Worker	Scenario 3	5.85E-01	1.26E-03	4.25E-03
3577	640923.5	4169286.2	Worker	Scenario 3	6.50E-01	1.40E-03	4.60E-03
3578	640948.5	4169286.2	Worker	Scenario 3	6.55E-01	1.41E-03	4.71E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3579	640973.5	4169286.2	Worker	Scenario 3	6.61E-01	1.42E-03	4.87E-03
3580	640998.5	4169286.2	Worker	Scenario 3	6.67E-01	1.44E-03	4.87E-03
3581	641023.5	4169286.2	Worker	Scenario 3	6.73E-01	1.45E-03	4.72E-03
3582	641048.5	4169286.2	Worker	Scenario 3	6.81E-01	1.47E-03	4.67E-03
3583	641073.5	4169286.2	Worker	Scenario 3	6.89E-01	1.48E-03	4.64E-03
3584	641098.5	4169286.2	Worker	Scenario 3	6.98E-01	1.50E-03	4.69E-03
3585	641123.5	4169286.2	Worker	Scenario 3	7.09E-01	1.52E-03	4.55E-03
3586	641148.5	4169286.2	Worker	Scenario 3	7.22E-01	1.55E-03	4.69E-03
3587	641173.5	4169286.2	Worker	Scenario 3	7.38E-01	1.58E-03	4.70E-03
3588	641348.5	4169286.2	Worker	Scenario 3	1.75E+00	3.61E-03	4.72E-03
3589	641373.5	4169286.2	Worker	Scenario 3	1.34E+00	2.80E-03	4.62E-03
3590	641398.5	4169286.2	Worker	Scenario 3	1.14E+00	2.40E-03	4.75E-03
3591	641423.5	4169286.2	Worker	Scenario 3	1.03E+00	2.16E-03	4.72E-03
3592	640423.5	4169311.2	Worker	Scenario 3	5.63E-01	1.21E-03	4.08E-03
3593	640448.5	4169311.2	Worker	Scenario 3	5.65E-01	1.22E-03	4.03E-03
3594	640473.5	4169311.2	Worker	Scenario 3	5.68E-01	1.22E-03	4.03E-03
3595	640498.5	4169311.2	Worker	Scenario 3	5.71E-01	1.23E-03	4.16E-03
3596	640873.5	4169311.2	Worker	Scenario 3	6.25E-01	1.35E-03	4.49E-03
3597	640898.5	4169311.2	Worker	Scenario 3	6.29E-01	1.36E-03	4.50E-03
3598	640923.5	4169311.2	Worker	Scenario 3	6.34E-01	1.37E-03	4.51E-03
3599	640948.5	4169311.2	Worker	Scenario 3	6.39E-01	1.38E-03	4.67E-03
3600	640973.5	4169311.2	Worker	Scenario 3	6.44E-01	1.39E-03	4.79E-03
3601	640998.5	4169311.2	Worker	Scenario 3	6.51E-01	1.40E-03	4.76E-03
3602	641023.5	4169311.2	Worker	Scenario 3	6.57E-01	1.42E-03	4.60E-03
3603	641048.5	4169311.2	Worker	Scenario 3	6.65E-01	1.43E-03	4.59E-03
3604	641073.5	4169311.2	Worker	Scenario 3	6.72E-01	1.45E-03	4.58E-03
3605	641098.5	4169311.2	Worker	Scenario 3	6.81E-01	1.46E-03	4.59E-03
3606	641123.5	4169311.2	Worker	Scenario 3	6.92E-01	1.49E-03	4.44E-03
3607	641148.5	4169311.2	Worker	Scenario 3	7.05E-01	1.51E-03	4.61E-03
3608	641173.5	4169311.2	Worker	Scenario 3	7.21E-01	1.54E-03	4.60E-03
3609	641348.5	4169311.2	Worker	Scenario 3	1.72E+00	3.56E-03	4.63E-03
3610	641373.5	4169311.2	Worker	Scenario 3	1.32E+00	2.76E-03	4.55E-03
3611	641398.5	4169311.2	Worker	Scenario 3	1.13E+00	2.36E-03	4.67E-03
3612	641423.5	4169311.2	Worker	Scenario 3	1.01E+00	2.13E-03	4.64E-03
3613	640423.5	4169336.2	Worker	Scenario 3	5.52E-01	1.19E-03	3.99E-03
3614	640448.5	4169336.2	Worker	Scenario 3	5.54E-01	1.19E-03	3.89E-03
3615	640473.5	4169336.2	Worker	Scenario 3	5.57E-01	1.20E-03	4.04E-03
3616	640498.5	4169336.2	Worker	Scenario 3	5.59E-01	1.20E-03	4.10E-03
3617	640823.5	4169336.2	Worker	Scenario 3	6.03E-01	1.30E-03	4.23E-03
3618	640848.5	4169336.2	Worker	Scenario 3	6.06E-01	1.31E-03	4.38E-03
3619	640873.5	4169336.2	Worker	Scenario 3	6.10E-01	1.31E-03	4.38E-03
3620	640898.5	4169336.2	Worker	Scenario 3	6.14E-01	1.32E-03	4.43E-03
3621	640923.5	4169336.2	Worker	Scenario 3	6.19E-01	1.33E-03	4.46E-03
3622	640948.5	4169336.2	Worker	Scenario 3	6.24E-01	1.35E-03	4.64E-03
3623	640973.5	4169336.2	Worker	Scenario 3	6.30E-01	1.36E-03	4.72E-03
3624	640998.5	4169336.2	Worker	Scenario 3	6.36E-01	1.37E-03	4.65E-03
3625	641023.5	4169336.2	Worker	Scenario 3	6.42E-01	1.38E-03	4.49E-03
3626	641048.5	4169336.2	Worker	Scenario 3	6.49E-01	1.40E-03	4.51E-03
3627	641073.5	4169336.2	Worker	Scenario 3	6.57E-01	1.41E-03	4.52E-03
3628	641098.5	4169336.2	Worker	Scenario 3	6.66E-01	1.43E-03	4.49E-03
3629	641123.5	4169336.2	Worker	Scenario 3	6.76E-01	1.45E-03	4.41E-03
3630	641148.5	4169336.2	Worker	Scenario 3	6.89E-01	1.48E-03	4.55E-03
3631	641348.5	4169336.2	Worker	Scenario 3	1.69E+00	3.49E-03	4.54E-03
3632	641373.5	4169336.2	Worker	Scenario 3	1.30E+00	2.71E-03	4.48E-03
3633	641398.5	4169336.2	Worker	Scenario 3	1.11E+00	2.32E-03	4.59E-03
3634	641423.5	4169336.2	Worker	Scenario 3	9.93E-01	2.09E-03	4.56E-03
3635	640423.5	4169361.2	Worker	Scenario 3	5.41E-01	1.16E-03	3.88E-03
3636	640448.5	4169361.2	Worker	Scenario 3	5.43E-01	1.17E-03	3.89E-03
3637	640473.5	4169361.2	Worker	Scenario 3	5.46E-01	1.17E-03	4.01E-03
3638	640498.5	4169361.2	Worker	Scenario 3	5.48E-01	1.18E-03	4.02E-03
3639	640798.5	4169361.2	Worker	Scenario 3	5.86E-01	1.26E-03	4.22E-03
3640	640823.5	4169361.2	Worker	Scenario 3	5.89E-01	1.27E-03	4.22E-03
3641	640848.5	4169361.2	Worker	Scenario 3	5.92E-01	1.28E-03	4.32E-03
3642	640873.5	4169361.2	Worker	Scenario 3	5.96E-01	1.29E-03	4.31E-03
3643	640898.5	4169361.2	Worker	Scenario 3	6.01E-01	1.29E-03	4.35E-03
3644	640923.5	4169361.2	Worker	Scenario 3	6.05E-01	1.30E-03	4.43E-03
3645	640948.5	4169361.2	Worker	Scenario 3	6.10E-01	1.32E-03	4.59E-03
3646	640973.5	4169361.2	Worker	Scenario 3	6.15E-01	1.33E-03	4.63E-03
3647	640998.5	4169361.2	Worker	Scenario 3	6.21E-01	1.34E-03	4.53E-03
3648	641023.5	4169361.2	Worker	Scenario 3	6.27E-01	1.35E-03	4.41E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3649	641048.5	4169361.2	Worker	Scenario 3	6.34E-01	1.37E-03	4.43E-03
3650	641073.5	4169361.2	Worker	Scenario 3	6.42E-01	1.38E-03	4.45E-03
3651	641098.5	4169361.2	Worker	Scenario 3	6.51E-01	1.40E-03	4.39E-03
3652	641123.5	4169361.2	Worker	Scenario 3	6.61E-01	1.42E-03	4.37E-03
3653	641148.5	4169361.2	Worker	Scenario 3	6.74E-01	1.45E-03	4.47E-03
3654	641348.5	4169361.2	Worker	Scenario 3	1.66E+00	3.43E-03	4.45E-03
3655	641373.5	4169361.2	Worker	Scenario 3	1.28E+00	2.67E-03	4.41E-03
3656	641398.5	4169361.2	Worker	Scenario 3	1.09E+00	2.28E-03	4.51E-03
3657	641423.5	4169361.2	Worker	Scenario 3	9.75E-01	2.05E-03	4.49E-03
3658	640423.5	4169386.2	Worker	Scenario 3	5.30E-01	1.14E-03	3.75E-03
3659	640448.5	4169386.2	Worker	Scenario 3	5.33E-01	1.15E-03	3.90E-03
3660	640473.5	4169386.2	Worker	Scenario 3	5.35E-01	1.15E-03	3.96E-03
3661	640498.5	4169386.2	Worker	Scenario 3	5.37E-01	1.16E-03	3.96E-03
3662	640773.5	4169386.2	Worker	Scenario 3	5.70E-01	1.23E-03	4.21E-03
3663	640798.5	4169386.2	Worker	Scenario 3	5.73E-01	1.23E-03	4.10E-03
3664	640823.5	4169386.2	Worker	Scenario 3	5.76E-01	1.24E-03	4.20E-03
3665	640848.5	4169386.2	Worker	Scenario 3	5.80E-01	1.25E-03	4.26E-03
3666	640873.5	4169386.2	Worker	Scenario 3	5.84E-01	1.26E-03	4.26E-03
3667	640898.5	4169386.2	Worker	Scenario 3	5.88E-01	1.27E-03	4.27E-03
3668	640923.5	4169386.2	Worker	Scenario 3	5.92E-01	1.28E-03	4.39E-03
3669	641098.5	4169386.2	Worker	Scenario 3	6.37E-01	1.37E-03	4.29E-03
3670	641123.5	4169386.2	Worker	Scenario 3	6.47E-01	1.39E-03	4.33E-03
3671	641148.5	4169386.2	Worker	Scenario 3	6.60E-01	1.41E-03	4.40E-03
3672	641173.5	4169386.2	Worker	Scenario 3	6.76E-01	1.45E-03	4.30E-03
3673	641198.5	4169386.2	Worker	Scenario 3	6.97E-01	1.49E-03	4.04E-03
3674	641223.5	4169386.2	Worker	Scenario 3	7.27E-01	1.55E-03	4.27E-03
3675	641248.5	4169386.2	Worker	Scenario 3	7.72E-01	1.64E-03	4.41E-03
3676	641273.5	4169386.2	Worker	Scenario 3	8.49E-01	1.79E-03	4.38E-03
3677	641298.5	4169386.2	Worker	Scenario 3	1.01E+00	2.11E-03	4.42E-03
3678	641348.5	4169386.2	Worker	Scenario 3	1.63E+00	3.37E-03	4.37E-03
3679	641373.5	4169386.2	Worker	Scenario 3	1.26E+00	2.62E-03	4.34E-03
3680	641398.5	4169386.2	Worker	Scenario 3	1.07E+00	2.24E-03	4.43E-03
3681	641423.5	4169386.2	Worker	Scenario 3	9.58E-01	2.01E-03	4.41E-03
3682	640423.5	4169411.2	Worker	Scenario 3	5.20E-01	1.12E-03	3.76E-03
3683	640448.5	4169411.2	Worker	Scenario 3	5.22E-01	1.12E-03	3.88E-03
3684	640473.5	4169411.2	Worker	Scenario 3	5.24E-01	1.13E-03	3.89E-03
3685	640498.5	4169411.2	Worker	Scenario 3	5.27E-01	1.13E-03	3.93E-03
3686	640698.5	4169411.2	Worker	Scenario 3	5.48E-01	1.18E-03	3.76E-03
3687	640723.5	4169411.2	Worker	Scenario 3	5.52E-01	1.19E-03	4.01E-03
3688	640748.5	4169411.2	Worker	Scenario 3	5.55E-01	1.19E-03	4.13E-03
3689	640773.5	4169411.2	Worker	Scenario 3	5.57E-01	1.20E-03	4.11E-03
3690	640798.5	4169411.2	Worker	Scenario 3	5.61E-01	1.21E-03	4.01E-03
3691	640823.5	4169411.2	Worker	Scenario 3	5.64E-01	1.22E-03	4.16E-03
3692	640848.5	4169411.2	Worker	Scenario 3	5.67E-01	1.22E-03	4.18E-03
3693	640873.5	4169411.2	Worker	Scenario 3	5.71E-01	1.23E-03	4.21E-03
3694	641098.5	4169411.2	Worker	Scenario 3	6.23E-01	1.34E-03	4.19E-03
3695	641123.5	4169411.2	Worker	Scenario 3	6.33E-01	1.36E-03	4.28E-03
3696	641148.5	4169411.2	Worker	Scenario 3	6.46E-01	1.38E-03	4.32E-03
3697	641173.5	4169411.2	Worker	Scenario 3	6.62E-01	1.42E-03	4.20E-03
3698	641198.5	4169411.2	Worker	Scenario 3	6.83E-01	1.46E-03	3.96E-03
3699	641223.5	4169411.2	Worker	Scenario 3	7.13E-01	1.52E-03	4.23E-03
3700	641248.5	4169411.2	Worker	Scenario 3	7.59E-01	1.61E-03	4.34E-03
3701	641273.5	4169411.2	Worker	Scenario 3	8.37E-01	1.77E-03	4.32E-03
3702	641298.5	4169411.2	Worker	Scenario 3	9.96E-01	2.09E-03	4.34E-03
3703	641348.5	4169411.2	Worker	Scenario 3	1.60E+00	3.32E-03	4.28E-03
3704	641373.5	4169411.2	Worker	Scenario 3	1.24E+00	2.58E-03	4.28E-03
3705	641398.5	4169411.2	Worker	Scenario 3	1.05E+00	2.20E-03	4.36E-03
3706	641423.5	4169411.2	Worker	Scenario 3	9.42E-01	1.98E-03	4.34E-03
3707	640423.5	4169436.2	Worker	Scenario 3	5.10E-01	1.10E-03	3.76E-03
3708	640448.5	4169436.2	Worker	Scenario 3	5.12E-01	1.10E-03	3.83E-03
3709	640473.5	4169436.2	Worker	Scenario 3	5.14E-01	1.11E-03	3.83E-03
3710	640498.5	4169436.2	Worker	Scenario 3	5.17E-01	1.11E-03	3.87E-03
3711	640523.5	4169436.2	Worker	Scenario 3	5.18E-01	1.12E-03	3.80E-03
3712	640548.5	4169436.2	Worker	Scenario 3	5.21E-01	1.12E-03	3.83E-03
3713	640573.5	4169436.2	Worker	Scenario 3	5.23E-01	1.13E-03	3.94E-03
3714	640598.5	4169436.2	Worker	Scenario 3	5.26E-01	1.13E-03	3.92E-03
3715	640623.5	4169436.2	Worker	Scenario 3	5.28E-01	1.14E-03	3.96E-03
3716	640648.5	4169436.2	Worker	Scenario 3	5.31E-01	1.14E-03	3.91E-03
3717	640673.5	4169436.2	Worker	Scenario 3	5.34E-01	1.15E-03	3.75E-03
3718	640698.5	4169436.2	Worker	Scenario 3	5.36E-01	1.15E-03	3.79E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3719	640723.5	4169436.2	Worker	Scenario 3	5.39E-01	1.16E-03	3.99E-03
3720	640748.5	4169436.2	Worker	Scenario 3	5.42E-01	1.17E-03	4.07E-03
3721	640773.5	4169436.2	Worker	Scenario 3	5.46E-01	1.18E-03	4.01E-03
3722	640798.5	4169436.2	Worker	Scenario 3	5.49E-01	1.18E-03	4.00E-03
3723	640823.5	4169436.2	Worker	Scenario 3	5.52E-01	1.19E-03	4.12E-03
3724	641098.5	4169436.2	Worker	Scenario 3	6.10E-01	1.31E-03	4.08E-03
3725	641123.5	4169436.2	Worker	Scenario 3	6.20E-01	1.33E-03	4.23E-03
3726	641148.5	4169436.2	Worker	Scenario 3	6.33E-01	1.36E-03	4.24E-03
3727	641173.5	4169436.2	Worker	Scenario 3	6.49E-01	1.39E-03	4.10E-03
3728	641198.5	4169436.2	Worker	Scenario 3	6.70E-01	1.43E-03	3.93E-03
3729	641223.5	4169436.2	Worker	Scenario 3	7.00E-01	1.49E-03	4.18E-03
3730	641248.5	4169436.2	Worker	Scenario 3	7.46E-01	1.58E-03	4.27E-03
3731	641273.5	4169436.2	Worker	Scenario 3	8.25E-01	1.74E-03	4.26E-03
3732	641298.5	4169436.2	Worker	Scenario 3	9.87E-01	2.07E-03	4.27E-03
3733	641348.5	4169436.2	Worker	Scenario 3	1.58E+00	3.26E-03	4.20E-03
3734	641373.5	4169436.2	Worker	Scenario 3	1.22E+00	2.54E-03	4.21E-03
3735	641398.5	4169436.2	Worker	Scenario 3	1.03E+00	2.17E-03	4.29E-03
3736	640423.5	4169461.2	Worker	Scenario 3	5.01E-01	1.08E-03	3.75E-03
3737	640448.5	4169461.2	Worker	Scenario 3	5.02E-01	1.08E-03	3.76E-03
3738	640473.5	4169461.2	Worker	Scenario 3	5.04E-01	1.09E-03	3.80E-03
3739	640498.5	4169461.2	Worker	Scenario 3	5.07E-01	1.09E-03	3.79E-03
3740	640523.5	4169461.2	Worker	Scenario 3	5.08E-01	1.09E-03	3.67E-03
3741	640548.5	4169461.2	Worker	Scenario 3	5.10E-01	1.10E-03	3.82E-03
3742	640573.5	4169461.2	Worker	Scenario 3	5.12E-01	1.10E-03	3.87E-03
3743	640598.5	4169461.2	Worker	Scenario 3	5.14E-01	1.11E-03	3.86E-03
3744	640623.5	4169461.2	Worker	Scenario 3	5.17E-01	1.11E-03	3.88E-03
3745	640648.5	4169461.2	Worker	Scenario 3	5.19E-01	1.12E-03	3.79E-03
3746	640673.5	4169461.2	Worker	Scenario 3	5.22E-01	1.12E-03	3.59E-03
3747	640698.5	4169461.2	Worker	Scenario 3	5.25E-01	1.13E-03	3.81E-03
3748	640723.5	4169461.2	Worker	Scenario 3	5.28E-01	1.14E-03	3.96E-03
3749	640748.5	4169461.2	Worker	Scenario 3	5.31E-01	1.14E-03	4.00E-03
3750	640773.5	4169461.2	Worker	Scenario 3	5.35E-01	1.15E-03	3.90E-03
3751	640798.5	4169461.2	Worker	Scenario 3	5.38E-01	1.16E-03	3.99E-03
3752	641148.5	4169461.2	Worker	Scenario 3	6.20E-01	1.33E-03	4.16E-03
3753	641173.5	4169461.2	Worker	Scenario 3	6.36E-01	1.36E-03	4.00E-03
3754	641198.5	4169461.2	Worker	Scenario 3	6.58E-01	1.40E-03	3.90E-03
3755	641223.5	4169461.2	Worker	Scenario 3	6.88E-01	1.47E-03	4.13E-03
3756	641248.5	4169461.2	Worker	Scenario 3	7.34E-01	1.56E-03	4.20E-03
3757	641273.5	4169461.2	Worker	Scenario 3	8.14E-01	1.72E-03	4.19E-03
3758	641298.5	4169461.2	Worker	Scenario 3	9.79E-01	2.05E-03	4.19E-03
3759	641348.5	4169461.2	Worker	Scenario 3	1.55E+00	3.21E-03	4.12E-03
3760	641373.5	4169461.2	Worker	Scenario 3	1.20E+00	2.50E-03	4.15E-03
3761	638073.5	4169486.2	Worker	Scenario 3	2.16E-01	4.58E-04	1.47E-03
3762	639398.5	4169486.2	Worker	Scenario 3	6.40E-01	1.34E-03	2.40E-03
3763	640448.5	4169486.2	Worker	Scenario 3	4.92E-01	1.06E-03	3.68E-03
3764	640473.5	4169486.2	Worker	Scenario 3	4.94E-01	1.06E-03	3.73E-03
3765	640498.5	4169486.2	Worker	Scenario 3	4.95E-01	1.07E-03	3.68E-03
3766	640523.5	4169486.2	Worker	Scenario 3	4.97E-01	1.07E-03	3.68E-03
3767	640548.5	4169486.2	Worker	Scenario 3	4.99E-01	1.08E-03	3.79E-03
3768	640573.5	4169486.2	Worker	Scenario 3	5.02E-01	1.08E-03	3.79E-03
3769	640598.5	4169486.2	Worker	Scenario 3	5.04E-01	1.09E-03	3.82E-03
3770	640623.5	4169486.2	Worker	Scenario 3	5.07E-01	1.09E-03	3.80E-03
3771	640648.5	4169486.2	Worker	Scenario 3	5.09E-01	1.10E-03	3.66E-03
3772	640673.5	4169486.2	Worker	Scenario 3	5.12E-01	1.10E-03	3.59E-03
3773	640698.5	4169486.2	Worker	Scenario 3	5.14E-01	1.11E-03	3.81E-03
3774	640723.5	4169486.2	Worker	Scenario 3	5.17E-01	1.11E-03	3.92E-03
3775	640748.5	4169486.2	Worker	Scenario 3	5.21E-01	1.12E-03	3.91E-03
3776	640773.5	4169486.2	Worker	Scenario 3	5.24E-01	1.13E-03	3.81E-03
3777	638048.5	4169511.2	Worker	Scenario 3	2.09E-01	4.42E-04	1.43E-03
3778	638073.5	4169511.2	Worker	Scenario 3	2.29E-01	4.83E-04	1.46E-03
3779	640473.5	4169511.2	Worker	Scenario 3	4.84E-01	1.04E-03	3.66E-03
3780	640498.5	4169511.2	Worker	Scenario 3	4.86E-01	1.05E-03	3.56E-03
3781	640523.5	4169511.2	Worker	Scenario 3	4.88E-01	1.05E-03	3.68E-03
3782	640548.5	4169511.2	Worker	Scenario 3	4.90E-01	1.05E-03	3.74E-03
3783	640573.5	4169511.2	Worker	Scenario 3	4.92E-01	1.06E-03	3.72E-03
3784	640598.5	4169511.2	Worker	Scenario 3	4.94E-01	1.06E-03	3.76E-03
3785	640623.5	4169511.2	Worker	Scenario 3	4.97E-01	1.07E-03	3.70E-03
3786	640648.5	4169511.2	Worker	Scenario 3	4.99E-01	1.07E-03	3.53E-03
3787	640673.5	4169511.2	Worker	Scenario 3	5.02E-01	1.08E-03	3.62E-03
3788	638023.5	4169536.2	Worker	Scenario 3	2.03E-01	4.30E-04	1.41E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3789	638048.5	4169536.2	Worker	Scenario 3	2.22E-01	4.68E-04	1.46E-03
3790	638073.5	4169536.2	Worker	Scenario 3	2.42E-01	5.10E-04	1.51E-03
3791	637998.5	4169561.2	Worker	Scenario 3	1.96E-01	4.16E-04	1.42E-03
3792	638023.5	4169561.2	Worker	Scenario 3	2.14E-01	4.53E-04	1.47E-03
3793	638048.5	4169561.2	Worker	Scenario 3	2.34E-01	4.92E-04	1.51E-03
3794	638073.5	4169561.2	Worker	Scenario 3	2.57E-01	5.40E-04	1.55E-03
3795	637998.5	4169586.2	Worker	Scenario 3	2.06E-01	4.37E-04	1.47E-03
3796	638023.5	4169586.2	Worker	Scenario 3	2.24E-01	4.73E-04	1.51E-03
3797	638048.5	4169586.2	Worker	Scenario 3	2.47E-01	5.18E-04	1.54E-03
3798	638073.5	4169586.2	Worker	Scenario 3	2.76E-01	5.77E-04	1.57E-03
3799	637998.5	4169611.2	Worker	Scenario 3	2.14E-01	4.53E-04	1.50E-03
3800	638023.5	4169611.2	Worker	Scenario 3	2.34E-01	4.94E-04	1.53E-03
3801	638048.5	4169611.2	Worker	Scenario 3	2.61E-01	5.47E-04	1.56E-03
3802	638073.5	4169611.2	Worker	Scenario 3	2.96E-01	6.18E-04	1.58E-03
3803	639248.5	4169611.2	Worker	Scenario 3	6.13E-01	1.28E-03	2.19E-03
3804	637998.5	4169636.2	Worker	Scenario 3	2.22E-01	4.69E-04	1.52E-03
3805	638023.5	4169636.2	Worker	Scenario 3	2.45E-01	5.15E-04	1.55E-03
3806	638048.5	4169636.2	Worker	Scenario 3	2.75E-01	5.76E-04	1.56E-03
3807	638073.5	4169636.2	Worker	Scenario 3	3.17E-01	6.61E-04	1.58E-03
3808	637998.5	4169661.2	Worker	Scenario 3	2.30E-01	4.85E-04	1.53E-03
3809	638023.5	4169661.2	Worker	Scenario 3	2.56E-01	5.36E-04	1.55E-03
3810	638048.5	4169661.2	Worker	Scenario 3	2.89E-01	6.04E-04	1.55E-03
3811	638073.5	4169661.2	Worker	Scenario 3	3.38E-01	7.02E-04	1.55E-03
3812	637998.5	4169686.2	Worker	Scenario 3	2.39E-01	5.02E-04	1.53E-03
3813	638023.5	4169686.2	Worker	Scenario 3	2.66E-01	5.58E-04	1.53E-03
3814	638048.5	4169686.2	Worker	Scenario 3	3.02E-01	6.30E-04	1.53E-03
3815	638073.5	4169686.2	Worker	Scenario 3	3.58E-01	7.42E-04	1.52E-03
3816	637998.5	4169711.2	Worker	Scenario 3	2.47E-01	5.18E-04	1.51E-03
3817	638023.5	4169711.2	Worker	Scenario 3	2.76E-01	5.76E-04	1.50E-03
3818	638048.5	4169711.2	Worker	Scenario 3	3.05E-01	6.35E-04	1.49E-03
3819	638073.5	4169711.2	Worker	Scenario 3	3.72E-01	7.72E-04	1.47E-03
3820	637998.5	4169736.2	Worker	Scenario 3	2.54E-01	5.32E-04	1.48E-03
3821	638023.5	4169736.2	Worker	Scenario 3	2.83E-01	5.92E-04	1.46E-03
3822	638048.5	4169736.2	Worker	Scenario 3	3.08E-01	6.42E-04	1.44E-03
3823	638073.5	4169736.2	Worker	Scenario 3	3.82E-01	7.93E-04	1.42E-03
3824	639098.5	4169736.2	Worker	Scenario 3	5.67E-01	1.18E-03	2.02E-03
3825	637998.5	4169761.2	Worker	Scenario 3	2.59E-01	5.43E-04	1.43E-03
3826	638023.5	4169761.2	Worker	Scenario 3	2.89E-01	6.04E-04	1.41E-03
3827	638048.5	4169761.2	Worker	Scenario 3	3.26E-01	6.79E-04	1.38E-03
3828	638073.5	4169761.2	Worker	Scenario 3	3.90E-01	8.09E-04	1.36E-03
3829	639073.5	4169761.2	Worker	Scenario 3	5.50E-01	1.14E-03	1.98E-03
3830	637998.5	4169786.2	Worker	Scenario 3	2.64E-01	5.52E-04	1.38E-03
3831	638023.5	4169786.2	Worker	Scenario 3	2.95E-01	6.15E-04	1.35E-03
3832	638048.5	4169786.2	Worker	Scenario 3	3.37E-01	7.00E-04	1.33E-03
3833	638073.5	4169786.2	Worker	Scenario 3	3.95E-01	8.18E-04	1.32E-03
3834	639048.5	4169786.2	Worker	Scenario 3	5.35E-01	1.11E-03	1.96E-03
3835	637998.5	4169811.2	Worker	Scenario 3	2.67E-01	5.58E-04	1.32E-03
3836	638023.5	4169811.2	Worker	Scenario 3	2.98E-01	6.21E-04	1.31E-03
3837	638048.5	4169811.2	Worker	Scenario 3	3.39E-01	7.04E-04	1.30E-03
3838	638073.5	4169811.2	Worker	Scenario 3	3.96E-01	8.19E-04	1.29E-03
3839	637998.5	4169836.2	Worker	Scenario 3	2.69E-01	5.62E-04	1.28E-03
3840	638023.5	4169836.2	Worker	Scenario 3	2.99E-01	6.23E-04	1.27E-03
3841	638048.5	4169836.2	Worker	Scenario 3	3.38E-01	7.03E-04	1.27E-03
3842	638073.5	4169836.2	Worker	Scenario 3	3.93E-01	8.13E-04	1.30E-03
3843	637998.5	4169861.2	Worker	Scenario 3	2.69E-01	5.62E-04	1.25E-03
3844	638023.5	4169861.2	Worker	Scenario 3	2.98E-01	6.21E-04	1.25E-03
3845	638048.5	4169861.2	Worker	Scenario 3	3.35E-01	6.97E-04	1.30E-03
3846	638073.5	4169861.2	Worker	Scenario 3	3.86E-01	7.99E-04	1.35E-03
3847	637998.5	4169886.2	Worker	Scenario 3	2.67E-01	5.59E-04	1.25E-03
3848	638023.5	4169886.2	Worker	Scenario 3	2.95E-01	6.15E-04	1.30E-03
3849	638048.5	4169886.2	Worker	Scenario 3	3.29E-01	6.85E-04	1.35E-03
3850	638073.5	4169886.2	Worker	Scenario 3	3.75E-01	7.77E-04	1.40E-03
3851	637998.5	4169911.2	Worker	Scenario 3	2.65E-01	5.55E-04	1.30E-03
3852	638023.5	4169911.2	Worker	Scenario 3	2.91E-01	6.06E-04	1.35E-03
3853	638048.5	4169911.2	Worker	Scenario 3	3.22E-01	6.69E-04	1.39E-03
3854	638073.5	4169911.2	Worker	Scenario 3	3.62E-01	7.50E-04	1.43E-03
3855	637998.5	4169936.2	Worker	Scenario 3	2.62E-01	5.48E-04	1.34E-03
3856	638023.5	4169936.2	Worker	Scenario 3	2.85E-01	5.95E-04	1.38E-03
3857	638048.5	4169936.2	Worker	Scenario 3	3.12E-01	6.51E-04	1.42E-03
3858	638073.5	4169936.2	Worker	Scenario 3	3.45E-01	7.18E-04	1.45E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3859	637998.5	4169961.2	Worker	Scenario 3	2.58E-01	5.40E-04	1.38E-03
3860	638023.5	4169961.2	Worker	Scenario 3	2.78E-01	5.81E-04	1.41E-03
3861	638048.5	4169961.2	Worker	Scenario 3	3.01E-01	6.28E-04	1.44E-03
3862	638073.5	4169961.2	Worker	Scenario 3	3.27E-01	6.80E-04	1.46E-03
3863	637998.5	4169986.2	Worker	Scenario 3	2.52E-01	5.29E-04	1.40E-03
3864	638023.5	4169986.2	Worker	Scenario 3	2.70E-01	5.65E-04	1.43E-03
3865	638048.5	4169986.2	Worker	Scenario 3	2.89E-01	6.03E-04	1.45E-03
3866	638073.5	4169986.2	Worker	Scenario 3	3.09E-01	6.44E-04	1.46E-03
3867	637998.5	4170011.2	Worker	Scenario 3	2.46E-01	5.17E-04	1.42E-03
3868	638023.5	4170011.2	Worker	Scenario 3	2.61E-01	5.47E-04	1.43E-03
3869	638048.5	4170011.2	Worker	Scenario 3	2.77E-01	5.79E-04	1.45E-03
3870	638073.5	4170011.2	Worker	Scenario 3	2.93E-01	6.12E-04	1.45E-03
3871	637998.5	4170036.2	Worker	Scenario 3	2.40E-01	5.03E-04	1.42E-03
3872	638023.5	4170036.2	Worker	Scenario 3	2.53E-01	5.30E-04	1.43E-03
3873	638048.5	4170036.2	Worker	Scenario 3	2.66E-01	5.57E-04	1.43E-03
3874	638073.5	4170036.2	Worker	Scenario 3	2.80E-01	5.84E-04	1.43E-03
3875	638098.5	4170036.2	Worker	Scenario 3	2.92E-01	6.09E-04	1.42E-03
3876	638123.5	4170036.2	Worker	Scenario 3	3.03E-01	6.33E-04	1.40E-03
3877	638148.5	4170036.2	Worker	Scenario 3	3.15E-01	6.57E-04	1.38E-03
3878	638173.5	4170036.2	Worker	Scenario 3	3.26E-01	6.80E-04	1.42E-03
3879	638198.5	4170036.2	Worker	Scenario 3	3.38E-01	7.04E-04	1.45E-03
3880	638223.5	4170036.2	Worker	Scenario 3	3.50E-01	7.28E-04	1.47E-03
3881	638248.5	4170036.2	Worker	Scenario 3	3.62E-01	7.53E-04	1.49E-03
3882	638273.5	4170036.2	Worker	Scenario 3	3.76E-01	7.81E-04	1.49E-03
3883	638298.5	4170036.2	Worker	Scenario 3	3.91E-01	8.11E-04	1.49E-03
3884	638323.5	4170036.2	Worker	Scenario 3	4.09E-01	8.49E-04	1.51E-03
3885	638348.5	4170036.2	Worker	Scenario 3	4.34E-01	8.99E-04	1.53E-03
3886	638373.5	4170036.2	Worker	Scenario 3	4.70E-01	9.73E-04	1.54E-03
3887	638398.5	4170036.2	Worker	Scenario 3	5.18E-01	1.07E-03	1.54E-03
3888	638423.5	4170036.2	Worker	Scenario 3	5.19E-01	1.07E-03	1.56E-03
3889	638448.5	4170036.2	Worker	Scenario 3	4.92E-01	1.02E-03	1.58E-03
3890	638473.5	4170036.2	Worker	Scenario 3	4.72E-01	9.78E-04	1.60E-03
3891	638498.5	4170036.2	Worker	Scenario 3	4.55E-01	9.45E-04	1.60E-03
3892	638523.5	4170036.2	Worker	Scenario 3	4.42E-01	9.18E-04	1.59E-03
3893	638548.5	4170036.2	Worker	Scenario 3	4.32E-01	8.98E-04	1.58E-03
3894	638573.5	4170036.2	Worker	Scenario 3	4.23E-01	8.81E-04	1.55E-03
3895	638598.5	4170036.2	Worker	Scenario 3	4.16E-01	8.66E-04	1.59E-03
3896	638623.5	4170036.2	Worker	Scenario 3	4.09E-01	8.54E-04	1.63E-03
3897	638648.5	4170036.2	Worker	Scenario 3	4.04E-01	8.42E-04	1.66E-03
3898	638673.5	4170036.2	Worker	Scenario 3	3.98E-01	8.32E-04	1.67E-03
3899	638698.5	4170036.2	Worker	Scenario 3	3.93E-01	8.22E-04	1.68E-03
3900	638723.5	4170036.2	Worker	Scenario 3	3.89E-01	8.13E-04	1.67E-03
3901	638748.5	4170036.2	Worker	Scenario 3	3.84E-01	8.05E-04	1.70E-03
3902	638023.5	4170061.2	Worker	Scenario 3	2.43E-01	5.10E-04	1.40E-03
3903	638048.5	4170061.2	Worker	Scenario 3	2.56E-01	5.37E-04	1.41E-03
3904	638073.5	4170061.2	Worker	Scenario 3	2.68E-01	5.60E-04	1.40E-03
3905	638098.5	4170061.2	Worker	Scenario 3	2.78E-01	5.82E-04	1.38E-03
3906	638123.5	4170061.2	Worker	Scenario 3	2.86E-01	5.98E-04	1.38E-03
3907	638148.5	4170061.2	Worker	Scenario 3	2.85E-01	5.96E-04	1.42E-03
3908	638173.5	4170061.2	Worker	Scenario 3	2.89E-01	6.05E-04	1.44E-03
3909	638198.5	4170061.2	Worker	Scenario 3	2.96E-01	6.20E-04	1.47E-03
3910	638223.5	4170061.2	Worker	Scenario 3	3.05E-01	6.37E-04	1.48E-03
3911	638248.5	4170061.2	Worker	Scenario 3	3.14E-01	6.57E-04	1.48E-03
3912	638273.5	4170061.2	Worker	Scenario 3	3.25E-01	6.79E-04	1.48E-03
3913	638298.5	4170061.2	Worker	Scenario 3	3.38E-01	7.04E-04	1.51E-03
3914	638323.5	4170061.2	Worker	Scenario 3	3.52E-01	7.33E-04	1.52E-03
3915	638348.5	4170061.2	Worker	Scenario 3	3.67E-01	7.64E-04	1.53E-03
3916	638373.5	4170061.2	Worker	Scenario 3	3.81E-01	7.92E-04	1.53E-03
3917	638398.5	4170061.2	Worker	Scenario 3	3.90E-01	8.12E-04	1.56E-03
3918	638423.5	4170061.2	Worker	Scenario 3	3.96E-01	8.24E-04	1.58E-03
3919	638448.5	4170061.2	Worker	Scenario 3	4.01E-01	8.34E-04	1.59E-03
3920	638473.5	4170061.2	Worker	Scenario 3	4.11E-01	8.55E-04	1.59E-03
3921	638498.5	4170061.2	Worker	Scenario 3	4.07E-01	8.47E-04	1.58E-03
3922	638523.5	4170061.2	Worker	Scenario 3	4.00E-01	8.33E-04	1.56E-03
3923	638548.5	4170061.2	Worker	Scenario 3	3.97E-01	8.27E-04	1.53E-03
3924	638573.5	4170061.2	Worker	Scenario 3	3.93E-01	8.19E-04	1.58E-03
3925	638598.5	4170061.2	Worker	Scenario 3	3.88E-01	8.11E-04	1.62E-03
3926	638623.5	4170061.2	Worker	Scenario 3	3.84E-01	8.03E-04	1.64E-03
3927	638648.5	4170061.2	Worker	Scenario 3	3.80E-01	7.95E-04	1.66E-03
3928	638673.5	4170061.2	Worker	Scenario 3	3.77E-01	7.88E-04	1.66E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3929	638698.5	4170061.2	Worker	Scenario 3	3.73E-01	7.80E-04	1.66E-03
3930	638723.5	4170061.2	Worker	Scenario 3	3.69E-01	7.73E-04	1.68E-03
3931	638748.5	4170061.2	Worker	Scenario 3	3.64E-01	7.64E-04	1.69E-03
3932	638048.5	4170086.2	Worker	Scenario 3	2.47E-01	5.19E-04	1.37E-03
3933	638073.5	4170086.2	Worker	Scenario 3	2.57E-01	5.40E-04	1.35E-03
3934	638098.5	4170086.2	Worker	Scenario 3	2.67E-01	5.59E-04	1.36E-03
3935	638123.5	4170086.2	Worker	Scenario 3	2.74E-01	5.74E-04	1.40E-03
3936	638148.5	4170086.2	Worker	Scenario 3	2.86E-01	5.98E-04	1.42E-03
3937	638173.5	4170086.2	Worker	Scenario 3	2.95E-01	6.17E-04	1.44E-03
3938	638198.5	4170086.2	Worker	Scenario 3	3.05E-01	6.37E-04	1.45E-03
3939	638223.5	4170086.2	Worker	Scenario 3	3.14E-01	6.56E-04	1.45E-03
3940	638248.5	4170086.2	Worker	Scenario 3	3.24E-01	6.75E-04	1.45E-03
3941	638273.5	4170086.2	Worker	Scenario 3	3.34E-01	6.96E-04	1.48E-03
3942	638298.5	4170086.2	Worker	Scenario 3	3.44E-01	7.17E-04	1.49E-03
3943	638323.5	4170086.2	Worker	Scenario 3	3.55E-01	7.41E-04	1.50E-03
3944	638348.5	4170086.2	Worker	Scenario 3	3.67E-01	7.64E-04	1.50E-03
3945	638373.5	4170086.2	Worker	Scenario 3	3.77E-01	7.85E-04	1.53E-03
3946	638398.5	4170086.2	Worker	Scenario 3	3.82E-01	7.96E-04	1.55E-03
3947	638423.5	4170086.2	Worker	Scenario 3	3.83E-01	7.98E-04	1.56E-03
3948	638448.5	4170086.2	Worker	Scenario 3	3.80E-01	7.92E-04	1.56E-03
3949	638473.5	4170086.2	Worker	Scenario 3	3.78E-01	7.88E-04	1.56E-03
3950	638498.5	4170086.2	Worker	Scenario 3	3.74E-01	7.80E-04	1.54E-03
3951	638523.5	4170086.2	Worker	Scenario 3	3.68E-01	7.68E-04	1.51E-03
3952	638548.5	4170086.2	Worker	Scenario 3	3.66E-01	7.65E-04	1.56E-03
3953	638573.5	4170086.2	Worker	Scenario 3	3.63E-01	7.60E-04	1.59E-03
3954	638598.5	4170086.2	Worker	Scenario 3	3.61E-01	7.55E-04	1.62E-03
3955	638623.5	4170086.2	Worker	Scenario 3	3.58E-01	7.50E-04	1.63E-03
3956	638648.5	4170086.2	Worker	Scenario 3	3.56E-01	7.45E-04	1.64E-03
3957	638673.5	4170086.2	Worker	Scenario 3	3.53E-01	7.41E-04	1.63E-03
3958	638698.5	4170086.2	Worker	Scenario 3	3.51E-01	7.36E-04	1.66E-03
3959	638723.5	4170086.2	Worker	Scenario 3	3.48E-01	7.31E-04	1.67E-03
3960	638323.5	4170111.2	Worker	Scenario 3	3.31E-01	6.92E-04	1.48E-03
3961	638348.5	4170111.2	Worker	Scenario 3	3.39E-01	7.08E-04	1.51E-03
3962	638373.5	4170111.2	Worker	Scenario 3	3.45E-01	7.21E-04	1.53E-03
3963	638398.5	4170111.2	Worker	Scenario 3	3.49E-01	7.28E-04	1.54E-03
3964	638423.5	4170111.2	Worker	Scenario 3	3.50E-01	7.31E-04	1.54E-03
3965	638448.5	4170111.2	Worker	Scenario 3	3.49E-01	7.28E-04	1.53E-03
3966	638473.5	4170111.2	Worker	Scenario 3	3.47E-01	7.26E-04	1.51E-03
3967	638498.5	4170111.2	Worker	Scenario 3	3.46E-01	7.23E-04	1.50E-03
3968	638523.5	4170111.2	Worker	Scenario 3	3.43E-01	7.19E-04	1.54E-03
3969	638548.5	4170111.2	Worker	Scenario 3	3.42E-01	7.17E-04	1.57E-03
3970	638573.5	4170111.2	Worker	Scenario 3	3.41E-01	7.14E-04	1.60E-03
3971	638598.5	4170111.2	Worker	Scenario 3	3.39E-01	7.11E-04	1.61E-03
3972	638623.5	4170111.2	Worker	Scenario 3	3.37E-01	7.08E-04	1.62E-03
3973	638648.5	4170111.2	Worker	Scenario 3	3.36E-01	7.05E-04	1.61E-03
3974	638673.5	4170111.2	Worker	Scenario 3	3.34E-01	7.03E-04	1.64E-03
3975	638698.5	4170111.2	Worker	Scenario 3	3.33E-01	7.00E-04	1.65E-03
3976	642711.0	4166673.7	Worker	Scenario 3	6.37E-01	1.52E-03	7.29E-03
3977	642761.0	4166673.7	Worker	Scenario 3	6.31E-01	1.50E-03	6.82E-03
3978	642811.0	4166673.7	Worker	Scenario 3	6.23E-01	1.48E-03	6.68E-03
3979	642861.0	4166673.7	Worker	Scenario 3	6.24E-01	1.47E-03	6.28E-03
3980	642911.0	4166673.7	Worker	Scenario 3	6.19E-01	1.46E-03	5.89E-03
3981	642961.0	4166673.7	Worker	Scenario 3	6.12E-01	1.44E-03	5.77E-03
3982	643011.0	4166673.7	Worker	Scenario 3	6.15E-01	1.44E-03	5.39E-03
3983	643061.0	4166673.7	Worker	Scenario 3	6.14E-01	1.43E-03	4.95E-03
3984	643111.0	4166673.7	Worker	Scenario 3	6.14E-01	1.43E-03	4.57E-03
3985	643161.0	4166673.7	Worker	Scenario 3	6.16E-01	1.43E-03	4.25E-03
3986	643211.0	4166673.7	Worker	Scenario 3	6.19E-01	1.43E-03	4.32E-03
3987	643261.0	4166673.7	Worker	Scenario 3	6.22E-01	1.44E-03	4.42E-03
3988	643311.0	4166673.7	Worker	Scenario 3	6.25E-01	1.44E-03	4.44E-03
3989	643361.0	4166673.7	Worker	Scenario 3	6.28E-01	1.44E-03	4.38E-03
3990	643411.0	4166673.7	Worker	Scenario 3	6.32E-01	1.44E-03	4.25E-03
3991	643461.0	4166673.7	Worker	Scenario 3	6.34E-01	1.45E-03	4.11E-03
3992	643511.0	4166673.7	Worker	Scenario 3	6.36E-01	1.45E-03	4.08E-03
3993	643561.0	4166673.7	Worker	Scenario 3	6.37E-01	1.44E-03	4.04E-03
3994	643611.0	4166673.7	Worker	Scenario 3	6.36E-01	1.44E-03	4.15E-03
3995	643661.0	4166673.7	Worker	Scenario 3	6.33E-01	1.43E-03	4.36E-03
3996	643711.0	4166673.7	Worker	Scenario 3	6.27E-01	1.41E-03	4.54E-03
3997	643761.0	4166673.7	Worker	Scenario 3	6.20E-01	1.40E-03	4.68E-03
3998	643811.0	4166673.7	Worker	Scenario 3	6.11E-01	1.38E-03	4.80E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3999	643861.0	4166673.7	Worker	Scenario 3	6.01E-01	1.35E-03	4.89E-03
4000	643911.0	4166673.7	Worker	Scenario 3	5.90E-01	1.33E-03	4.94E-03
4001	643961.0	4166673.7	Worker	Scenario 3	5.80E-01	1.30E-03	4.97E-03
4002	644011.0	4166673.7	Worker	Scenario 3	5.70E-01	1.28E-03	4.96E-03
4003	644061.0	4166673.7	Worker	Scenario 3	5.60E-01	1.26E-03	4.94E-03
4004	644111.0	4166673.7	Worker	Scenario 3	5.51E-01	1.24E-03	4.89E-03
4005	641461.0	4166723.7	Worker	Scenario 3	6.77E-01	1.61E-03	2.73E-02
4006	641511.0	4166723.7	Worker	Scenario 3	6.57E-01	1.60E-03	3.28E-02
4007	641561.0	4166723.7	Worker	Scenario 3	6.81E-01	1.69E-03	3.67E-02
4008	641611.0	4166723.7	Worker	Scenario 3	7.26E-01	1.81E-03	3.03E-02
4009	641661.0	4166723.7	Worker	Scenario 3	7.88E-01	1.97E-03	3.17E-02
4010	641711.0	4166723.7	Worker	Scenario 3	8.53E-01	2.13E-03	2.58E-02
4011	641761.0	4166723.7	Worker	Scenario 3	9.15E-01	2.28E-03	2.23E-02
4012	641811.0	4166723.7	Worker	Scenario 3	9.63E-01	2.42E-03	1.78E-02
4013	641861.0	4166723.7	Worker	Scenario 3	9.98E-01	2.50E-03	1.72E-02
4014	641911.0	4166723.7	Worker	Scenario 3	1.02E+00	2.54E-03	1.66E-02
4015	641961.0	4166723.7	Worker	Scenario 3	1.03E+00	2.55E-03	1.60E-02
4016	642011.0	4166723.7	Worker	Scenario 3	1.02E+00	2.52E-03	1.47E-02
4017	642061.0	4166723.7	Worker	Scenario 3	9.94E-01	2.44E-03	1.40E-02
4018	642111.0	4166723.7	Worker	Scenario 3	9.62E-01	2.35E-03	1.29E-02
4019	642161.0	4166723.7	Worker	Scenario 3	9.26E-01	2.25E-03	1.29E-02
4020	642211.0	4166723.7	Worker	Scenario 3	8.93E-01	2.16E-03	1.08E-02
4021	642261.0	4166723.7	Worker	Scenario 3	8.62E-01	2.08E-03	1.16E-02
4022	642311.0	4166723.7	Worker	Scenario 3	8.34E-01	2.01E-03	1.17E-02
4023	642361.0	4166723.7	Worker	Scenario 3	8.09E-01	1.95E-03	1.05E-02
4024	642411.0	4166723.7	Worker	Scenario 3	7.87E-01	1.89E-03	9.78E-03
4025	642661.0	4166723.7	Worker	Scenario 3	7.08E-01	1.69E-03	7.66E-03
4026	642711.0	4166723.7	Worker	Scenario 3	7.00E-01	1.67E-03	7.42E-03
4027	642761.0	4166723.7	Worker	Scenario 3	6.93E-01	1.65E-03	7.02E-03
4028	642811.0	4166723.7	Worker	Scenario 3	6.88E-01	1.63E-03	6.60E-03
4029	642861.0	4166723.7	Worker	Scenario 3	6.81E-01	1.61E-03	6.38E-03
4030	642911.0	4166723.7	Worker	Scenario 3	6.84E-01	1.61E-03	5.87E-03
4031	642961.0	4166723.7	Worker	Scenario 3	6.77E-01	1.59E-03	5.36E-03
4032	643011.0	4166723.7	Worker	Scenario 3	6.78E-01	1.59E-03	4.91E-03
4033	643061.0	4166723.7	Worker	Scenario 3	6.78E-01	1.58E-03	4.76E-03
4034	643111.0	4166723.7	Worker	Scenario 3	6.80E-01	1.58E-03	4.91E-03
4035	643161.0	4166723.7	Worker	Scenario 3	6.84E-01	1.58E-03	4.95E-03
4036	643211.0	4166723.7	Worker	Scenario 3	6.87E-01	1.59E-03	4.89E-03
4037	643261.0	4166723.7	Worker	Scenario 3	6.91E-01	1.59E-03	4.74E-03
4038	643311.0	4166723.7	Worker	Scenario 3	6.95E-01	1.59E-03	4.55E-03
4039	643361.0	4166723.7	Worker	Scenario 3	6.99E-01	1.60E-03	4.50E-03
4040	643411.0	4166723.7	Worker	Scenario 3	7.03E-01	1.60E-03	4.41E-03
4041	643461.0	4166723.7	Worker	Scenario 3	7.07E-01	1.60E-03	4.52E-03
4042	643511.0	4166723.7	Worker	Scenario 3	7.08E-01	1.60E-03	4.74E-03
4043	643561.0	4166723.7	Worker	Scenario 3	7.08E-01	1.60E-03	4.92E-03
4044	643611.0	4166723.7	Worker	Scenario 3	7.05E-01	1.59E-03	5.06E-03
4045	643661.0	4166723.7	Worker	Scenario 3	6.99E-01	1.57E-03	5.17E-03
4046	643711.0	4166723.7	Worker	Scenario 3	6.91E-01	1.55E-03	5.24E-03
4047	643761.0	4166723.7	Worker	Scenario 3	6.81E-01	1.53E-03	5.27E-03
4048	643811.0	4166723.7	Worker	Scenario 3	6.69E-01	1.50E-03	5.28E-03
4049	643861.0	4166723.7	Worker	Scenario 3	6.57E-01	1.47E-03	5.25E-03
4050	643911.0	4166723.7	Worker	Scenario 3	6.45E-01	1.44E-03	5.19E-03
4051	643961.0	4166723.7	Worker	Scenario 3	6.33E-01	1.42E-03	5.11E-03
4052	644011.0	4166723.7	Worker	Scenario 3	6.22E-01	1.39E-03	5.01E-03
4053	644061.0	4166723.7	Worker	Scenario 3	6.12E-01	1.37E-03	4.89E-03
4054	644111.0	4166723.7	Worker	Scenario 3	6.02E-01	1.35E-03	4.75E-03
4055	644161.0	4166723.7	Worker	Scenario 3	5.92E-01	1.32E-03	4.60E-03
4056	644211.0	4166723.7	Worker	Scenario 3	5.83E-01	1.30E-03	4.44E-03
4057	644261.0	4166723.7	Worker	Scenario 3	5.73E-01	1.28E-03	4.28E-03
4058	644311.0	4166723.7	Worker	Scenario 3	5.63E-01	1.26E-03	4.11E-03
4059	644361.0	4166723.7	Worker	Scenario 3	5.53E-01	1.23E-03	3.93E-03
4060	644411.0	4166723.7	Worker	Scenario 3	5.42E-01	1.21E-03	3.76E-03
4061	641461.0	4166773.7	Worker	Scenario 3	7.62E-01	1.82E-03	3.10E-02
4062	641511.0	4166773.7	Worker	Scenario 3	7.67E-01	1.87E-03	3.61E-02
4063	641561.0	4166773.7	Worker	Scenario 3	8.15E-01	2.02E-03	3.94E-02
4064	641611.0	4166773.7	Worker	Scenario 3	8.91E-01	2.22E-03	3.31E-02
4065	641661.0	4166773.7	Worker	Scenario 3	9.81E-01	2.44E-03	3.45E-02
4066	641711.0	4166773.7	Worker	Scenario 3	1.07E+00	2.66E-03	2.82E-02
4067	641761.0	4166773.7	Worker	Scenario 3	1.16E+00	2.89E-03	2.23E-02
4068	641811.0	4166773.7	Worker	Scenario 3	1.22E+00	3.02E-03	2.07E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4069	641861.0	4166773.7	Worker	Scenario 3	1.25E+00	3.10E-03	1.92E-02
4070	641911.0	4166773.7	Worker	Scenario 3	1.27E+00	3.12E-03	1.83E-02
4071	641961.0	4166773.7	Worker	Scenario 3	1.26E+00	3.09E-03	1.70E-02
4072	642011.0	4166773.7	Worker	Scenario 3	1.24E+00	3.00E-03	1.58E-02
4073	642061.0	4166773.7	Worker	Scenario 3	1.18E+00	2.86E-03	1.46E-02
4074	642111.0	4166773.7	Worker	Scenario 3	1.13E+00	2.72E-03	1.43E-02
4075	642161.0	4166773.7	Worker	Scenario 3	1.08E+00	2.59E-03	1.24E-02
4076	642211.0	4166773.7	Worker	Scenario 3	1.03E+00	2.47E-03	1.33E-02
4077	642261.0	4166773.7	Worker	Scenario 3	9.85E-01	2.37E-03	1.28E-02
4078	642311.0	4166773.7	Worker	Scenario 3	9.46E-01	2.27E-03	1.13E-02
4079	642361.0	4166773.7	Worker	Scenario 3	9.12E-01	2.19E-03	1.06E-02
4080	642611.0	4166773.7	Worker	Scenario 3	7.94E-01	1.90E-03	8.37E-03
4081	642661.0	4166773.7	Worker	Scenario 3	7.80E-01	1.86E-03	7.85E-03
4082	642711.0	4166773.7	Worker	Scenario 3	7.71E-01	1.84E-03	7.41E-03
4083	642761.0	4166773.7	Worker	Scenario 3	7.65E-01	1.82E-03	7.04E-03
4084	642811.0	4166773.7	Worker	Scenario 3	7.62E-01	1.80E-03	6.45E-03
4085	642861.0	4166773.7	Worker	Scenario 3	7.60E-01	1.79E-03	5.83E-03
4086	642911.0	4166773.7	Worker	Scenario 3	7.56E-01	1.78E-03	5.39E-03
4087	642961.0	4166773.7	Worker	Scenario 3	7.60E-01	1.78E-03	5.50E-03
4088	643011.0	4166773.7	Worker	Scenario 3	7.60E-01	1.77E-03	5.57E-03
4089	643061.0	4166773.7	Worker	Scenario 3	7.62E-01	1.77E-03	5.51E-03
4090	643111.0	4166773.7	Worker	Scenario 3	7.67E-01	1.77E-03	5.34E-03
4091	643161.0	4166773.7	Worker	Scenario 3	7.72E-01	1.78E-03	5.11E-03
4092	643211.0	4166773.7	Worker	Scenario 3	7.77E-01	1.78E-03	4.99E-03
4093	643261.0	4166773.7	Worker	Scenario 3	7.82E-01	1.79E-03	4.86E-03
4094	643311.0	4166773.7	Worker	Scenario 3	7.87E-01	1.79E-03	4.95E-03
4095	643361.0	4166773.7	Worker	Scenario 3	7.93E-01	1.80E-03	5.18E-03
4096	643411.0	4166773.7	Worker	Scenario 3	7.97E-01	1.80E-03	5.35E-03
4097	643461.0	4166773.7	Worker	Scenario 3	8.00E-01	1.80E-03	5.49E-03
4098	643511.0	4166773.7	Worker	Scenario 3	8.01E-01	1.80E-03	5.58E-03
4099	643561.0	4166773.7	Worker	Scenario 3	7.98E-01	1.79E-03	5.63E-03
4100	643611.0	4166773.7	Worker	Scenario 3	7.92E-01	1.77E-03	5.63E-03
4101	643661.0	4166773.7	Worker	Scenario 3	7.83E-01	1.75E-03	5.60E-03
4102	643711.0	4166773.7	Worker	Scenario 3	7.72E-01	1.72E-03	5.54E-03
4103	643761.0	4166773.7	Worker	Scenario 3	7.58E-01	1.69E-03	5.44E-03
4104	643811.0	4166773.7	Worker	Scenario 3	7.44E-01	1.66E-03	5.32E-03
4105	643861.0	4166773.7	Worker	Scenario 3	7.29E-01	1.63E-03	5.18E-03
4106	643911.0	4166773.7	Worker	Scenario 3	7.15E-01	1.59E-03	5.02E-03
4107	643961.0	4166773.7	Worker	Scenario 3	7.02E-01	1.56E-03	4.85E-03
4108	644011.0	4166773.7	Worker	Scenario 3	6.90E-01	1.54E-03	4.67E-03
4109	644061.0	4166773.7	Worker	Scenario 3	6.79E-01	1.51E-03	4.48E-03
4110	644111.0	4166773.7	Worker	Scenario 3	6.69E-01	1.49E-03	4.28E-03
4111	644161.0	4166773.7	Worker	Scenario 3	6.58E-01	1.46E-03	4.09E-03
4112	644211.0	4166773.7	Worker	Scenario 3	6.47E-01	1.44E-03	3.89E-03
4113	644261.0	4166773.7	Worker	Scenario 3	6.35E-01	1.41E-03	3.69E-03
4114	644311.0	4166773.7	Worker	Scenario 3	6.22E-01	1.38E-03	3.50E-03
4115	644361.0	4166773.7	Worker	Scenario 3	6.08E-01	1.35E-03	3.31E-03
4116	644411.0	4166773.7	Worker	Scenario 3	5.94E-01	1.32E-03	3.13E-03
4117	644461.0	4166773.7	Worker	Scenario 3	5.78E-01	1.28E-03	2.96E-03
4118	644511.0	4166773.7	Worker	Scenario 3	5.59E-01	1.24E-03	2.85E-03
4119	641511.0	4166823.7	Worker	Scenario 3	9.28E-01	2.27E-03	3.97E-02
4120	641561.0	4166823.7	Worker	Scenario 3	1.02E+00	2.53E-03	4.14E-02
4121	641611.0	4166823.7	Worker	Scenario 3	1.16E+00	2.86E-03	3.58E-02
4122	641661.0	4166823.7	Worker	Scenario 3	1.29E+00	3.17E-03	3.43E-02
4123	641711.0	4166823.7	Worker	Scenario 3	1.42E+00	3.47E-03	2.85E-02
4124	641761.0	4166823.7	Worker	Scenario 3	1.52E+00	3.74E-03	2.32E-02
4125	641811.0	4166823.7	Worker	Scenario 3	1.60E+00	3.90E-03	2.16E-02
4126	641861.0	4166823.7	Worker	Scenario 3	1.63E+00	3.97E-03	2.13E-02
4127	641911.0	4166823.7	Worker	Scenario 3	1.64E+00	3.95E-03	1.98E-02
4128	641961.0	4166823.7	Worker	Scenario 3	1.60E+00	3.84E-03	1.80E-02
4129	642011.0	4166823.7	Worker	Scenario 3	1.53E+00	3.65E-03	1.68E-02
4130	642061.0	4166823.7	Worker	Scenario 3	1.43E+00	3.42E-03	1.60E-02
4131	642111.0	4166823.7	Worker	Scenario 3	1.35E+00	3.21E-03	1.46E-02
4132	642161.0	4166823.7	Worker	Scenario 3	1.27E+00	3.02E-03	1.52E-02
4133	642211.0	4166823.7	Worker	Scenario 3	1.20E+00	2.86E-03	1.38E-02
4134	642261.0	4166823.7	Worker	Scenario 3	1.13E+00	2.71E-03	1.25E-02
4135	642311.0	4166823.7	Worker	Scenario 3	1.08E+00	2.58E-03	1.12E-02
4136	644111.0	4166823.7	Worker	Scenario 3	7.66E-01	1.69E-03	3.59E-03
4137	644161.0	4166823.7	Worker	Scenario 3	7.53E-01	1.66E-03	3.38E-03
4138	644211.0	4166823.7	Worker	Scenario 3	7.39E-01	1.63E-03	3.18E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4139	644261.0	4166823.7	Worker	Scenario 3	7.22E-01	1.59E-03	3.01E-03
4140	644311.0	4166823.7	Worker	Scenario 3	7.02E-01	1.55E-03	2.88E-03
4141	644411.0	4166823.7	Worker	Scenario 3	6.57E-01	1.45E-03	2.67E-03
4142	644461.0	4166823.7	Worker	Scenario 3	6.39E-01	1.41E-03	2.58E-03
4143	644511.0	4166823.7	Worker	Scenario 3	6.18E-01	1.36E-03	2.50E-03
4144	644711.0	4166973.7	Worker	Scenario 3	6.79E-01	1.49E-03	2.21E-03
4145	644761.0	4166973.7	Worker	Scenario 3	6.49E-01	1.42E-03	2.16E-03
4146	641161.0	4167023.7	Worker	Scenario 3	5.75E-01	1.58E-03	3.59E-02
4147	641211.0	4167023.7	Worker	Scenario 3	6.66E-01	1.84E-03	4.50E-02
4148	641261.0	4167023.7	Worker	Scenario 3	7.97E-01	2.20E-03	5.92E-02
4149	644711.0	4167023.7	Worker	Scenario 3	7.21E-01	1.57E-03	2.19E-03
4150	644761.0	4167023.7	Worker	Scenario 3	6.84E-01	1.50E-03	2.15E-03
4151	644811.0	4167023.7	Worker	Scenario 3	6.53E-01	1.43E-03	2.12E-03
4152	641161.0	4167073.7	Worker	Scenario 3	6.35E-01	1.79E-03	4.72E-02
4153	641211.0	4167073.7	Worker	Scenario 3	7.41E-01	2.11E-03	4.51E-02
4154	641261.0	4167073.7	Worker	Scenario 3	8.99E-01	2.56E-03	5.70E-02
4155	644711.0	4167073.7	Worker	Scenario 3	7.62E-01	1.66E-03	2.21E-03
4156	644761.0	4167073.7	Worker	Scenario 3	7.16E-01	1.56E-03	2.15E-03
4157	644811.0	4167073.7	Worker	Scenario 3	6.79E-01	1.49E-03	2.10E-03
4158	641161.0	4167123.7	Worker	Scenario 3	7.00E-01	2.04E-03	4.89E-02
4159	641211.0	4167123.7	Worker	Scenario 3	8.23E-01	2.42E-03	5.60E-02
4160	641261.0	4167123.7	Worker	Scenario 3	1.01E+00	2.99E-03	5.89E-02
4161	644711.0	4167123.7	Worker	Scenario 3	7.99E-01	1.73E-03	2.16E-03
4162	644761.0	4167123.7	Worker	Scenario 3	7.41E-01	1.62E-03	2.12E-03
4163	644811.0	4167123.7	Worker	Scenario 3	6.97E-01	1.52E-03	2.09E-03
4164	641161.0	4167173.7	Worker	Scenario 3	7.73E-01	2.39E-03	5.07E-02
4165	641211.0	4167173.7	Worker	Scenario 3	9.17E-01	2.89E-03	5.38E-02
4166	641261.0	4167173.7	Worker	Scenario 3	1.14E+00	3.63E-03	5.91E-02
4167	644711.0	4167173.7	Worker	Scenario 3	8.20E-01	1.78E-03	2.22E-03
4168	644761.0	4167173.7	Worker	Scenario 3	7.54E-01	1.64E-03	2.17E-03
4169	644811.0	4167173.7	Worker	Scenario 3	7.09E-01	1.55E-03	2.12E-03
4170	641161.0	4167223.7	Worker	Scenario 3	8.49E-01	2.67E-03	6.67E-02
4171	641211.0	4167223.7	Worker	Scenario 3	1.01E+00	3.29E-03	6.81E-02
4172	641261.0	4167223.7	Worker	Scenario 3	1.25E+00	4.22E-03	8.65E-02
4173	644711.0	4167223.7	Worker	Scenario 3	7.96E-01	1.73E-03	2.12E-03
4174	644761.0	4167223.7	Worker	Scenario 3	7.47E-01	1.63E-03	2.08E-03
4175	644811.0	4167223.7	Worker	Scenario 3	7.08E-01	1.55E-03	2.04E-03
4176	641161.0	4167273.7	Worker	Scenario 3	9.26E-01	2.93E-03	5.97E-02
4177	641211.0	4167273.7	Worker	Scenario 3	1.10E+00	3.67E-03	6.87E-02
4178	641261.0	4167273.7	Worker	Scenario 3	1.36E+00	4.82E-03	9.07E-02
4179	641161.0	4167323.7	Worker	Scenario 3	1.00E+00	3.17E-03	6.06E-02
4180	641211.0	4167323.7	Worker	Scenario 3	1.19E+00	3.98E-03	7.66E-02
4181	641261.0	4167323.7	Worker	Scenario 3	1.45E+00	5.30E-03	1.05E-01
4182	641161.0	4167373.7	Worker	Scenario 3	1.09E+00	3.38E-03	5.47E-02
4183	641211.0	4167373.7	Worker	Scenario 3	1.28E+00	4.24E-03	7.04E-02
4184	641261.0	4167373.7	Worker	Scenario 3	1.54E+00	5.63E-03	9.01E-02
4185	644511.0	4167373.7	Worker	Scenario 3	8.84E-01	1.92E-03	2.36E-03
4186	644561.0	4167373.7	Worker	Scenario 3	8.48E-01	1.85E-03	2.30E-03
4187	644611.0	4167373.7	Worker	Scenario 3	8.14E-01	1.77E-03	2.25E-03
4188	644661.0	4167373.7	Worker	Scenario 3	7.81E-01	1.71E-03	2.20E-03
4189	644711.0	4167373.7	Worker	Scenario 3	7.51E-01	1.64E-03	2.16E-03
4190	644761.0	4167373.7	Worker	Scenario 3	7.22E-01	1.58E-03	2.11E-03
4191	644811.0	4167373.7	Worker	Scenario 3	6.96E-01	1.52E-03	2.07E-03
4192	640961.0	4167423.7	Worker	Scenario 3	7.51E-01	1.99E-03	2.60E-02
4193	641011.0	4167423.7	Worker	Scenario 3	8.27E-01	2.24E-03	2.95E-02
4194	641061.0	4167423.7	Worker	Scenario 3	9.23E-01	2.58E-03	3.40E-02
4195	641111.0	4167423.7	Worker	Scenario 3	1.05E+00	3.03E-03	3.82E-02
4196	641161.0	4167423.7	Worker	Scenario 3	1.20E+00	3.64E-03	4.74E-02
4197	641211.0	4167423.7	Worker	Scenario 3	1.38E+00	4.54E-03	6.62E-02
4198	641261.0	4167423.7	Worker	Scenario 3	1.63E+00	5.96E-03	8.56E-02
4199	644361.0	4167423.7	Worker	Scenario 3	9.90E-01	2.15E-03	2.35E-03
4200	644411.0	4167423.7	Worker	Scenario 3	9.50E-01	2.06E-03	2.30E-03
4201	644461.0	4167423.7	Worker	Scenario 3	9.12E-01	1.98E-03	2.25E-03
4202	644511.0	4167423.7	Worker	Scenario 3	8.76E-01	1.90E-03	2.20E-03
4203	644561.0	4167423.7	Worker	Scenario 3	8.41E-01	1.83E-03	2.15E-03
4204	644611.0	4167423.7	Worker	Scenario 3	8.07E-01	1.76E-03	2.10E-03
4205	644661.0	4167423.7	Worker	Scenario 3	7.77E-01	1.69E-03	2.06E-03
4206	644711.0	4167423.7	Worker	Scenario 3	7.47E-01	1.63E-03	2.01E-03
4207	644761.0	4167423.7	Worker	Scenario 3	7.20E-01	1.57E-03	1.97E-03
4208	640761.0	4167473.7	Worker	Scenario 3	5.91E-01	1.45E-03	1.61E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4209	640811.0	4167473.7	Worker	Scenario 3	6.42E-01	1.59E-03	1.76E-02
4210	640861.0	4167473.7	Worker	Scenario 3	7.01E-01	1.76E-03	1.89E-02
4211	640911.0	4167473.7	Worker	Scenario 3	7.67E-01	1.95E-03	2.00E-02
4212	640961.0	4167473.7	Worker	Scenario 3	8.42E-01	2.18E-03	2.12E-02
4213	641011.0	4167473.7	Worker	Scenario 3	9.29E-01	2.47E-03	2.81E-02
4214	641061.0	4167473.7	Worker	Scenario 3	1.04E+00	2.84E-03	3.50E-02
4215	641111.0	4167473.7	Worker	Scenario 3	1.17E+00	3.33E-03	4.06E-02
4216	643361.0	4167473.7	Worker	Scenario 3	6.05E+00	1.25E-02	4.67E-03
4217	643411.0	4167473.7	Worker	Scenario 3	4.89E+00	1.01E-02	4.48E-03
4218	643461.0	4167473.7	Worker	Scenario 3	4.07E+00	8.48E-03	4.30E-03
4219	643511.0	4167473.7	Worker	Scenario 3	3.47E+00	7.26E-03	4.13E-03
4220	643561.0	4167473.7	Worker	Scenario 3	3.02E+00	6.34E-03	3.96E-03
4221	643611.0	4167473.7	Worker	Scenario 3	2.67E+00	5.63E-03	3.80E-03
4222	643661.0	4167473.7	Worker	Scenario 3	2.39E+00	5.06E-03	3.65E-03
4223	643711.0	4167473.7	Worker	Scenario 3	2.17E+00	4.60E-03	3.51E-03
4224	643761.0	4167473.7	Worker	Scenario 3	1.98E+00	4.21E-03	3.37E-03
4225	643811.0	4167473.7	Worker	Scenario 3	1.83E+00	3.90E-03	3.24E-03
4226	643861.0	4167473.7	Worker	Scenario 3	1.70E+00	3.62E-03	3.14E-03
4227	643911.0	4167473.7	Worker	Scenario 3	1.58E+00	3.39E-03	3.04E-03
4228	643961.0	4167473.7	Worker	Scenario 3	1.48E+00	3.18E-03	2.95E-03
4229	644211.0	4167473.7	Worker	Scenario 3	1.12E+00	2.43E-03	2.56E-03
4230	644261.0	4167473.7	Worker	Scenario 3	1.07E+00	2.32E-03	2.49E-03
4231	644311.0	4167473.7	Worker	Scenario 3	1.02E+00	2.22E-03	2.43E-03
4232	644361.0	4167473.7	Worker	Scenario 3	9.81E-01	2.13E-03	2.37E-03
4233	644411.0	4167473.7	Worker	Scenario 3	9.41E-01	2.04E-03	2.31E-03
4234	644461.0	4167473.7	Worker	Scenario 3	9.02E-01	1.96E-03	2.26E-03
4235	644511.0	4167473.7	Worker	Scenario 3	8.66E-01	1.88E-03	2.20E-03
4236	644561.0	4167473.7	Worker	Scenario 3	8.33E-01	1.81E-03	2.15E-03
4237	644611.0	4167473.7	Worker	Scenario 3	8.00E-01	1.74E-03	2.09E-03
4238	644661.0	4167473.7	Worker	Scenario 3	7.70E-01	1.68E-03	2.04E-03
4239	640561.0	4167523.7	Worker	Scenario 3	4.95E-01	1.17E-03	1.12E-02
4240	640611.0	4167523.7	Worker	Scenario 3	5.23E-01	1.24E-03	1.18E-02
4241	640661.0	4167523.7	Worker	Scenario 3	5.63E-01	1.34E-03	1.24E-02
4242	640711.0	4167523.7	Worker	Scenario 3	6.08E-01	1.46E-03	1.27E-02
4243	640761.0	4167523.7	Worker	Scenario 3	6.62E-01	1.60E-03	1.28E-02
4244	640811.0	4167523.7	Worker	Scenario 3	7.24E-01	1.76E-03	1.55E-02
4245	640861.0	4167523.7	Worker	Scenario 3	7.93E-01	1.95E-03	1.92E-02
4246	640911.0	4167523.7	Worker	Scenario 3	8.75E-01	2.18E-03	2.26E-02
4247	640961.0	4167523.7	Worker	Scenario 3	9.67E-01	2.45E-03	2.48E-02
4248	643361.0	4167523.7	Worker	Scenario 3	5.78E+00	1.19E-02	4.69E-03
4249	643411.0	4167523.7	Worker	Scenario 3	4.69E+00	9.72E-03	4.56E-03
4250	643461.0	4167523.7	Worker	Scenario 3	3.92E+00	8.17E-03	4.44E-03
4251	643511.0	4167523.7	Worker	Scenario 3	3.36E+00	7.02E-03	4.31E-03
4252	643561.0	4167523.7	Worker	Scenario 3	2.93E+00	6.15E-03	4.18E-03
4253	643611.0	4167523.7	Worker	Scenario 3	2.60E+00	5.47E-03	4.06E-03
4254	643661.0	4167523.7	Worker	Scenario 3	2.34E+00	4.93E-03	3.93E-03
4255	643711.0	4167523.7	Worker	Scenario 3	2.12E+00	4.49E-03	3.81E-03
4256	643761.0	4167523.7	Worker	Scenario 3	1.94E+00	4.12E-03	3.70E-03
4257	643811.0	4167523.7	Worker	Scenario 3	1.79E+00	3.82E-03	3.59E-03
4258	643861.0	4167523.7	Worker	Scenario 3	1.66E+00	3.55E-03	3.47E-03
4259	643911.0	4167523.7	Worker	Scenario 3	1.55E+00	3.32E-03	3.37E-03
4260	643961.0	4167523.7	Worker	Scenario 3	1.46E+00	3.12E-03	3.26E-03
4261	644011.0	4167523.7	Worker	Scenario 3	1.37E+00	2.94E-03	3.16E-03
4262	644061.0	4167523.7	Worker	Scenario 3	1.29E+00	2.78E-03	3.06E-03
4263	644111.0	4167523.7	Worker	Scenario 3	1.22E+00	2.64E-03	2.96E-03
4264	644161.0	4167523.7	Worker	Scenario 3	1.16E+00	2.50E-03	2.86E-03
4265	644211.0	4167523.7	Worker	Scenario 3	1.11E+00	2.39E-03	2.77E-03
4266	644261.0	4167523.7	Worker	Scenario 3	1.06E+00	2.28E-03	2.68E-03
4267	644311.0	4167523.7	Worker	Scenario 3	1.01E+00	2.18E-03	2.60E-03
4268	644361.0	4167523.7	Worker	Scenario 3	9.66E-01	2.09E-03	2.51E-03
4269	644411.0	4167523.7	Worker	Scenario 3	9.26E-01	2.01E-03	2.43E-03
4270	644461.0	4167523.7	Worker	Scenario 3	8.89E-01	1.93E-03	2.36E-03
4271	644511.0	4167523.7	Worker	Scenario 3	8.54E-01	1.86E-03	2.28E-03
4272	640361.0	4167573.7	Worker	Scenario 3	4.06E-01	9.38E-04	8.32E-03
4273	640411.0	4167573.7	Worker	Scenario 3	4.33E-01	1.00E-03	8.63E-03
4274	640461.0	4167573.7	Worker	Scenario 3	4.67E-01	1.08E-03	8.84E-03
4275	640511.0	4167573.7	Worker	Scenario 3	5.11E-01	1.18E-03	8.93E-03
4276	640561.0	4167573.7	Worker	Scenario 3	5.46E-01	1.27E-03	8.92E-03
4277	640611.0	4167573.7	Worker	Scenario 3	5.87E-01	1.37E-03	9.83E-03
4278	640661.0	4167573.7	Worker	Scenario 3	6.34E-01	1.49E-03	1.20E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4279	640711.0	4167573.7	Worker	Scenario 3	6.91E-01	1.63E-03	1.42E-02
4280	640761.0	4167573.7	Worker	Scenario 3	7.57E-01	1.80E-03	1.62E-02
4281	640811.0	4167573.7	Worker	Scenario 3	8.34E-01	2.00E-03	1.76E-02
4282	643311.0	4167573.7	Worker	Scenario 3	5.04E+00	1.04E-02	4.86E-03
4283	643361.0	4167573.7	Worker	Scenario 3	4.35E+00	9.05E-03	4.63E-03
4284	643411.0	4167573.7	Worker	Scenario 3	3.78E+00	7.89E-03	4.42E-03
4285	643461.0	4167573.7	Worker	Scenario 3	3.32E+00	6.94E-03	4.26E-03
4286	643511.0	4167573.7	Worker	Scenario 3	2.94E+00	6.16E-03	4.16E-03
4287	643561.0	4167573.7	Worker	Scenario 3	2.63E+00	5.53E-03	4.06E-03
4288	643611.0	4167573.7	Worker	Scenario 3	2.37E+00	5.00E-03	3.95E-03
4289	643661.0	4167573.7	Worker	Scenario 3	2.16E+00	4.57E-03	3.84E-03
4290	643711.0	4167573.7	Worker	Scenario 3	1.98E+00	4.20E-03	3.74E-03
4291	643761.0	4167573.7	Worker	Scenario 3	1.83E+00	3.89E-03	3.63E-03
4292	643811.0	4167573.7	Worker	Scenario 3	1.70E+00	3.63E-03	3.53E-03
4293	643861.0	4167573.7	Worker	Scenario 3	1.59E+00	3.39E-03	3.43E-03
4294	643911.0	4167573.7	Worker	Scenario 3	1.49E+00	3.19E-03	3.35E-03
4295	643961.0	4167573.7	Worker	Scenario 3	1.40E+00	3.00E-03	3.28E-03
4296	644011.0	4167573.7	Worker	Scenario 3	1.32E+00	2.84E-03	3.21E-03
4297	644061.0	4167573.7	Worker	Scenario 3	1.25E+00	2.69E-03	3.13E-03
4298	644111.0	4167573.7	Worker	Scenario 3	1.19E+00	2.56E-03	3.06E-03
4299	644161.0	4167573.7	Worker	Scenario 3	1.13E+00	2.43E-03	2.98E-03
4300	644211.0	4167573.7	Worker	Scenario 3	1.08E+00	2.32E-03	2.91E-03
4301	644261.0	4167573.7	Worker	Scenario 3	1.03E+00	2.22E-03	2.84E-03
4302	644311.0	4167573.7	Worker	Scenario 3	9.86E-01	2.13E-03	2.77E-03
4303	644361.0	4167573.7	Worker	Scenario 3	9.45E-01	2.05E-03	2.70E-03
4304	640261.0	4167623.7	Worker	Scenario 3	3.78E-01	8.66E-04	6.71E-03
4305	640311.0	4167623.7	Worker	Scenario 3	4.12E-01	9.41E-04	6.73E-03
4306	640361.0	4167623.7	Worker	Scenario 3	4.51E-01	1.03E-03	6.66E-03
4307	640411.0	4167623.7	Worker	Scenario 3	4.84E-01	1.11E-03	6.79E-03
4308	640461.0	4167623.7	Worker	Scenario 3	5.25E-01	1.20E-03	8.15E-03
4309	640511.0	4167623.7	Worker	Scenario 3	5.72E-01	1.31E-03	9.61E-03
4310	640561.0	4167623.7	Worker	Scenario 3	6.21E-01	1.43E-03	1.11E-02
4311	640611.0	4167623.7	Worker	Scenario 3	6.73E-01	1.55E-03	1.24E-02
4312	640661.0	4167623.7	Worker	Scenario 3	7.33E-01	1.70E-03	1.33E-02
4313	643261.0	4167623.7	Worker	Scenario 3	2.71E+00	5.74E-03	5.08E-03
4314	643311.0	4167623.7	Worker	Scenario 3	2.87E+00	6.05E-03	4.89E-03
4315	643361.0	4167623.7	Worker	Scenario 3	2.84E+00	5.98E-03	4.70E-03
4316	643411.0	4167623.7	Worker	Scenario 3	2.72E+00	5.72E-03	4.53E-03
4317	644011.0	4167623.7	Worker	Scenario 3	1.26E+00	2.70E-03	3.13E-03
4318	644061.0	4167623.7	Worker	Scenario 3	1.20E+00	2.57E-03	3.06E-03
4319	644111.0	4167623.7	Worker	Scenario 3	1.14E+00	2.45E-03	2.99E-03
4320	644161.0	4167623.7	Worker	Scenario 3	1.09E+00	2.34E-03	2.92E-03
4321	644211.0	4167623.7	Worker	Scenario 3	1.04E+00	2.24E-03	2.85E-03
4322	640211.0	4167673.7	Worker	Scenario 3	3.84E-01	8.72E-04	5.10E-03
4323	640261.0	4167673.7	Worker	Scenario 3	4.19E-01	9.49E-04	5.90E-03
4324	640311.0	4167673.7	Worker	Scenario 3	4.51E-01	1.02E-03	6.92E-03
4325	640361.0	4167673.7	Worker	Scenario 3	5.02E-01	1.13E-03	7.95E-03
4326	640411.0	4167673.7	Worker	Scenario 3	5.50E-01	1.24E-03	8.97E-03
4327	640461.0	4167673.7	Worker	Scenario 3	6.02E-01	1.36E-03	9.88E-03
4328	640511.0	4167673.7	Worker	Scenario 3	6.62E-01	1.50E-03	1.05E-02
4329	643211.0	4167673.7	Worker	Scenario 3	1.60E+00	3.49E-03	5.25E-03
4330	643261.0	4167673.7	Worker	Scenario 3	1.66E+00	3.59E-03	5.03E-03
4331	643311.0	4167673.7	Worker	Scenario 3	1.78E+00	3.82E-03	4.84E-03
4332	643361.0	4167673.7	Worker	Scenario 3	1.87E+00	4.00E-03	4.69E-03
4333	640111.0	4167723.7	Worker	Scenario 3	3.58E-01	8.08E-04	5.18E-03
4334	640161.0	4167723.7	Worker	Scenario 3	3.92E-01	8.82E-04	5.95E-03
4335	640211.0	4167723.7	Worker	Scenario 3	4.30E-01	9.66E-04	6.74E-03
4336	640261.0	4167723.7	Worker	Scenario 3	4.75E-01	1.06E-03	7.48E-03
4337	640311.0	4167723.7	Worker	Scenario 3	5.24E-01	1.17E-03	8.14E-03
4338	640361.0	4167723.7	Worker	Scenario 3	5.74E-01	1.28E-03	8.65E-03
4339	643161.0	4167723.7	Worker	Scenario 3	1.52E+00	3.31E-03	5.24E-03
4340	643211.0	4167723.7	Worker	Scenario 3	1.38E+00	3.03E-03	5.14E-03
4341	643261.0	4167723.7	Worker	Scenario 3	1.33E+00	2.91E-03	5.00E-03
4342	643311.0	4167723.7	Worker	Scenario 3	1.34E+00	2.92E-03	4.82E-03
4343	640011.0	4167773.7	Worker	Scenario 3	3.27E-01	7.36E-04	5.20E-03
4344	640061.0	4167773.7	Worker	Scenario 3	3.60E-01	8.08E-04	5.80E-03
4345	640111.0	4167773.7	Worker	Scenario 3	3.99E-01	8.91E-04	6.38E-03
4346	640161.0	4167773.7	Worker	Scenario 3	4.41E-01	9.83E-04	6.88E-03
4347	640211.0	4167773.7	Worker	Scenario 3	4.91E-01	1.09E-03	7.26E-03
4348	640261.0	4167773.7	Worker	Scenario 3	5.53E-01	1.22E-03	7.47E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4349	643161.0	4167773.7	Worker	Scenario 3	1.38E+00	3.01E-03	5.30E-03
4350	643211.0	4167773.7	Worker	Scenario 3	1.26E+00	2.77E-03	5.14E-03
4351	643261.0	4167773.7	Worker	Scenario 3	1.19E+00	2.62E-03	4.94E-03
4352	639961.0	4167823.7	Worker	Scenario 3	3.30E-01	7.38E-04	5.52E-03
4353	640011.0	4167823.7	Worker	Scenario 3	3.63E-01	8.09E-04	5.92E-03
4354	640061.0	4167823.7	Worker	Scenario 3	4.04E-01	8.98E-04	6.23E-03
4355	640111.0	4167823.7	Worker	Scenario 3	4.52E-01	1.00E-03	6.41E-03
4356	640161.0	4167823.7	Worker	Scenario 3	5.11E-01	1.13E-03	6.57E-03
4357	643111.0	4167823.7	Worker	Scenario 3	1.41E+00	3.06E-03	5.45E-03
4358	643161.0	4167823.7	Worker	Scenario 3	1.28E+00	2.79E-03	5.27E-03
4359	643211.0	4167823.7	Worker	Scenario 3	1.18E+00	2.59E-03	5.06E-03
4360	643261.0	4167823.7	Worker	Scenario 3	1.11E+00	2.44E-03	4.89E-03
4361	639861.0	4167873.7	Worker	Scenario 3	3.05E-01	6.81E-04	5.16E-03
4362	639911.0	4167873.7	Worker	Scenario 3	3.34E-01	7.43E-04	5.41E-03
4363	639961.0	4167873.7	Worker	Scenario 3	3.73E-01	8.26E-04	5.57E-03
4364	640011.0	4167873.7	Worker	Scenario 3	4.13E-01	9.11E-04	5.64E-03
4365	640061.0	4167873.7	Worker	Scenario 3	4.64E-01	1.02E-03	5.97E-03
4366	643061.0	4167873.7	Worker	Scenario 3	1.40E+00	3.04E-03	5.61E-03
4367	643111.0	4167873.7	Worker	Scenario 3	1.31E+00	2.83E-03	5.31E-03
4368	643161.0	4167873.7	Worker	Scenario 3	1.20E+00	2.62E-03	5.12E-03
4369	643211.0	4167873.7	Worker	Scenario 3	1.12E+00	2.45E-03	5.01E-03
4370	639811.0	4167923.7	Worker	Scenario 3	3.07E-01	6.82E-04	4.90E-03
4371	639861.0	4167923.7	Worker	Scenario 3	3.37E-01	7.46E-04	4.95E-03
4372	639911.0	4167923.7	Worker	Scenario 3	3.77E-01	8.32E-04	5.17E-03
4373	639961.0	4167923.7	Worker	Scenario 3	4.23E-01	9.28E-04	5.46E-03
4374	640011.0	4167923.7	Worker	Scenario 3	4.79E-01	1.05E-03	5.77E-03
4375	643011.0	4167923.7	Worker	Scenario 3	1.38E+00	2.98E-03	5.75E-03
4376	643061.0	4167923.7	Worker	Scenario 3	1.30E+00	2.82E-03	5.44E-03
4377	643111.0	4167923.7	Worker	Scenario 3	1.22E+00	2.65E-03	5.23E-03
4378	643161.0	4167923.7	Worker	Scenario 3	1.14E+00	2.49E-03	5.13E-03
4379	639711.0	4167973.7	Worker	Scenario 3	2.85E-01	6.33E-04	4.41E-03
4380	639761.0	4167973.7	Worker	Scenario 3	3.20E-01	7.06E-04	4.53E-03
4381	639811.0	4167973.7	Worker	Scenario 3	3.38E-01	7.45E-04	4.75E-03
4382	639861.0	4167973.7	Worker	Scenario 3	3.81E-01	8.36E-04	5.03E-03
4383	639911.0	4167973.7	Worker	Scenario 3	4.30E-01	9.39E-04	5.24E-03
4384	642911.0	4167973.7	Worker	Scenario 3	1.41E+00	3.04E-03	6.11E-03
4385	642961.0	4167973.7	Worker	Scenario 3	1.35E+00	2.91E-03	5.87E-03
4386	643011.0	4167973.7	Worker	Scenario 3	1.28E+00	2.78E-03	5.61E-03
4387	643061.0	4167973.7	Worker	Scenario 3	1.22E+00	2.64E-03	5.44E-03
4388	643111.0	4167973.7	Worker	Scenario 3	1.16E+00	2.51E-03	5.23E-03
4389	639661.0	4168023.7	Worker	Scenario 3	2.85E-01	6.30E-04	4.21E-03
4390	639711.0	4168023.7	Worker	Scenario 3	3.18E-01	7.00E-04	4.41E-03
4391	639761.0	4168023.7	Worker	Scenario 3	3.48E-01	7.64E-04	4.63E-03
4392	639811.0	4168023.7	Worker	Scenario 3	3.89E-01	8.49E-04	4.75E-03
4393	642861.0	4168023.7	Worker	Scenario 3	1.38E+00	2.96E-03	6.30E-03
4394	642911.0	4168023.7	Worker	Scenario 3	1.32E+00	2.85E-03	5.93E-03
4395	642961.0	4168023.7	Worker	Scenario 3	1.27E+00	2.74E-03	5.75E-03
4396	643011.0	4168023.7	Worker	Scenario 3	1.21E+00	2.62E-03	5.55E-03
4397	643061.0	4168023.7	Worker	Scenario 3	1.16E+00	2.50E-03	5.32E-03
4398	639561.0	4168073.7	Worker	Scenario 3	2.60E-01	5.75E-04	3.90E-03
4399	639611.0	4168073.7	Worker	Scenario 3	2.84E-01	6.26E-04	4.11E-03
4400	639661.0	4168073.7	Worker	Scenario 3	3.14E-01	6.90E-04	4.26E-03
4401	639711.0	4168073.7	Worker	Scenario 3	3.47E-01	7.58E-04	4.33E-03
4402	639761.0	4168073.7	Worker	Scenario 3	3.90E-01	8.49E-04	4.30E-03
4403	642761.0	4168073.7	Worker	Scenario 3	1.39E+00	2.99E-03	6.82E-03
4404	642811.0	4168073.7	Worker	Scenario 3	1.35E+00	2.90E-03	6.70E-03
4405	642861.0	4168073.7	Worker	Scenario 3	1.30E+00	2.80E-03	6.67E-03
4406	642911.0	4168073.7	Worker	Scenario 3	1.25E+00	2.70E-03	6.39E-03
4407	642961.0	4168073.7	Worker	Scenario 3	1.20E+00	2.59E-03	5.93E-03
4408	639561.0	4168123.7	Worker	Scenario 3	2.81E-01	6.19E-04	3.92E-03
4409	639611.0	4168123.7	Worker	Scenario 3	3.10E-01	6.79E-04	3.95E-03
4410	639661.0	4168123.7	Worker	Scenario 3	3.47E-01	7.56E-04	3.90E-03
4411	642661.0	4168123.7	Worker	Scenario 3	1.42E+00	3.04E-03	7.53E-03
4412	642711.0	4168123.7	Worker	Scenario 3	1.37E+00	2.95E-03	7.25E-03
4413	642761.0	4168123.7	Worker	Scenario 3	1.33E+00	2.86E-03	6.98E-03
4414	642811.0	4168123.7	Worker	Scenario 3	1.29E+00	2.76E-03	6.68E-03
4415	642861.0	4168123.7	Worker	Scenario 3	1.24E+00	2.67E-03	6.19E-03
4416	642911.0	4168123.7	Worker	Scenario 3	1.20E+00	2.57E-03	6.36E-03
4417	639511.0	4168173.7	Worker	Scenario 3	2.79E-01	6.13E-04	3.60E-03
4418	639561.0	4168173.7	Worker	Scenario 3	3.07E-01	6.71E-04	3.57E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4419	642611.0	4168173.7	Worker	Scenario 3	1.42E+00	3.04E-03	7.78E-03
4420	642661.0	4168173.7	Worker	Scenario 3	1.37E+00	2.93E-03	7.41E-03
4421	642711.0	4168173.7	Worker	Scenario 3	1.32E+00	2.84E-03	7.11E-03
4422	642761.0	4168173.7	Worker	Scenario 3	1.28E+00	2.74E-03	6.84E-03
4423	642811.0	4168173.7	Worker	Scenario 3	1.23E+00	2.65E-03	6.59E-03
4424	639311.0	4168223.7	Worker	Scenario 3	2.21E-01	4.87E-04	3.30E-03
4425	639361.0	4168223.7	Worker	Scenario 3	2.38E-01	5.23E-04	3.33E-03
4426	639411.0	4168223.7	Worker	Scenario 3	2.58E-01	5.65E-04	3.30E-03
4427	639461.0	4168223.7	Worker	Scenario 3	2.79E-01	6.12E-04	3.29E-03
4428	639511.0	4168223.7	Worker	Scenario 3	3.05E-01	6.65E-04	3.39E-03
4429	642511.0	4168223.7	Worker	Scenario 3	1.50E+00	3.21E-03	7.95E-03
4430	642561.0	4168223.7	Worker	Scenario 3	1.43E+00	3.07E-03	7.54E-03
4431	642611.0	4168223.7	Worker	Scenario 3	1.38E+00	2.95E-03	7.44E-03
4432	642661.0	4168223.7	Worker	Scenario 3	1.32E+00	2.84E-03	7.19E-03
4433	642711.0	4168223.7	Worker	Scenario 3	1.28E+00	2.74E-03	6.98E-03
4434	642761.0	4168223.7	Worker	Scenario 3	1.23E+00	2.64E-03	6.61E-03
4435	639261.0	4168273.7	Worker	Scenario 3	2.23E-01	4.91E-04	3.07E-03
4436	639311.0	4168273.7	Worker	Scenario 3	2.40E-01	5.26E-04	3.04E-03
4437	639361.0	4168273.7	Worker	Scenario 3	2.58E-01	5.65E-04	3.03E-03
4438	639411.0	4168273.7	Worker	Scenario 3	2.81E-01	6.14E-04	3.19E-03
4439	642461.0	4168273.7	Worker	Scenario 3	1.53E+00	3.27E-03	8.28E-03
4440	642511.0	4168273.7	Worker	Scenario 3	1.45E+00	3.11E-03	7.83E-03
4441	642561.0	4168273.7	Worker	Scenario 3	1.39E+00	2.98E-03	7.35E-03
4442	642611.0	4168273.7	Worker	Scenario 3	1.33E+00	2.85E-03	7.13E-03
4443	642661.0	4168273.7	Worker	Scenario 3	1.28E+00	2.74E-03	6.94E-03
4444	639211.0	4168323.7	Worker	Scenario 3	2.27E-01	4.96E-04	2.82E-03
4445	639261.0	4168323.7	Worker	Scenario 3	2.43E-01	5.30E-04	2.82E-03
4446	639311.0	4168323.7	Worker	Scenario 3	2.63E-01	5.72E-04	3.01E-03
4447	639361.0	4168323.7	Worker	Scenario 3	2.85E-01	6.19E-04	3.23E-03
4448	642461.0	4168323.7	Worker	Scenario 3	1.48E+00	3.16E-03	7.76E-03
4449	642511.0	4168323.7	Worker	Scenario 3	1.41E+00	3.01E-03	7.69E-03
4450	642561.0	4168323.7	Worker	Scenario 3	1.35E+00	2.88E-03	7.35E-03
4451	642611.0	4168323.7	Worker	Scenario 3	1.29E+00	2.76E-03	6.79E-03
4452	639111.0	4168373.7	Worker	Scenario 3	2.15E-01	4.70E-04	2.62E-03
4453	639161.0	4168373.7	Worker	Scenario 3	2.31E-01	5.04E-04	2.63E-03
4454	639211.0	4168373.7	Worker	Scenario 3	2.48E-01	5.39E-04	2.84E-03
4455	639261.0	4168373.7	Worker	Scenario 3	2.67E-01	5.81E-04	3.03E-03
4456	642361.0	4168373.7	Worker	Scenario 3	1.61E+00	3.41E-03	7.72E-03
4457	642411.0	4168373.7	Worker	Scenario 3	1.51E+00	3.21E-03	7.73E-03
4458	642461.0	4168373.7	Worker	Scenario 3	1.43E+00	3.05E-03	7.45E-03
4459	642511.0	4168373.7	Worker	Scenario 3	1.36E+00	2.90E-03	7.23E-03
4460	642561.0	4168373.7	Worker	Scenario 3	1.30E+00	2.77E-03	7.17E-03
4461	639061.0	4168423.7	Worker	Scenario 3	2.18E-01	4.76E-04	2.48E-03
4462	639111.0	4168423.7	Worker	Scenario 3	2.34E-01	5.10E-04	2.68E-03
4463	639161.0	4168423.7	Worker	Scenario 3	2.54E-01	5.50E-04	2.86E-03
4464	642261.0	4168423.7	Worker	Scenario 3	1.75E+00	3.71E-03	8.18E-03
4465	642311.0	4168423.7	Worker	Scenario 3	1.63E+00	3.46E-03	7.95E-03
4466	642361.0	4168423.7	Worker	Scenario 3	1.53E+00	3.25E-03	7.95E-03
4467	642411.0	4168423.7	Worker	Scenario 3	1.44E+00	3.07E-03	7.14E-03
4468	642461.0	4168423.7	Worker	Scenario 3	1.37E+00	2.92E-03	7.19E-03
4469	642511.0	4168423.7	Worker	Scenario 3	1.30E+00	2.78E-03	6.97E-03
4470	639011.0	4168473.7	Worker	Scenario 3	2.22E-01	4.83E-04	2.54E-03
4471	639061.0	4168473.7	Worker	Scenario 3	2.40E-01	5.20E-04	2.70E-03
4472	639111.0	4168473.7	Worker	Scenario 3	2.60E-01	5.61E-04	2.81E-03
4473	642161.0	4168473.7	Worker	Scenario 3	1.92E+00	4.04E-03	8.27E-03
4474	642211.0	4168473.7	Worker	Scenario 3	1.76E+00	3.73E-03	7.83E-03
4475	642261.0	4168473.7	Worker	Scenario 3	1.64E+00	3.48E-03	7.83E-03
4476	642311.0	4168473.7	Worker	Scenario 3	1.54E+00	3.27E-03	7.57E-03
4477	642361.0	4168473.7	Worker	Scenario 3	1.45E+00	3.08E-03	7.47E-03
4478	642411.0	4168473.7	Worker	Scenario 3	1.37E+00	2.92E-03	7.36E-03
4479	642461.0	4168473.7	Worker	Scenario 3	1.30E+00	2.77E-03	6.73E-03
4480	638911.0	4168523.7	Worker	Scenario 3	2.10E-01	4.56E-04	2.41E-03
4481	638961.0	4168523.7	Worker	Scenario 3	2.28E-01	4.93E-04	2.55E-03
4482	639011.0	4168523.7	Worker	Scenario 3	2.48E-01	5.35E-04	2.65E-03
4483	642061.0	4168523.7	Worker	Scenario 3	2.07E+00	4.34E-03	8.30E-03
4484	642111.0	4168523.7	Worker	Scenario 3	1.90E+00	3.99E-03	8.13E-03
4485	642161.0	4168523.7	Worker	Scenario 3	1.75E+00	3.69E-03	7.92E-03
4486	642211.0	4168523.7	Worker	Scenario 3	1.63E+00	3.44E-03	7.71E-03
4487	642261.0	4168523.7	Worker	Scenario 3	1.52E+00	3.23E-03	7.48E-03
4488	642311.0	4168523.7	Worker	Scenario 3	1.43E+00	3.05E-03	7.29E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4489	642361.0	4168523.7	Worker	Scenario 3	1.36E+00	2.89E-03	7.11E-03
4490	638861.0	4168573.7	Worker	Scenario 3	2.12E-01	4.60E-04	2.42E-03
4491	638911.0	4168573.7	Worker	Scenario 3	2.32E-01	5.01E-04	2.51E-03
4492	638961.0	4168573.7	Worker	Scenario 3	2.56E-01	5.51E-04	2.56E-03
4493	641911.0	4168573.7	Worker	Scenario 3	2.30E+00	4.80E-03	8.84E-03
4494	641961.0	4168573.7	Worker	Scenario 3	2.11E+00	4.41E-03	7.79E-03
4495	642011.0	4168573.7	Worker	Scenario 3	1.95E+00	4.08E-03	8.04E-03
4496	642061.0	4168573.7	Worker	Scenario 3	1.81E+00	3.80E-03	7.91E-03
4497	642111.0	4168573.7	Worker	Scenario 3	1.68E+00	3.55E-03	7.71E-03
4498	642161.0	4168573.7	Worker	Scenario 3	1.57E+00	3.33E-03	7.39E-03
4499	642211.0	4168573.7	Worker	Scenario 3	1.48E+00	3.14E-03	7.39E-03
4500	642261.0	4168573.7	Worker	Scenario 3	1.40E+00	2.97E-03	7.12E-03
4501	638811.0	4168623.7	Worker	Scenario 3	2.20E-01	4.74E-04	2.38E-03
4502	638861.0	4168623.7	Worker	Scenario 3	2.37E-01	5.10E-04	2.42E-03
4503	641811.0	4168623.7	Worker	Scenario 3	2.24E+00	4.68E-03	1.15E-02
4504	641861.0	4168623.7	Worker	Scenario 3	2.06E+00	4.33E-03	1.16E-02
4505	641911.0	4168623.7	Worker	Scenario 3	1.91E+00	4.02E-03	9.39E-03
4506	641961.0	4168623.7	Worker	Scenario 3	1.79E+00	3.75E-03	7.20E-03
4507	642011.0	4168623.7	Worker	Scenario 3	1.67E+00	3.52E-03	7.74E-03
4508	642061.0	4168623.7	Worker	Scenario 3	1.58E+00	3.33E-03	7.58E-03
4509	642111.0	4168623.7	Worker	Scenario 3	1.49E+00	3.15E-03	7.40E-03
4510	638711.0	4168673.7	Worker	Scenario 3	2.12E-01	4.56E-04	2.25E-03
4511	638761.0	4168673.7	Worker	Scenario 3	2.28E-01	4.90E-04	2.29E-03
4512	638811.0	4168673.7	Worker	Scenario 3	2.48E-01	5.32E-04	2.34E-03
4513	641661.0	4168673.7	Worker	Scenario 3	2.23E+00	4.66E-03	7.85E-03
4514	641711.0	4168673.7	Worker	Scenario 3	2.11E+00	4.42E-03	8.09E-03
4515	641761.0	4168673.7	Worker	Scenario 3	1.99E+00	4.17E-03	8.36E-03
4516	641811.0	4168673.7	Worker	Scenario 3	1.86E+00	3.91E-03	1.07E-02
4517	641861.0	4168673.7	Worker	Scenario 3	1.75E+00	3.68E-03	1.14E-02
4518	641911.0	4168673.7	Worker	Scenario 3	1.64E+00	3.46E-03	9.92E-03
4519	641961.0	4168673.7	Worker	Scenario 3	1.55E+00	3.26E-03	7.50E-03
4520	642011.0	4168673.7	Worker	Scenario 3	1.46E+00	3.09E-03	7.15E-03
4521	638661.0	4168723.7	Worker	Scenario 3	2.17E-01	4.67E-04	2.18E-03
4522	638711.0	4168723.7	Worker	Scenario 3	2.37E-01	5.07E-04	2.22E-03
4523	641511.0	4168723.7	Worker	Scenario 3	2.12E+00	4.44E-03	7.87E-03
4524	641561.0	4168723.7	Worker	Scenario 3	2.02E+00	4.24E-03	7.84E-03
4525	641611.0	4168723.7	Worker	Scenario 3	1.94E+00	4.07E-03	7.81E-03
4526	641661.0	4168723.7	Worker	Scenario 3	1.85E+00	3.89E-03	7.60E-03
4527	641711.0	4168723.7	Worker	Scenario 3	1.77E+00	3.72E-03	7.71E-03
4528	641761.0	4168723.7	Worker	Scenario 3	1.68E+00	3.54E-03	7.85E-03
4529	641811.0	4168723.7	Worker	Scenario 3	1.59E+00	3.36E-03	9.82E-03
4530	641861.0	4168723.7	Worker	Scenario 3	1.51E+00	3.20E-03	1.11E-02
4531	641911.0	4168723.7	Worker	Scenario 3	1.44E+00	3.04E-03	1.03E-02
4532	638561.0	4168773.7	Worker	Scenario 3	2.05E-01	4.40E-04	2.07E-03
4533	638611.0	4168773.7	Worker	Scenario 3	2.22E-01	4.75E-04	2.11E-03
4534	638661.0	4168773.7	Worker	Scenario 3	2.44E-01	5.20E-04	2.16E-03
4535	641461.0	4168773.7	Worker	Scenario 3	1.93E+00	4.05E-03	7.51E-03
4536	641511.0	4168773.7	Worker	Scenario 3	1.82E+00	3.83E-03	7.48E-03
4537	641561.0	4168773.7	Worker	Scenario 3	1.74E+00	3.66E-03	7.44E-03
4538	641611.0	4168773.7	Worker	Scenario 3	1.67E+00	3.51E-03	7.40E-03
4539	641661.0	4168773.7	Worker	Scenario 3	1.60E+00	3.37E-03	7.33E-03
4540	641711.0	4168773.7	Worker	Scenario 3	1.53E+00	3.24E-03	7.29E-03
4541	641761.0	4168773.7	Worker	Scenario 3	1.46E+00	3.10E-03	7.34E-03
4542	638511.0	4168823.7	Worker	Scenario 3	2.07E-01	4.44E-04	2.01E-03
4543	638561.0	4168823.7	Worker	Scenario 3	2.26E-01	4.83E-04	2.06E-03
4544	641461.0	4168823.7	Worker	Scenario 3	1.71E+00	3.58E-03	7.16E-03
4545	641511.0	4168823.7	Worker	Scenario 3	1.61E+00	3.38E-03	7.12E-03
4546	641561.0	4168823.7	Worker	Scenario 3	1.53E+00	3.23E-03	7.08E-03
4547	641611.0	4168823.7	Worker	Scenario 3	1.47E+00	3.10E-03	7.06E-03
4548	638461.0	4168873.7	Worker	Scenario 3	1.99E-01	4.27E-04	1.96E-03
4549	638511.0	4168873.7	Worker	Scenario 3	2.25E-01	4.79E-04	1.98E-03
4550	640211.0	4168873.7	Worker	Scenario 3	8.01E-01	1.70E-03	4.19E-03
4551	641461.0	4168873.7	Worker	Scenario 3	1.54E+00	3.23E-03	6.83E-03
4552	641511.0	4168873.7	Worker	Scenario 3	1.44E+00	3.04E-03	6.78E-03
4553	641561.0	4168873.7	Worker	Scenario 3	1.37E+00	2.90E-03	6.78E-03
4554	638361.0	4168923.7	Worker	Scenario 3	1.72E-01	3.71E-04	1.88E-03
4555	638411.0	4168923.7	Worker	Scenario 3	1.92E-01	4.12E-04	1.89E-03
4556	638461.0	4168923.7	Worker	Scenario 3	2.18E-01	4.66E-04	1.88E-03
4557	640111.0	4168923.7	Worker	Scenario 3	7.81E-01	1.66E-03	3.88E-03
4558	640161.0	4168923.7	Worker	Scenario 3	7.67E-01	1.63E-03	3.97E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4559	640211.0	4168923.7	Worker	Scenario 3	7.60E-01	1.62E-03	4.04E-03
4560	640261.0	4168923.7	Worker	Scenario 3	7.57E-01	1.62E-03	4.16E-03
4561	640311.0	4168923.7	Worker	Scenario 3	7.60E-01	1.62E-03	4.26E-03
4562	640361.0	4168923.7	Worker	Scenario 3	7.66E-01	1.64E-03	4.34E-03
4563	641461.0	4168923.7	Worker	Scenario 3	1.40E+00	2.96E-03	6.53E-03
4564	641511.0	4168923.7	Worker	Scenario 3	1.31E+00	2.77E-03	6.48E-03
4565	641561.0	4168923.7	Worker	Scenario 3	1.25E+00	2.64E-03	6.50E-03
4566	638311.0	4168973.7	Worker	Scenario 3	1.70E-01	3.67E-04	1.81E-03
4567	638361.0	4168973.7	Worker	Scenario 3	1.89E-01	4.06E-04	1.81E-03
4568	638411.0	4168973.7	Worker	Scenario 3	2.14E-01	4.57E-04	1.77E-03
4569	640061.0	4168973.7	Worker	Scenario 3	7.56E-01	1.60E-03	3.68E-03
4570	640111.0	4168973.7	Worker	Scenario 3	7.40E-01	1.57E-03	3.81E-03
4571	640161.0	4168973.7	Worker	Scenario 3	7.30E-01	1.55E-03	3.88E-03
4572	640211.0	4168973.7	Worker	Scenario 3	7.25E-01	1.55E-03	3.93E-03
4573	640261.0	4168973.7	Worker	Scenario 3	7.24E-01	1.55E-03	4.03E-03
4574	640311.0	4168973.7	Worker	Scenario 3	7.27E-01	1.56E-03	4.12E-03
4575	640361.0	4168973.7	Worker	Scenario 3	7.34E-01	1.57E-03	4.09E-03
4576	640411.0	4168973.7	Worker	Scenario 3	7.44E-01	1.59E-03	4.28E-03
4577	641461.0	4168973.7	Worker	Scenario 3	1.30E+00	2.74E-03	6.26E-03
4578	641511.0	4168973.7	Worker	Scenario 3	1.21E+00	2.56E-03	6.21E-03
4579	641561.0	4168973.7	Worker	Scenario 3	1.15E+00	2.43E-03	6.22E-03
4580	638261.0	4169023.7	Worker	Scenario 3	1.69E-01	3.64E-04	1.73E-03
4581	638311.0	4169023.7	Worker	Scenario 3	1.87E-01	4.01E-04	1.70E-03
4582	638361.0	4169023.7	Worker	Scenario 3	2.11E-01	4.50E-04	1.65E-03
4583	640011.0	4169023.7	Worker	Scenario 3	7.34E-01	1.55E-03	3.49E-03
4584	640061.0	4169023.7	Worker	Scenario 3	7.17E-01	1.52E-03	3.65E-03
4585	640111.0	4169023.7	Worker	Scenario 3	7.05E-01	1.50E-03	3.72E-03
4586	640161.0	4169023.7	Worker	Scenario 3	6.97E-01	1.49E-03	3.76E-03
4587	640311.0	4169023.7	Worker	Scenario 3	6.97E-01	1.49E-03	3.98E-03
4588	640361.0	4169023.7	Worker	Scenario 3	7.04E-01	1.51E-03	4.07E-03
4589	640411.0	4169023.7	Worker	Scenario 3	7.13E-01	1.53E-03	4.11E-03
4590	641461.0	4169023.7	Worker	Scenario 3	1.21E+00	2.55E-03	5.98E-03
4591	641511.0	4169023.7	Worker	Scenario 3	1.12E+00	2.37E-03	5.93E-03
4592	641561.0	4169023.7	Worker	Scenario 3	1.06E+00	2.25E-03	5.95E-03
4593	638161.0	4169073.7	Worker	Scenario 3	1.53E-01	3.30E-04	1.66E-03
4594	638211.0	4169073.7	Worker	Scenario 3	1.68E-01	3.61E-04	1.64E-03
4595	638261.0	4169073.7	Worker	Scenario 3	1.85E-01	3.97E-04	1.59E-03
4596	639961.0	4169073.7	Worker	Scenario 3	7.12E-01	1.51E-03	3.30E-03
4597	640011.0	4169073.7	Worker	Scenario 3	6.94E-01	1.47E-03	3.50E-03
4598	640061.0	4169073.7	Worker	Scenario 3	6.82E-01	1.45E-03	3.56E-03
4599	640111.0	4169073.7	Worker	Scenario 3	6.73E-01	1.43E-03	3.60E-03
4600	640311.0	4169073.7	Worker	Scenario 3	6.69E-01	1.43E-03	3.82E-03
4601	640361.0	4169073.7	Worker	Scenario 3	6.75E-01	1.45E-03	3.94E-03
4602	640411.0	4169073.7	Worker	Scenario 3	6.84E-01	1.47E-03	3.96E-03
4603	641461.0	4169073.7	Worker	Scenario 3	1.14E+00	2.40E-03	5.73E-03
4604	641511.0	4169073.7	Worker	Scenario 3	1.05E+00	2.23E-03	5.71E-03
4605	641561.0	4169073.7	Worker	Scenario 3	9.94E-01	2.11E-03	5.73E-03
4606	638161.0	4169123.7	Worker	Scenario 3	1.61E-01	3.46E-04	1.53E-03
4607	638211.0	4169123.7	Worker	Scenario 3	1.79E-01	3.84E-04	1.48E-03
4608	639911.0	4169123.7	Worker	Scenario 3	6.92E-01	1.46E-03	3.13E-03
4609	639961.0	4169123.7	Worker	Scenario 3	6.74E-01	1.43E-03	3.34E-03
4610	640011.0	4169123.7	Worker	Scenario 3	6.60E-01	1.40E-03	3.40E-03
4611	640061.0	4169123.7	Worker	Scenario 3	6.51E-01	1.38E-03	3.44E-03
4612	640311.0	4169123.7	Worker	Scenario 3	6.43E-01	1.38E-03	3.78E-03
4613	640361.0	4169123.7	Worker	Scenario 3	6.48E-01	1.39E-03	3.80E-03
4614	640411.0	4169123.7	Worker	Scenario 3	6.55E-01	1.41E-03	4.06E-03
4615	641461.0	4169123.7	Worker	Scenario 3	1.08E+00	2.27E-03	5.52E-03
4616	641511.0	4169123.7	Worker	Scenario 3	9.91E-01	2.10E-03	5.50E-03
4617	641561.0	4169123.7	Worker	Scenario 3	9.35E-01	1.99E-03	5.50E-03
4618	638061.0	4169173.7	Worker	Scenario 3	1.41E-01	3.05E-04	1.48E-03
4619	638161.0	4169173.7	Worker	Scenario 3	1.71E-01	3.67E-04	1.45E-03
4620	639861.0	4169173.7	Worker	Scenario 3	6.78E-01	1.43E-03	2.97E-03
4621	639911.0	4169173.7	Worker	Scenario 3	6.57E-01	1.39E-03	3.20E-03
4622	639961.0	4169173.7	Worker	Scenario 3	6.42E-01	1.36E-03	3.25E-03
4623	640011.0	4169173.7	Worker	Scenario 3	6.31E-01	1.34E-03	3.28E-03
4624	640311.0	4169173.7	Worker	Scenario 3	6.17E-01	1.32E-03	3.63E-03
4625	640361.0	4169173.7	Worker	Scenario 3	6.22E-01	1.33E-03	3.66E-03
4626	640411.0	4169173.7	Worker	Scenario 3	6.28E-01	1.35E-03	4.25E-03
4627	641461.0	4169173.7	Worker	Scenario 3	1.02E+00	2.16E-03	5.31E-03
4628	641511.0	4169173.7	Worker	Scenario 3	9.39E-01	1.99E-03	5.30E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4629	641561.0	4169173.7	Worker	Scenario 3	8.85E-01	1.88E-03	5.29E-03
4630	638011.0	4169223.7	Worker	Scenario 3	1.36E-01	2.95E-04	1.38E-03
4631	638061.0	4169223.7	Worker	Scenario 3	1.48E-01	3.19E-04	1.36E-03
4632	639661.0	4169223.7	Worker	Scenario 3	7.28E-01	1.52E-03	2.87E-03
4633	639761.0	4169223.7	Worker	Scenario 3	7.18E-01	1.51E-03	2.70E-03
4634	639811.0	4169223.7	Worker	Scenario 3	6.69E-01	1.41E-03	2.82E-03
4635	639861.0	4169223.7	Worker	Scenario 3	6.43E-01	1.36E-03	3.06E-03
4636	639911.0	4169223.7	Worker	Scenario 3	6.26E-01	1.33E-03	3.11E-03
4637	639961.0	4169223.7	Worker	Scenario 3	6.13E-01	1.30E-03	3.17E-03
4638	640311.0	4169223.7	Worker	Scenario 3	5.93E-01	1.27E-03	3.51E-03
4639	640361.0	4169223.7	Worker	Scenario 3	5.97E-01	1.28E-03	3.86E-03
4640	640411.0	4169223.7	Worker	Scenario 3	6.03E-01	1.29E-03	4.27E-03
4641	641461.0	4169223.7	Worker	Scenario 3	9.76E-01	2.06E-03	5.12E-03
4642	641511.0	4169223.7	Worker	Scenario 3	8.94E-01	1.90E-03	5.10E-03
4643	641561.0	4169223.7	Worker	Scenario 3	8.40E-01	1.79E-03	5.09E-03
4644	637961.0	4169273.7	Worker	Scenario 3	1.32E-01	2.87E-04	1.31E-03
4645	638011.0	4169273.7	Worker	Scenario 3	1.43E-01	3.09E-04	1.41E-03
4646	638061.0	4169273.7	Worker	Scenario 3	1.56E-01	3.36E-04	1.52E-03
4647	639611.0	4169273.7	Worker	Scenario 3	6.98E-01	1.46E-03	2.77E-03
4648	639661.0	4169273.7	Worker	Scenario 3	6.83E-01	1.43E-03	2.71E-03
4649	639761.0	4169273.7	Worker	Scenario 3	6.55E-01	1.38E-03	2.68E-03
4650	639811.0	4169273.7	Worker	Scenario 3	6.27E-01	1.32E-03	2.92E-03
4651	639861.0	4169273.7	Worker	Scenario 3	6.09E-01	1.29E-03	3.00E-03
4652	639911.0	4169273.7	Worker	Scenario 3	5.96E-01	1.26E-03	3.06E-03
4653	640311.0	4169273.7	Worker	Scenario 3	5.70E-01	1.22E-03	3.45E-03
4654	640361.0	4169273.7	Worker	Scenario 3	5.74E-01	1.23E-03	3.99E-03
4655	640411.0	4169273.7	Worker	Scenario 3	5.79E-01	1.24E-03	4.15E-03
4656	641461.0	4169273.7	Worker	Scenario 3	9.35E-01	1.98E-03	4.93E-03
4657	641511.0	4169273.7	Worker	Scenario 3	8.53E-01	1.81E-03	4.92E-03
4658	641561.0	4169273.7	Worker	Scenario 3	8.01E-01	1.71E-03	4.89E-03
4659	637911.0	4169323.7	Worker	Scenario 3	1.28E-01	2.78E-04	1.33E-03
4660	637961.0	4169323.7	Worker	Scenario 3	1.38E-01	2.99E-04	1.43E-03
4661	638011.0	4169323.7	Worker	Scenario 3	1.50E-01	3.24E-04	1.53E-03
4662	639611.0	4169323.7	Worker	Scenario 3	6.57E-01	1.38E-03	2.62E-03
4663	639661.0	4169323.7	Worker	Scenario 3	6.39E-01	1.34E-03	2.50E-03
4664	639761.0	4169323.7	Worker	Scenario 3	6.07E-01	1.28E-03	2.80E-03
4665	639811.0	4169323.7	Worker	Scenario 3	5.90E-01	1.25E-03	2.90E-03
4666	640311.0	4169323.7	Worker	Scenario 3	5.49E-01	1.18E-03	3.67E-03
4667	640361.0	4169323.7	Worker	Scenario 3	5.52E-01	1.19E-03	3.99E-03
4668	640411.0	4169323.7	Worker	Scenario 3	5.56E-01	1.20E-03	4.03E-03
4669	641461.0	4169323.7	Worker	Scenario 3	8.98E-01	1.90E-03	4.76E-03
4670	641511.0	4169323.7	Worker	Scenario 3	8.18E-01	1.74E-03	4.75E-03
4671	641561.0	4169323.7	Worker	Scenario 3	7.66E-01	1.63E-03	4.71E-03
4672	637861.0	4169373.7	Worker	Scenario 3	1.24E-01	2.69E-04	1.36E-03
4673	637911.0	4169373.7	Worker	Scenario 3	1.34E-01	2.89E-04	1.45E-03
4674	637961.0	4169373.7	Worker	Scenario 3	1.45E-01	3.13E-04	1.54E-03
4675	639561.0	4169373.7	Worker	Scenario 3	6.42E-01	1.34E-03	2.54E-03
4676	639611.0	4169373.7	Worker	Scenario 3	6.20E-01	1.30E-03	2.41E-03
4677	639661.0	4169373.7	Worker	Scenario 3	6.02E-01	1.27E-03	2.46E-03
4678	640311.0	4169373.7	Worker	Scenario 3	5.28E-01	1.13E-03	3.76E-03
4679	640361.0	4169373.7	Worker	Scenario 3	5.31E-01	1.14E-03	3.85E-03
4680	640411.0	4169373.7	Worker	Scenario 3	5.35E-01	1.15E-03	3.87E-03
4681	641461.0	4169373.7	Worker	Scenario 3	8.65E-01	1.83E-03	4.60E-03
4682	641511.0	4169373.7	Worker	Scenario 3	7.85E-01	1.67E-03	4.59E-03
4683	641561.0	4169373.7	Worker	Scenario 3	7.34E-01	1.56E-03	4.54E-03
4684	637861.0	4169423.7	Worker	Scenario 3	1.29E-01	2.79E-04	1.46E-03
4685	637911.0	4169423.7	Worker	Scenario 3	1.40E-01	3.02E-04	1.53E-03
4686	639511.0	4169423.7	Worker	Scenario 3	6.29E-01	1.32E-03	2.46E-03
4687	639561.0	4169423.7	Worker	Scenario 3	6.06E-01	1.27E-03	2.33E-03
4688	639611.0	4169423.7	Worker	Scenario 3	5.86E-01	1.23E-03	2.37E-03
4689	639661.0	4169423.7	Worker	Scenario 3	5.70E-01	1.20E-03	2.56E-03
4690	640311.0	4169423.7	Worker	Scenario 3	5.08E-01	1.09E-03	3.73E-03
4691	640361.0	4169423.7	Worker	Scenario 3	5.11E-01	1.10E-03	3.76E-03
4692	640411.0	4169423.7	Worker	Scenario 3	5.14E-01	1.11E-03	3.68E-03
4693	640861.0	4169423.7	Worker	Scenario 3	5.63E-01	1.21E-03	4.16E-03
4694	640911.0	4169423.7	Worker	Scenario 3	5.71E-01	1.23E-03	4.26E-03
4695	640961.0	4169423.7	Worker	Scenario 3	5.80E-01	1.25E-03	4.43E-03
4696	641011.0	4169423.7	Worker	Scenario 3	5.90E-01	1.27E-03	4.23E-03
4697	641061.0	4169423.7	Worker	Scenario 3	6.04E-01	1.30E-03	4.27E-03
4698	641461.0	4169423.7	Worker	Scenario 3	8.34E-01	1.76E-03	4.44E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4699	641511.0	4169423.7	Worker	Scenario 3	7.55E-01	1.60E-03	4.44E-03
4700	641561.0	4169423.7	Worker	Scenario 3	7.05E-01	1.50E-03	4.39E-03
4701	637861.0	4169473.7	Worker	Scenario 3	1.35E-01	2.91E-04	1.51E-03
4702	639461.0	4169473.7	Worker	Scenario 3	6.15E-01	1.29E-03	2.39E-03
4703	639511.0	4169473.7	Worker	Scenario 3	5.92E-01	1.24E-03	2.26E-03
4704	639561.0	4169473.7	Worker	Scenario 3	5.72E-01	1.20E-03	2.29E-03
4705	639611.0	4169473.7	Worker	Scenario 3	5.55E-01	1.17E-03	2.45E-03
4706	640311.0	4169473.7	Worker	Scenario 3	4.89E-01	1.05E-03	3.58E-03
4707	640361.0	4169473.7	Worker	Scenario 3	4.92E-01	1.06E-03	3.61E-03
4708	640411.0	4169473.7	Worker	Scenario 3	4.95E-01	1.07E-03	3.70E-03
4709	640811.0	4169473.7	Worker	Scenario 3	5.34E-01	1.15E-03	4.02E-03
4710	640861.0	4169473.7	Worker	Scenario 3	5.40E-01	1.17E-03	4.04E-03
4711	640911.0	4169473.7	Worker	Scenario 3	5.47E-01	1.18E-03	4.22E-03
4712	640961.0	4169473.7	Worker	Scenario 3	5.55E-01	1.20E-03	4.25E-03
4713	641011.0	4169473.7	Worker	Scenario 3	5.66E-01	1.22E-03	4.11E-03
4714	641061.0	4169473.7	Worker	Scenario 3	5.79E-01	1.25E-03	4.13E-03
4715	641111.0	4169473.7	Worker	Scenario 3	5.96E-01	1.28E-03	4.09E-03
4716	641161.0	4169473.7	Worker	Scenario 3	6.21E-01	1.33E-03	4.05E-03
4717	641211.0	4169473.7	Worker	Scenario 3	6.65E-01	1.42E-03	4.01E-03
4718	641361.0	4169473.7	Worker	Scenario 3	1.33E+00	2.76E-03	4.03E-03
4719	641411.0	4169473.7	Worker	Scenario 3	9.51E-01	1.99E-03	4.15E-03
4720	641461.0	4169473.7	Worker	Scenario 3	8.05E-01	1.70E-03	4.30E-03
4721	641511.0	4169473.7	Worker	Scenario 3	7.28E-01	1.54E-03	4.29E-03
4722	639361.0	4169523.7	Worker	Scenario 3	6.25E-01	1.30E-03	2.34E-03
4723	639411.0	4169523.7	Worker	Scenario 3	5.97E-01	1.25E-03	2.31E-03
4724	639461.0	4169523.7	Worker	Scenario 3	5.75E-01	1.20E-03	2.19E-03
4725	639511.0	4169523.7	Worker	Scenario 3	5.56E-01	1.17E-03	2.20E-03
4726	639561.0	4169523.7	Worker	Scenario 3	5.40E-01	1.14E-03	2.35E-03
4727	640311.0	4169523.7	Worker	Scenario 3	4.70E-01	1.01E-03	3.52E-03
4728	640361.0	4169523.7	Worker	Scenario 3	4.73E-01	1.02E-03	3.44E-03
4729	640411.0	4169523.7	Worker	Scenario 3	4.75E-01	1.02E-03	3.60E-03
4730	640461.0	4169523.7	Worker	Scenario 3	4.79E-01	1.03E-03	3.64E-03
4731	640611.0	4169523.7	Worker	Scenario 3	4.91E-01	1.06E-03	3.70E-03
4732	640661.0	4169523.7	Worker	Scenario 3	4.96E-01	1.07E-03	3.52E-03
4733	640711.0	4169523.7	Worker	Scenario 3	5.01E-01	1.08E-03	3.83E-03
4734	640761.0	4169523.7	Worker	Scenario 3	5.07E-01	1.09E-03	3.71E-03
4735	640811.0	4169523.7	Worker	Scenario 3	5.13E-01	1.11E-03	3.89E-03
4736	640861.0	4169523.7	Worker	Scenario 3	5.19E-01	1.12E-03	3.91E-03
4737	640911.0	4169523.7	Worker	Scenario 3	5.25E-01	1.13E-03	4.14E-03
4738	640961.0	4169523.7	Worker	Scenario 3	5.33E-01	1.15E-03	4.06E-03
4739	641011.0	4169523.7	Worker	Scenario 3	5.43E-01	1.17E-03	3.98E-03
4740	641061.0	4169523.7	Worker	Scenario 3	5.56E-01	1.20E-03	3.98E-03
4741	641111.0	4169523.7	Worker	Scenario 3	5.73E-01	1.23E-03	4.00E-03
4742	641161.0	4169523.7	Worker	Scenario 3	6.01E-01	1.29E-03	3.90E-03
4743	641211.0	4169523.7	Worker	Scenario 3	6.44E-01	1.37E-03	3.95E-03
4744	641261.0	4169523.7	Worker	Scenario 3	7.44E-01	1.57E-03	4.02E-03
4745	641361.0	4169523.7	Worker	Scenario 3	1.29E+00	2.68E-03	3.92E-03
4746	641411.0	4169523.7	Worker	Scenario 3	9.21E-01	1.93E-03	4.01E-03
4747	641461.0	4169523.7	Worker	Scenario 3	7.78E-01	1.64E-03	4.16E-03
4748	641511.0	4169523.7	Worker	Scenario 3	7.02E-01	1.49E-03	4.16E-03
4749	639311.0	4169573.7	Worker	Scenario 3	6.08E-01	1.27E-03	2.26E-03
4750	639361.0	4169573.7	Worker	Scenario 3	5.80E-01	1.21E-03	2.24E-03
4751	639411.0	4169573.7	Worker	Scenario 3	5.57E-01	1.17E-03	2.13E-03
4752	639461.0	4169573.7	Worker	Scenario 3	5.39E-01	1.13E-03	2.13E-03
4753	639511.0	4169573.7	Worker	Scenario 3	5.23E-01	1.10E-03	2.25E-03
4754	640361.0	4169573.7	Worker	Scenario 3	4.55E-01	9.80E-04	3.45E-03
4755	640411.0	4169573.7	Worker	Scenario 3	4.58E-01	9.86E-04	3.50E-03
4756	640461.0	4169573.7	Worker	Scenario 3	4.61E-01	9.93E-04	3.47E-03
4757	640511.0	4169573.7	Worker	Scenario 3	4.64E-01	1.00E-03	3.58E-03
4758	640561.0	4169573.7	Worker	Scenario 3	4.68E-01	1.01E-03	3.61E-03
4759	640611.0	4169573.7	Worker	Scenario 3	4.72E-01	1.02E-03	3.49E-03
4760	640661.0	4169573.7	Worker	Scenario 3	4.77E-01	1.03E-03	3.56E-03
4761	640711.0	4169573.7	Worker	Scenario 3	4.81E-01	1.04E-03	3.71E-03
4762	640761.0	4169573.7	Worker	Scenario 3	4.87E-01	1.05E-03	3.70E-03
4763	640811.0	4169573.7	Worker	Scenario 3	4.92E-01	1.06E-03	3.76E-03
4764	640861.0	4169573.7	Worker	Scenario 3	4.98E-01	1.08E-03	3.84E-03
4765	640911.0	4169573.7	Worker	Scenario 3	5.05E-01	1.09E-03	4.03E-03
4766	641061.0	4169573.7	Worker	Scenario 3	5.34E-01	1.15E-03	3.82E-03
4767	641111.0	4169573.7	Worker	Scenario 3	5.51E-01	1.18E-03	3.89E-03
4768	641161.0	4169573.7	Worker	Scenario 3	5.78E-01	1.24E-03	3.71E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4769	641211.0	4169573.7	Worker	Scenario 3	6.23E-01	1.33E-03	3.87E-03
4770	641261.0	4169573.7	Worker	Scenario 3	7.23E-01	1.53E-03	3.91E-03
4771	641361.0	4169573.7	Worker	Scenario 3	1.26E+00	2.61E-03	3.81E-03
4772	641411.0	4169573.7	Worker	Scenario 3	8.95E-01	1.88E-03	3.89E-03
4773	641461.0	4169573.7	Worker	Scenario 3	7.51E-01	1.59E-03	4.02E-03
4774	637961.0	4169623.7	Worker	Scenario 3	1.94E-01	4.12E-04	1.46E-03
4775	639261.0	4169623.7	Worker	Scenario 3	5.90E-01	1.23E-03	2.19E-03
4776	639311.0	4169623.7	Worker	Scenario 3	5.63E-01	1.18E-03	2.18E-03
4777	639361.0	4169623.7	Worker	Scenario 3	5.41E-01	1.13E-03	2.08E-03
4778	639411.0	4169623.7	Worker	Scenario 3	5.22E-01	1.10E-03	2.06E-03
4779	639461.0	4169623.7	Worker	Scenario 3	5.06E-01	1.06E-03	2.15E-03
4780	640361.0	4169623.7	Worker	Scenario 3	4.38E-01	9.44E-04	3.39E-03
4781	640411.0	4169623.7	Worker	Scenario 3	4.41E-01	9.50E-04	3.42E-03
4782	640461.0	4169623.7	Worker	Scenario 3	4.44E-01	9.56E-04	3.36E-03
4783	640511.0	4169623.7	Worker	Scenario 3	4.47E-01	9.63E-04	3.49E-03
4784	640561.0	4169623.7	Worker	Scenario 3	4.50E-01	9.70E-04	3.50E-03
4785	640611.0	4169623.7	Worker	Scenario 3	4.54E-01	9.79E-04	3.24E-03
4786	640661.0	4169623.7	Worker	Scenario 3	4.59E-01	9.88E-04	3.55E-03
4787	640711.0	4169623.7	Worker	Scenario 3	4.63E-01	9.99E-04	3.55E-03
4788	640761.0	4169623.7	Worker	Scenario 3	4.68E-01	1.01E-03	3.64E-03
4789	640811.0	4169623.7	Worker	Scenario 3	4.73E-01	1.02E-03	3.68E-03
4790	641261.0	4169623.7	Worker	Scenario 3	7.05E-01	1.49E-03	3.79E-03
4791	637911.0	4169673.7	Worker	Scenario 3	1.79E-01	3.81E-04	1.45E-03
4792	637961.0	4169673.7	Worker	Scenario 3	2.06E-01	4.35E-04	1.51E-03
4793	639211.0	4169673.7	Worker	Scenario 3	5.69E-01	1.19E-03	2.13E-03
4794	639261.0	4169673.7	Worker	Scenario 3	5.44E-01	1.14E-03	2.12E-03
4795	639311.0	4169673.7	Worker	Scenario 3	5.23E-01	1.10E-03	2.03E-03
4796	639361.0	4169673.7	Worker	Scenario 3	5.05E-01	1.06E-03	2.00E-03
4797	640461.0	4169673.7	Worker	Scenario 3	4.27E-01	9.21E-04	3.35E-03
4798	640511.0	4169673.7	Worker	Scenario 3	4.30E-01	9.27E-04	3.38E-03
4799	640561.0	4169673.7	Worker	Scenario 3	4.34E-01	9.35E-04	3.34E-03
4800	640611.0	4169673.7	Worker	Scenario 3	4.37E-01	9.43E-04	3.24E-03
4801	637861.0	4169723.7	Worker	Scenario 3	1.67E-01	3.55E-04	1.44E-03
4802	637911.0	4169723.7	Worker	Scenario 3	1.88E-01	3.98E-04	1.48E-03
4803	637961.0	4169723.7	Worker	Scenario 3	2.18E-01	4.59E-04	1.50E-03
4804	639161.0	4169723.7	Worker	Scenario 3	5.43E-01	1.13E-03	2.06E-03
4805	639211.0	4169723.7	Worker	Scenario 3	5.21E-01	1.09E-03	2.06E-03
4806	639261.0	4169723.7	Worker	Scenario 3	5.02E-01	1.05E-03	1.97E-03
4807	639311.0	4169723.7	Worker	Scenario 3	4.86E-01	1.02E-03	1.94E-03
4808	637861.0	4169773.7	Worker	Scenario 3	1.71E-01	3.64E-04	1.45E-03
4809	637911.0	4169773.7	Worker	Scenario 3	1.95E-01	4.12E-04	1.45E-03
4810	637961.0	4169773.7	Worker	Scenario 3	2.25E-01	4.74E-04	1.44E-03
4811	639111.0	4169773.7	Worker	Scenario 3	5.17E-01	1.08E-03	2.01E-03
4812	639161.0	4169773.7	Worker	Scenario 3	4.97E-01	1.04E-03	2.00E-03
4813	639211.0	4169773.7	Worker	Scenario 3	4.80E-01	1.01E-03	1.93E-03
4814	639261.0	4169773.7	Worker	Scenario 3	4.65E-01	9.77E-04	1.88E-03
4815	637861.0	4169823.7	Worker	Scenario 3	1.77E-01	3.75E-04	1.41E-03
4816	637911.0	4169823.7	Worker	Scenario 3	2.00E-01	4.23E-04	1.38E-03
4817	637961.0	4169823.7	Worker	Scenario 3	2.33E-01	4.90E-04	1.33E-03
4818	639061.0	4169823.7	Worker	Scenario 3	4.90E-01	1.02E-03	1.95E-03
4819	639111.0	4169823.7	Worker	Scenario 3	4.72E-01	9.89E-04	1.95E-03
4820	639161.0	4169823.7	Worker	Scenario 3	4.57E-01	9.58E-04	1.88E-03
4821	639211.0	4169823.7	Worker	Scenario 3	4.43E-01	9.31E-04	1.82E-03
4822	637861.0	4169873.7	Worker	Scenario 3	1.80E-01	3.82E-04	1.32E-03
4823	637911.0	4169873.7	Worker	Scenario 3	2.04E-01	4.30E-04	1.27E-03
4824	637961.0	4169873.7	Worker	Scenario 3	2.36E-01	4.95E-04	1.25E-03
4825	639011.0	4169873.7	Worker	Scenario 3	4.62E-01	9.66E-04	1.90E-03
4826	639061.0	4169873.7	Worker	Scenario 3	4.47E-01	9.36E-04	1.90E-03
4827	639111.0	4169873.7	Worker	Scenario 3	4.33E-01	9.10E-04	1.83E-03
4828	639161.0	4169873.7	Worker	Scenario 3	4.21E-01	8.86E-04	1.77E-03
4829	637861.0	4169923.7	Worker	Scenario 3	1.83E-01	3.87E-04	1.23E-03
4830	637911.0	4169923.7	Worker	Scenario 3	2.05E-01	4.33E-04	1.20E-03
4831	637961.0	4169923.7	Worker	Scenario 3	2.35E-01	4.93E-04	1.25E-03
4832	638961.0	4169923.7	Worker	Scenario 3	4.31E-01	9.03E-04	1.85E-03
4833	639011.0	4169923.7	Worker	Scenario 3	4.19E-01	8.80E-04	1.85E-03
4834	639061.0	4169923.7	Worker	Scenario 3	4.09E-01	8.59E-04	1.79E-03
4835	639111.0	4169923.7	Worker	Scenario 3	3.99E-01	8.40E-04	1.72E-03
4836	637861.0	4169973.7	Worker	Scenario 3	1.84E-01	3.89E-04	1.17E-03
4837	637911.0	4169973.7	Worker	Scenario 3	2.04E-01	4.31E-04	1.25E-03
4838	637961.0	4169973.7	Worker	Scenario 3	2.31E-01	4.85E-04	1.34E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4839	638911.0	4169973.7	Worker	Scenario 3	4.01E-01	8.41E-04	1.80E-03
4840	638961.0	4169973.7	Worker	Scenario 3	3.91E-01	8.22E-04	1.80E-03
4841	639011.0	4169973.7	Worker	Scenario 3	3.83E-01	8.06E-04	1.75E-03
4842	639061.0	4169973.7	Worker	Scenario 3	3.76E-01	7.92E-04	1.67E-03
4843	637861.0	4170023.7	Worker	Scenario 3	1.83E-01	3.87E-04	1.24E-03
4844	637911.0	4170023.7	Worker	Scenario 3	2.01E-01	4.25E-04	1.32E-03
4845	637961.0	4170023.7	Worker	Scenario 3	2.24E-01	4.71E-04	1.39E-03
4846	638911.0	4170023.7	Worker	Scenario 3	3.65E-01	7.68E-04	1.76E-03
4847	638961.0	4170023.7	Worker	Scenario 3	3.58E-01	7.55E-04	1.71E-03
4848	639011.0	4170023.7	Worker	Scenario 3	3.53E-01	7.44E-04	1.63E-03
4849	637861.0	4170073.7	Worker	Scenario 3	1.81E-01	3.83E-04	1.30E-03
4850	637911.0	4170073.7	Worker	Scenario 3	1.96E-01	4.14E-04	1.35E-03
4851	637961.0	4170073.7	Worker	Scenario 3	2.13E-01	4.49E-04	1.38E-03
4852	638011.0	4170073.7	Worker	Scenario 3	2.32E-01	4.88E-04	1.39E-03
4853	638911.0	4170073.7	Worker	Scenario 3	3.36E-01	7.09E-04	1.67E-03
4854	638961.0	4170073.7	Worker	Scenario 3	3.32E-01	7.01E-04	1.59E-03
4855	637911.0	4170123.7	Worker	Scenario 3	1.91E-01	4.05E-04	1.35E-03
4856	637961.0	4170123.7	Worker	Scenario 3	2.06E-01	4.34E-04	1.35E-03
4857	638011.0	4170123.7	Worker	Scenario 3	2.20E-01	4.64E-04	1.33E-03
4858	638061.0	4170123.7	Worker	Scenario 3	2.40E-01	5.04E-04	1.35E-03
4859	638111.0	4170123.7	Worker	Scenario 3	2.56E-01	5.38E-04	1.40E-03
4860	638161.0	4170123.7	Worker	Scenario 3	2.71E-01	5.69E-04	1.42E-03
4861	638211.0	4170123.7	Worker	Scenario 3	2.87E-01	6.02E-04	1.43E-03
4862	638261.0	4170123.7	Worker	Scenario 3	3.03E-01	6.33E-04	1.47E-03
4863	638311.0	4170123.7	Worker	Scenario 3	3.18E-01	6.64E-04	1.48E-03
4864	638361.0	4170123.7	Worker	Scenario 3	3.31E-01	6.91E-04	1.52E-03
4865	638411.0	4170123.7	Worker	Scenario 3	3.37E-01	7.04E-04	1.53E-03
4866	638461.0	4170123.7	Worker	Scenario 3	3.36E-01	7.03E-04	1.50E-03
4867	638511.0	4170123.7	Worker	Scenario 3	3.34E-01	6.99E-04	1.53E-03
4868	638561.0	4170123.7	Worker	Scenario 3	3.31E-01	6.95E-04	1.59E-03
4869	638611.0	4170123.7	Worker	Scenario 3	3.29E-01	6.91E-04	1.61E-03
4870	638661.0	4170123.7	Worker	Scenario 3	3.27E-01	6.87E-04	1.63E-03
4871	638911.0	4170123.7	Worker	Scenario 3	3.12E-01	6.59E-04	1.55E-03
4872	638961.0	4170123.7	Worker	Scenario 3	3.08E-01	6.53E-04	1.56E-03
4873	637911.0	4170173.7	Worker	Scenario 3	1.86E-01	3.95E-04	1.32E-03
4874	637961.0	4170173.7	Worker	Scenario 3	1.98E-01	4.20E-04	1.29E-03
4875	638011.0	4170173.7	Worker	Scenario 3	2.11E-01	4.46E-04	1.32E-03
4876	638061.0	4170173.7	Worker	Scenario 3	2.26E-01	4.76E-04	1.37E-03
4877	638111.0	4170173.7	Worker	Scenario 3	2.39E-01	5.03E-04	1.39E-03
4878	638161.0	4170173.7	Worker	Scenario 3	2.52E-01	5.29E-04	1.40E-03
4879	638211.0	4170173.7	Worker	Scenario 3	2.64E-01	5.55E-04	1.43E-03
4880	638261.0	4170173.7	Worker	Scenario 3	2.75E-01	5.78E-04	1.45E-03
4881	638311.0	4170173.7	Worker	Scenario 3	2.85E-01	5.99E-04	1.49E-03
4882	638361.0	4170173.7	Worker	Scenario 3	2.94E-01	6.16E-04	1.49E-03
4883	638411.0	4170173.7	Worker	Scenario 3	2.98E-01	6.27E-04	1.46E-03
4884	638461.0	4170173.7	Worker	Scenario 3	3.00E-01	6.31E-04	1.50E-03
4885	638511.0	4170173.7	Worker	Scenario 3	3.00E-01	6.31E-04	1.55E-03
4886	638561.0	4170173.7	Worker	Scenario 3	3.00E-01	6.32E-04	1.57E-03
4887	638611.0	4170173.7	Worker	Scenario 3	3.00E-01	6.32E-04	1.59E-03
4888	638861.0	4170173.7	Worker	Scenario 3	2.92E-01	6.20E-04	1.53E-03
4889	638911.0	4170173.7	Worker	Scenario 3	2.91E-01	6.17E-04	1.52E-03
4890	638961.0	4170173.7	Worker	Scenario 3	2.89E-01	6.14E-04	1.54E-03
4891	638011.0	4170223.7	Worker	Scenario 3	2.02E-01	4.28E-04	1.34E-03
4892	638061.0	4170223.7	Worker	Scenario 3	2.14E-01	4.51E-04	1.36E-03
4893	638111.0	4170223.7	Worker	Scenario 3	2.25E-01	4.74E-04	1.38E-03
4894	638161.0	4170223.7	Worker	Scenario 3	2.35E-01	4.95E-04	1.40E-03
4895	638211.0	4170223.7	Worker	Scenario 3	2.45E-01	5.16E-04	1.42E-03
4896	638261.0	4170223.7	Worker	Scenario 3	2.53E-01	5.34E-04	1.45E-03
4897	638311.0	4170223.7	Worker	Scenario 3	2.60E-01	5.48E-04	1.45E-03
4898	638361.0	4170223.7	Worker	Scenario 3	2.66E-01	5.60E-04	1.42E-03
4899	638411.0	4170223.7	Worker	Scenario 3	2.70E-01	5.70E-04	1.46E-03
4900	638461.0	4170223.7	Worker	Scenario 3	2.74E-01	5.78E-04	1.51E-03
4901	638511.0	4170223.7	Worker	Scenario 3	2.75E-01	5.81E-04	1.53E-03
4902	638561.0	4170223.7	Worker	Scenario 3	2.76E-01	5.84E-04	1.55E-03
4903	638811.0	4170223.7	Worker	Scenario 3	2.75E-01	5.83E-04	1.50E-03
4904	638861.0	4170223.7	Worker	Scenario 3	2.74E-01	5.82E-04	1.48E-03
4905	638911.0	4170223.7	Worker	Scenario 3	2.73E-01	5.81E-04	1.50E-03
4906	638761.0	4170273.7	Worker	Scenario 3	2.59E-01	5.51E-04	1.48E-03
4907	641536.2	4164448.9	Worker	Scenario 3	2.60E-02	5.94E-05	1.55E-03
4908	641636.2	4164448.9	Worker	Scenario 3	2.89E-02	6.67E-05	1.88E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4909	641736.2	4164448.9	Worker	Scenario 3	2.86E-02	6.61E-05	1.10E-03
4910	641836.2	4164448.9	Worker	Scenario 3	2.87E-02	6.63E-05	1.01E-03
4911	641936.2	4164448.9	Worker	Scenario 3	2.94E-02	6.81E-05	9.29E-04
4912	642036.2	4164448.9	Worker	Scenario 3	3.06E-02	7.10E-05	1.16E-03
4913	642136.2	4164448.9	Worker	Scenario 3	3.16E-02	7.34E-05	1.25E-03
4914	642236.2	4164448.9	Worker	Scenario 3	3.40E-02	7.91E-05	1.15E-03
4915	642336.2	4164448.9	Worker	Scenario 3	3.62E-02	8.43E-05	1.14E-03
4916	642436.2	4164448.9	Worker	Scenario 3	3.65E-02	8.53E-05	8.74E-04
4917	642536.2	4164448.9	Worker	Scenario 3	3.57E-02	8.33E-05	9.53E-04
4918	642636.2	4164448.9	Worker	Scenario 3	3.70E-02	8.63E-05	1.03E-03
4919	642736.2	4164448.9	Worker	Scenario 3	4.10E-02	9.62E-05	1.60E-03
4920	642836.2	4164448.9	Worker	Scenario 3	4.76E-02	1.12E-04	2.27E-03
4921	642936.2	4164448.9	Worker	Scenario 3	4.84E-02	1.14E-04	1.84E-03
4922	643036.2	4164448.9	Worker	Scenario 3	5.04E-02	1.18E-04	2.05E-03
4923	643136.2	4164448.9	Worker	Scenario 3	5.59E-02	1.32E-04	3.06E-03
4924	643236.2	4164448.9	Worker	Scenario 3	6.01E-02	1.42E-04	3.44E-03
4925	643336.2	4164448.9	Worker	Scenario 3	6.46E-02	1.53E-04	3.36E-03
4926	643436.2	4164448.9	Worker	Scenario 3	6.76E-02	1.60E-04	3.47E-03
4927	643536.2	4164448.9	Worker	Scenario 3	6.97E-02	1.65E-04	3.93E-03
4928	643636.2	4164448.9	Worker	Scenario 3	7.30E-02	1.73E-04	3.68E-03
4929	643736.2	4164448.9	Worker	Scenario 3	7.50E-02	1.77E-04	4.00E-03
4930	643836.2	4164448.9	Worker	Scenario 3	7.64E-02	1.80E-04	3.25E-03
4931	643936.2	4164448.9	Worker	Scenario 3	7.86E-02	1.84E-04	3.11E-03
4932	644036.2	4164448.9	Worker	Scenario 3	8.03E-02	1.87E-04	3.06E-03
4933	644136.2	4164448.9	Worker	Scenario 3	8.12E-02	1.89E-04	3.59E-03
4934	644336.2	4164448.9	Worker	Scenario 3	8.21E-02	1.90E-04	2.98E-03
4935	644436.2	4164448.9	Worker	Scenario 3	8.24E-02	1.90E-04	2.90E-03
4936	644536.2	4164448.9	Worker	Scenario 3	8.20E-02	1.89E-04	2.66E-03
4937	640936.2	4164548.9	Worker	Scenario 3	2.27E-02	5.21E-05	9.93E-04
4938	641036.2	4164548.9	Worker	Scenario 3	2.20E-02	5.02E-05	1.06E-03
4939	641136.2	4164548.9	Worker	Scenario 3	2.27E-02	5.15E-05	9.93E-04
4940	641236.2	4164548.9	Worker	Scenario 3	2.34E-02	5.30E-05	5.42E-04
4941	641336.2	4164548.9	Worker	Scenario 3	2.42E-02	5.49E-05	6.97E-04
4942	641436.2	4164548.9	Worker	Scenario 3	2.46E-02	5.57E-05	8.21E-04
4943	641536.2	4164548.9	Worker	Scenario 3	2.56E-02	5.81E-05	7.96E-04
4944	641636.2	4164548.9	Worker	Scenario 3	2.72E-02	6.22E-05	7.44E-04
4945	641736.2	4164548.9	Worker	Scenario 3	3.03E-02	7.02E-05	1.34E-03
4946	641836.2	4164548.9	Worker	Scenario 3	3.38E-02	7.87E-05	2.27E-03
4947	641936.2	4164548.9	Worker	Scenario 3	3.39E-02	7.90E-05	1.22E-03
4948	642036.2	4164548.9	Worker	Scenario 3	3.23E-02	7.52E-05	1.22E-03
4949	642136.2	4164548.9	Worker	Scenario 3	3.37E-02	7.85E-05	1.27E-03
4950	642236.2	4164548.9	Worker	Scenario 3	3.41E-02	7.91E-05	1.13E-03
4951	642336.2	4164548.9	Worker	Scenario 3	3.62E-02	8.44E-05	8.76E-04
4952	642436.2	4164548.9	Worker	Scenario 3	4.40E-02	1.04E-04	2.06E-03
4953	642536.2	4164548.9	Worker	Scenario 3	3.83E-02	8.95E-05	1.07E-03
4954	642636.2	4164548.9	Worker	Scenario 3	3.91E-02	9.14E-05	1.03E-03
4955	642736.2	4164548.9	Worker	Scenario 3	4.06E-02	9.53E-05	8.37E-04
4956	642836.2	4164548.9	Worker	Scenario 3	4.83E-02	1.14E-04	1.61E-03
4957	642936.2	4164548.9	Worker	Scenario 3	5.46E-02	1.28E-04	2.31E-03
4958	643036.2	4164548.9	Worker	Scenario 3	5.38E-02	1.27E-04	2.36E-03
4959	643136.2	4164548.9	Worker	Scenario 3	5.84E-02	1.39E-04	3.06E-03
4960	643236.2	4164548.9	Worker	Scenario 3	6.35E-02	1.51E-04	3.23E-03
4961	643336.2	4164548.9	Worker	Scenario 3	6.82E-02	1.62E-04	3.62E-03
4962	643436.2	4164548.9	Worker	Scenario 3	7.11E-02	1.69E-04	3.75E-03
4963	643536.2	4164548.9	Worker	Scenario 3	7.45E-02	1.77E-04	4.03E-03
4964	643636.2	4164548.9	Worker	Scenario 3	7.71E-02	1.82E-04	4.17E-03
4965	643736.2	4164548.9	Worker	Scenario 3	7.95E-02	1.87E-04	3.55E-03
4966	643836.2	4164548.9	Worker	Scenario 3	8.09E-02	1.90E-04	3.34E-03
4967	643936.2	4164548.9	Worker	Scenario 3	8.24E-02	1.93E-04	3.11E-03
4968	644036.2	4164548.9	Worker	Scenario 3	8.43E-02	1.97E-04	3.79E-03
4969	644236.2	4164548.9	Worker	Scenario 3	8.39E-02	1.95E-04	3.29E-03
4970	644336.2	4164548.9	Worker	Scenario 3	8.53E-02	1.97E-04	3.11E-03
4971	644436.2	4164548.9	Worker	Scenario 3	8.56E-02	1.97E-04	2.81E-03
4972	644536.2	4164548.9	Worker	Scenario 3	8.60E-02	1.97E-04	2.53E-03
4973	644636.2	4164548.9	Worker	Scenario 3	8.61E-02	1.97E-04	2.35E-03
4974	644736.2	4164548.9	Worker	Scenario 3	8.63E-02	1.97E-04	1.90E-03
4975	644836.2	4164548.9	Worker	Scenario 3	8.62E-02	1.96E-04	2.08E-03
4976	644936.2	4164548.9	Worker	Scenario 3	8.56E-02	1.95E-04	2.23E-03
4977	645036.2	4164548.9	Worker	Scenario 3	8.69E-02	1.97E-04	2.00E-03
4978	640536.2	4164648.9	Worker	Scenario 3	2.04E-02	4.69E-05	6.53E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4979	640636.2	4164648.9	Worker	Scenario 3	2.17E-02	4.99E-05	1.16E-03
4980	640736.2	4164648.9	Worker	Scenario 3	2.14E-02	4.90E-05	6.70E-04
4981	640836.2	4164648.9	Worker	Scenario 3	2.23E-02	5.11E-05	9.93E-04
4982	640936.2	4164648.9	Worker	Scenario 3	2.34E-02	5.37E-05	1.07E-03
4983	641036.2	4164648.9	Worker	Scenario 3	2.28E-02	5.21E-05	9.92E-04
4984	641136.2	4164648.9	Worker	Scenario 3	2.35E-02	5.36E-05	1.14E-03
4985	641236.2	4164648.9	Worker	Scenario 3	2.43E-02	5.50E-05	5.48E-04
4986	641336.2	4164648.9	Worker	Scenario 3	2.60E-02	5.90E-05	7.10E-04
4987	641436.2	4164648.9	Worker	Scenario 3	2.57E-02	5.83E-05	8.43E-04
4988	641536.2	4164648.9	Worker	Scenario 3	2.65E-02	6.03E-05	8.17E-04
4989	641636.2	4164648.9	Worker	Scenario 3	2.77E-02	6.33E-05	6.71E-04
4990	641736.2	4164648.9	Worker	Scenario 3	2.91E-02	6.70E-05	8.29E-04
4991	641836.2	4164648.9	Worker	Scenario 3	3.36E-02	7.82E-05	1.80E-03
4992	641936.2	4164648.9	Worker	Scenario 3	3.89E-02	9.14E-05	1.63E-03
4993	642036.2	4164648.9	Worker	Scenario 3	3.62E-02	8.47E-05	1.27E-03
4994	642136.2	4164648.9	Worker	Scenario 3	3.53E-02	8.21E-05	1.29E-03
4995	642236.2	4164648.9	Worker	Scenario 3	3.61E-02	8.39E-05	1.10E-03
4996	642336.2	4164648.9	Worker	Scenario 3	3.72E-02	8.66E-05	8.07E-04
4997	642436.2	4164648.9	Worker	Scenario 3	4.15E-02	9.75E-05	1.32E-03
4998	642536.2	4164648.9	Worker	Scenario 3	4.78E-02	1.13E-04	2.95E-03
4999	642636.2	4164648.9	Worker	Scenario 3	4.23E-02	9.94E-05	1.25E-03
5000	642736.2	4164648.9	Worker	Scenario 3	4.30E-02	1.01E-04	7.26E-04
5001	642836.2	4164648.9	Worker	Scenario 3	4.87E-02	1.15E-04	1.33E-03
5002	642936.2	4164648.9	Worker	Scenario 3	5.65E-02	1.33E-04	2.58E-03
5003	643036.2	4164648.9	Worker	Scenario 3	6.00E-02	1.43E-04	3.09E-03
5004	643136.2	4164648.9	Worker	Scenario 3	6.14E-02	1.46E-04	3.02E-03
5005	643236.2	4164648.9	Worker	Scenario 3	6.78E-02	1.62E-04	3.58E-03
5006	643336.2	4164648.9	Worker	Scenario 3	7.12E-02	1.70E-04	3.57E-03
5007	643436.2	4164648.9	Worker	Scenario 3	7.57E-02	1.80E-04	4.24E-03
5008	643536.2	4164648.9	Worker	Scenario 3	7.92E-02	1.88E-04	4.22E-03
5009	643636.2	4164648.9	Worker	Scenario 3	8.16E-02	1.93E-04	3.92E-03
5010	643736.2	4164648.9	Worker	Scenario 3	8.41E-02	1.98E-04	3.55E-03
5011	643836.2	4164648.9	Worker	Scenario 3	8.56E-02	2.01E-04	3.18E-03
5012	644136.2	4164648.9	Worker	Scenario 3	8.83E-02	2.05E-04	3.42E-03
5013	644236.2	4164648.9	Worker	Scenario 3	8.87E-02	2.05E-04	3.38E-03
5014	644336.2	4164648.9	Worker	Scenario 3	8.96E-02	2.07E-04	2.94E-03
5015	644436.2	4164648.9	Worker	Scenario 3	8.99E-02	2.07E-04	2.70E-03
5016	644536.2	4164648.9	Worker	Scenario 3	9.00E-02	2.06E-04	2.45E-03
5017	644736.2	4164648.9	Worker	Scenario 3	9.07E-02	2.07E-04	2.13E-03
5018	644836.2	4164648.9	Worker	Scenario 3	9.10E-02	2.07E-04	2.04E-03
5019	644936.2	4164648.9	Worker	Scenario 3	9.10E-02	2.07E-04	2.23E-03
5020	645036.2	4164648.9	Worker	Scenario 3	9.12E-02	2.07E-04	2.32E-03
5021	645136.2	4164648.9	Worker	Scenario 3	9.07E-02	2.06E-04	2.52E-03
5022	645236.2	4164648.9	Worker	Scenario 3	9.12E-02	2.07E-04	2.04E-03
5023	640336.2	4164748.9	Worker	Scenario 3	2.88E-02	6.75E-05	2.99E-03
5024	640436.2	4164748.9	Worker	Scenario 3	2.22E-02	5.13E-05	1.52E-03
5025	640536.2	4164748.9	Worker	Scenario 3	2.12E-02	4.88E-05	7.43E-04
5026	640636.2	4164748.9	Worker	Scenario 3	2.22E-02	5.11E-05	1.05E-03
5027	640736.2	4164748.9	Worker	Scenario 3	2.23E-02	5.12E-05	9.06E-04
5028	640836.2	4164748.9	Worker	Scenario 3	2.30E-02	5.27E-05	9.32E-04
5029	640936.2	4164748.9	Worker	Scenario 3	2.43E-02	5.58E-05	1.13E-03
5030	641036.2	4164748.9	Worker	Scenario 3	2.37E-02	5.42E-05	9.04E-04
5031	641136.2	4164748.9	Worker	Scenario 3	2.44E-02	5.57E-05	1.25E-03
5032	641236.2	4164748.9	Worker	Scenario 3	2.55E-02	5.80E-05	6.36E-04
5033	641336.2	4164748.9	Worker	Scenario 3	2.70E-02	6.13E-05	7.23E-04
5034	641436.2	4164748.9	Worker	Scenario 3	2.68E-02	6.09E-05	8.67E-04
5035	641536.2	4164748.9	Worker	Scenario 3	2.78E-02	6.34E-05	8.38E-04
5036	641636.2	4164748.9	Worker	Scenario 3	2.91E-02	6.68E-05	7.07E-04
5037	641736.2	4164748.9	Worker	Scenario 3	3.04E-02	7.00E-05	8.67E-04
5038	641836.2	4164748.9	Worker	Scenario 3	3.26E-02	7.55E-05	9.16E-04
5039	641936.2	4164748.9	Worker	Scenario 3	3.86E-02	9.06E-05	1.40E-03
5040	642036.2	4164748.9	Worker	Scenario 3	3.80E-02	8.90E-05	1.33E-03
5041	642136.2	4164748.9	Worker	Scenario 3	3.68E-02	8.56E-05	1.29E-03
5042	642236.2	4164748.9	Worker	Scenario 3	3.96E-02	9.26E-05	1.05E-03
5043	642336.2	4164748.9	Worker	Scenario 3	4.03E-02	9.43E-05	9.20E-04
5044	642436.2	4164748.9	Worker	Scenario 3	4.11E-02	9.63E-05	1.08E-03
5045	642536.2	4164748.9	Worker	Scenario 3	4.96E-02	1.17E-04	2.89E-03
5046	642636.2	4164748.9	Worker	Scenario 3	4.68E-02	1.10E-04	1.41E-03
5047	642736.2	4164748.9	Worker	Scenario 3	4.60E-02	1.08E-04	7.78E-04
5048	642836.2	4164748.9	Worker	Scenario 3	4.84E-02	1.14E-04	1.11E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5049	642936.2	4164748.9	Worker	Scenario 3	5.41E-02	1.28E-04	2.24E-03
5050	643036.2	4164748.9	Worker	Scenario 3	6.45E-02	1.54E-04	3.34E-03
5051	643136.2	4164748.9	Worker	Scenario 3	6.63E-02	1.58E-04	3.28E-03
5052	643236.2	4164748.9	Worker	Scenario 3	7.32E-02	1.75E-04	3.83E-03
5053	643336.2	4164748.9	Worker	Scenario 3	7.63E-02	1.82E-04	4.20E-03
5054	643436.2	4164748.9	Worker	Scenario 3	7.96E-02	1.90E-04	3.99E-03
5055	643536.2	4164748.9	Worker	Scenario 3	8.36E-02	1.99E-04	4.24E-03
5056	643636.2	4164748.9	Worker	Scenario 3	8.67E-02	2.05E-04	3.71E-03
5057	643736.2	4164748.9	Worker	Scenario 3	8.86E-02	2.08E-04	3.36E-03
5058	644036.2	4164748.9	Worker	Scenario 3	9.20E-02	2.14E-04	3.67E-03
5059	644136.2	4164748.9	Worker	Scenario 3	9.34E-02	2.17E-04	3.52E-03
5060	644236.2	4164748.9	Worker	Scenario 3	9.38E-02	2.17E-04	3.11E-03
5061	644336.2	4164748.9	Worker	Scenario 3	9.41E-02	2.17E-04	2.88E-03
5062	644436.2	4164748.9	Worker	Scenario 3	9.45E-02	2.17E-04	2.50E-03
5063	644536.2	4164748.9	Worker	Scenario 3	9.49E-02	2.17E-04	2.16E-03
5064	644736.2	4164748.9	Worker	Scenario 3	9.56E-02	2.18E-04	2.22E-03
5065	644836.2	4164748.9	Worker	Scenario 3	9.58E-02	2.18E-04	2.38E-03
5066	644936.2	4164748.9	Worker	Scenario 3	9.59E-02	2.18E-04	2.53E-03
5067	645036.2	4164748.9	Worker	Scenario 3	9.46E-02	2.15E-04	2.95E-03
5068	645136.2	4164748.9	Worker	Scenario 3	9.58E-02	2.17E-04	2.19E-03
5069	645236.2	4164748.9	Worker	Scenario 3	9.57E-02	2.17E-04	1.76E-03
5070	645336.2	4164748.9	Worker	Scenario 3	9.53E-02	2.16E-04	1.56E-03
5071	645436.2	4164748.9	Worker	Scenario 3	9.58E-02	2.17E-04	1.29E-03
5072	640136.2	4164848.9	Worker	Scenario 3	2.06E-02	4.71E-05	9.32E-04
5073	640236.2	4164848.9	Worker	Scenario 3	2.44E-02	5.66E-05	1.29E-03
5074	640336.2	4164848.9	Worker	Scenario 3	3.04E-02	7.14E-05	3.08E-03
5075	640436.2	4164848.9	Worker	Scenario 3	2.32E-02	5.38E-05	1.42E-03
5076	640536.2	4164848.9	Worker	Scenario 3	2.18E-02	5.02E-05	8.07E-04
5077	640636.2	4164848.9	Worker	Scenario 3	2.28E-02	5.25E-05	8.55E-04
5078	640736.2	4164848.9	Worker	Scenario 3	2.42E-02	5.58E-05	1.31E-03
5079	640836.2	4164848.9	Worker	Scenario 3	2.40E-02	5.52E-05	8.46E-04
5080	640936.2	4164848.9	Worker	Scenario 3	2.55E-02	5.87E-05	1.17E-03
5081	641036.2	4164848.9	Worker	Scenario 3	2.47E-02	5.65E-05	9.08E-04
5082	641136.2	4164848.9	Worker	Scenario 3	2.55E-02	5.81E-05	1.36E-03
5083	641236.2	4164848.9	Worker	Scenario 3	2.66E-02	6.07E-05	6.88E-04
5084	641336.2	4164848.9	Worker	Scenario 3	2.81E-02	6.39E-05	7.37E-04
5085	641436.2	4164848.9	Worker	Scenario 3	2.83E-02	6.44E-05	8.93E-04
5086	641536.2	4164848.9	Worker	Scenario 3	2.91E-02	6.65E-05	8.61E-04
5087	641636.2	4164848.9	Worker	Scenario 3	3.03E-02	6.94E-05	7.10E-04
5088	641736.2	4164848.9	Worker	Scenario 3	3.25E-02	7.50E-05	9.04E-04
5089	641836.2	4164848.9	Worker	Scenario 3	3.42E-02	7.95E-05	9.61E-04
5090	641936.2	4164848.9	Worker	Scenario 3	3.79E-02	8.88E-05	1.25E-03
5091	642036.2	4164848.9	Worker	Scenario 3	4.79E-02	1.13E-04	2.31E-03
5092	642136.2	4164848.9	Worker	Scenario 3	3.93E-02	9.17E-05	1.28E-03
5093	642236.2	4164848.9	Worker	Scenario 3	4.08E-02	9.53E-05	9.92E-04
5094	642336.2	4164848.9	Worker	Scenario 3	4.59E-02	1.08E-04	1.31E-03
5095	642436.2	4164848.9	Worker	Scenario 3	4.38E-02	1.03E-04	1.04E-03
5096	642536.2	4164848.9	Worker	Scenario 3	4.78E-02	1.13E-04	1.79E-03
5097	642636.2	4164848.9	Worker	Scenario 3	5.29E-02	1.25E-04	1.72E-03
5098	642736.2	4164848.9	Worker	Scenario 3	4.92E-02	1.16E-04	9.05E-04
5099	642836.2	4164848.9	Worker	Scenario 3	5.17E-02	1.22E-04	1.24E-03
5100	642936.2	4164848.9	Worker	Scenario 3	5.61E-02	1.34E-04	2.42E-03
5101	643036.2	4164848.9	Worker	Scenario 3	6.11E-02	1.46E-04	2.80E-03
5102	643136.2	4164848.9	Worker	Scenario 3	7.63E-02	1.83E-04	4.05E-03
5103	643236.2	4164848.9	Worker	Scenario 3	7.77E-02	1.86E-04	3.99E-03
5104	643336.2	4164848.9	Worker	Scenario 3	8.27E-02	1.98E-04	4.10E-03
5105	643436.2	4164848.9	Worker	Scenario 3	8.60E-02	2.05E-04	4.52E-03
5106	643536.2	4164848.9	Worker	Scenario 3	8.85E-02	2.10E-04	3.77E-03
5107	643636.2	4164848.9	Worker	Scenario 3	9.15E-02	2.16E-04	3.54E-03
5108	643936.2	4164848.9	Worker	Scenario 3	9.67E-02	2.26E-04	3.87E-03
5109	644036.2	4164848.9	Worker	Scenario 3	9.77E-02	2.27E-04	3.79E-03
5110	644136.2	4164848.9	Worker	Scenario 3	9.86E-02	2.28E-04	3.25E-03
5111	644236.2	4164848.9	Worker	Scenario 3	9.89E-02	2.28E-04	3.03E-03
5112	644336.2	4164848.9	Worker	Scenario 3	9.91E-02	2.28E-04	2.62E-03
5113	644436.2	4164848.9	Worker	Scenario 3	9.96E-02	2.28E-04	2.37E-03
5114	644536.2	4164848.9	Worker	Scenario 3	1.00E-01	2.29E-04	2.41E-03
5115	644736.2	4164848.9	Worker	Scenario 3	1.01E-01	2.30E-04	2.57E-03
5116	644836.2	4164848.9	Worker	Scenario 3	1.00E-01	2.28E-04	2.98E-03
5117	644936.2	4164848.9	Worker	Scenario 3	1.00E-01	2.28E-04	2.85E-03
5118	645036.2	4164848.9	Worker	Scenario 3	1.01E-01	2.29E-04	2.22E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5119	645136.2	4164848.9	Worker	Scenario 3	1.01E-01	2.29E-04	1.80E-03
5120	645236.2	4164848.9	Worker	Scenario 3	1.01E-01	2.28E-04	1.70E-03
5121	645336.2	4164848.9	Worker	Scenario 3	9.98E-02	2.26E-04	1.64E-03
5122	645436.2	4164848.9	Worker	Scenario 3	9.91E-02	2.24E-04	1.46E-03
5123	645536.2	4164848.9	Worker	Scenario 3	9.87E-02	2.23E-04	1.13E-03
5124	645636.2	4164848.9	Worker	Scenario 3	1.01E-01	2.27E-04	1.18E-03
5125	645736.2	4164848.9	Worker	Scenario 3	9.96E-02	2.25E-04	1.19E-03
5126	640036.2	4164948.9	Worker	Scenario 3	1.98E-02	4.54E-05	7.41E-04
5127	640136.2	4164948.9	Worker	Scenario 3	2.19E-02	5.04E-05	8.96E-04
5128	640236.2	4164948.9	Worker	Scenario 3	2.58E-02	6.00E-05	1.83E-03
5129	640336.2	4164948.9	Worker	Scenario 3	3.18E-02	7.51E-05	3.28E-03
5130	640436.2	4164948.9	Worker	Scenario 3	2.67E-02	6.23E-05	2.05E-03
5131	640536.2	4164948.9	Worker	Scenario 3	2.26E-02	5.22E-05	8.30E-04
5132	640636.2	4164948.9	Worker	Scenario 3	2.32E-02	5.35E-05	7.31E-04
5133	640736.2	4164948.9	Worker	Scenario 3	2.41E-02	5.55E-05	1.21E-03
5134	640836.2	4164948.9	Worker	Scenario 3	2.62E-02	6.03E-05	8.79E-04
5135	640936.2	4164948.9	Worker	Scenario 3	2.76E-02	6.39E-05	2.35E-03
5136	641036.2	4164948.9	Worker	Scenario 3	2.58E-02	5.91E-05	1.03E-03
5137	641136.2	4164948.9	Worker	Scenario 3	2.65E-02	6.06E-05	1.44E-03
5138	641236.2	4164948.9	Worker	Scenario 3	2.81E-02	6.40E-05	7.83E-04
5139	641336.2	4164948.9	Worker	Scenario 3	2.94E-02	6.68E-05	7.51E-04
5140	641436.2	4164948.9	Worker	Scenario 3	3.01E-02	6.87E-05	1.02E-03
5141	641536.2	4164948.9	Worker	Scenario 3	3.06E-02	6.99E-05	8.86E-04
5142	641636.2	4164948.9	Worker	Scenario 3	3.17E-02	7.28E-05	7.45E-04
5143	641736.2	4164948.9	Worker	Scenario 3	3.37E-02	7.79E-05	9.42E-04
5144	641836.2	4164948.9	Worker	Scenario 3	3.88E-02	9.07E-05	1.57E-03
5145	641936.2	4164948.9	Worker	Scenario 3	3.87E-02	9.06E-05	1.34E-03
5146	642036.2	4164948.9	Worker	Scenario 3	5.07E-02	1.20E-04	2.65E-03
5147	642136.2	4164948.9	Worker	Scenario 3	4.19E-02	9.81E-05	1.25E-03
5148	642236.2	4164948.9	Worker	Scenario 3	4.28E-02	1.00E-04	9.22E-04
5149	642336.2	4164948.9	Worker	Scenario 3	4.73E-02	1.11E-04	1.37E-03
5150	642436.2	4164948.9	Worker	Scenario 3	5.13E-02	1.21E-04	2.52E-03
5151	642536.2	4164948.9	Worker	Scenario 3	5.21E-02	1.23E-04	1.73E-03
5152	642636.2	4164948.9	Worker	Scenario 3	5.93E-02	1.40E-04	2.04E-03
5153	642736.2	4164948.9	Worker	Scenario 3	5.52E-02	1.31E-04	1.39E-03
5154	642836.2	4164948.9	Worker	Scenario 3	5.53E-02	1.32E-04	1.68E-03
5155	642936.2	4164948.9	Worker	Scenario 3	5.98E-02	1.43E-04	2.45E-03
5156	643036.2	4164948.9	Worker	Scenario 3	6.46E-02	1.55E-04	2.90E-03
5157	643136.2	4164948.9	Worker	Scenario 3	8.14E-02	1.96E-04	4.00E-03
5158	643236.2	4164948.9	Worker	Scenario 3	8.49E-02	2.04E-04	4.46E-03
5159	643336.2	4164948.9	Worker	Scenario 3	8.97E-02	2.15E-04	4.80E-03
5160	643436.2	4164948.9	Worker	Scenario 3	9.26E-02	2.21E-04	3.90E-03
5161	643536.2	4164948.9	Worker	Scenario 3	9.51E-02	2.25E-04	3.75E-03
5162	643736.2	4164948.9	Worker	Scenario 3	9.89E-02	2.33E-04	4.58E-03
5163	643836.2	4164948.9	Worker	Scenario 3	1.01E-01	2.37E-04	4.12E-03
5164	643936.2	4164948.9	Worker	Scenario 3	1.03E-01	2.40E-04	3.99E-03
5165	644036.2	4164948.9	Worker	Scenario 3	1.04E-01	2.41E-04	3.38E-03
5166	644136.2	4164948.9	Worker	Scenario 3	1.04E-01	2.40E-04	3.24E-03
5167	644236.2	4164948.9	Worker	Scenario 3	1.04E-01	2.40E-04	2.71E-03
5168	644336.2	4164948.9	Worker	Scenario 3	1.05E-01	2.41E-04	2.56E-03
5169	644436.2	4164948.9	Worker	Scenario 3	1.05E-01	2.41E-04	2.54E-03
5170	644536.2	4164948.9	Worker	Scenario 3	1.06E-01	2.42E-04	2.64E-03
5171	644736.2	4164948.9	Worker	Scenario 3	1.07E-01	2.43E-04	2.85E-03
5172	644836.2	4164948.9	Worker	Scenario 3	1.07E-01	2.43E-04	2.59E-03
5173	644936.2	4164948.9	Worker	Scenario 3	1.04E-01	2.37E-04	2.72E-03
5174	645036.2	4164948.9	Worker	Scenario 3	1.06E-01	2.41E-04	1.95E-03
5175	645136.2	4164948.9	Worker	Scenario 3	1.06E-01	2.41E-04	1.83E-03
5176	645236.2	4164948.9	Worker	Scenario 3	1.05E-01	2.39E-04	1.76E-03
5177	645336.2	4164948.9	Worker	Scenario 3	1.05E-01	2.38E-04	1.24E-03
5178	645436.2	4164948.9	Worker	Scenario 3	1.04E-01	2.36E-04	1.24E-03
5179	645536.2	4164948.9	Worker	Scenario 3	1.06E-01	2.40E-04	1.27E-03
5180	645636.2	4164948.9	Worker	Scenario 3	1.05E-01	2.37E-04	1.25E-03
5181	645736.2	4164948.9	Worker	Scenario 3	1.04E-01	2.35E-04	1.26E-03
5182	645836.2	4164948.9	Worker	Scenario 3	1.03E-01	2.32E-04	1.22E-03
5183	639836.2	4165048.9	Worker	Scenario 3	2.02E-02	4.64E-05	5.61E-04
5184	639936.2	4165048.9	Worker	Scenario 3	1.98E-02	4.55E-05	5.95E-04
5185	640036.2	4165048.9	Worker	Scenario 3	2.10E-02	4.82E-05	7.41E-04
5186	640136.2	4165048.9	Worker	Scenario 3	2.18E-02	5.01E-05	8.43E-04
5187	640236.2	4165048.9	Worker	Scenario 3	2.43E-02	5.61E-05	1.28E-03
5188	640336.2	4165048.9	Worker	Scenario 3	3.08E-02	7.23E-05	2.57E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5189	640436.2	4165048.9	Worker	Scenario 3	3.33E-02	7.87E-05	3.31E-03
5190	640536.2	4165048.9	Worker	Scenario 3	2.40E-02	5.54E-05	8.10E-04
5191	640636.2	4165048.9	Worker	Scenario 3	2.45E-02	5.67E-05	8.57E-04
5192	640736.2	4165048.9	Worker	Scenario 3	2.47E-02	5.71E-05	1.09E-03
5193	640836.2	4165048.9	Worker	Scenario 3	2.59E-02	5.96E-05	1.01E-03
5194	640936.2	4165048.9	Worker	Scenario 3	2.95E-02	6.85E-05	2.30E-03
5195	641036.2	4165048.9	Worker	Scenario 3	2.69E-02	6.17E-05	1.14E-03
5196	641136.2	4165048.9	Worker	Scenario 3	2.77E-02	6.34E-05	1.48E-03
5197	641236.2	4165048.9	Worker	Scenario 3	2.96E-02	6.76E-05	9.34E-04
5198	641336.2	4165048.9	Worker	Scenario 3	3.00E-02	6.82E-05	7.66E-04
5199	641436.2	4165048.9	Worker	Scenario 3	3.45E-02	7.90E-05	1.88E-03
5200	641536.2	4165048.9	Worker	Scenario 3	3.40E-02	7.81E-05	1.82E-03
5201	641636.2	4165048.9	Worker	Scenario 3	3.36E-02	7.75E-05	8.09E-04
5202	641736.2	4165048.9	Worker	Scenario 3	3.52E-02	8.14E-05	9.83E-04
5203	641836.2	4165048.9	Worker	Scenario 3	3.79E-02	8.84E-05	1.14E-03
5204	641936.2	4165048.9	Worker	Scenario 3	4.68E-02	1.11E-04	1.95E-03
5205	642036.2	4165048.9	Worker	Scenario 3	4.85E-02	1.14E-04	2.24E-03
5206	642136.2	4165048.9	Worker	Scenario 3	5.07E-02	1.20E-04	2.25E-03
5207	642236.2	4165048.9	Worker	Scenario 3	4.58E-02	1.08E-04	1.00E-03
5208	642336.2	4165048.9	Worker	Scenario 3	4.83E-02	1.14E-04	1.21E-03
5209	642436.2	4165048.9	Worker	Scenario 3	5.22E-02	1.23E-04	1.78E-03
5210	642536.2	4165048.9	Worker	Scenario 3	6.48E-02	1.54E-04	3.15E-03
5211	642636.2	4165048.9	Worker	Scenario 3	7.06E-02	1.68E-04	3.34E-03
5212	642736.2	4165048.9	Worker	Scenario 3	6.50E-02	1.55E-04	2.50E-03
5213	642836.2	4165048.9	Worker	Scenario 3	6.05E-02	1.45E-04	2.17E-03
5214	642936.2	4165048.9	Worker	Scenario 3	6.51E-02	1.56E-04	2.68E-03
5215	643036.2	4165048.9	Worker	Scenario 3	7.89E-02	1.90E-04	3.76E-03
5216	643136.2	4165048.9	Worker	Scenario 3	8.70E-02	2.10E-04	4.62E-03
5217	643236.2	4165048.9	Worker	Scenario 3	9.65E-02	2.32E-04	5.20E-03
5218	643336.2	4165048.9	Worker	Scenario 3	9.74E-02	2.33E-04	4.32E-03
5219	643436.2	4165048.9	Worker	Scenario 3	1.01E-01	2.40E-04	3.99E-03
5220	643636.2	4165048.9	Worker	Scenario 3	1.04E-01	2.46E-04	4.87E-03
5221	643736.2	4165048.9	Worker	Scenario 3	1.06E-01	2.49E-04	4.40E-03
5222	643836.2	4165048.9	Worker	Scenario 3	1.09E-01	2.54E-04	4.20E-03
5223	643936.2	4165048.9	Worker	Scenario 3	1.10E-01	2.56E-04	3.50E-03
5224	644036.2	4165048.9	Worker	Scenario 3	1.10E-01	2.55E-04	3.36E-03
5225	644136.2	4165048.9	Worker	Scenario 3	1.10E-01	2.55E-04	2.76E-03
5226	644236.2	4165048.9	Worker	Scenario 3	1.11E-01	2.54E-04	2.81E-03
5227	644336.2	4165048.9	Worker	Scenario 3	1.11E-01	2.55E-04	2.70E-03
5228	644436.2	4165048.9	Worker	Scenario 3	1.12E-01	2.56E-04	2.94E-03
5229	644536.2	4165048.9	Worker	Scenario 3	1.12E-01	2.57E-04	3.09E-03
5230	644736.2	4165048.9	Worker	Scenario 3	1.13E-01	2.58E-04	2.59E-03
5231	644836.2	4165048.9	Worker	Scenario 3	1.14E-01	2.58E-04	2.06E-03
5232	644936.2	4165048.9	Worker	Scenario 3	1.13E-01	2.57E-04	1.97E-03
5233	645036.2	4165048.9	Worker	Scenario 3	1.13E-01	2.56E-04	1.85E-03
5234	645136.2	4165048.9	Worker	Scenario 3	1.12E-01	2.55E-04	1.66E-03
5235	645236.2	4165048.9	Worker	Scenario 3	1.11E-01	2.52E-04	1.78E-03
5236	645336.2	4165048.9	Worker	Scenario 3	1.14E-01	2.57E-04	1.34E-03
5237	645436.2	4165048.9	Worker	Scenario 3	1.13E-01	2.55E-04	1.34E-03
5238	645536.2	4165048.9	Worker	Scenario 3	1.12E-01	2.52E-04	1.34E-03
5239	645636.2	4165048.9	Worker	Scenario 3	1.10E-01	2.49E-04	1.31E-03
5240	645736.2	4165048.9	Worker	Scenario 3	1.09E-01	2.46E-04	1.28E-03
5241	646036.2	4165048.9	Worker	Scenario 3	1.04E-01	2.34E-04	1.16E-03
5242	639736.2	4165148.9	Worker	Scenario 3	2.00E-02	4.59E-05	5.92E-04
5243	639836.2	4165148.9	Worker	Scenario 3	2.11E-02	4.85E-05	5.89E-04
5244	639936.2	4165148.9	Worker	Scenario 3	2.05E-02	4.69E-05	4.90E-04
5245	640036.2	4165148.9	Worker	Scenario 3	2.12E-02	4.85E-05	6.76E-04
5246	640136.2	4165148.9	Worker	Scenario 3	2.25E-02	5.18E-05	8.02E-04
5247	640236.2	4165148.9	Worker	Scenario 3	2.36E-02	5.43E-05	9.45E-04
5248	640336.2	4165148.9	Worker	Scenario 3	2.92E-02	6.82E-05	2.25E-03
5249	640436.2	4165148.9	Worker	Scenario 3	3.67E-02	8.68E-05	3.87E-03
5250	640536.2	4165148.9	Worker	Scenario 3	2.62E-02	6.07E-05	1.43E-03
5251	640636.2	4165148.9	Worker	Scenario 3	2.61E-02	6.07E-05	1.78E-03
5252	640736.2	4165148.9	Worker	Scenario 3	2.58E-02	5.97E-05	9.21E-04
5253	640836.2	4165148.9	Worker	Scenario 3	2.69E-02	6.20E-05	1.26E-03
5254	640936.2	4165148.9	Worker	Scenario 3	3.12E-02	7.26E-05	2.17E-03
5255	641036.2	4165148.9	Worker	Scenario 3	2.82E-02	6.48E-05	1.25E-03
5256	641136.2	4165148.9	Worker	Scenario 3	2.90E-02	6.65E-05	1.48E-03
5257	641236.2	4165148.9	Worker	Scenario 3	3.02E-02	6.90E-05	1.04E-03
5258	641336.2	4165148.9	Worker	Scenario 3	3.30E-02	7.54E-05	1.56E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5259	641436.2	4165148.9	Worker	Scenario 3	3.39E-02	7.76E-05	1.96E-03
5260	641536.2	4165148.9	Worker	Scenario 3	3.61E-02	8.31E-05	1.87E-03
5261	641636.2	4165148.9	Worker	Scenario 3	3.59E-02	8.30E-05	8.89E-04
5262	641736.2	4165148.9	Worker	Scenario 3	3.76E-02	8.72E-05	1.03E-03
5263	641836.2	4165148.9	Worker	Scenario 3	3.95E-02	9.24E-05	1.25E-03
5264	641936.2	4165148.9	Worker	Scenario 3	4.35E-02	1.02E-04	1.50E-03
5265	642036.2	4165148.9	Worker	Scenario 3	5.35E-02	1.27E-04	2.78E-03
5266	642136.2	4165148.9	Worker	Scenario 3	6.28E-02	1.49E-04	3.23E-03
5267	642236.2	4165148.9	Worker	Scenario 3	5.01E-02	1.18E-04	1.31E-03
5268	642336.2	4165148.9	Worker	Scenario 3	5.21E-02	1.23E-04	1.22E-03
5269	642436.2	4165148.9	Worker	Scenario 3	5.49E-02	1.30E-04	1.24E-03
5270	642536.2	4165148.9	Worker	Scenario 3	5.75E-02	1.36E-04	9.81E-04
5271	642636.2	4165148.9	Worker	Scenario 3	6.86E-02	1.64E-04	2.15E-03
5272	642736.2	4165148.9	Worker	Scenario 3	7.73E-02	1.86E-04	3.75E-03
5273	642836.2	4165148.9	Worker	Scenario 3	6.66E-02	1.60E-04	2.31E-03
5274	642936.2	4165148.9	Worker	Scenario 3	7.23E-02	1.75E-04	2.97E-03
5275	643036.2	4165148.9	Worker	Scenario 3	8.83E-02	2.14E-04	4.29E-03
5276	643136.2	4165148.9	Worker	Scenario 3	9.66E-02	2.34E-04	4.89E-03
5277	643236.2	4165148.9	Worker	Scenario 3	1.01E-01	2.44E-04	4.84E-03
5278	643336.2	4165148.9	Worker	Scenario 3	1.07E-01	2.56E-04	4.39E-03
5279	643536.2	4165148.9	Worker	Scenario 3	1.11E-01	2.63E-04	5.18E-03
5280	643636.2	4165148.9	Worker	Scenario 3	1.14E-01	2.68E-04	4.59E-03
5281	643736.2	4165148.9	Worker	Scenario 3	1.17E-01	2.73E-04	4.29E-03
5282	643836.2	4165148.9	Worker	Scenario 3	1.17E-01	2.73E-04	3.59E-03
5283	643936.2	4165148.9	Worker	Scenario 3	1.17E-01	2.72E-04	3.46E-03
5284	644036.2	4165148.9	Worker	Scenario 3	1.17E-01	2.71E-04	2.77E-03
5285	644136.2	4165148.9	Worker	Scenario 3	1.18E-01	2.71E-04	2.94E-03
5286	644236.2	4165148.9	Worker	Scenario 3	1.18E-01	2.71E-04	2.99E-03
5287	644336.2	4165148.9	Worker	Scenario 3	1.19E-01	2.72E-04	3.20E-03
5288	644436.2	4165148.9	Worker	Scenario 3	1.19E-01	2.73E-04	3.33E-03
5289	644536.2	4165148.9	Worker	Scenario 3	1.20E-01	2.73E-04	3.10E-03
5290	644736.2	4165148.9	Worker	Scenario 3	1.21E-01	2.74E-04	2.15E-03
5291	644836.2	4165148.9	Worker	Scenario 3	1.21E-01	2.74E-04	2.09E-03
5292	644936.2	4165148.9	Worker	Scenario 3	1.20E-01	2.73E-04	1.86E-03
5293	645036.2	4165148.9	Worker	Scenario 3	1.20E-01	2.72E-04	1.73E-03
5294	645136.2	4165148.9	Worker	Scenario 3	1.18E-01	2.68E-04	1.90E-03
5295	645236.2	4165148.9	Worker	Scenario 3	1.17E-01	2.66E-04	1.44E-03
5296	645336.2	4165148.9	Worker	Scenario 3	1.20E-01	2.70E-04	1.43E-03
5297	645436.2	4165148.9	Worker	Scenario 3	1.18E-01	2.67E-04	1.41E-03
5298	645536.2	4165148.9	Worker	Scenario 3	1.17E-01	2.64E-04	1.36E-03
5299	645636.2	4165148.9	Worker	Scenario 3	1.16E-01	2.61E-04	1.32E-03
5300	645736.2	4165148.9	Worker	Scenario 3	1.12E-01	2.53E-04	1.25E-03
5301	645936.2	4165148.9	Worker	Scenario 3	1.10E-01	2.49E-04	1.24E-03
5302	646036.2	4165148.9	Worker	Scenario 3	1.09E-01	2.47E-04	1.19E-03
5303	646136.2	4165148.9	Worker	Scenario 3	1.08E-01	2.45E-04	1.12E-03
5304	639636.2	4165248.9	Worker	Scenario 3	1.94E-02	4.44E-05	5.52E-04
5305	639736.2	4165248.9	Worker	Scenario 3	2.01E-02	4.61E-05	4.87E-04
5306	639836.2	4165248.9	Worker	Scenario 3	2.11E-02	4.83E-05	5.75E-04
5307	639936.2	4165248.9	Worker	Scenario 3	2.21E-02	5.07E-05	6.23E-04
5308	640036.2	4165248.9	Worker	Scenario 3	2.19E-02	5.03E-05	5.76E-04
5309	640136.2	4165248.9	Worker	Scenario 3	2.32E-02	5.35E-05	7.60E-04
5310	640236.2	4165248.9	Worker	Scenario 3	2.56E-02	5.92E-05	1.10E-03
5311	640336.2	4165248.9	Worker	Scenario 3	3.01E-02	7.02E-05	2.64E-03
5312	640436.2	4165248.9	Worker	Scenario 3	3.80E-02	9.00E-05	3.61E-03
5313	640536.2	4165248.9	Worker	Scenario 3	3.55E-02	8.37E-05	3.38E-03
5314	640636.2	4165248.9	Worker	Scenario 3	2.65E-02	6.14E-05	8.95E-04
5315	640736.2	4165248.9	Worker	Scenario 3	2.69E-02	6.24E-05	8.28E-04
5316	640836.2	4165248.9	Worker	Scenario 3	2.82E-02	6.53E-05	1.46E-03
5317	640936.2	4165248.9	Worker	Scenario 3	3.35E-02	7.80E-05	2.03E-03
5318	641036.2	4165248.9	Worker	Scenario 3	3.04E-02	7.00E-05	1.32E-03
5319	641136.2	4165248.9	Worker	Scenario 3	3.04E-02	6.99E-05	1.41E-03
5320	641236.2	4165248.9	Worker	Scenario 3	3.32E-02	7.62E-05	1.42E-03
5321	641336.2	4165248.9	Worker	Scenario 3	3.63E-02	8.33E-05	1.58E-03
5322	641436.2	4165248.9	Worker	Scenario 3	3.50E-02	8.01E-05	1.15E-03
5323	641536.2	4165248.9	Worker	Scenario 3	3.96E-02	9.16E-05	1.92E-03
5324	641636.2	4165248.9	Worker	Scenario 3	3.81E-02	8.81E-05	9.51E-04
5325	641736.2	4165248.9	Worker	Scenario 3	4.04E-02	9.42E-05	1.08E-03
5326	641836.2	4165248.9	Worker	Scenario 3	4.24E-02	9.95E-05	1.37E-03
5327	641936.2	4165248.9	Worker	Scenario 3	4.52E-02	1.06E-04	1.58E-03
5328	642036.2	4165248.9	Worker	Scenario 3	5.28E-02	1.25E-04	2.03E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5329	642136.2	4165248.9	Worker	Scenario 3	6.80E-02	1.62E-04	3.35E-03
5330	642236.2	4165248.9	Worker	Scenario 3	6.18E-02	1.47E-04	2.79E-03
5331	642336.2	4165248.9	Worker	Scenario 3	6.16E-02	1.47E-04	2.83E-03
5332	642436.2	4165248.9	Worker	Scenario 3	5.98E-02	1.42E-04	1.15E-03
5333	642536.2	4165248.9	Worker	Scenario 3	6.53E-02	1.56E-04	1.47E-03
5334	642636.2	4165248.9	Worker	Scenario 3	6.84E-02	1.64E-04	2.30E-03
5335	642736.2	4165248.9	Worker	Scenario 3	9.65E-02	2.33E-04	5.97E-03
5336	642836.2	4165248.9	Worker	Scenario 3	7.45E-02	1.80E-04	2.90E-03
5337	642936.2	4165248.9	Worker	Scenario 3	8.35E-02	2.03E-04	3.39E-03
5338	643036.2	4165248.9	Worker	Scenario 3	9.95E-02	2.42E-04	4.75E-03
5339	643136.2	4165248.9	Worker	Scenario 3	1.06E-01	2.56E-04	5.38E-03
5340	643436.2	4165248.9	Worker	Scenario 3	1.21E-01	2.87E-04	5.39E-03
5341	643536.2	4165248.9	Worker	Scenario 3	1.24E-01	2.91E-04	4.65E-03
5342	643636.2	4165248.9	Worker	Scenario 3	1.25E-01	2.93E-04	4.36E-03
5343	643736.2	4165248.9	Worker	Scenario 3	1.25E-01	2.92E-04	3.71E-03
5344	643836.2	4165248.9	Worker	Scenario 3	1.25E-01	2.91E-04	3.50E-03
5345	643936.2	4165248.9	Worker	Scenario 3	1.25E-01	2.89E-04	2.91E-03
5346	644036.2	4165248.9	Worker	Scenario 3	1.25E-01	2.89E-04	3.02E-03
5347	644136.2	4165248.9	Worker	Scenario 3	1.26E-01	2.89E-04	3.22E-03
5348	644236.2	4165248.9	Worker	Scenario 3	1.26E-01	2.90E-04	3.47E-03
5349	644336.2	4165248.9	Worker	Scenario 3	1.27E-01	2.91E-04	3.50E-03
5350	644436.2	4165248.9	Worker	Scenario 3	1.28E-01	2.92E-04	3.11E-03
5351	644536.2	4165248.9	Worker	Scenario 3	1.28E-01	2.92E-04	2.50E-03
5352	644736.2	4165248.9	Worker	Scenario 3	1.29E-01	2.92E-04	2.17E-03
5353	644836.2	4165248.9	Worker	Scenario 3	1.28E-01	2.91E-04	1.98E-03
5354	644936.2	4165248.9	Worker	Scenario 3	1.28E-01	2.90E-04	1.83E-03
5355	645036.2	4165248.9	Worker	Scenario 3	1.27E-01	2.88E-04	1.55E-03
5356	645136.2	4165248.9	Worker	Scenario 3	1.25E-01	2.85E-04	1.53E-03
5357	645236.2	4165248.9	Worker	Scenario 3	1.24E-01	2.82E-04	1.52E-03
5358	645336.2	4165248.9	Worker	Scenario 3	1.23E-01	2.79E-04	1.47E-03
5359	645436.2	4165248.9	Worker	Scenario 3	1.21E-01	2.75E-04	1.43E-03
5360	645536.2	4165248.9	Worker	Scenario 3	1.20E-01	2.72E-04	1.34E-03
5361	645636.2	4165248.9	Worker	Scenario 3	1.18E-01	2.69E-04	1.33E-03
5362	645936.2	4165248.9	Worker	Scenario 3	1.16E-01	2.62E-04	1.18E-03
5363	646036.2	4165248.9	Worker	Scenario 3	1.15E-01	2.60E-04	1.17E-03
5364	646136.2	4165248.9	Worker	Scenario 3	1.14E-01	2.58E-04	1.16E-03
5365	639536.2	4165348.9	Worker	Scenario 3	1.95E-02	4.44E-05	6.64E-04
5366	639636.2	4165348.9	Worker	Scenario 3	2.06E-02	4.71E-05	6.48E-04
5367	639736.2	4165348.9	Worker	Scenario 3	2.05E-02	4.70E-05	5.62E-04
5368	639836.2	4165348.9	Worker	Scenario 3	2.16E-02	4.96E-05	6.19E-04
5369	639936.2	4165348.9	Worker	Scenario 3	2.36E-02	5.44E-05	7.02E-04
5370	640036.2	4165348.9	Worker	Scenario 3	2.26E-02	5.17E-05	5.07E-04
5371	640136.2	4165348.9	Worker	Scenario 3	2.37E-02	5.44E-05	6.69E-04
5372	640236.2	4165348.9	Worker	Scenario 3	2.52E-02	5.81E-05	8.55E-04
5373	640336.2	4165348.9	Worker	Scenario 3	2.74E-02	6.35E-05	1.15E-03
5374	640436.2	4165348.9	Worker	Scenario 3	3.67E-02	8.66E-05	3.35E-03
5375	640536.2	4165348.9	Worker	Scenario 3	4.29E-02	1.02E-04	4.57E-03
5376	640636.2	4165348.9	Worker	Scenario 3	3.03E-02	7.07E-05	1.65E-03
5377	640736.2	4165348.9	Worker	Scenario 3	2.84E-02	6.61E-05	9.48E-04
5378	640836.2	4165348.9	Worker	Scenario 3	3.05E-02	7.08E-05	1.62E-03
5379	640936.2	4165348.9	Worker	Scenario 3	3.59E-02	8.40E-05	2.14E-03
5380	641036.2	4165348.9	Worker	Scenario 3	3.11E-02	7.16E-05	1.37E-03
5381	641136.2	4165348.9	Worker	Scenario 3	3.19E-02	7.34E-05	1.27E-03
5382	641236.2	4165348.9	Worker	Scenario 3	3.37E-02	7.73E-05	1.54E-03
5383	641336.2	4165348.9	Worker	Scenario 3	3.77E-02	8.65E-05	1.61E-03
5384	641436.2	4165348.9	Worker	Scenario 3	4.22E-02	9.71E-05	2.07E-03
5385	641536.2	4165348.9	Worker	Scenario 3	4.37E-02	1.01E-04	2.36E-03
5386	641636.2	4165348.9	Worker	Scenario 3	4.13E-02	9.60E-05	1.40E-03
5387	641736.2	4165348.9	Worker	Scenario 3	4.36E-02	1.02E-04	1.12E-03
5388	641836.2	4165348.9	Worker	Scenario 3	4.61E-02	1.09E-04	1.48E-03
5389	641936.2	4165348.9	Worker	Scenario 3	4.89E-02	1.15E-04	1.64E-03
5390	642036.2	4165348.9	Worker	Scenario 3	5.30E-02	1.25E-04	1.41E-03
5391	642136.2	4165348.9	Worker	Scenario 3	6.07E-02	1.44E-04	1.71E-03
5392	642236.2	4165348.9	Worker	Scenario 3	8.41E-02	2.01E-04	5.73E-03
5393	642336.2	4165348.9	Worker	Scenario 3	6.93E-02	1.66E-04	3.07E-03
5394	642436.2	4165348.9	Worker	Scenario 3	6.71E-02	1.60E-04	1.22E-03
5395	642536.2	4165348.9	Worker	Scenario 3	7.63E-02	1.83E-04	2.33E-03
5396	642636.2	4165348.9	Worker	Scenario 3	7.61E-02	1.84E-04	3.16E-03
5397	642736.2	4165348.9	Worker	Scenario 3	8.97E-02	2.18E-04	4.28E-03
5398	642836.2	4165348.9	Worker	Scenario 3	1.01E-01	2.47E-04	4.98E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5399	642936.2	4165348.9	Worker	Scenario 3	9.53E-02	2.32E-04	3.86E-03
5400	643036.2	4165348.9	Worker	Scenario 3	1.11E-01	2.71E-04	5.82E-03
5401	643236.2	4165348.9	Worker	Scenario 3	1.30E-01	3.10E-04	4.97E-03
5402	643336.2	4165348.9	Worker	Scenario 3	1.32E-01	3.13E-04	5.42E-03
5403	643436.2	4165348.9	Worker	Scenario 3	1.33E-01	3.14E-04	4.71E-03
5404	643536.2	4165348.9	Worker	Scenario 3	1.34E-01	3.14E-04	4.46E-03
5405	643636.2	4165348.9	Worker	Scenario 3	1.34E-01	3.13E-04	3.84E-03
5406	643736.2	4165348.9	Worker	Scenario 3	1.34E-01	3.12E-04	3.56E-03
5407	643836.2	4165348.9	Worker	Scenario 3	1.34E-01	3.11E-04	3.07E-03
5408	643936.2	4165348.9	Worker	Scenario 3	1.34E-01	3.10E-04	3.11E-03
5409	644036.2	4165348.9	Worker	Scenario 3	1.35E-01	3.10E-04	3.42E-03
5410	644136.2	4165348.9	Worker	Scenario 3	1.35E-01	3.10E-04	3.72E-03
5411	644236.2	4165348.9	Worker	Scenario 3	1.36E-01	3.11E-04	3.60E-03
5412	644336.2	4165348.9	Worker	Scenario 3	1.36E-01	3.12E-04	3.04E-03
5413	644436.2	4165348.9	Worker	Scenario 3	1.37E-01	3.13E-04	2.50E-03
5414	644536.2	4165348.9	Worker	Scenario 3	1.37E-01	3.13E-04	2.45E-03
5415	644736.2	4165348.9	Worker	Scenario 3	1.37E-01	3.12E-04	2.13E-03
5416	644836.2	4165348.9	Worker	Scenario 3	1.37E-01	3.11E-04	1.92E-03
5417	644936.2	4165348.9	Worker	Scenario 3	1.36E-01	3.08E-04	1.64E-03
5418	645036.2	4165348.9	Worker	Scenario 3	1.35E-01	3.06E-04	1.64E-03
5419	645136.2	4165348.9	Worker	Scenario 3	1.33E-01	3.02E-04	1.58E-03
5420	645236.2	4165348.9	Worker	Scenario 3	1.32E-01	2.98E-04	1.55E-03
5421	645336.2	4165348.9	Worker	Scenario 3	1.30E-01	2.95E-04	1.45E-03
5422	645436.2	4165348.9	Worker	Scenario 3	1.28E-01	2.91E-04	1.43E-03
5423	645536.2	4165348.9	Worker	Scenario 3	1.27E-01	2.88E-04	1.42E-03
5424	645636.2	4165348.9	Worker	Scenario 3	1.26E-01	2.85E-04	1.36E-03
5425	639436.2	4165448.9	Worker	Scenario 3	1.96E-02	4.45E-05	5.16E-04
5426	639536.2	4165448.9	Worker	Scenario 3	2.07E-02	4.73E-05	6.28E-04
5427	639636.2	4165448.9	Worker	Scenario 3	2.16E-02	4.94E-05	6.88E-04
5428	639736.2	4165448.9	Worker	Scenario 3	2.13E-02	4.88E-05	6.70E-04
5429	639836.2	4165448.9	Worker	Scenario 3	2.20E-02	5.04E-05	5.80E-04
5430	639936.2	4165448.9	Worker	Scenario 3	2.43E-02	5.61E-05	9.03E-04
5431	640036.2	4165448.9	Worker	Scenario 3	2.39E-02	5.48E-05	6.33E-04
5432	640136.2	4165448.9	Worker	Scenario 3	2.43E-02	5.57E-05	5.57E-04
5433	640236.2	4165448.9	Worker	Scenario 3	2.60E-02	6.00E-05	7.70E-04
5434	640336.2	4165448.9	Worker	Scenario 3	2.76E-02	6.39E-05	1.04E-03
5435	640436.2	4165448.9	Worker	Scenario 3	3.47E-02	8.14E-05	3.20E-03
5436	640536.2	4165448.9	Worker	Scenario 3	4.56E-02	1.09E-04	4.44E-03
5437	640636.2	4165448.9	Worker	Scenario 3	3.68E-02	8.68E-05	3.09E-03
5438	640736.2	4165448.9	Worker	Scenario 3	2.98E-02	6.92E-05	9.88E-04
5439	640836.2	4165448.9	Worker	Scenario 3	3.24E-02	7.56E-05	1.58E-03
5440	640936.2	4165448.9	Worker	Scenario 3	3.55E-02	8.27E-05	1.86E-03
5441	641036.2	4165448.9	Worker	Scenario 3	3.28E-02	7.59E-05	1.36E-03
5442	641136.2	4165448.9	Worker	Scenario 3	3.37E-02	7.78E-05	1.20E-03
5443	641236.2	4165448.9	Worker	Scenario 3	3.51E-02	8.07E-05	1.70E-03
5444	641336.2	4165448.9	Worker	Scenario 3	3.67E-02	8.41E-05	8.24E-04
5445	641436.2	4165448.9	Worker	Scenario 3	4.04E-02	9.30E-05	2.17E-03
5446	641536.2	4165448.9	Worker	Scenario 3	5.19E-02	1.21E-04	3.92E-03
5447	641636.2	4165448.9	Worker	Scenario 3	4.97E-02	1.17E-04	2.34E-03
5448	641736.2	4165448.9	Worker	Scenario 3	4.64E-02	1.09E-04	1.20E-03
5449	641836.2	4165448.9	Worker	Scenario 3	5.17E-02	1.23E-04	1.60E-03
5450	641936.2	4165448.9	Worker	Scenario 3	5.41E-02	1.28E-04	1.67E-03
5451	642036.2	4165448.9	Worker	Scenario 3	5.95E-02	1.41E-04	1.53E-03
5452	642136.2	4165448.9	Worker	Scenario 3	6.14E-02	1.46E-04	1.64E-03
5453	642236.2	4165448.9	Worker	Scenario 3	7.94E-02	1.91E-04	4.82E-03
5454	642336.2	4165448.9	Worker	Scenario 3	9.22E-02	2.21E-04	5.15E-03
5455	642436.2	4165448.9	Worker	Scenario 3	8.00E-02	1.92E-04	2.23E-03
5456	642536.2	4165448.9	Worker	Scenario 3	8.40E-02	2.03E-04	3.39E-03
5457	642636.2	4165448.9	Worker	Scenario 3	9.90E-02	2.41E-04	4.62E-03
5458	642736.2	4165448.9	Worker	Scenario 3	9.26E-02	2.26E-04	3.90E-03
5459	642836.2	4165448.9	Worker	Scenario 3	1.23E-01	3.00E-04	6.88E-03
5460	642936.2	4165448.9	Worker	Scenario 3	1.26E-01	3.07E-04	6.71E-03
5461	643136.2	4165448.9	Worker	Scenario 3	1.40E-01	3.35E-04	5.00E-03
5462	643236.2	4165448.9	Worker	Scenario 3	1.42E-01	3.40E-04	5.33E-03
5463	643336.2	4165448.9	Worker	Scenario 3	1.44E-01	3.41E-04	4.74E-03
5464	643436.2	4165448.9	Worker	Scenario 3	1.44E-01	3.39E-04	4.50E-03
5465	643536.2	4165448.9	Worker	Scenario 3	1.44E-01	3.38E-04	3.95E-03
5466	643636.2	4165448.9	Worker	Scenario 3	1.45E-01	3.36E-04	3.58E-03
5467	643736.2	4165448.9	Worker	Scenario 3	1.45E-01	3.35E-04	3.16E-03
5468	643836.2	4165448.9	Worker	Scenario 3	1.44E-01	3.34E-04	3.30E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5469	643936.2	4165448.9	Worker	Scenario 3	1.45E-01	3.34E-04	3.57E-03
5470	644036.2	4165448.9	Worker	Scenario 3	1.45E-01	3.34E-04	3.81E-03
5471	644136.2	4165448.9	Worker	Scenario 3	1.46E-01	3.34E-04	3.54E-03
5472	644236.2	4165448.9	Worker	Scenario 3	1.46E-01	3.35E-04	2.98E-03
5473	644336.2	4165448.9	Worker	Scenario 3	1.47E-01	3.37E-04	2.62E-03
5474	644436.2	4165448.9	Worker	Scenario 3	1.56E-01	3.54E-04	1.93E-03
5475	644536.2	4165448.9	Worker	Scenario 3	1.56E-01	3.53E-04	1.72E-03
5476	644636.2	4165448.9	Worker	Scenario 3	1.48E-01	3.36E-04	2.17E-03
5477	644736.2	4165448.9	Worker	Scenario 3	1.50E-01	3.41E-04	1.77E-03
5478	644836.2	4165448.9	Worker	Scenario 3	1.44E-01	3.28E-04	2.47E-03
5479	644936.2	4165448.9	Worker	Scenario 3	1.42E-01	3.24E-04	2.65E-03
5480	645036.2	4165448.9	Worker	Scenario 3	1.43E-01	3.25E-04	1.67E-03
5481	645136.2	4165448.9	Worker	Scenario 3	1.44E-01	3.25E-04	1.56E-03
5482	645236.2	4165448.9	Worker	Scenario 3	1.44E-01	3.25E-04	1.53E-03
5483	645336.2	4165448.9	Worker	Scenario 3	1.44E-01	3.25E-04	1.50E-03
5484	645436.2	4165448.9	Worker	Scenario 3	1.41E-01	3.18E-04	1.40E-03
5485	645536.2	4165448.9	Worker	Scenario 3	1.37E-01	3.09E-04	1.27E-03
5486	645636.2	4165448.9	Worker	Scenario 3	1.35E-01	3.05E-04	1.28E-03
5487	645936.2	4165448.9	Worker	Scenario 3	1.30E-01	2.94E-04	1.17E-03
5488	646036.2	4165448.9	Worker	Scenario 3	1.29E-01	2.91E-04	1.08E-03
5489	646136.2	4165448.9	Worker	Scenario 3	1.27E-01	2.88E-04	1.01E-03
5490	646336.2	4165448.9	Worker	Scenario 3	1.25E-01	2.83E-04	8.62E-04
5491	646436.2	4165448.9	Worker	Scenario 3	1.24E-01	2.81E-04	9.03E-04
5492	639436.2	4165548.9	Worker	Scenario 3	2.08E-02	4.73E-05	4.12E-04
5493	639536.2	4165548.9	Worker	Scenario 3	2.12E-02	4.82E-05	5.31E-04
5494	639636.2	4165548.9	Worker	Scenario 3	2.29E-02	5.24E-05	6.52E-04
5495	639736.2	4165548.9	Worker	Scenario 3	2.27E-02	5.19E-05	7.17E-04
5496	639836.2	4165548.9	Worker	Scenario 3	2.36E-02	5.41E-05	7.46E-04
5497	639936.2	4165548.9	Worker	Scenario 3	2.56E-02	5.90E-05	7.80E-04
5498	640036.2	4165548.9	Worker	Scenario 3	2.50E-02	5.75E-05	8.05E-04
5499	640136.2	4165548.9	Worker	Scenario 3	2.50E-02	5.75E-05	5.09E-04
5500	640236.2	4165548.9	Worker	Scenario 3	2.63E-02	6.06E-05	6.58E-04
5501	640336.2	4165548.9	Worker	Scenario 3	2.90E-02	6.70E-05	9.99E-04
5502	640436.2	4165548.9	Worker	Scenario 3	3.07E-02	7.12E-05	1.19E-03
5503	640536.2	4165548.9	Worker	Scenario 3	4.63E-02	1.10E-04	4.34E-03
5504	640636.2	4165548.9	Worker	Scenario 3	4.14E-02	9.80E-05	3.58E-03
5505	640736.2	4165548.9	Worker	Scenario 3	3.31E-02	7.71E-05	1.91E-03
5506	640836.2	4165548.9	Worker	Scenario 3	3.50E-02	8.21E-05	1.98E-03
5507	640936.2	4165548.9	Worker	Scenario 3	3.72E-02	8.71E-05	2.21E-03
5508	641036.2	4165548.9	Worker	Scenario 3	3.50E-02	8.10E-05	1.29E-03
5509	641136.2	4165548.9	Worker	Scenario 3	3.64E-02	8.41E-05	1.35E-03
5510	641236.2	4165548.9	Worker	Scenario 3	3.79E-02	8.74E-05	2.07E-03
5511	641336.2	4165548.9	Worker	Scenario 3	3.93E-02	9.01E-05	8.55E-04
5512	641436.2	4165548.9	Worker	Scenario 3	4.14E-02	9.52E-05	1.21E-03
5513	641536.2	4165548.9	Worker	Scenario 3	4.73E-02	1.10E-04	2.12E-03
5514	641636.2	4165548.9	Worker	Scenario 3	5.70E-02	1.35E-04	3.47E-03
5515	641736.2	4165548.9	Worker	Scenario 3	5.07E-02	1.20E-04	1.42E-03
5516	641836.2	4165548.9	Worker	Scenario 3	5.47E-02	1.30E-04	1.72E-03
5517	641936.2	4165548.9	Worker	Scenario 3	6.18E-02	1.47E-04	1.94E-03
5518	642036.2	4165548.9	Worker	Scenario 3	6.56E-02	1.57E-04	1.63E-03
5519	642136.2	4165548.9	Worker	Scenario 3	6.95E-02	1.66E-04	2.14E-03
5520	642236.2	4165548.9	Worker	Scenario 3	7.64E-02	1.84E-04	3.07E-03
5521	642336.2	4165548.9	Worker	Scenario 3	1.19E-01	2.84E-04	6.38E-03
5522	642436.2	4165548.9	Worker	Scenario 3	9.18E-02	2.22E-04	3.11E-03
5523	642536.2	4165548.9	Worker	Scenario 3	1.09E-01	2.66E-04	5.53E-03
5524	642636.2	4165548.9	Worker	Scenario 3	1.06E-01	2.60E-04	4.90E-03
5525	642736.2	4165548.9	Worker	Scenario 3	1.29E-01	3.14E-04	6.82E-03
5526	643036.2	4165548.9	Worker	Scenario 3	1.50E-01	3.63E-04	5.05E-03
5527	643136.2	4165548.9	Worker	Scenario 3	1.53E-01	3.68E-04	5.29E-03
5528	643236.2	4165548.9	Worker	Scenario 3	1.55E-01	3.69E-04	4.62E-03
5529	643336.2	4165548.9	Worker	Scenario 3	1.56E-01	3.68E-04	4.44E-03
5530	643436.2	4165548.9	Worker	Scenario 3	1.56E-01	3.65E-04	4.04E-03
5531	643536.2	4165548.9	Worker	Scenario 3	1.56E-01	3.64E-04	3.55E-03
5532	643636.2	4165548.9	Worker	Scenario 3	1.56E-01	3.63E-04	3.19E-03
5533	643736.2	4165548.9	Worker	Scenario 3	1.56E-01	3.62E-04	3.43E-03
5534	643836.2	4165548.9	Worker	Scenario 3	1.56E-01	3.61E-04	3.83E-03
5535	643936.2	4165548.9	Worker	Scenario 3	1.57E-01	3.61E-04	3.87E-03
5536	644036.2	4165548.9	Worker	Scenario 3	1.57E-01	3.62E-04	3.35E-03
5537	644136.2	4165548.9	Worker	Scenario 3	1.72E-01	3.91E-04	2.13E-03
5538	644236.2	4165548.9	Worker	Scenario 3	1.72E-01	3.91E-04	2.09E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5539	644336.2	4165548.9	Worker	Scenario 3	1.72E-01	3.90E-04	1.92E-03
5540	644436.2	4165548.9	Worker	Scenario 3	1.72E-01	3.89E-04	1.84E-03
5541	644536.2	4165548.9	Worker	Scenario 3	1.69E-01	3.82E-04	1.90E-03
5542	644636.2	4165548.9	Worker	Scenario 3	1.59E-01	3.62E-04	1.92E-03
5543	644736.2	4165548.9	Worker	Scenario 3	1.60E-01	3.62E-04	1.68E-03
5544	644836.2	4165548.9	Worker	Scenario 3	1.60E-01	3.61E-04	1.67E-03
5545	644936.2	4165548.9	Worker	Scenario 3	1.60E-01	3.61E-04	1.69E-03
5546	645036.2	4165548.9	Worker	Scenario 3	1.52E-01	3.45E-04	1.66E-03
5547	645136.2	4165548.9	Worker	Scenario 3	1.50E-01	3.41E-04	1.65E-03
5548	645236.2	4165548.9	Worker	Scenario 3	1.50E-01	3.38E-04	1.43E-03
5549	645336.2	4165548.9	Worker	Scenario 3	1.47E-01	3.33E-04	1.34E-03
5550	645436.2	4165548.9	Worker	Scenario 3	1.47E-01	3.32E-04	1.37E-03
5551	645536.2	4165548.9	Worker	Scenario 3	1.45E-01	3.27E-04	1.33E-03
5552	645636.2	4165548.9	Worker	Scenario 3	1.43E-01	3.22E-04	1.25E-03
5553	645936.2	4165548.9	Worker	Scenario 3	1.38E-01	3.12E-04	1.06E-03
5554	646036.2	4165548.9	Worker	Scenario 3	1.37E-01	3.09E-04	9.70E-04
5555	646136.2	4165548.9	Worker	Scenario 3	1.35E-01	3.06E-04	9.62E-04
5556	646336.2	4165548.9	Worker	Scenario 3	1.33E-01	3.01E-04	1.06E-03
5557	646436.2	4165548.9	Worker	Scenario 3	1.32E-01	2.98E-04	1.08E-03
5558	646536.2	4165548.9	Worker	Scenario 3	1.31E-01	2.95E-04	1.10E-03
5559	639236.2	4165648.9	Worker	Scenario 3	2.16E-02	4.93E-05	7.28E-04
5560	639336.2	4165648.9	Worker	Scenario 3	2.49E-02	5.73E-05	1.86E-03
5561	639436.2	4165648.9	Worker	Scenario 3	2.27E-02	5.19E-05	6.39E-04
5562	639536.2	4165648.9	Worker	Scenario 3	2.17E-02	4.93E-05	4.18E-04
5563	639636.2	4165648.9	Worker	Scenario 3	2.31E-02	5.28E-05	5.46E-04
5564	639736.2	4165648.9	Worker	Scenario 3	2.47E-02	5.65E-05	6.78E-04
5565	639836.2	4165648.9	Worker	Scenario 3	2.64E-02	6.06E-05	1.18E-03
5566	639936.2	4165648.9	Worker	Scenario 3	2.69E-02	6.20E-05	9.49E-04
5567	640036.2	4165648.9	Worker	Scenario 3	2.56E-02	5.89E-05	6.35E-04
5568	640136.2	4165648.9	Worker	Scenario 3	2.65E-02	6.11E-05	7.58E-04
5569	640236.2	4165648.9	Worker	Scenario 3	2.82E-02	6.50E-05	8.20E-04
5570	640336.2	4165648.9	Worker	Scenario 3	3.17E-02	7.34E-05	8.82E-04
5571	640436.2	4165648.9	Worker	Scenario 3	3.80E-02	8.91E-05	3.33E-03
5572	640536.2	4165648.9	Worker	Scenario 3	4.34E-02	1.03E-04	4.39E-03
5573	640636.2	4165648.9	Worker	Scenario 3	5.00E-02	1.20E-04	4.74E-03
5574	640736.2	4165648.9	Worker	Scenario 3	3.37E-02	7.84E-05	1.65E-03
5575	640836.2	4165648.9	Worker	Scenario 3	3.46E-02	8.09E-05	2.14E-03
5576	640936.2	4165648.9	Worker	Scenario 3	4.64E-02	1.10E-04	3.08E-03
5577	641036.2	4165648.9	Worker	Scenario 3	4.01E-02	9.36E-05	2.33E-03
5578	641136.2	4165648.9	Worker	Scenario 3	4.15E-02	9.68E-05	3.01E-03
5579	641236.2	4165648.9	Worker	Scenario 3	4.02E-02	9.28E-05	2.20E-03
5580	641336.2	4165648.9	Worker	Scenario 3	4.47E-02	1.03E-04	1.70E-03
5581	641436.2	4165648.9	Worker	Scenario 3	4.67E-02	1.08E-04	2.35E-03
5582	641536.2	4165648.9	Worker	Scenario 3	4.92E-02	1.14E-04	2.21E-03
5583	641636.2	4165648.9	Worker	Scenario 3	7.04E-02	1.69E-04	5.10E-03
5584	641736.2	4165648.9	Worker	Scenario 3	5.70E-02	1.35E-04	1.74E-03
5585	641836.2	4165648.9	Worker	Scenario 3	6.44E-02	1.54E-04	1.93E-03
5586	641936.2	4165648.9	Worker	Scenario 3	7.46E-02	1.79E-04	3.54E-03
5587	642036.2	4165648.9	Worker	Scenario 3	8.41E-02	2.03E-04	3.76E-03
5588	642136.2	4165648.9	Worker	Scenario 3	9.06E-02	2.19E-04	5.23E-03
5589	642236.2	4165648.9	Worker	Scenario 3	8.51E-02	2.05E-04	2.49E-03
5590	642336.2	4165648.9	Worker	Scenario 3	1.10E-01	2.65E-04	4.90E-03
5591	642436.2	4165648.9	Worker	Scenario 3	1.35E-01	3.26E-04	7.90E-03
5592	642536.2	4165648.9	Worker	Scenario 3	1.27E-01	3.11E-04	6.07E-03
5593	642636.2	4165648.9	Worker	Scenario 3	1.50E-01	3.65E-04	7.13E-03
5594	642836.2	4165648.9	Worker	Scenario 3	1.62E-01	3.94E-04	6.40E-03
5595	642936.2	4165648.9	Worker	Scenario 3	1.62E-01	3.93E-04	5.41E-03
5596	643036.2	4165648.9	Worker	Scenario 3	1.65E-01	3.97E-04	5.78E-03
5597	643136.2	4165648.9	Worker	Scenario 3	1.67E-01	4.00E-04	4.64E-03
5598	643236.2	4165648.9	Worker	Scenario 3	1.69E-01	4.01E-04	4.06E-03
5599	643336.2	4165648.9	Worker	Scenario 3	1.69E-01	3.98E-04	4.00E-03
5600	643436.2	4165648.9	Worker	Scenario 3	1.70E-01	3.97E-04	3.45E-03
5601	643536.2	4165648.9	Worker	Scenario 3	1.70E-01	3.96E-04	3.10E-03
5602	643636.2	4165648.9	Worker	Scenario 3	1.70E-01	3.95E-04	3.50E-03
5603	643736.2	4165648.9	Worker	Scenario 3	1.70E-01	3.94E-04	3.82E-03
5604	643836.2	4165648.9	Worker	Scenario 3	1.80E-01	4.13E-04	2.68E-03
5605	643936.2	4165648.9	Worker	Scenario 3	1.84E-01	4.20E-04	2.23E-03
5606	644036.2	4165648.9	Worker	Scenario 3	1.83E-01	4.17E-04	2.22E-03
5607	644136.2	4165648.9	Worker	Scenario 3	1.84E-01	4.18E-04	2.12E-03
5608	644236.2	4165648.9	Worker	Scenario 3	1.85E-01	4.19E-04	1.92E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5609	644336.2	4165648.9	Worker	Scenario 3	1.84E-01	4.17E-04	2.00E-03
5610	644436.2	4165648.9	Worker	Scenario 3	1.84E-01	4.15E-04	1.99E-03
5611	644536.2	4165648.9	Worker	Scenario 3	1.80E-01	4.07E-04	2.03E-03
5612	644636.2	4165648.9	Worker	Scenario 3	1.71E-01	3.90E-04	1.98E-03
5613	644736.2	4165648.9	Worker	Scenario 3	1.72E-01	3.88E-04	1.68E-03
5614	644836.2	4165648.9	Worker	Scenario 3	1.68E-01	3.80E-04	1.62E-03
5615	644936.2	4165648.9	Worker	Scenario 3	1.67E-01	3.77E-04	1.63E-03
5616	645036.2	4165648.9	Worker	Scenario 3	1.71E-01	3.86E-04	1.65E-03
5617	645136.2	4165648.9	Worker	Scenario 3	1.61E-01	3.65E-04	1.59E-03
5618	645236.2	4165648.9	Worker	Scenario 3	1.58E-01	3.59E-04	1.59E-03
5619	645336.2	4165648.9	Worker	Scenario 3	1.62E-01	3.65E-04	1.47E-03
5620	645436.2	4165648.9	Worker	Scenario 3	1.56E-01	3.52E-04	1.32E-03
5621	645536.2	4165648.9	Worker	Scenario 3	1.57E-01	3.56E-04	1.27E-03
5622	645836.2	4165648.9	Worker	Scenario 3	1.48E-01	3.36E-04	1.03E-03
5623	645936.2	4165648.9	Worker	Scenario 3	1.47E-01	3.33E-04	1.10E-03
5624	646036.2	4165648.9	Worker	Scenario 3	1.45E-01	3.29E-04	1.15E-03
5625	646136.2	4165648.9	Worker	Scenario 3	1.44E-01	3.26E-04	1.18E-03
5626	646336.2	4165648.9	Worker	Scenario 3	1.41E-01	3.19E-04	1.21E-03
5627	646436.2	4165648.9	Worker	Scenario 3	1.40E-01	3.16E-04	1.21E-03
5628	646536.2	4165648.9	Worker	Scenario 3	1.39E-01	3.13E-04	1.21E-03
5629	646636.2	4165648.9	Worker	Scenario 3	1.37E-01	3.10E-04	1.25E-03
5630	639036.2	4165748.9	Worker	Scenario 3	1.94E-02	4.43E-05	4.63E-04
5631	639136.2	4165748.9	Worker	Scenario 3	2.01E-02	4.57E-05	5.32E-04
5632	639236.2	4165748.9	Worker	Scenario 3	2.20E-02	5.03E-05	6.38E-04
5633	639336.2	4165748.9	Worker	Scenario 3	2.72E-02	6.28E-05	2.08E-03
5634	639436.2	4165748.9	Worker	Scenario 3	2.32E-02	5.30E-05	6.59E-04
5635	639536.2	4165748.9	Worker	Scenario 3	2.24E-02	5.09E-05	3.19E-04
5636	639636.2	4165748.9	Worker	Scenario 3	2.33E-02	5.30E-05	4.40E-04
5637	639736.2	4165748.9	Worker	Scenario 3	2.71E-02	6.26E-05	1.22E-03
5638	639836.2	4165748.9	Worker	Scenario 3	3.02E-02	6.98E-05	1.85E-03
5639	639936.2	4165748.9	Worker	Scenario 3	2.83E-02	6.50E-05	1.20E-03
5640	640036.2	4165748.9	Worker	Scenario 3	2.86E-02	6.60E-05	1.00E-03
5641	640136.2	4165748.9	Worker	Scenario 3	2.98E-02	6.90E-05	1.04E-03
5642	640236.2	4165748.9	Worker	Scenario 3	2.91E-02	6.71E-05	8.07E-04
5643	640336.2	4165748.9	Worker	Scenario 3	3.11E-02	7.18E-05	9.47E-04
5644	640436.2	4165748.9	Worker	Scenario 3	3.29E-02	7.63E-05	1.02E-03
5645	640536.2	4165748.9	Worker	Scenario 3	4.36E-02	1.03E-04	4.10E-03
5646	640636.2	4165748.9	Worker	Scenario 3	6.07E-02	1.46E-04	6.11E-03
5647	640736.2	4165748.9	Worker	Scenario 3	4.13E-02	9.71E-05	2.04E-03
5648	640836.2	4165748.9	Worker	Scenario 3	3.75E-02	8.79E-05	2.19E-03
5649	640936.2	4165748.9	Worker	Scenario 3	3.97E-02	9.33E-05	1.84E-03
5650	641036.2	4165748.9	Worker	Scenario 3	5.16E-02	1.22E-04	3.81E-03
5651	641136.2	4165748.9	Worker	Scenario 3	4.71E-02	1.10E-04	3.24E-03
5652	641236.2	4165748.9	Worker	Scenario 3	4.46E-02	1.04E-04	2.58E-03
5653	641336.2	4165748.9	Worker	Scenario 3	4.88E-02	1.13E-04	1.75E-03
5654	641436.2	4165748.9	Worker	Scenario 3	5.35E-02	1.24E-04	2.43E-03
5655	641536.2	4165748.9	Worker	Scenario 3	5.44E-02	1.27E-04	2.28E-03
5656	641636.2	4165748.9	Worker	Scenario 3	8.24E-02	1.99E-04	5.97E-03
5657	641736.2	4165748.9	Worker	Scenario 3	6.47E-02	1.55E-04	2.13E-03
5658	641836.2	4165748.9	Worker	Scenario 3	7.45E-02	1.79E-04	2.86E-03
5659	641936.2	4165748.9	Worker	Scenario 3	9.61E-02	2.33E-04	5.36E-03
5660	642036.2	4165748.9	Worker	Scenario 3	1.05E-01	2.54E-04	5.85E-03
5661	642136.2	4165748.9	Worker	Scenario 3	9.62E-02	2.33E-04	4.87E-03
5662	642236.2	4165748.9	Worker	Scenario 3	1.12E-01	2.72E-04	5.01E-03
5663	642336.2	4165748.9	Worker	Scenario 3	1.38E-01	3.35E-04	8.22E-03
5664	642436.2	4165748.9	Worker	Scenario 3	1.60E-01	3.89E-04	9.03E-03
5665	642536.2	4165748.9	Worker	Scenario 3	1.74E-01	4.23E-04	6.53E-03
5666	642736.2	4165748.9	Worker	Scenario 3	1.81E-01	4.42E-04	6.38E-03
5667	642836.2	4165748.9	Worker	Scenario 3	1.81E-01	4.39E-04	5.59E-03
5668	642936.2	4165748.9	Worker	Scenario 3	1.80E-01	4.36E-04	5.95E-03
5669	643036.2	4165748.9	Worker	Scenario 3	1.81E-01	4.35E-04	5.04E-03
5670	643136.2	4165748.9	Worker	Scenario 3	1.83E-01	4.37E-04	4.08E-03
5671	643236.2	4165748.9	Worker	Scenario 3	1.85E-01	4.40E-04	3.45E-03
5672	643336.2	4165748.9	Worker	Scenario 3	1.85E-01	4.37E-04	2.97E-03
5673	643436.2	4165748.9	Worker	Scenario 3	1.85E-01	4.35E-04	2.72E-03
5674	643536.2	4165748.9	Worker	Scenario 3	1.88E-01	4.37E-04	3.01E-03
5675	643636.2	4165748.9	Worker	Scenario 3	2.00E-01	4.59E-04	2.84E-03
5676	643736.2	4165748.9	Worker	Scenario 3	2.00E-01	4.58E-04	2.64E-03
5677	643836.2	4165748.9	Worker	Scenario 3	2.00E-01	4.56E-04	2.41E-03
5678	643936.2	4165748.9	Worker	Scenario 3	1.99E-01	4.55E-04	2.39E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5679	644036.2	4165748.9	Worker	Scenario 3	1.99E-01	4.53E-04	2.13E-03
5680	644136.2	4165748.9	Worker	Scenario 3	1.98E-01	4.50E-04	2.11E-03
5681	644236.2	4165748.9	Worker	Scenario 3	1.97E-01	4.47E-04	2.09E-03
5682	644336.2	4165748.9	Worker	Scenario 3	1.97E-01	4.45E-04	2.08E-03
5683	644436.2	4165748.9	Worker	Scenario 3	1.97E-01	4.45E-04	2.04E-03
5684	644536.2	4165748.9	Worker	Scenario 3	1.91E-01	4.33E-04	2.04E-03
5685	644636.2	4165748.9	Worker	Scenario 3	1.85E-01	4.20E-04	1.98E-03
5686	644736.2	4165748.9	Worker	Scenario 3	1.84E-01	4.17E-04	1.76E-03
5687	644836.2	4165748.9	Worker	Scenario 3	1.80E-01	4.07E-04	1.62E-03
5688	644936.2	4165748.9	Worker	Scenario 3	1.76E-01	3.99E-04	1.55E-03
5689	645036.2	4165748.9	Worker	Scenario 3	1.83E-01	4.14E-04	1.68E-03
5690	645136.2	4165748.9	Worker	Scenario 3	1.75E-01	3.97E-04	1.62E-03
5691	645236.2	4165748.9	Worker	Scenario 3	1.70E-01	3.85E-04	1.49E-03
5692	645336.2	4165748.9	Worker	Scenario 3	1.66E-01	3.78E-04	1.37E-03
5693	645736.2	4165748.9	Worker	Scenario 3	1.60E-01	3.63E-04	1.25E-03
5694	645836.2	4165748.9	Worker	Scenario 3	1.58E-01	3.59E-04	1.28E-03
5695	645936.2	4165748.9	Worker	Scenario 3	1.57E-01	3.55E-04	1.30E-03
5696	646036.2	4165748.9	Worker	Scenario 3	1.55E-01	3.51E-04	1.33E-03
5697	646136.2	4165748.9	Worker	Scenario 3	1.53E-01	3.47E-04	1.33E-03
5698	646336.2	4165748.9	Worker	Scenario 3	1.50E-01	3.40E-04	1.38E-03
5699	646436.2	4165748.9	Worker	Scenario 3	1.49E-01	3.36E-04	1.46E-03
5700	646536.2	4165748.9	Worker	Scenario 3	1.47E-01	3.32E-04	1.59E-03
5701	646636.2	4165748.9	Worker	Scenario 3	1.46E-01	3.29E-04	1.71E-03
5702	638936.2	4165848.9	Worker	Scenario 3	1.95E-02	4.46E-05	4.42E-04
5703	639036.2	4165848.9	Worker	Scenario 3	2.01E-02	4.59E-05	3.96E-04
5704	639136.2	4165848.9	Worker	Scenario 3	2.11E-02	4.83E-05	5.06E-04
5705	639236.2	4165848.9	Worker	Scenario 3	2.22E-02	5.09E-05	6.47E-04
5706	639336.2	4165848.9	Worker	Scenario 3	2.64E-02	6.08E-05	1.47E-03
5707	639436.2	4165848.9	Worker	Scenario 3	2.71E-02	6.25E-05	1.50E-03
5708	639536.2	4165848.9	Worker	Scenario 3	2.44E-02	5.56E-05	5.83E-04
5709	639636.2	4165848.9	Worker	Scenario 3	2.44E-02	5.55E-05	3.33E-04
5710	639736.2	4165848.9	Worker	Scenario 3	2.54E-02	5.80E-05	4.88E-04
5711	639836.2	4165848.9	Worker	Scenario 3	2.80E-02	6.44E-05	8.72E-04
5712	639936.2	4165848.9	Worker	Scenario 3	3.15E-02	7.29E-05	1.64E-03
5713	640036.2	4165848.9	Worker	Scenario 3	3.49E-02	8.09E-05	2.89E-03
5714	640136.2	4165848.9	Worker	Scenario 3	2.98E-02	6.88E-05	9.94E-04
5715	640236.2	4165848.9	Worker	Scenario 3	3.03E-02	6.99E-05	9.22E-04
5716	640336.2	4165848.9	Worker	Scenario 3	3.21E-02	7.42E-05	8.40E-04
5717	640436.2	4165848.9	Worker	Scenario 3	3.33E-02	7.71E-05	8.51E-04
5718	640536.2	4165848.9	Worker	Scenario 3	3.84E-02	8.95E-05	1.64E-03
5719	640636.2	4165848.9	Worker	Scenario 3	5.25E-02	1.25E-04	5.27E-03
5720	640736.2	4165848.9	Worker	Scenario 3	6.98E-02	1.69E-04	6.65E-03
5721	640836.2	4165848.9	Worker	Scenario 3	5.44E-02	1.30E-04	5.15E-03
5722	640936.2	4165848.9	Worker	Scenario 3	4.81E-02	1.14E-04	3.51E-03
5723	641036.2	4165848.9	Worker	Scenario 3	4.71E-02	1.11E-04	2.70E-03
5724	641136.2	4165848.9	Worker	Scenario 3	6.93E-02	1.65E-04	5.78E-03
5725	641236.2	4165848.9	Worker	Scenario 3	5.66E-02	1.33E-04	3.54E-03
5726	641336.2	4165848.9	Worker	Scenario 3	5.54E-02	1.29E-04	2.28E-03
5727	641436.2	4165848.9	Worker	Scenario 3	6.55E-02	1.53E-04	3.17E-03
5728	641536.2	4165848.9	Worker	Scenario 3	6.37E-02	1.50E-04	3.17E-03
5729	641636.2	4165848.9	Worker	Scenario 3	9.44E-02	2.29E-04	6.66E-03
5730	641736.2	4165848.9	Worker	Scenario 3	7.81E-02	1.89E-04	3.19E-03
5731	641836.2	4165848.9	Worker	Scenario 3	8.93E-02	2.17E-04	4.40E-03
5732	641936.2	4165848.9	Worker	Scenario 3	1.06E-01	2.59E-04	4.86E-03
5733	642036.2	4165848.9	Worker	Scenario 3	1.28E-01	3.13E-04	8.14E-03
5734	642136.2	4165848.9	Worker	Scenario 3	1.47E-01	3.56E-04	8.97E-03
5735	642236.2	4165848.9	Worker	Scenario 3	1.69E-01	4.09E-04	9.09E-03
5736	642336.2	4165848.9	Worker	Scenario 3	1.82E-01	4.44E-04	9.17E-03
5737	642636.2	4165848.9	Worker	Scenario 3	2.03E-01	4.97E-04	6.22E-03
5738	642736.2	4165848.9	Worker	Scenario 3	2.04E-01	4.97E-04	5.46E-03
5739	642836.2	4165848.9	Worker	Scenario 3	2.02E-01	4.90E-04	5.61E-03
5740	642936.2	4165848.9	Worker	Scenario 3	2.01E-01	4.85E-04	4.72E-03
5741	643036.2	4165848.9	Worker	Scenario 3	2.01E-01	4.82E-04	3.62E-03
5742	643136.2	4165848.9	Worker	Scenario 3	2.01E-01	4.78E-04	3.76E-03
5743	643236.2	4165848.9	Worker	Scenario 3	2.03E-01	4.79E-04	3.12E-03
5744	643336.2	4165848.9	Worker	Scenario 3	2.04E-01	4.79E-04	3.12E-03
5745	643436.2	4165848.9	Worker	Scenario 3	2.13E-01	4.96E-04	3.29E-03
5746	643536.2	4165848.9	Worker	Scenario 3	2.21E-01	5.09E-04	3.14E-03
5747	643636.2	4165848.9	Worker	Scenario 3	2.09E-01	4.84E-04	2.90E-03
5748	643736.2	4165848.9	Worker	Scenario 3	2.05E-01	4.75E-04	2.85E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5749	643836.2	4165848.9	Worker	Scenario 3	2.06E-01	4.74E-04	2.66E-03
5750	643936.2	4165848.9	Worker	Scenario 3	2.06E-01	4.74E-04	2.47E-03
5751	644036.2	4165848.9	Worker	Scenario 3	2.07E-01	4.75E-04	2.50E-03
5752	644136.2	4165848.9	Worker	Scenario 3	2.08E-01	4.75E-04	2.49E-03
5753	644236.2	4165848.9	Worker	Scenario 3	2.08E-01	4.74E-04	2.38E-03
5754	644336.2	4165848.9	Worker	Scenario 3	2.07E-01	4.72E-04	2.26E-03
5755	644436.2	4165848.9	Worker	Scenario 3	2.06E-01	4.68E-04	2.17E-03
5756	644536.2	4165848.9	Worker	Scenario 3	2.03E-01	4.61E-04	2.13E-03
5757	644636.2	4165848.9	Worker	Scenario 3	2.00E-01	4.54E-04	1.98E-03
5758	644736.2	4165848.9	Worker	Scenario 3	1.97E-01	4.46E-04	1.71E-03
5759	644836.2	4165848.9	Worker	Scenario 3	1.93E-01	4.38E-04	1.67E-03
5760	644936.2	4165848.9	Worker	Scenario 3	1.99E-01	4.49E-04	1.69E-03
5761	645036.2	4165848.9	Worker	Scenario 3	1.91E-01	4.33E-04	1.57E-03
5762	645436.2	4165848.9	Worker	Scenario 3	1.77E-01	4.03E-04	1.36E-03
5763	645536.2	4165848.9	Worker	Scenario 3	1.75E-01	3.98E-04	1.41E-03
5764	645636.2	4165848.9	Worker	Scenario 3	1.73E-01	3.93E-04	1.43E-03
5765	645736.2	4165848.9	Worker	Scenario 3	1.71E-01	3.89E-04	1.46E-03
5766	645836.2	4165848.9	Worker	Scenario 3	1.69E-01	3.84E-04	1.46E-03
5767	645936.2	4165848.9	Worker	Scenario 3	1.68E-01	3.80E-04	1.44E-03
5768	646036.2	4165848.9	Worker	Scenario 3	1.66E-01	3.75E-04	1.51E-03
5769	646136.2	4165848.9	Worker	Scenario 3	1.64E-01	3.71E-04	1.61E-03
5770	646336.2	4165848.9	Worker	Scenario 3	1.60E-01	3.62E-04	1.91E-03
5771	646436.2	4165848.9	Worker	Scenario 3	1.58E-01	3.57E-04	2.04E-03
5772	646536.2	4165848.9	Worker	Scenario 3	1.56E-01	3.53E-04	2.15E-03
5773	646636.2	4165848.9	Worker	Scenario 3	1.54E-01	3.49E-04	2.25E-03
5774	646736.2	4165848.9	Worker	Scenario 3	1.53E-01	3.44E-04	2.33E-03
5775	638736.2	4165948.9	Worker	Scenario 3	1.95E-02	4.44E-05	8.55E-04
5776	638836.2	4165948.9	Worker	Scenario 3	2.24E-02	5.15E-05	1.11E-03
5777	638936.2	4165948.9	Worker	Scenario 3	2.11E-02	4.83E-05	7.99E-04
5778	639036.2	4165948.9	Worker	Scenario 3	2.15E-02	4.93E-05	6.49E-04
5779	639136.2	4165948.9	Worker	Scenario 3	2.26E-02	5.18E-05	6.00E-04
5780	639236.2	4165948.9	Worker	Scenario 3	2.33E-02	5.44E-05	8.73E-03
5781	639336.2	4165948.9	Worker	Scenario 3	2.72E-02	6.32E-05	1.86E-03
5782	639436.2	4165948.9	Worker	Scenario 3	2.78E-02	6.44E-05	1.64E-03
5783	639536.2	4165948.9	Worker	Scenario 3	2.44E-02	5.55E-05	6.68E-04
5784	639636.2	4165948.9	Worker	Scenario 3	2.57E-02	5.85E-05	6.80E-04
5785	639736.2	4165948.9	Worker	Scenario 3	2.70E-02	6.16E-05	5.37E-04
5786	639836.2	4165948.9	Worker	Scenario 3	2.82E-02	6.45E-05	6.82E-04
5787	639936.2	4165948.9	Worker	Scenario 3	2.94E-02	6.74E-05	6.65E-04
5788	640036.2	4165948.9	Worker	Scenario 3	3.82E-02	8.90E-05	2.74E-03
5789	640136.2	4165948.9	Worker	Scenario 3	3.26E-02	7.51E-05	1.05E-03
5790	640236.2	4165948.9	Worker	Scenario 3	3.38E-02	7.83E-05	1.18E-03
5791	640336.2	4165948.9	Worker	Scenario 3	3.60E-02	8.38E-05	1.45E-03
5792	640436.2	4165948.9	Worker	Scenario 3	3.86E-02	8.99E-05	1.33E-03
5793	640536.2	4165948.9	Worker	Scenario 3	4.43E-02	1.04E-04	2.02E-03
5794	640636.2	4165948.9	Worker	Scenario 3	5.20E-02	1.23E-04	4.87E-03
5795	640736.2	4165948.9	Worker	Scenario 3	6.14E-02	1.47E-04	5.80E-03
5796	640836.2	4165948.9	Worker	Scenario 3	7.99E-02	1.94E-04	8.38E-03
5797	640936.2	4165948.9	Worker	Scenario 3	8.35E-02	2.02E-04	8.75E-03
5798	641036.2	4165948.9	Worker	Scenario 3	8.04E-02	1.95E-04	7.23E-03
5799	641136.2	4165948.9	Worker	Scenario 3	6.00E-02	1.42E-04	3.91E-03
5800	641236.2	4165948.9	Worker	Scenario 3	6.67E-02	1.58E-04	5.27E-03
5801	641336.2	4165948.9	Worker	Scenario 3	6.81E-02	1.60E-04	3.62E-03
5802	641436.2	4165948.9	Worker	Scenario 3	8.39E-02	1.97E-04	4.75E-03
5803	641536.2	4165948.9	Worker	Scenario 3	8.75E-02	2.09E-04	6.80E-03
5804	641636.2	4165948.9	Worker	Scenario 3	1.06E-01	2.58E-04	7.32E-03
5805	641736.2	4165948.9	Worker	Scenario 3	1.17E-01	2.87E-04	8.32E-03
5806	641836.2	4165948.9	Worker	Scenario 3	1.38E-01	3.38E-04	1.03E-02
5807	642136.2	4165948.9	Worker	Scenario 3	1.96E-01	4.78E-04	8.74E-03
5808	642236.2	4165948.9	Worker	Scenario 3	2.11E-01	5.17E-04	8.35E-03
5809	642436.2	4165948.9	Worker	Scenario 3	2.18E-01	5.37E-04	7.92E-03
5810	642536.2	4165948.9	Worker	Scenario 3	2.24E-01	5.50E-04	7.19E-03
5811	642636.2	4165948.9	Worker	Scenario 3	2.28E-01	5.59E-04	5.88E-03
5812	642736.2	4165948.9	Worker	Scenario 3	2.29E-01	5.59E-04	4.61E-03
5813	642836.2	4165948.9	Worker	Scenario 3	2.26E-01	5.49E-04	4.35E-03
5814	642936.2	4165948.9	Worker	Scenario 3	2.24E-01	5.39E-04	4.04E-03
5815	643036.2	4165948.9	Worker	Scenario 3	2.23E-01	5.32E-04	4.10E-03
5816	643136.2	4165948.9	Worker	Scenario 3	2.23E-01	5.28E-04	3.27E-03
5817	643236.2	4165948.9	Worker	Scenario 3	2.24E-01	5.27E-04	3.56E-03
5818	643336.2	4165948.9	Worker	Scenario 3	2.34E-01	5.44E-04	3.66E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5819	643436.2	4165948.9	Worker	Scenario 3	2.38E-01	5.52E-04	3.42E-03
5820	643536.2	4165948.9	Worker	Scenario 3	2.27E-01	5.27E-04	3.13E-03
5821	643636.2	4165948.9	Worker	Scenario 3	2.27E-01	5.26E-04	3.07E-03
5822	643736.2	4165948.9	Worker	Scenario 3	2.27E-01	5.25E-04	2.68E-03
5823	643836.2	4165948.9	Worker	Scenario 3	2.28E-01	5.24E-04	2.77E-03
5824	643936.2	4165948.9	Worker	Scenario 3	2.28E-01	5.24E-04	2.76E-03
5825	644036.2	4165948.9	Worker	Scenario 3	2.29E-01	5.25E-04	2.64E-03
5826	644136.2	4165948.9	Worker	Scenario 3	2.29E-01	5.23E-04	2.52E-03
5827	644236.2	4165948.9	Worker	Scenario 3	2.29E-01	5.21E-04	2.40E-03
5828	644336.2	4165948.9	Worker	Scenario 3	2.27E-01	5.16E-04	2.34E-03
5829	644436.2	4165948.9	Worker	Scenario 3	2.22E-01	5.06E-04	2.16E-03
5830	644536.2	4165948.9	Worker	Scenario 3	2.19E-01	4.98E-04	2.11E-03
5831	644636.2	4165948.9	Worker	Scenario 3	2.16E-01	4.92E-04	2.03E-03
5832	644736.2	4165948.9	Worker	Scenario 3	2.13E-01	4.84E-04	1.87E-03
5833	645236.2	4165948.9	Worker	Scenario 3	1.96E-01	4.46E-04	1.55E-03
5834	645336.2	4165948.9	Worker	Scenario 3	1.94E-01	4.40E-04	1.58E-03
5835	645436.2	4165948.9	Worker	Scenario 3	1.91E-01	4.34E-04	1.61E-03
5836	645536.2	4165948.9	Worker	Scenario 3	1.89E-01	4.28E-04	1.61E-03
5837	645636.2	4165948.9	Worker	Scenario 3	1.86E-01	4.22E-04	1.60E-03
5838	645736.2	4165948.9	Worker	Scenario 3	1.84E-01	4.17E-04	1.67E-03
5839	645836.2	4165948.9	Worker	Scenario 3	1.82E-01	4.12E-04	1.80E-03
5840	645936.2	4165948.9	Worker	Scenario 3	1.80E-01	4.07E-04	1.96E-03
5841	646036.2	4165948.9	Worker	Scenario 3	1.77E-01	4.01E-04	2.11E-03
5842	646136.2	4165948.9	Worker	Scenario 3	1.75E-01	3.96E-04	2.26E-03
5843	646336.2	4165948.9	Worker	Scenario 3	1.71E-01	3.85E-04	2.48E-03
5844	646436.2	4165948.9	Worker	Scenario 3	1.68E-01	3.80E-04	2.56E-03
5845	646536.2	4165948.9	Worker	Scenario 3	1.66E-01	3.75E-04	2.62E-03
5846	646636.2	4165948.9	Worker	Scenario 3	1.64E-01	3.69E-04	2.65E-03
5847	646736.2	4165948.9	Worker	Scenario 3	1.62E-01	3.64E-04	2.66E-03
5848	638536.2	4166048.9	Worker	Scenario 3	2.37E-02	5.48E-05	2.73E-03
5849	638636.2	4166048.9	Worker	Scenario 3	2.08E-02	4.76E-05	1.94E-03
5850	638736.2	4166048.9	Worker	Scenario 3	2.02E-02	4.61E-05	1.29E-03
5851	638836.2	4166048.9	Worker	Scenario 3	2.28E-02	5.22E-05	1.27E-03
5852	638936.2	4166048.9	Worker	Scenario 3	2.36E-02	5.42E-05	1.18E-03
5853	639036.2	4166048.9	Worker	Scenario 3	2.29E-02	5.23E-05	9.35E-04
5854	639136.2	4166048.9	Worker	Scenario 3	2.29E-02	5.24E-05	8.23E-04
5855	639236.2	4166048.9	Worker	Scenario 3	2.42E-02	5.55E-05	7.33E-04
5856	639336.2	4166048.9	Worker	Scenario 3	2.86E-02	6.67E-05	1.98E-03
5857	639436.2	4166048.9	Worker	Scenario 3	2.86E-02	6.67E-05	1.71E-03
5858	639536.2	4166048.9	Worker	Scenario 3	2.55E-02	5.83E-05	7.14E-04
5859	639636.2	4166048.9	Worker	Scenario 3	2.71E-02	6.19E-05	7.48E-04
5860	639736.2	4166048.9	Worker	Scenario 3	2.79E-02	6.37E-05	8.22E-04
5861	639836.2	4166048.9	Worker	Scenario 3	2.99E-02	6.86E-05	8.07E-04
5862	639936.2	4166048.9	Worker	Scenario 3	3.10E-02	7.10E-05	7.39E-04
5863	640036.2	4166048.9	Worker	Scenario 3	3.30E-02	7.61E-05	1.04E-03
5864	640136.2	4166048.9	Worker	Scenario 3	4.61E-02	1.08E-04	3.70E-03
5865	640236.2	4166048.9	Worker	Scenario 3	3.99E-02	9.26E-05	2.69E-03
5866	640336.2	4166048.9	Worker	Scenario 3	4.01E-02	9.36E-05	1.62E-03
5867	640436.2	4166048.9	Worker	Scenario 3	4.22E-02	9.89E-05	1.78E-03
5868	640536.2	4166048.9	Worker	Scenario 3	4.37E-02	1.02E-04	1.65E-03
5869	640636.2	4166048.9	Worker	Scenario 3	5.10E-02	1.20E-04	3.29E-03
5870	640736.2	4166048.9	Worker	Scenario 3	5.96E-02	1.42E-04	5.50E-03
5871	640836.2	4166048.9	Worker	Scenario 3	7.29E-02	1.77E-04	6.72E-03
5872	640936.2	4166048.9	Worker	Scenario 3	8.16E-02	1.98E-04	7.91E-03
5873	641036.2	4166048.9	Worker	Scenario 3	1.02E-01	2.50E-04	1.02E-02
5874	641136.2	4166048.9	Worker	Scenario 3	8.41E-02	2.03E-04	7.17E-03
5875	641236.2	4166048.9	Worker	Scenario 3	9.56E-02	2.29E-04	8.56E-03
5876	641336.2	4166048.9	Worker	Scenario 3	1.08E-01	2.56E-04	9.18E-03
5877	641436.2	4166048.9	Worker	Scenario 3	1.17E-01	2.75E-04	8.08E-03
5878	641636.2	4166048.9	Worker	Scenario 3	1.43E-01	3.51E-04	1.41E-02
5879	641736.2	4166048.9	Worker	Scenario 3	1.54E-01	3.81E-04	1.26E-02
5880	641836.2	4166048.9	Worker	Scenario 3	1.78E-01	4.39E-04	1.36E-02
5881	641936.2	4166048.9	Worker	Scenario 3	1.98E-01	4.87E-04	1.29E-02
5882	642036.2	4166048.9	Worker	Scenario 3	2.14E-01	5.25E-04	1.12E-02
5883	642136.2	4166048.9	Worker	Scenario 3	2.29E-01	5.63E-04	9.50E-03
5884	642336.2	4166048.9	Worker	Scenario 3	2.51E-01	6.20E-04	6.94E-03
5885	642436.2	4166048.9	Worker	Scenario 3	2.53E-01	6.26E-04	7.21E-03
5886	642536.2	4166048.9	Worker	Scenario 3	2.57E-01	6.35E-04	5.62E-03
5887	642636.2	4166048.9	Worker	Scenario 3	2.58E-01	6.32E-04	5.09E-03
5888	642736.2	4166048.9	Worker	Scenario 3	2.56E-01	6.22E-04	4.85E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5889	642836.2	4166048.9	Worker	Scenario 3	2.52E-01	6.09E-04	4.54E-03
5890	642936.2	4166048.9	Worker	Scenario 3	2.49E-01	5.97E-04	4.47E-03
5891	643036.2	4166048.9	Worker	Scenario 3	2.48E-01	5.89E-04	3.50E-03
5892	643136.2	4166048.9	Worker	Scenario 3	2.47E-01	5.85E-04	4.05E-03
5893	643236.2	4166048.9	Worker	Scenario 3	2.50E-01	5.87E-04	4.09E-03
5894	643336.2	4166048.9	Worker	Scenario 3	2.51E-01	5.88E-04	3.65E-03
5895	643436.2	4166048.9	Worker	Scenario 3	2.52E-01	5.86E-04	3.49E-03
5896	643536.2	4166048.9	Worker	Scenario 3	2.53E-01	5.86E-04	3.18E-03
5897	643636.2	4166048.9	Worker	Scenario 3	2.53E-01	5.86E-04	3.08E-03
5898	643736.2	4166048.9	Worker	Scenario 3	2.54E-01	5.85E-04	3.07E-03
5899	643836.2	4166048.9	Worker	Scenario 3	2.54E-01	5.83E-04	2.95E-03
5900	643936.2	4166048.9	Worker	Scenario 3	2.55E-01	5.83E-04	2.82E-03
5901	644036.2	4166048.9	Worker	Scenario 3	2.55E-01	5.82E-04	2.67E-03
5902	644136.2	4166048.9	Worker	Scenario 3	2.54E-01	5.79E-04	2.60E-03
5903	644236.2	4166048.9	Worker	Scenario 3	2.52E-01	5.73E-04	2.37E-03
5904	644336.2	4166048.9	Worker	Scenario 3	2.49E-01	5.66E-04	2.34E-03
5905	644936.2	4166048.9	Worker	Scenario 3	2.23E-01	5.07E-04	1.71E-03
5906	645036.2	4166048.9	Worker	Scenario 3	2.19E-01	4.99E-04	1.76E-03
5907	645136.2	4166048.9	Worker	Scenario 3	2.16E-01	4.91E-04	1.78E-03
5908	645236.2	4166048.9	Worker	Scenario 3	2.13E-01	4.83E-04	1.79E-03
5909	645336.2	4166048.9	Worker	Scenario 3	2.10E-01	4.76E-04	1.76E-03
5910	645436.2	4166048.9	Worker	Scenario 3	2.06E-01	4.68E-04	1.86E-03
5911	645536.2	4166048.9	Worker	Scenario 3	2.03E-01	4.61E-04	2.02E-03
5912	645636.2	4166048.9	Worker	Scenario 3	2.01E-01	4.55E-04	2.20E-03
5913	645736.2	4166048.9	Worker	Scenario 3	1.98E-01	4.49E-04	2.37E-03
5914	645836.2	4166048.9	Worker	Scenario 3	1.95E-01	4.42E-04	2.51E-03
5915	645936.2	4166048.9	Worker	Scenario 3	1.93E-01	4.36E-04	2.63E-03
5916	646036.2	4166048.9	Worker	Scenario 3	1.90E-01	4.30E-04	2.73E-03
5917	646136.2	4166048.9	Worker	Scenario 3	1.87E-01	4.23E-04	2.81E-03
5918	646336.2	4166048.9	Worker	Scenario 3	1.82E-01	4.11E-04	2.88E-03
5919	646436.2	4166048.9	Worker	Scenario 3	1.79E-01	4.04E-04	2.88E-03
5920	646536.2	4166048.9	Worker	Scenario 3	1.77E-01	3.98E-04	2.86E-03
5921	646636.2	4166048.9	Worker	Scenario 3	1.74E-01	3.92E-04	2.80E-03
5922	646736.2	4166048.9	Worker	Scenario 3	1.71E-01	3.85E-04	2.73E-03
5923	646836.2	4166048.9	Worker	Scenario 3	1.69E-01	3.79E-04	2.65E-03
5924	638436.2	4166148.9	Worker	Scenario 3	2.21E-02	5.18E-05	6.02E-03
5925	638536.2	4166148.9	Worker	Scenario 3	2.33E-02	5.44E-05	5.27E-03
5926	638636.2	4166148.9	Worker	Scenario 3	2.13E-02	4.92E-05	4.32E-03
5927	638736.2	4166148.9	Worker	Scenario 3	2.12E-02	4.86E-05	3.31E-03
5928	638836.2	4166148.9	Worker	Scenario 3	2.29E-02	5.24E-05	2.36E-03
5929	638936.2	4166148.9	Worker	Scenario 3	2.62E-02	6.04E-05	1.97E-03
5930	639036.2	4166148.9	Worker	Scenario 3	2.54E-02	5.84E-05	1.52E-03
5931	639136.2	4166148.9	Worker	Scenario 3	2.36E-02	5.37E-05	1.00E-03
5932	639236.2	4166148.9	Worker	Scenario 3	2.46E-02	5.63E-05	9.52E-04
5933	639336.2	4166148.9	Worker	Scenario 3	2.80E-02	6.49E-05	1.35E-03
5934	639436.2	4166148.9	Worker	Scenario 3	3.28E-02	7.70E-05	2.67E-03
5935	639536.2	4166148.9	Worker	Scenario 3	2.84E-02	6.56E-05	8.65E-04
5936	639636.2	4166148.9	Worker	Scenario 3	3.10E-02	7.21E-05	1.54E-03
5937	639736.2	4166148.9	Worker	Scenario 3	3.11E-02	7.18E-05	1.06E-03
5938	639836.2	4166148.9	Worker	Scenario 3	3.35E-02	7.72E-05	1.27E-03
5939	639936.2	4166148.9	Worker	Scenario 3	3.72E-02	8.63E-05	2.54E-03
5940	640036.2	4166148.9	Worker	Scenario 3	3.84E-02	8.95E-05	2.25E-03
5941	640136.2	4166148.9	Worker	Scenario 3	4.84E-02	1.15E-04	4.56E-03
5942	640236.2	4166148.9	Worker	Scenario 3	4.72E-02	1.11E-04	3.37E-03
5943	640336.2	4166148.9	Worker	Scenario 3	4.21E-02	9.78E-05	2.13E-03
5944	640436.2	4166148.9	Worker	Scenario 3	5.08E-02	1.20E-04	2.86E-03
5945	640536.2	4166148.9	Worker	Scenario 3	5.00E-02	1.18E-04	2.65E-03
5946	640636.2	4166148.9	Worker	Scenario 3	5.71E-02	1.35E-04	3.75E-03
5947	640736.2	4166148.9	Worker	Scenario 3	6.61E-02	1.58E-04	6.14E-03
5948	640836.2	4166148.9	Worker	Scenario 3	8.07E-02	1.96E-04	7.40E-03
5949	640936.2	4166148.9	Worker	Scenario 3	9.62E-02	2.35E-04	9.20E-03
5950	641036.2	4166148.9	Worker	Scenario 3	1.10E-01	2.68E-04	1.14E-02
5951	641136.2	4166148.9	Worker	Scenario 3	1.24E-01	3.03E-04	1.19E-02
5952	641236.2	4166148.9	Worker	Scenario 3	1.26E-01	3.05E-04	1.19E-02
5953	641336.2	4166148.9	Worker	Scenario 3	1.40E-01	3.34E-04	1.25E-02
5954	641436.2	4166148.9	Worker	Scenario 3	1.52E-01	3.62E-04	1.19E-02
5955	641536.2	4166148.9	Worker	Scenario 3	1.64E-01	3.99E-04	1.56E-02
5956	641636.2	4166148.9	Worker	Scenario 3	1.75E-01	4.31E-04	1.73E-02
5957	641736.2	4166148.9	Worker	Scenario 3	1.87E-01	4.64E-04	1.51E-02
5958	641836.2	4166148.9	Worker	Scenario 3	2.10E-01	5.21E-04	1.58E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5959	641936.2	4166148.9	Worker	Scenario 3	2.34E-01	5.78E-04	1.21E-02
5960	642236.2	4166148.9	Worker	Scenario 3	2.88E-01	7.19E-04	6.48E-03
5961	642336.2	4166148.9	Worker	Scenario 3	2.94E-01	7.32E-04	6.61E-03
5962	642436.2	4166148.9	Worker	Scenario 3	2.94E-01	7.30E-04	6.29E-03
5963	642536.2	4166148.9	Worker	Scenario 3	2.94E-01	7.24E-04	5.65E-03
5964	642636.2	4166148.9	Worker	Scenario 3	2.92E-01	7.12E-04	5.45E-03
5965	642736.2	4166148.9	Worker	Scenario 3	2.87E-01	6.95E-04	5.14E-03
5966	642836.2	4166148.9	Worker	Scenario 3	2.82E-01	6.78E-04	4.89E-03
5967	642936.2	4166148.9	Worker	Scenario 3	2.79E-01	6.66E-04	4.16E-03
5968	643036.2	4166148.9	Worker	Scenario 3	2.77E-01	6.58E-04	4.58E-03
5969	644536.2	4166148.9	Worker	Scenario 3	2.62E-01	5.96E-04	1.78E-03
5970	644636.2	4166148.9	Worker	Scenario 3	2.57E-01	5.85E-04	1.90E-03
5971	644736.2	4166148.9	Worker	Scenario 3	2.52E-01	5.73E-04	1.97E-03
5972	644836.2	4166148.9	Worker	Scenario 3	2.47E-01	5.62E-04	1.99E-03
5973	644936.2	4166148.9	Worker	Scenario 3	2.43E-01	5.52E-04	1.99E-03
5974	645036.2	4166148.9	Worker	Scenario 3	2.39E-01	5.43E-04	1.97E-03
5975	645136.2	4166148.9	Worker	Scenario 3	2.35E-01	5.33E-04	2.06E-03
5976	645236.2	4166148.9	Worker	Scenario 3	2.31E-01	5.24E-04	2.25E-03
5977	645336.2	4166148.9	Worker	Scenario 3	2.27E-01	5.16E-04	2.44E-03
5978	645436.2	4166148.9	Worker	Scenario 3	2.23E-01	5.06E-04	2.67E-03
5979	645536.2	4166148.9	Worker	Scenario 3	2.20E-01	4.98E-04	2.82E-03
5980	645636.2	4166148.9	Worker	Scenario 3	2.17E-01	4.91E-04	2.95E-03
5981	645736.2	4166148.9	Worker	Scenario 3	2.13E-01	4.83E-04	3.04E-03
5982	645836.2	4166148.9	Worker	Scenario 3	2.10E-01	4.75E-04	3.09E-03
5983	645936.2	4166148.9	Worker	Scenario 3	2.07E-01	4.68E-04	3.12E-03
5984	646036.2	4166148.9	Worker	Scenario 3	2.04E-01	4.60E-04	3.12E-03
5985	646136.2	4166148.9	Worker	Scenario 3	2.01E-01	4.52E-04	3.09E-03
5986	646336.2	4166148.9	Worker	Scenario 3	1.94E-01	4.37E-04	2.96E-03
5987	646436.2	4166148.9	Worker	Scenario 3	1.91E-01	4.30E-04	2.87E-03
5988	646536.2	4166148.9	Worker	Scenario 3	1.88E-01	4.22E-04	2.76E-03
5989	646636.2	4166148.9	Worker	Scenario 3	1.84E-01	4.15E-04	2.64E-03
5990	646736.2	4166148.9	Worker	Scenario 3	1.81E-01	4.07E-04	2.51E-03
5991	646836.2	4166148.9	Worker	Scenario 3	1.78E-01	3.99E-04	2.37E-03
5992	638236.2	4166248.9	Worker	Scenario 3	2.18E-02	5.12E-05	5.70E-03
5993	638336.2	4166248.9	Worker	Scenario 3	2.49E-02	5.90E-05	6.41E-03
5994	638436.2	4166248.9	Worker	Scenario 3	2.49E-02	5.89E-05	6.90E-03
5995	638536.2	4166248.9	Worker	Scenario 3	2.37E-02	5.59E-05	7.05E-03
5996	638636.2	4166248.9	Worker	Scenario 3	2.21E-02	5.14E-05	6.80E-03
5997	638736.2	4166248.9	Worker	Scenario 3	2.25E-02	5.21E-05	6.15E-03
5998	638836.2	4166248.9	Worker	Scenario 3	2.65E-02	6.21E-05	5.18E-03
5999	638936.2	4166248.9	Worker	Scenario 3	2.57E-02	5.97E-05	4.03E-03
6000	639036.2	4166248.9	Worker	Scenario 3	2.42E-02	5.53E-05	2.90E-03
6001	639136.2	4166248.9	Worker	Scenario 3	2.49E-02	5.70E-05	1.92E-03
6002	639236.2	4166248.9	Worker	Scenario 3	2.77E-02	6.36E-05	1.55E-03
6003	639336.2	4166248.9	Worker	Scenario 3	2.85E-02	6.55E-05	1.31E-03
6004	639436.2	4166248.9	Worker	Scenario 3	4.18E-02	9.80E-05	3.93E-03
6005	639536.2	4166248.9	Worker	Scenario 3	3.21E-02	7.46E-05	1.74E-03
6006	639636.2	4166248.9	Worker	Scenario 3	3.63E-02	8.53E-05	2.74E-03
6007	639736.2	4166248.9	Worker	Scenario 3	3.71E-02	8.73E-05	2.57E-03
6008	639836.2	4166248.9	Worker	Scenario 3	4.27E-02	1.01E-04	3.73E-03
6009	639936.2	4166248.9	Worker	Scenario 3	4.58E-02	1.07E-04	3.22E-03
6010	640036.2	4166248.9	Worker	Scenario 3	4.16E-02	9.68E-05	2.82E-03
6011	640136.2	4166248.9	Worker	Scenario 3	4.64E-02	1.09E-04	3.57E-03
6012	640236.2	4166248.9	Worker	Scenario 3	5.27E-02	1.25E-04	4.81E-03
6013	640336.2	4166248.9	Worker	Scenario 3	5.47E-02	1.29E-04	4.14E-03
6014	640436.2	4166248.9	Worker	Scenario 3	6.61E-02	1.56E-04	6.39E-03
6015	640536.2	4166248.9	Worker	Scenario 3	7.34E-02	1.75E-04	6.19E-03
6016	640636.2	4166248.9	Worker	Scenario 3	8.86E-02	2.12E-04	7.76E-03
6017	640736.2	4166248.9	Worker	Scenario 3	1.03E-01	2.49E-04	1.13E-02
6018	640836.2	4166248.9	Worker	Scenario 3	1.15E-01	2.82E-04	1.29E-02
6019	640936.2	4166248.9	Worker	Scenario 3	1.22E-01	3.01E-04	1.31E-02
6020	641036.2	4166248.9	Worker	Scenario 3	1.29E-01	3.17E-04	1.31E-02
6021	641136.2	4166248.9	Worker	Scenario 3	1.41E-01	3.48E-04	1.32E-02
6022	641236.2	4166248.9	Worker	Scenario 3	1.50E-01	3.66E-04	1.55E-02
6023	641336.2	4166248.9	Worker	Scenario 3	1.63E-01	3.93E-04	1.44E-02
6024	641436.2	4166248.9	Worker	Scenario 3	1.78E-01	4.26E-04	1.40E-02
6025	641536.2	4166248.9	Worker	Scenario 3	1.95E-01	4.77E-04	1.72E-02
6026	641636.2	4166248.9	Worker	Scenario 3	2.13E-01	5.30E-04	1.90E-02
6027	641736.2	4166248.9	Worker	Scenario 3	2.28E-01	5.70E-04	1.67E-02
6028	641836.2	4166248.9	Worker	Scenario 3	2.52E-01	6.26E-04	1.74E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6029	641936.2	4166248.9	Worker	Scenario 3	2.77E-01	6.87E-04	1.40E-02
6030	642036.2	4166248.9	Worker	Scenario 3	3.07E-01	7.65E-04	1.08E-02
6031	642136.2	4166248.9	Worker	Scenario 3	3.28E-01	8.22E-04	8.19E-03
6032	642236.2	4166248.9	Worker	Scenario 3	3.41E-01	8.52E-04	7.62E-03
6033	642336.2	4166248.9	Worker	Scenario 3	3.44E-01	8.55E-04	7.21E-03
6034	642436.2	4166248.9	Worker	Scenario 3	3.41E-01	8.43E-04	6.35E-03
6035	642536.2	4166248.9	Worker	Scenario 3	3.36E-01	8.22E-04	6.18E-03
6036	642636.2	4166248.9	Worker	Scenario 3	3.31E-01	8.02E-04	5.86E-03
6037	642736.2	4166248.9	Worker	Scenario 3	3.26E-01	7.83E-04	5.34E-03
6038	642836.2	4166248.9	Worker	Scenario 3	3.20E-01	7.66E-04	4.94E-03
6039	642936.2	4166248.9	Worker	Scenario 3	3.15E-01	7.50E-04	5.24E-03
6040	644236.2	4166248.9	Worker	Scenario 3	3.10E-01	7.05E-04	2.10E-03
6041	644336.2	4166248.9	Worker	Scenario 3	3.08E-01	6.99E-04	2.11E-03
6042	644436.2	4166248.9	Worker	Scenario 3	3.01E-01	6.82E-04	2.20E-03
6043	644536.2	4166248.9	Worker	Scenario 3	2.93E-01	6.65E-04	2.22E-03
6044	644636.2	4166248.9	Worker	Scenario 3	2.82E-01	6.41E-04	2.25E-03
6045	644736.2	4166248.9	Worker	Scenario 3	2.76E-01	6.28E-04	2.21E-03
6046	644836.2	4166248.9	Worker	Scenario 3	2.71E-01	6.16E-04	2.30E-03
6047	644936.2	4166248.9	Worker	Scenario 3	2.66E-01	6.04E-04	2.51E-03
6048	645036.2	4166248.9	Worker	Scenario 3	2.61E-01	5.93E-04	2.74E-03
6049	645136.2	4166248.9	Worker	Scenario 3	2.56E-01	5.82E-04	2.95E-03
6050	645236.2	4166248.9	Worker	Scenario 3	2.52E-01	5.70E-04	3.13E-03
6051	645336.2	4166248.9	Worker	Scenario 3	2.47E-01	5.60E-04	3.25E-03
6052	645436.2	4166248.9	Worker	Scenario 3	2.43E-01	5.49E-04	3.37E-03
6053	645536.2	4166248.9	Worker	Scenario 3	2.38E-01	5.39E-04	3.41E-03
6054	645636.2	4166248.9	Worker	Scenario 3	2.34E-01	5.30E-04	3.41E-03
6055	645736.2	4166248.9	Worker	Scenario 3	2.30E-01	5.20E-04	3.38E-03
6056	645836.2	4166248.9	Worker	Scenario 3	2.27E-01	5.11E-04	3.31E-03
6057	645936.2	4166248.9	Worker	Scenario 3	2.23E-01	5.02E-04	3.22E-03
6058	646036.2	4166248.9	Worker	Scenario 3	2.19E-01	4.93E-04	3.11E-03
6059	646136.2	4166248.9	Worker	Scenario 3	2.15E-01	4.84E-04	2.98E-03
6060	646336.2	4166248.9	Worker	Scenario 3	2.07E-01	4.66E-04	2.68E-03
6061	646436.2	4166248.9	Worker	Scenario 3	2.03E-01	4.57E-04	2.53E-03
6062	646536.2	4166248.9	Worker	Scenario 3	1.99E-01	4.48E-04	2.37E-03
6063	646636.2	4166248.9	Worker	Scenario 3	1.95E-01	4.39E-04	2.21E-03
6064	646736.2	4166248.9	Worker	Scenario 3	1.91E-01	4.29E-04	2.06E-03
6065	646836.2	4166248.9	Worker	Scenario 3	1.87E-01	4.20E-04	1.91E-03
6066	646936.2	4166248.9	Worker	Scenario 3	1.83E-01	4.11E-04	1.76E-03
6067	638136.2	4166348.9	Worker	Scenario 3	2.23E-02	5.17E-05	2.66E-03
6068	638236.2	4166348.9	Worker	Scenario 3	2.59E-02	6.06E-05	3.43E-03
6069	638336.2	4166348.9	Worker	Scenario 3	2.51E-02	5.88E-05	4.32E-03
6070	638436.2	4166348.9	Worker	Scenario 3	2.50E-02	5.89E-05	5.28E-03
6071	638536.2	4166348.9	Worker	Scenario 3	2.21E-02	5.15E-05	6.22E-03
6072	638636.2	4166348.9	Worker	Scenario 3	2.36E-02	5.53E-05	7.01E-03
6073	638736.2	4166348.9	Worker	Scenario 3	2.70E-02	6.40E-05	7.50E-03
6074	638836.2	4166348.9	Worker	Scenario 3	2.80E-02	6.63E-05	7.56E-03
6075	638936.2	4166348.9	Worker	Scenario 3	2.63E-02	6.16E-05	7.11E-03
6076	639036.2	4166348.9	Worker	Scenario 3	2.81E-02	6.58E-05	6.19E-03
6077	639136.2	4166348.9	Worker	Scenario 3	2.94E-02	6.84E-05	4.95E-03
6078	639236.2	4166348.9	Worker	Scenario 3	3.30E-02	7.70E-05	3.61E-03
6079	639336.2	4166348.9	Worker	Scenario 3	3.27E-02	7.57E-05	2.59E-03
6080	639436.2	4166348.9	Worker	Scenario 3	3.86E-02	9.00E-05	3.40E-03
6081	639536.2	4166348.9	Worker	Scenario 3	4.70E-02	1.10E-04	4.38E-03
6082	639636.2	4166348.9	Worker	Scenario 3	4.20E-02	9.83E-05	3.50E-03
6083	639736.2	4166348.9	Worker	Scenario 3	4.16E-02	9.78E-05	3.40E-03
6084	639836.2	4166348.9	Worker	Scenario 3	5.25E-02	1.25E-04	4.92E-03
6085	639936.2	4166348.9	Worker	Scenario 3	5.56E-02	1.33E-04	5.20E-03
6086	640036.2	4166348.9	Worker	Scenario 3	5.86E-02	1.39E-04	5.00E-03
6087	640136.2	4166348.9	Worker	Scenario 3	6.12E-02	1.44E-04	5.42E-03
6088	640236.2	4166348.9	Worker	Scenario 3	6.78E-02	1.61E-04	6.57E-03
6089	640336.2	4166348.9	Worker	Scenario 3	7.79E-02	1.87E-04	7.30E-03
6090	640436.2	4166348.9	Worker	Scenario 3	9.32E-02	2.23E-04	9.15E-03
6091	640536.2	4166348.9	Worker	Scenario 3	1.08E-01	2.59E-04	1.00E-02
6092	640636.2	4166348.9	Worker	Scenario 3	1.20E-01	2.90E-04	1.09E-02
6093	640736.2	4166348.9	Worker	Scenario 3	1.29E-01	3.13E-04	1.40E-02
6094	640836.2	4166348.9	Worker	Scenario 3	1.32E-01	3.23E-04	1.61E-02
6095	640936.2	4166348.9	Worker	Scenario 3	1.39E-01	3.45E-04	1.75E-02
6096	641036.2	4166348.9	Worker	Scenario 3	1.48E-01	3.67E-04	1.56E-02
6097	641136.2	4166348.9	Worker	Scenario 3	1.63E-01	4.04E-04	1.56E-02
6098	641236.2	4166348.9	Worker	Scenario 3	1.77E-01	4.35E-04	1.86E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6099	641336.2	4166348.9	Worker	Scenario 3	1.92E-01	4.65E-04	1.82E-02
6100	641436.2	4166348.9	Worker	Scenario 3	2.11E-01	5.07E-04	1.63E-02
6101	641536.2	4166348.9	Worker	Scenario 3	2.33E-01	5.70E-04	1.94E-02
6102	641636.2	4166348.9	Worker	Scenario 3	2.60E-01	6.49E-04	1.95E-02
6103	641936.2	4166348.9	Worker	Scenario 3	3.43E-01	8.57E-04	1.27E-02
6104	642036.2	4166348.9	Worker	Scenario 3	3.76E-01	9.42E-04	1.07E-02
6105	642136.2	4166348.9	Worker	Scenario 3	3.96E-01	9.95E-04	8.67E-03
6106	642236.2	4166348.9	Worker	Scenario 3	4.02E-01	1.00E-03	8.43E-03
6107	642336.2	4166348.9	Worker	Scenario 3	4.00E-01	9.93E-04	7.57E-03
6108	642436.2	4166348.9	Worker	Scenario 3	3.94E-01	9.69E-04	7.08E-03
6109	642536.2	4166348.9	Worker	Scenario 3	3.87E-01	9.41E-04	6.73E-03
6110	642636.2	4166348.9	Worker	Scenario 3	3.80E-01	9.15E-04	5.82E-03
6111	642736.2	4166348.9	Worker	Scenario 3	3.74E-01	8.94E-04	5.83E-03
6112	642836.2	4166348.9	Worker	Scenario 3	3.68E-01	8.75E-04	5.88E-03
6113	643036.2	4166348.9	Worker	Scenario 3	3.66E-01	8.62E-04	4.69E-03
6114	643136.2	4166348.9	Worker	Scenario 3	3.68E-01	8.61E-04	4.38E-03
6115	643236.2	4166348.9	Worker	Scenario 3	3.70E-01	8.62E-04	4.34E-03
6116	643336.2	4166348.9	Worker	Scenario 3	3.73E-01	8.63E-04	4.10E-03
6117	643436.2	4166348.9	Worker	Scenario 3	3.74E-01	8.63E-04	3.81E-03
6118	643536.2	4166348.9	Worker	Scenario 3	3.72E-01	8.57E-04	3.66E-03
6119	643636.2	4166348.9	Worker	Scenario 3	3.70E-01	8.49E-04	3.41E-03
6120	643736.2	4166348.9	Worker	Scenario 3	3.71E-01	8.49E-04	3.24E-03
6121	643836.2	4166348.9	Worker	Scenario 3	3.70E-01	8.44E-04	2.87E-03
6122	643936.2	4166348.9	Worker	Scenario 3	3.69E-01	8.40E-04	2.56E-03
6123	644036.2	4166348.9	Worker	Scenario 3	3.68E-01	8.35E-04	2.37E-03
6124	644136.2	4166348.9	Worker	Scenario 3	3.60E-01	8.16E-04	2.51E-03
6125	644236.2	4166348.9	Worker	Scenario 3	3.50E-01	7.95E-04	2.54E-03
6126	644336.2	4166348.9	Worker	Scenario 3	3.41E-01	7.74E-04	2.51E-03
6127	644436.2	4166348.9	Worker	Scenario 3	3.32E-01	7.53E-04	2.46E-03
6128	644536.2	4166348.9	Worker	Scenario 3	3.24E-01	7.34E-04	2.52E-03
6129	644636.2	4166348.9	Worker	Scenario 3	3.11E-01	7.07E-04	2.86E-03
6130	644736.2	4166348.9	Worker	Scenario 3	3.05E-01	6.92E-04	3.10E-03
6131	644836.2	4166348.9	Worker	Scenario 3	2.98E-01	6.77E-04	3.32E-03
6132	644936.2	4166348.9	Worker	Scenario 3	2.93E-01	6.63E-04	3.48E-03
6133	645036.2	4166348.9	Worker	Scenario 3	2.87E-01	6.50E-04	3.59E-03
6134	645136.2	4166348.9	Worker	Scenario 3	2.81E-01	6.36E-04	3.66E-03
6135	645236.2	4166348.9	Worker	Scenario 3	2.75E-01	6.22E-04	3.70E-03
6136	645336.2	4166348.9	Worker	Scenario 3	2.70E-01	6.09E-04	3.67E-03
6137	645436.2	4166348.9	Worker	Scenario 3	2.64E-01	5.96E-04	3.63E-03
6138	645536.2	4166348.9	Worker	Scenario 3	2.59E-01	5.84E-04	3.53E-03
6139	645636.2	4166348.9	Worker	Scenario 3	2.54E-01	5.72E-04	3.39E-03
6140	645736.2	4166348.9	Worker	Scenario 3	2.49E-01	5.61E-04	3.23E-03
6141	645836.2	4166348.9	Worker	Scenario 3	2.44E-01	5.50E-04	3.06E-03
6142	645936.2	4166348.9	Worker	Scenario 3	2.40E-01	5.39E-04	2.88E-03
6143	646036.2	4166348.9	Worker	Scenario 3	2.35E-01	5.28E-04	2.70E-03
6144	646136.2	4166348.9	Worker	Scenario 3	2.30E-01	5.17E-04	2.51E-03
6145	646336.2	4166348.9	Worker	Scenario 3	2.20E-01	4.95E-04	2.15E-03
6146	646436.2	4166348.9	Worker	Scenario 3	2.16E-01	4.84E-04	1.98E-03
6147	646536.2	4166348.9	Worker	Scenario 3	2.11E-01	4.73E-04	1.81E-03
6148	646636.2	4166348.9	Worker	Scenario 3	2.06E-01	4.62E-04	1.66E-03
6149	646736.2	4166348.9	Worker	Scenario 3	2.01E-01	4.51E-04	1.52E-03
6150	646836.2	4166348.9	Worker	Scenario 3	1.97E-01	4.41E-04	1.38E-03
6151	637936.2	4166448.9	Worker	Scenario 3	2.00E-02	4.59E-05	1.17E-03
6152	638036.2	4166448.9	Worker	Scenario 3	2.09E-02	4.80E-05	1.37E-03
6153	638136.2	4166448.9	Worker	Scenario 3	2.15E-02	4.95E-05	1.58E-03
6154	638236.2	4166448.9	Worker	Scenario 3	2.25E-02	5.20E-05	1.79E-03
6155	638336.2	4166448.9	Worker	Scenario 3	2.99E-02	6.96E-05	2.68E-03
6156	638436.2	4166448.9	Worker	Scenario 3	2.58E-02	6.02E-05	2.74E-03
6157	638536.2	4166448.9	Worker	Scenario 3	2.32E-02	5.39E-05	3.61E-03
6158	638636.2	4166448.9	Worker	Scenario 3	2.62E-02	6.13E-05	4.63E-03
6159	638736.2	4166448.9	Worker	Scenario 3	2.91E-02	6.86E-05	5.75E-03
6160	638836.2	4166448.9	Worker	Scenario 3	3.04E-02	7.21E-05	6.84E-03
6161	638936.2	4166448.9	Worker	Scenario 3	3.03E-02	7.20E-05	7.73E-03
6162	639036.2	4166448.9	Worker	Scenario 3	3.73E-02	8.94E-05	8.21E-03
6163	639136.2	4166448.9	Worker	Scenario 3	3.48E-02	8.29E-05	8.11E-03
6164	639236.2	4166448.9	Worker	Scenario 3	3.73E-02	8.89E-05	7.37E-03
6165	639336.2	4166448.9	Worker	Scenario 3	4.06E-02	9.63E-05	6.09E-03
6166	639436.2	4166448.9	Worker	Scenario 3	4.39E-02	1.04E-04	4.53E-03
6167	639536.2	4166448.9	Worker	Scenario 3	5.00E-02	1.18E-04	4.24E-03
6168	639636.2	4166448.9	Worker	Scenario 3	5.56E-02	1.31E-04	4.95E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6169	639736.2	4166448.9	Worker	Scenario 3	6.09E-02	1.44E-04	5.24E-03
6170	639836.2	4166448.9	Worker	Scenario 3	6.91E-02	1.64E-04	6.21E-03
6171	639936.2	4166448.9	Worker	Scenario 3	7.59E-02	1.81E-04	7.47E-03
6172	640036.2	4166448.9	Worker	Scenario 3	8.24E-02	1.98E-04	8.82E-03
6173	640136.2	4166448.9	Worker	Scenario 3	8.41E-02	2.02E-04	8.73E-03
6174	640236.2	4166448.9	Worker	Scenario 3	8.51E-02	2.02E-04	6.11E-03
6175	640336.2	4166448.9	Worker	Scenario 3	9.48E-02	2.26E-04	9.15E-03
6176	640436.2	4166448.9	Worker	Scenario 3	1.07E-01	2.58E-04	1.17E-02
6177	640536.2	4166448.9	Worker	Scenario 3	1.21E-01	2.92E-04	1.10E-02
6178	641436.2	4166448.9	Worker	Scenario 3	2.64E-01	6.34E-04	1.91E-02
6179	641536.2	4166448.9	Worker	Scenario 3	2.92E-01	7.17E-04	2.19E-02
6180	641736.2	4166448.9	Worker	Scenario 3	3.64E-01	9.15E-04	1.98E-02
6181	641836.2	4166448.9	Worker	Scenario 3	3.98E-01	9.97E-04	1.67E-02
6182	641936.2	4166448.9	Worker	Scenario 3	4.37E-01	1.10E-03	1.41E-02
6183	642036.2	4166448.9	Worker	Scenario 3	4.69E-01	1.18E-03	1.02E-02
6184	642136.2	4166448.9	Worker	Scenario 3	4.81E-01	1.21E-03	1.00E-02
6185	642236.2	4166448.9	Worker	Scenario 3	4.80E-01	1.20E-03	9.13E-03
6186	642336.2	4166448.9	Worker	Scenario 3	4.70E-01	1.16E-03	8.26E-03
6187	642436.2	4166448.9	Worker	Scenario 3	4.59E-01	1.12E-03	7.85E-03
6188	642536.2	4166448.9	Worker	Scenario 3	4.49E-01	1.08E-03	6.34E-03
6189	642636.2	4166448.9	Worker	Scenario 3	4.42E-01	1.06E-03	6.89E-03
6190	642936.2	4166448.9	Worker	Scenario 3	4.19E-01	9.92E-04	5.12E-03
6191	643036.2	4166448.9	Worker	Scenario 3	4.24E-01	9.95E-04	5.05E-03
6192	643136.2	4166448.9	Worker	Scenario 3	4.24E-01	9.90E-04	4.78E-03
6193	643236.2	4166448.9	Worker	Scenario 3	4.26E-01	9.91E-04	4.41E-03
6194	643336.2	4166448.9	Worker	Scenario 3	4.29E-01	9.93E-04	4.17E-03
6195	643436.2	4166448.9	Worker	Scenario 3	4.31E-01	9.93E-04	3.89E-03
6196	643536.2	4166448.9	Worker	Scenario 3	4.33E-01	9.94E-04	3.60E-03
6197	643636.2	4166448.9	Worker	Scenario 3	4.35E-01	9.94E-04	3.14E-03
6198	643736.2	4166448.9	Worker	Scenario 3	4.35E-01	9.91E-04	2.78E-03
6199	643836.2	4166448.9	Worker	Scenario 3	4.32E-01	9.81E-04	2.89E-03
6200	643936.2	4166448.9	Worker	Scenario 3	4.25E-01	9.63E-04	2.96E-03
6201	644036.2	4166448.9	Worker	Scenario 3	4.15E-01	9.40E-04	2.89E-03
6202	644136.2	4166448.9	Worker	Scenario 3	4.03E-01	9.13E-04	2.83E-03
6203	644236.2	4166448.9	Worker	Scenario 3	3.91E-01	8.86E-04	2.87E-03
6204	644336.2	4166448.9	Worker	Scenario 3	3.80E-01	8.61E-04	3.13E-03
6205	644436.2	4166448.9	Worker	Scenario 3	3.70E-01	8.37E-04	3.41E-03
6206	644536.2	4166448.9	Worker	Scenario 3	3.60E-01	8.15E-04	3.64E-03
6207	644636.2	4166448.9	Worker	Scenario 3	3.46E-01	7.85E-04	3.93E-03
6208	644736.2	4166448.9	Worker	Scenario 3	3.39E-01	7.67E-04	4.01E-03
6209	644836.2	4166448.9	Worker	Scenario 3	3.31E-01	7.49E-04	4.03E-03
6210	644936.2	4166448.9	Worker	Scenario 3	3.24E-01	7.32E-04	3.99E-03
6211	645036.2	4166448.9	Worker	Scenario 3	3.17E-01	7.15E-04	3.91E-03
6212	645136.2	4166448.9	Worker	Scenario 3	3.09E-01	6.98E-04	3.80E-03
6213	645236.2	4166448.9	Worker	Scenario 3	3.02E-01	6.80E-04	3.67E-03
6214	645336.2	4166448.9	Worker	Scenario 3	2.95E-01	6.65E-04	3.49E-03
6215	645436.2	4166448.9	Worker	Scenario 3	2.88E-01	6.48E-04	3.32E-03
6216	645536.2	4166448.9	Worker	Scenario 3	2.82E-01	6.34E-04	3.10E-03
6217	645636.2	4166448.9	Worker	Scenario 3	2.76E-01	6.19E-04	2.89E-03
6218	645736.2	4166448.9	Worker	Scenario 3	2.69E-01	6.05E-04	2.67E-03
6219	645836.2	4166448.9	Worker	Scenario 3	2.63E-01	5.91E-04	2.45E-03
6220	645936.2	4166448.9	Worker	Scenario 3	2.57E-01	5.78E-04	2.24E-03
6221	646036.2	4166448.9	Worker	Scenario 3	2.52E-01	5.64E-04	2.04E-03
6222	646136.2	4166448.9	Worker	Scenario 3	2.46E-01	5.51E-04	1.86E-03
6223	646336.2	4166448.9	Worker	Scenario 3	2.34E-01	5.24E-04	1.53E-03
6224	646436.2	4166448.9	Worker	Scenario 3	2.28E-01	5.11E-04	1.41E-03
6225	646536.2	4166448.9	Worker	Scenario 3	2.22E-01	4.98E-04	1.32E-03
6226	646636.2	4166448.9	Worker	Scenario 3	2.17E-01	4.85E-04	1.24E-03
6227	646736.2	4166448.9	Worker	Scenario 3	2.11E-01	4.74E-04	1.18E-03
6228	646836.2	4166448.9	Worker	Scenario 3	2.06E-01	4.62E-04	1.14E-03
6229	637736.2	4166548.9	Worker	Scenario 3	2.16E-02	4.95E-05	1.32E-03
6230	637836.2	4166548.9	Worker	Scenario 3	1.98E-02	4.53E-05	8.41E-04
6231	637936.2	4166548.9	Worker	Scenario 3	2.05E-02	4.71E-05	9.40E-04
6232	638036.2	4166548.9	Worker	Scenario 3	2.16E-02	4.96E-05	1.03E-03
6233	638136.2	4166548.9	Worker	Scenario 3	2.33E-02	5.37E-05	1.17E-03
6234	638236.2	4166548.9	Worker	Scenario 3	2.77E-02	6.39E-05	2.36E-03
6235	638336.2	4166548.9	Worker	Scenario 3	2.87E-02	6.63E-05	2.43E-03
6236	638436.2	4166548.9	Worker	Scenario 3	2.94E-02	6.82E-05	2.45E-03
6237	638536.2	4166548.9	Worker	Scenario 3	2.93E-02	6.81E-05	2.48E-03
6238	638636.2	4166548.9	Worker	Scenario 3	3.15E-02	7.34E-05	2.80E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6239	638736.2	4166548.9	Worker	Scenario 3	3.35E-02	7.83E-05	3.04E-03
6240	638836.2	4166548.9	Worker	Scenario 3	3.71E-02	8.73E-05	3.79E-03
6241	638936.2	4166548.9	Worker	Scenario 3	3.97E-02	9.37E-05	4.99E-03
6242	639036.2	4166548.9	Worker	Scenario 3	4.63E-02	1.10E-04	6.31E-03
6243	639136.2	4166548.9	Worker	Scenario 3	5.14E-02	1.23E-04	7.59E-03
6244	639236.2	4166548.9	Worker	Scenario 3	5.62E-02	1.35E-04	8.59E-03
6245	639336.2	4166548.9	Worker	Scenario 3	5.28E-02	1.27E-04	9.02E-03
6246	639436.2	4166548.9	Worker	Scenario 3	5.48E-02	1.32E-04	8.67E-03
6247	639536.2	4166548.9	Worker	Scenario 3	5.66E-02	1.36E-04	7.50E-03
6248	639636.2	4166548.9	Worker	Scenario 3	6.38E-02	1.52E-04	6.02E-03
6249	639736.2	4166548.9	Worker	Scenario 3	6.75E-02	1.61E-04	6.12E-03
6250	639836.2	4166548.9	Worker	Scenario 3	7.42E-02	1.76E-04	6.99E-03
6251	639936.2	4166548.9	Worker	Scenario 3	8.27E-02	1.97E-04	7.64E-03
6252	640036.2	4166548.9	Worker	Scenario 3	9.19E-02	2.20E-04	7.17E-03
6253	640136.2	4166548.9	Worker	Scenario 3	9.62E-02	2.32E-04	1.04E-02
6254	640236.2	4166548.9	Worker	Scenario 3	9.95E-02	2.41E-04	1.06E-02
6255	640336.2	4166548.9	Worker	Scenario 3	1.09E-01	2.61E-04	9.79E-03
6256	640436.2	4166548.9	Worker	Scenario 3	1.20E-01	2.88E-04	1.07E-02
6257	640536.2	4166548.9	Worker	Scenario 3	1.34E-01	3.26E-04	1.40E-02
6258	641636.2	4166548.9	Worker	Scenario 3	4.24E-01	1.06E-03	2.28E-02
6259	641736.2	4166548.9	Worker	Scenario 3	4.71E-01	1.18E-03	2.35E-02
6260	641836.2	4166548.9	Worker	Scenario 3	5.26E-01	1.32E-03	1.66E-02
6261	641936.2	4166548.9	Worker	Scenario 3	5.71E-01	1.43E-03	1.52E-02
6262	642036.2	4166548.9	Worker	Scenario 3	5.96E-01	1.50E-03	1.17E-02
6263	642136.2	4166548.9	Worker	Scenario 3	5.98E-01	1.49E-03	1.11E-02
6264	642236.2	4166548.9	Worker	Scenario 3	5.83E-01	1.44E-03	9.80E-03
6265	642336.2	4166548.9	Worker	Scenario 3	5.63E-01	1.38E-03	9.29E-03
6266	642436.2	4166548.9	Worker	Scenario 3	5.44E-01	1.32E-03	7.53E-03
6267	642536.2	4166548.9	Worker	Scenario 3	5.30E-01	1.28E-03	8.23E-03
6268	642836.2	4166548.9	Worker	Scenario 3	5.01E-01	1.19E-03	6.03E-03
6269	642936.2	4166548.9	Worker	Scenario 3	4.92E-01	1.16E-03	5.75E-03
6270	643036.2	4166548.9	Worker	Scenario 3	4.94E-01	1.16E-03	5.20E-03
6271	643136.2	4166548.9	Worker	Scenario 3	4.94E-01	1.15E-03	4.84E-03
6272	643236.2	4166548.9	Worker	Scenario 3	4.98E-01	1.15E-03	4.53E-03
6273	643336.2	4166548.9	Worker	Scenario 3	5.01E-01	1.16E-03	4.05E-03
6274	643436.2	4166548.9	Worker	Scenario 3	5.04E-01	1.16E-03	3.51E-03
6275	643536.2	4166548.9	Worker	Scenario 3	5.07E-01	1.16E-03	3.36E-03
6276	643636.2	4166548.9	Worker	Scenario 3	5.09E-01	1.16E-03	3.49E-03
6277	643736.2	4166548.9	Worker	Scenario 3	5.06E-01	1.15E-03	3.43E-03
6278	643836.2	4166548.9	Worker	Scenario 3	4.98E-01	1.13E-03	3.30E-03
6279	643936.2	4166548.9	Worker	Scenario 3	4.85E-01	1.10E-03	3.31E-03
6280	644036.2	4166548.9	Worker	Scenario 3	4.71E-01	1.06E-03	3.60E-03
6281	644136.2	4166548.9	Worker	Scenario 3	4.56E-01	1.03E-03	3.90E-03
6282	644236.2	4166548.9	Worker	Scenario 3	4.42E-01	9.98E-04	4.13E-03
6283	644336.2	4166548.9	Worker	Scenario 3	4.29E-01	9.68E-04	4.27E-03
6284	644436.2	4166548.9	Worker	Scenario 3	4.16E-01	9.39E-04	4.34E-03
6285	644536.2	4166548.9	Worker	Scenario 3	4.05E-01	9.12E-04	4.33E-03
6286	644636.2	4166548.9	Worker	Scenario 3	3.90E-01	8.79E-04	4.35E-03
6287	644736.2	4166548.9	Worker	Scenario 3	3.79E-01	8.55E-04	4.20E-03
6288	644836.2	4166548.9	Worker	Scenario 3	3.70E-01	8.32E-04	3.99E-03
6289	644936.2	4166548.9	Worker	Scenario 3	3.60E-01	8.11E-04	3.76E-03
6290	645036.2	4166548.9	Worker	Scenario 3	3.51E-01	7.89E-04	3.52E-03
6291	645136.2	4166548.9	Worker	Scenario 3	3.41E-01	7.67E-04	3.28E-03
6292	645236.2	4166548.9	Worker	Scenario 3	3.32E-01	7.46E-04	3.04E-03
6293	645336.2	4166548.9	Worker	Scenario 3	3.23E-01	7.26E-04	2.79E-03
6294	645436.2	4166548.9	Worker	Scenario 3	3.15E-01	7.06E-04	2.56E-03
6295	645536.2	4166548.9	Worker	Scenario 3	3.06E-01	6.87E-04	2.33E-03
6296	645636.2	4166548.9	Worker	Scenario 3	2.99E-01	6.69E-04	2.11E-03
6297	645736.2	4166548.9	Worker	Scenario 3	2.91E-01	6.52E-04	1.90E-03
6298	645836.2	4166548.9	Worker	Scenario 3	2.83E-01	6.35E-04	1.71E-03
6299	645936.2	4166548.9	Worker	Scenario 3	2.76E-01	6.18E-04	1.59E-03
6300	646036.2	4166548.9	Worker	Scenario 3	2.69E-01	6.01E-04	1.48E-03
6301	646136.2	4166548.9	Worker	Scenario 3	2.61E-01	5.85E-04	1.40E-03
6302	646336.2	4166548.9	Worker	Scenario 3	2.47E-01	5.53E-04	1.29E-03
6303	646436.2	4166548.9	Worker	Scenario 3	2.40E-01	5.37E-04	1.24E-03
6304	646536.2	4166548.9	Worker	Scenario 3	2.33E-01	5.23E-04	1.19E-03
6305	646636.2	4166548.9	Worker	Scenario 3	2.27E-01	5.09E-04	1.13E-03
6306	646936.2	4166548.9	Worker	Scenario 3	2.10E-01	4.71E-04	9.98E-04
6307	637636.2	4166648.9	Worker	Scenario 3	2.59E-02	6.00E-05	2.14E-03
6308	637736.2	4166648.9	Worker	Scenario 3	2.65E-02	6.14E-05	2.17E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6309	637836.2	4166648.9	Worker	Scenario 3	2.64E-02	6.11E-05	2.16E-03
6310	637936.2	4166648.9	Worker	Scenario 3	2.61E-02	6.05E-05	2.11E-03
6311	638036.2	4166648.9	Worker	Scenario 3	3.00E-02	6.94E-05	2.55E-03
6312	638136.2	4166648.9	Worker	Scenario 3	3.03E-02	7.00E-05	2.53E-03
6313	638236.2	4166648.9	Worker	Scenario 3	3.21E-02	7.41E-05	2.59E-03
6314	638336.2	4166648.9	Worker	Scenario 3	3.17E-02	7.32E-05	2.40E-03
6315	638436.2	4166648.9	Worker	Scenario 3	3.47E-02	8.03E-05	2.46E-03
6316	638536.2	4166648.9	Worker	Scenario 3	3.69E-02	8.52E-05	2.53E-03
6317	638636.2	4166648.9	Worker	Scenario 3	3.88E-02	8.97E-05	2.89E-03
6318	638736.2	4166648.9	Worker	Scenario 3	4.09E-02	9.47E-05	3.25E-03
6319	638836.2	4166648.9	Worker	Scenario 3	4.17E-02	9.68E-05	3.50E-03
6320	638936.2	4166648.9	Worker	Scenario 3	4.46E-02	1.04E-04	3.71E-03
6321	639036.2	4166648.9	Worker	Scenario 3	4.95E-02	1.16E-04	4.16E-03
6322	639136.2	4166648.9	Worker	Scenario 3	5.58E-02	1.31E-04	5.12E-03
6323	639236.2	4166648.9	Worker	Scenario 3	6.20E-02	1.46E-04	6.04E-03
6324	639336.2	4166648.9	Worker	Scenario 3	6.31E-02	1.50E-04	6.99E-03
6325	639436.2	4166648.9	Worker	Scenario 3	6.09E-02	1.46E-04	8.53E-03
6326	639536.2	4166648.9	Worker	Scenario 3	6.51E-02	1.57E-04	9.67E-03
6327	639636.2	4166648.9	Worker	Scenario 3	6.63E-02	1.60E-04	9.98E-03
6328	639736.2	4166648.9	Worker	Scenario 3	7.35E-02	1.77E-04	9.19E-03
6329	639836.2	4166648.9	Worker	Scenario 3	8.01E-02	1.93E-04	7.53E-03
6330	639936.2	4166648.9	Worker	Scenario 3	8.80E-02	2.11E-04	8.73E-03
6331	640036.2	4166648.9	Worker	Scenario 3	9.80E-02	2.35E-04	8.83E-03
6332	640136.2	4166648.9	Worker	Scenario 3	1.08E-01	2.60E-04	9.92E-03
6333	640236.2	4166648.9	Worker	Scenario 3	1.14E-01	2.76E-04	1.00E-02
6334	640336.2	4166648.9	Worker	Scenario 3	1.24E-01	3.01E-04	1.33E-02
6335	640436.2	4166648.9	Worker	Scenario 3	1.36E-01	3.30E-04	1.41E-02
6336	640536.2	4166648.9	Worker	Scenario 3	1.52E-01	3.69E-04	1.10E-02
6337	641536.2	4166648.9	Worker	Scenario 3	5.35E-01	1.30E-03	2.80E-02
6338	641636.2	4166648.9	Worker	Scenario 3	5.77E-01	1.44E-03	2.65E-02
6339	641736.2	4166648.9	Worker	Scenario 3	6.55E-01	1.64E-03	2.29E-02
6340	641836.2	4166648.9	Worker	Scenario 3	7.30E-01	1.83E-03	1.94E-02
6341	641936.2	4166648.9	Worker	Scenario 3	7.84E-01	1.97E-03	1.45E-02
6342	642036.2	4166648.9	Worker	Scenario 3	7.89E-01	1.97E-03	1.35E-02
6343	642136.2	4166648.9	Worker	Scenario 3	7.67E-01	1.89E-03	1.19E-02
6344	642236.2	4166648.9	Worker	Scenario 3	7.27E-01	1.78E-03	1.11E-02
6345	642336.2	4166648.9	Worker	Scenario 3	6.91E-01	1.67E-03	9.63E-03
6346	642436.2	4166648.9	Worker	Scenario 3	6.62E-01	1.59E-03	9.61E-03
6347	642736.2	4166648.9	Worker	Scenario 3	6.06E-01	1.44E-03	7.00E-03
6348	642836.2	4166648.9	Worker	Scenario 3	5.99E-01	1.42E-03	6.32E-03
6349	642936.2	4166648.9	Worker	Scenario 3	5.86E-01	1.38E-03	5.80E-03
6350	643036.2	4166648.9	Worker	Scenario 3	5.86E-01	1.37E-03	5.33E-03
6351	643136.2	4166648.9	Worker	Scenario 3	5.87E-01	1.37E-03	4.58E-03
6352	643236.2	4166648.9	Worker	Scenario 3	5.92E-01	1.37E-03	3.99E-03
6353	643336.2	4166648.9	Worker	Scenario 3	5.97E-01	1.37E-03	4.21E-03
6354	643436.2	4166648.9	Worker	Scenario 3	6.03E-01	1.38E-03	4.16E-03
6355	643536.2	4166648.9	Worker	Scenario 3	6.06E-01	1.38E-03	3.93E-03
6356	643636.2	4166648.9	Worker	Scenario 3	6.05E-01	1.37E-03	3.87E-03
6357	643736.2	4166648.9	Worker	Scenario 3	5.97E-01	1.35E-03	4.19E-03
6358	643836.2	4166648.9	Worker	Scenario 3	5.81E-01	1.31E-03	4.51E-03
6359	643936.2	4166648.9	Worker	Scenario 3	5.62E-01	1.27E-03	4.72E-03
6360	644036.2	4166648.9	Worker	Scenario 3	5.43E-01	1.22E-03	4.82E-03
6361	644136.2	4166648.9	Worker	Scenario 3	5.25E-01	1.18E-03	4.81E-03
6362	644236.2	4166648.9	Worker	Scenario 3	5.09E-01	1.14E-03	4.72E-03
6363	644336.2	4166648.9	Worker	Scenario 3	4.93E-01	1.11E-03	4.55E-03
6364	644436.2	4166648.9	Worker	Scenario 3	4.77E-01	1.07E-03	4.33E-03
6365	644536.2	4166648.9	Worker	Scenario 3	4.61E-01	1.03E-03	4.07E-03
6366	644636.2	4166648.9	Worker	Scenario 3	4.43E-01	9.93E-04	3.84E-03
6367	644736.2	4166648.9	Worker	Scenario 3	4.29E-01	9.62E-04	3.52E-03
6368	644836.2	4166648.9	Worker	Scenario 3	4.16E-01	9.32E-04	3.20E-03
6369	644936.2	4166648.9	Worker	Scenario 3	4.03E-01	9.02E-04	2.89E-03
6370	645036.2	4166648.9	Worker	Scenario 3	3.90E-01	8.73E-04	2.61E-03
6371	645136.2	4166648.9	Worker	Scenario 3	3.77E-01	8.44E-04	2.35E-03
6372	645236.2	4166648.9	Worker	Scenario 3	3.65E-01	8.17E-04	2.12E-03
6373	645336.2	4166648.9	Worker	Scenario 3	3.54E-01	7.92E-04	1.95E-03
6374	645436.2	4166648.9	Worker	Scenario 3	3.43E-01	7.67E-04	1.81E-03
6375	645536.2	4166648.9	Worker	Scenario 3	3.33E-01	7.44E-04	1.70E-03
6376	645636.2	4166648.9	Worker	Scenario 3	3.23E-01	7.21E-04	1.63E-03
6377	645736.2	4166648.9	Worker	Scenario 3	3.13E-01	7.00E-04	1.56E-03
6378	645836.2	4166648.9	Worker	Scenario 3	3.04E-01	6.78E-04	1.49E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6379	646836.2	4166648.9	Worker	Scenario 3	2.25E-01	5.03E-04	1.07E-03
6380	646936.2	4166648.9	Worker	Scenario 3	2.19E-01	4.90E-04	1.04E-03
6381	647036.2	4166648.9	Worker	Scenario 3	2.13E-01	4.77E-04	1.02E-03
6382	637436.2	4166748.9	Worker	Scenario 3	2.28E-02	5.28E-05	1.69E-03
6383	637536.2	4166748.9	Worker	Scenario 3	2.27E-02	5.24E-05	1.61E-03
6384	637636.2	4166748.9	Worker	Scenario 3	2.55E-02	5.91E-05	1.90E-03
6385	637736.2	4166748.9	Worker	Scenario 3	2.70E-02	6.29E-05	2.00E-03
6386	637836.2	4166748.9	Worker	Scenario 3	3.06E-02	7.11E-05	2.40E-03
6387	637936.2	4166748.9	Worker	Scenario 3	3.33E-02	7.75E-05	2.65E-03
6388	638036.2	4166748.9	Worker	Scenario 3	3.70E-02	8.59E-05	2.85E-03
6389	638136.2	4166748.9	Worker	Scenario 3	3.67E-02	8.53E-05	2.95E-03
6390	638236.2	4166748.9	Worker	Scenario 3	3.34E-02	7.77E-05	2.82E-03
6391	638336.2	4166748.9	Worker	Scenario 3	3.40E-02	7.92E-05	2.88E-03
6392	638436.2	4166748.9	Worker	Scenario 3	3.59E-02	8.36E-05	3.08E-03
6393	638536.2	4166748.9	Worker	Scenario 3	3.78E-02	8.79E-05	3.23E-03
6394	638636.2	4166748.9	Worker	Scenario 3	4.12E-02	9.56E-05	3.38E-03
6395	638736.2	4166748.9	Worker	Scenario 3	4.39E-02	1.02E-04	3.41E-03
6396	638836.2	4166748.9	Worker	Scenario 3	4.59E-02	1.06E-04	3.33E-03
6397	638936.2	4166748.9	Worker	Scenario 3	4.97E-02	1.15E-04	3.23E-03
6398	639036.2	4166748.9	Worker	Scenario 3	5.40E-02	1.25E-04	3.93E-03
6399	639136.2	4166748.9	Worker	Scenario 3	5.96E-02	1.38E-04	5.38E-03
6400	639236.2	4166748.9	Worker	Scenario 3	6.67E-02	1.55E-04	6.70E-03
6401	639336.2	4166748.9	Worker	Scenario 3	6.85E-02	1.60E-04	6.85E-03
6402	639436.2	4166748.9	Worker	Scenario 3	7.07E-02	1.66E-04	6.41E-03
6403	639536.2	4166748.9	Worker	Scenario 3	7.38E-02	1.75E-04	6.99E-03
6404	639636.2	4166748.9	Worker	Scenario 3	7.73E-02	1.85E-04	7.84E-03
6405	639736.2	4166748.9	Worker	Scenario 3	8.17E-02	1.97E-04	9.75E-03
6406	639836.2	4166748.9	Worker	Scenario 3	8.74E-02	2.11E-04	1.10E-02
6407	639936.2	4166748.9	Worker	Scenario 3	9.63E-02	2.33E-04	1.11E-02
6408	640036.2	4166748.9	Worker	Scenario 3	1.05E-01	2.55E-04	9.73E-03
6409	640136.2	4166748.9	Worker	Scenario 3	1.17E-01	2.84E-04	1.37E-02
6410	640236.2	4166748.9	Worker	Scenario 3	1.29E-01	3.12E-04	1.15E-02
6411	640336.2	4166748.9	Worker	Scenario 3	1.40E-01	3.41E-04	1.23E-02
6412	640436.2	4166748.9	Worker	Scenario 3	1.54E-01	3.76E-04	1.40E-02
6413	640536.2	4166748.9	Worker	Scenario 3	1.71E-01	4.21E-04	1.65E-02
6414	644536.2	4166748.9	Worker	Scenario 3	5.35E-01	1.19E-03	3.02E-03
6415	644636.2	4166748.9	Worker	Scenario 3	5.10E-01	1.14E-03	2.72E-03
6416	644836.2	4166748.9	Worker	Scenario 3	4.70E-01	1.05E-03	2.24E-03
6417	644936.2	4166748.9	Worker	Scenario 3	4.51E-01	1.01E-03	2.10E-03
6418	645036.2	4166748.9	Worker	Scenario 3	4.33E-01	9.65E-04	2.00E-03
6419	645136.2	4166748.9	Worker	Scenario 3	4.17E-01	9.28E-04	1.91E-03
6420	645236.2	4166748.9	Worker	Scenario 3	4.01E-01	8.93E-04	1.81E-03
6421	645336.2	4166748.9	Worker	Scenario 3	3.86E-01	8.61E-04	1.71E-03
6422	645436.2	4166748.9	Worker	Scenario 3	3.72E-01	8.30E-04	1.63E-03
6423	645536.2	4166748.9	Worker	Scenario 3	3.59E-01	8.01E-04	1.55E-03
6424	645636.2	4166748.9	Worker	Scenario 3	3.47E-01	7.73E-04	1.47E-03
6425	645736.2	4166748.9	Worker	Scenario 3	3.35E-01	7.46E-04	1.44E-03
6426	645936.2	4166748.9	Worker	Scenario 3	3.12E-01	6.96E-04	1.38E-03
6427	646036.2	4166748.9	Worker	Scenario 3	3.01E-01	6.71E-04	1.35E-03
6428	646436.2	4166748.9	Worker	Scenario 3	2.64E-01	5.89E-04	1.20E-03
6429	646536.2	4166748.9	Worker	Scenario 3	2.56E-01	5.71E-04	1.16E-03
6430	646636.2	4166748.9	Worker	Scenario 3	2.48E-01	5.54E-04	1.12E-03
6431	646736.2	4166748.9	Worker	Scenario 3	2.41E-01	5.38E-04	1.10E-03
6432	646836.2	4166748.9	Worker	Scenario 3	2.34E-01	5.23E-04	1.07E-03
6433	646936.2	4166748.9	Worker	Scenario 3	2.27E-01	5.08E-04	1.05E-03
6434	647036.2	4166748.9	Worker	Scenario 3	2.21E-01	4.94E-04	1.02E-03
6435	637336.2	4166848.9	Worker	Scenario 3	2.25E-02	5.19E-05	1.66E-03
6436	637436.2	4166848.9	Worker	Scenario 3	2.43E-02	5.61E-05	1.87E-03
6437	637536.2	4166848.9	Worker	Scenario 3	2.42E-02	5.61E-05	1.84E-03
6438	637636.2	4166848.9	Worker	Scenario 3	2.69E-02	6.25E-05	2.12E-03
6439	637736.2	4166848.9	Worker	Scenario 3	2.96E-02	6.87E-05	2.30E-03
6440	637836.2	4166848.9	Worker	Scenario 3	3.22E-02	7.49E-05	2.45E-03
6441	637936.2	4166848.9	Worker	Scenario 3	3.64E-02	8.47E-05	3.02E-03
6442	638036.2	4166848.9	Worker	Scenario 3	3.94E-02	9.15E-05	3.33E-03
6443	638136.2	4166848.9	Worker	Scenario 3	3.97E-02	9.23E-05	3.31E-03
6444	638236.2	4166848.9	Worker	Scenario 3	3.64E-02	8.50E-05	2.75E-03
6445	638336.2	4166848.9	Worker	Scenario 3	3.66E-02	8.56E-05	2.77E-03
6446	638436.2	4166848.9	Worker	Scenario 3	3.93E-02	9.19E-05	3.07E-03
6447	638536.2	4166848.9	Worker	Scenario 3	4.08E-02	9.55E-05	3.30E-03
6448	638636.2	4166848.9	Worker	Scenario 3	4.31E-02	1.01E-04	3.52E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6449	638736.2	4166848.9	Worker	Scenario 3	4.67E-02	1.09E-04	3.73E-03
6450	638836.2	4166848.9	Worker	Scenario 3	4.94E-02	1.15E-04	3.86E-03
6451	638936.2	4166848.9	Worker	Scenario 3	5.28E-02	1.23E-04	4.08E-03
6452	639036.2	4166848.9	Worker	Scenario 3	5.78E-02	1.34E-04	4.22E-03
6453	639136.2	4166848.9	Worker	Scenario 3	6.41E-02	1.49E-04	4.22E-03
6454	639236.2	4166848.9	Worker	Scenario 3	7.04E-02	1.63E-04	4.12E-03
6455	639336.2	4166848.9	Worker	Scenario 3	7.42E-02	1.72E-04	4.90E-03
6456	639436.2	4166848.9	Worker	Scenario 3	7.72E-02	1.80E-04	6.25E-03
6457	639536.2	4166848.9	Worker	Scenario 3	8.12E-02	1.90E-04	7.61E-03
6458	639636.2	4166848.9	Worker	Scenario 3	8.61E-02	2.02E-04	8.63E-03
6459	639736.2	4166848.9	Worker	Scenario 3	9.11E-02	2.15E-04	8.89E-03
6460	644836.2	4166848.9	Worker	Scenario 3	5.31E-01	1.18E-03	2.04E-03
6461	644936.2	4166848.9	Worker	Scenario 3	5.04E-01	1.12E-03	1.91E-03
6462	645036.2	4166848.9	Worker	Scenario 3	4.79E-01	1.06E-03	1.87E-03
6463	645136.2	4166848.9	Worker	Scenario 3	4.57E-01	1.01E-03	1.83E-03
6464	645236.2	4166848.9	Worker	Scenario 3	4.36E-01	9.69E-04	1.78E-03
6465	645336.2	4166848.9	Worker	Scenario 3	4.18E-01	9.29E-04	1.72E-03
6466	645436.2	4166848.9	Worker	Scenario 3	4.01E-01	8.91E-04	1.67E-03
6467	645536.2	4166848.9	Worker	Scenario 3	3.85E-01	8.55E-04	1.61E-03
6468	645636.2	4166848.9	Worker	Scenario 3	3.70E-01	8.22E-04	1.54E-03
6469	645836.2	4166848.9	Worker	Scenario 3	3.41E-01	7.59E-04	1.44E-03
6470	645936.2	4166848.9	Worker	Scenario 3	3.27E-01	7.28E-04	1.40E-03
6471	646436.2	4166848.9	Worker	Scenario 3	2.75E-01	6.13E-04	1.19E-03
6472	646536.2	4166848.9	Worker	Scenario 3	2.66E-01	5.93E-04	1.15E-03
6473	646636.2	4166848.9	Worker	Scenario 3	2.58E-01	5.75E-04	1.13E-03
6474	646736.2	4166848.9	Worker	Scenario 3	2.50E-01	5.58E-04	1.10E-03
6475	646836.2	4166848.9	Worker	Scenario 3	2.42E-01	5.41E-04	1.07E-03
6476	646936.2	4166848.9	Worker	Scenario 3	2.35E-01	5.25E-04	1.05E-03
6477	647036.2	4166848.9	Worker	Scenario 3	2.29E-01	5.11E-04	1.02E-03
6478	637136.2	4166948.9	Worker	Scenario 3	2.26E-02	5.22E-05	1.73E-03
6479	637236.2	4166948.9	Worker	Scenario 3	2.34E-02	5.41E-05	1.79E-03
6480	637336.2	4166948.9	Worker	Scenario 3	2.34E-02	5.41E-05	1.75E-03
6481	637436.2	4166948.9	Worker	Scenario 3	2.60E-02	6.04E-05	2.00E-03
6482	637536.2	4166948.9	Worker	Scenario 3	2.62E-02	6.07E-05	1.98E-03
6483	637636.2	4166948.9	Worker	Scenario 3	2.89E-02	6.72E-05	2.16E-03
6484	637736.2	4166948.9	Worker	Scenario 3	3.13E-02	7.29E-05	2.26E-03
6485	637836.2	4166948.9	Worker	Scenario 3	3.02E-02	7.03E-05	2.22E-03
6486	637936.2	4166948.9	Worker	Scenario 3	3.15E-02	7.33E-05	2.37E-03
6487	638036.2	4166948.9	Worker	Scenario 3	3.66E-02	8.54E-05	2.66E-03
6488	638136.2	4166948.9	Worker	Scenario 3	4.43E-02	1.03E-04	2.87E-03
6489	638236.2	4166948.9	Worker	Scenario 3	3.88E-02	9.05E-05	2.91E-03
6490	638336.2	4166948.9	Worker	Scenario 3	3.88E-02	9.09E-05	3.00E-03
6491	638436.2	4166948.9	Worker	Scenario 3	4.39E-02	1.03E-04	3.42E-03
6492	638536.2	4166948.9	Worker	Scenario 3	4.34E-02	1.02E-04	3.44E-03
6493	638636.2	4166948.9	Worker	Scenario 3	4.61E-02	1.08E-04	3.81E-03
6494	638736.2	4166948.9	Worker	Scenario 3	4.91E-02	1.15E-04	4.13E-03
6495	638836.2	4166948.9	Worker	Scenario 3	5.32E-02	1.25E-04	4.46E-03
6496	638936.2	4166948.9	Worker	Scenario 3	5.62E-02	1.32E-04	4.56E-03
6497	639036.2	4166948.9	Worker	Scenario 3	6.08E-02	1.42E-04	4.93E-03
6498	639136.2	4166948.9	Worker	Scenario 3	6.58E-02	1.54E-04	5.22E-03
6499	639236.2	4166948.9	Worker	Scenario 3	7.16E-02	1.67E-04	5.88E-03
6500	639336.2	4166948.9	Worker	Scenario 3	7.87E-02	1.84E-04	6.46E-03
6501	639436.2	4166948.9	Worker	Scenario 3	8.53E-02	1.99E-04	6.63E-03
6502	639536.2	4166948.9	Worker	Scenario 3	8.86E-02	2.07E-04	6.22E-03
6503	639636.2	4166948.9	Worker	Scenario 3	9.46E-02	2.22E-04	5.62E-03
6504	639736.2	4166948.9	Worker	Scenario 3	1.01E-01	2.37E-04	6.56E-03
6505	639836.2	4166948.9	Worker	Scenario 3	1.08E-01	2.55E-04	8.73E-03
6506	639936.2	4166948.9	Worker	Scenario 3	1.17E-01	2.76E-04	1.08E-02
6507	640036.2	4166948.9	Worker	Scenario 3	1.29E-01	3.07E-04	1.22E-02
6508	640136.2	4166948.9	Worker	Scenario 3	1.41E-01	3.41E-04	1.41E-02
6509	640236.2	4166948.9	Worker	Scenario 3	1.56E-01	3.81E-04	2.06E-02
6510	640336.2	4166948.9	Worker	Scenario 3	1.73E-01	4.26E-04	2.67E-02
6511	640436.2	4166948.9	Worker	Scenario 3	1.92E-01	4.79E-04	2.93E-02
6512	640536.2	4166948.9	Worker	Scenario 3	2.14E-01	5.37E-04	2.57E-02
6513	640636.2	4166948.9	Worker	Scenario 3	2.37E-01	6.01E-04	1.79E-02
6514	640736.2	4166948.9	Worker	Scenario 3	2.73E-01	7.02E-04	1.82E-02
6515	645636.2	4166948.9	Worker	Scenario 3	3.88E-01	8.63E-04	1.55E-03
6516	637036.2	4167048.9	Worker	Scenario 3	2.10E-02	4.84E-05	1.29E-03
6517	637136.2	4167048.9	Worker	Scenario 3	2.44E-02	5.66E-05	1.66E-03
6518	637236.2	4167048.9	Worker	Scenario 3	2.59E-02	6.01E-05	1.79E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6519	637336.2	4167048.9	Worker	Scenario 3	2.44E-02	5.65E-05	1.71E-03
6520	637436.2	4167048.9	Worker	Scenario 3	2.74E-02	6.37E-05	1.98E-03
6521	637536.2	4167048.9	Worker	Scenario 3	2.80E-02	6.51E-05	2.06E-03
6522	637636.2	4167048.9	Worker	Scenario 3	2.81E-02	6.54E-05	2.11E-03
6523	637736.2	4167048.9	Worker	Scenario 3	2.91E-02	6.78E-05	2.21E-03
6524	637836.2	4167048.9	Worker	Scenario 3	3.28E-02	7.66E-05	2.46E-03
6525	637936.2	4167048.9	Worker	Scenario 3	3.40E-02	7.93E-05	2.57E-03
6526	638036.2	4167048.9	Worker	Scenario 3	3.73E-02	8.71E-05	2.92E-03
6527	638136.2	4167048.9	Worker	Scenario 3	4.38E-02	1.02E-04	3.72E-03
6528	638236.2	4167048.9	Worker	Scenario 3	4.42E-02	1.03E-04	3.75E-03
6529	638336.2	4167048.9	Worker	Scenario 3	4.18E-02	9.79E-05	3.33E-03
6530	638436.2	4167048.9	Worker	Scenario 3	4.74E-02	1.11E-04	3.95E-03
6531	638536.2	4167048.9	Worker	Scenario 3	4.61E-02	1.08E-04	3.62E-03
6532	638636.2	4167048.9	Worker	Scenario 3	5.01E-02	1.18E-04	3.91E-03
6533	638736.2	4167048.9	Worker	Scenario 3	5.20E-02	1.22E-04	3.88E-03
6534	638836.2	4167048.9	Worker	Scenario 3	5.66E-02	1.33E-04	4.10E-03
6535	638936.2	4167048.9	Worker	Scenario 3	6.08E-02	1.43E-04	4.14E-03
6536	639036.2	4167048.9	Worker	Scenario 3	6.47E-02	1.52E-04	4.54E-03
6537	639136.2	4167048.9	Worker	Scenario 3	6.96E-02	1.64E-04	5.18E-03
6538	639236.2	4167048.9	Worker	Scenario 3	7.57E-02	1.78E-04	5.80E-03
6539	639336.2	4167048.9	Worker	Scenario 3	8.23E-02	1.93E-04	6.32E-03
6540	639436.2	4167048.9	Worker	Scenario 3	9.02E-02	2.12E-04	6.68E-03
6541	639536.2	4167048.9	Worker	Scenario 3	9.58E-02	2.25E-04	6.98E-03
6542	639636.2	4167048.9	Worker	Scenario 3	1.03E-01	2.43E-04	7.33E-03
6543	639736.2	4167048.9	Worker	Scenario 3	1.11E-01	2.62E-04	8.48E-03
6544	639836.2	4167048.9	Worker	Scenario 3	1.20E-01	2.84E-04	9.37E-03
6545	639936.2	4167048.9	Worker	Scenario 3	1.30E-01	3.07E-04	9.84E-03
6546	640036.2	4167048.9	Worker	Scenario 3	1.43E-01	3.39E-04	9.71E-03
6547	640136.2	4167048.9	Worker	Scenario 3	1.56E-01	3.74E-04	9.15E-03
6548	640236.2	4167048.9	Worker	Scenario 3	1.72E-01	4.16E-04	1.17E-02
6549	640336.2	4167048.9	Worker	Scenario 3	1.91E-01	4.67E-04	1.38E-02
6550	640436.2	4167048.9	Worker	Scenario 3	2.15E-01	5.32E-04	1.58E-02
6551	640536.2	4167048.9	Worker	Scenario 3	2.40E-01	6.04E-04	2.44E-02
6552	641036.2	4167048.9	Worker	Scenario 3	4.53E-01	1.24E-03	3.57E-02
6553	641136.2	4167048.9	Worker	Scenario 3	5.65E-01	1.57E-03	4.39E-02
6554	644836.2	4167048.9	Worker	Scenario 3	6.52E-01	1.43E-03	2.10E-03
6555	644936.2	4167048.9	Worker	Scenario 3	5.96E-01	1.31E-03	2.01E-03
6556	645036.2	4167048.9	Worker	Scenario 3	5.55E-01	1.22E-03	1.92E-03
6557	645136.2	4167048.9	Worker	Scenario 3	5.21E-01	1.15E-03	1.84E-03
6558	645436.2	4167048.9	Worker	Scenario 3	4.44E-01	9.83E-04	1.60E-03
6559	645536.2	4167048.9	Worker	Scenario 3	4.23E-01	9.37E-04	1.53E-03
6560	645636.2	4167048.9	Worker	Scenario 3	4.04E-01	8.96E-04	1.48E-03
6561	645836.2	4167048.9	Worker	Scenario 3	3.70E-01	8.21E-04	1.41E-03
6562	645936.2	4167048.9	Worker	Scenario 3	3.55E-01	7.89E-04	1.37E-03
6563	646436.2	4167048.9	Worker	Scenario 3	2.94E-01	6.54E-04	1.20E-03
6564	646536.2	4167048.9	Worker	Scenario 3	2.84E-01	6.32E-04	1.17E-03
6565	646636.2	4167048.9	Worker	Scenario 3	2.74E-01	6.11E-04	1.14E-03
6566	646736.2	4167048.9	Worker	Scenario 3	2.65E-01	5.91E-04	1.11E-03
6567	646936.2	4167048.9	Worker	Scenario 3	2.49E-01	5.54E-04	1.05E-03
6568	647036.2	4167048.9	Worker	Scenario 3	2.41E-01	5.38E-04	1.02E-03
6569	636936.2	4167148.9	Worker	Scenario 3	2.24E-02	5.18E-05	1.71E-03
6570	637036.2	4167148.9	Worker	Scenario 3	2.14E-02	4.92E-05	1.55E-03
6571	637136.2	4167148.9	Worker	Scenario 3	2.36E-02	5.46E-05	1.79E-03
6572	637236.2	4167148.9	Worker	Scenario 3	2.53E-02	5.85E-05	1.92E-03
6573	637336.2	4167148.9	Worker	Scenario 3	2.71E-02	6.27E-05	2.03E-03
6574	637436.2	4167148.9	Worker	Scenario 3	2.88E-02	6.67E-05	2.12E-03
6575	637536.2	4167148.9	Worker	Scenario 3	2.89E-02	6.71E-05	2.14E-03
6576	637636.2	4167148.9	Worker	Scenario 3	2.78E-02	6.45E-05	2.05E-03
6577	637736.2	4167148.9	Worker	Scenario 3	3.18E-02	7.38E-05	2.29E-03
6578	637836.2	4167148.9	Worker	Scenario 3	3.27E-02	7.62E-05	2.34E-03
6579	637936.2	4167148.9	Worker	Scenario 3	3.61E-02	8.40E-05	2.76E-03
6580	638036.2	4167148.9	Worker	Scenario 3	4.13E-02	9.60E-05	3.62E-03
6581	638136.2	4167148.9	Worker	Scenario 3	4.13E-02	9.63E-05	3.48E-03
6582	638236.2	4167148.9	Worker	Scenario 3	5.06E-02	1.17E-04	4.56E-03
6583	638336.2	4167148.9	Worker	Scenario 3	4.53E-02	1.06E-04	3.84E-03
6584	638436.2	4167148.9	Worker	Scenario 3	4.95E-02	1.16E-04	4.30E-03
6585	638536.2	4167148.9	Worker	Scenario 3	4.96E-02	1.16E-04	4.09E-03
6586	638636.2	4167148.9	Worker	Scenario 3	5.27E-02	1.24E-04	4.33E-03
6587	638736.2	4167148.9	Worker	Scenario 3	5.58E-02	1.31E-04	4.50E-03
6588	638836.2	4167148.9	Worker	Scenario 3	6.06E-02	1.42E-04	4.82E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million) Receptor Risk	Chronic Hazard Index Receptor Risk	Acute Hazard Index Receptor Risk
6589	638936.2	4167148.9	Worker	Scenario 3	6.42E-02	1.51E-04	5.04E-03
6590	639036.2	4167148.9	Worker	Scenario 3	6.91E-02	1.62E-04	5.51E-03
6591	639136.2	4167148.9	Worker	Scenario 3	7.45E-02	1.75E-04	5.99E-03
6592	639236.2	4167148.9	Worker	Scenario 3	8.06E-02	1.89E-04	6.45E-03
6593	639336.2	4167148.9	Worker	Scenario 3	8.74E-02	2.06E-04	6.85E-03
6594	639436.2	4167148.9	Worker	Scenario 3	9.64E-02	2.27E-04	7.22E-03
6595	639536.2	4167148.9	Worker	Scenario 3	1.05E-01	2.48E-04	7.52E-03
6596	639636.2	4167148.9	Worker	Scenario 3	1.12E-01	2.63E-04	7.77E-03
6597	639736.2	4167148.9	Worker	Scenario 3	1.21E-01	2.86E-04	7.92E-03
6598	639836.2	4167148.9	Worker	Scenario 3	1.32E-01	3.13E-04	7.95E-03
6599	639936.2	4167148.9	Worker	Scenario 3	1.44E-01	3.42E-04	7.99E-03
6600	640036.2	4167148.9	Worker	Scenario 3	1.58E-01	3.77E-04	8.47E-03
6601	640136.2	4167148.9	Worker	Scenario 3	1.73E-01	4.17E-04	9.18E-03
6602	640236.2	4167148.9	Worker	Scenario 3	1.92E-01	4.64E-04	1.10E-02
6603	640336.2	4167148.9	Worker	Scenario 3	2.14E-01	5.23E-04	1.25E-02
6604	640436.2	4167148.9	Worker	Scenario 3	2.41E-01	5.95E-04	1.35E-02
6605	640836.2	4167148.9	Worker	Scenario 3	3.91E-01	1.04E-03	3.06E-02
6606	640936.2	4167148.9	Worker	Scenario 3	4.48E-01	1.23E-03	4.58E-02
6607	641036.2	4167148.9	Worker	Scenario 3	5.36E-01	1.52E-03	4.29E-02
6608	641136.2	4167148.9	Worker	Scenario 3	6.83E-01	2.00E-03	4.73E-02
6609	644836.2	4167148.9	Worker	Scenario 3	6.86E-01	1.50E-03	2.10E-03
6610	644936.2	4167148.9	Worker	Scenario 3	6.26E-01	1.38E-03	2.02E-03
6611	645036.2	4167148.9	Worker	Scenario 3	5.81E-01	1.28E-03	1.94E-03
6612	645136.2	4167148.9	Worker	Scenario 3	5.44E-01	1.20E-03	1.86E-03
6613	645436.2	4167148.9	Worker	Scenario 3	4.61E-01	1.02E-03	1.66E-03
6614	645536.2	4167148.9	Worker	Scenario 3	4.38E-01	9.71E-04	1.60E-03
6615	645636.2	4167148.9	Worker	Scenario 3	4.18E-01	9.26E-04	1.54E-03
6616	645836.2	4167148.9	Worker	Scenario 3	3.81E-01	8.46E-04	1.43E-03
6617	645936.2	4167148.9	Worker	Scenario 3	3.65E-01	8.11E-04	1.38E-03
6618	646036.2	4167148.9	Worker	Scenario 3	3.51E-01	7.79E-04	1.33E-03
6619	646336.2	4167148.9	Worker	Scenario 3	3.12E-01	6.94E-04	1.19E-03
6620	646436.2	4167148.9	Worker	Scenario 3	3.01E-01	6.69E-04	1.15E-03
6621	646536.2	4167148.9	Worker	Scenario 3	2.90E-01	6.46E-04	1.11E-03
6622	646636.2	4167148.9	Worker	Scenario 3	2.80E-01	6.24E-04	1.08E-03
6623	646736.2	4167148.9	Worker	Scenario 3	2.71E-01	6.04E-04	1.04E-03
6624	646836.2	4167148.9	Worker	Scenario 3	2.62E-01	5.84E-04	1.01E-03
6625	646936.2	4167148.9	Worker	Scenario 3	2.54E-01	5.66E-04	9.86E-04
6626	647036.2	4167148.9	Worker	Scenario 3	2.46E-01	5.48E-04	9.63E-04
6627	636836.2	4167248.9	Worker	Scenario 3	2.16E-02	4.95E-05	1.52E-03
6628	636936.2	4167248.9	Worker	Scenario 3	2.43E-02	5.57E-05	1.75E-03
6629	637036.2	4167248.9	Worker	Scenario 3	2.28E-02	5.22E-05	1.62E-03
6630	637136.2	4167248.9	Worker	Scenario 3	2.50E-02	5.74E-05	1.81E-03
6631	637236.2	4167248.9	Worker	Scenario 3	2.62E-02	6.01E-05	1.90E-03
6632	637336.2	4167248.9	Worker	Scenario 3	2.93E-02	6.74E-05	2.21E-03
6633	637436.2	4167248.9	Worker	Scenario 3	3.05E-02	7.02E-05	2.31E-03
6634	637536.2	4167248.9	Worker	Scenario 3	3.08E-02	7.08E-05	2.29E-03
6635	637636.2	4167248.9	Worker	Scenario 3	3.01E-02	6.94E-05	2.22E-03
6636	637736.2	4167248.9	Worker	Scenario 3	3.35E-02	7.71E-05	2.51E-03
6637	637836.2	4167248.9	Worker	Scenario 3	3.97E-02	9.14E-05	3.02E-03
6638	637936.2	4167248.9	Worker	Scenario 3	3.57E-02	8.24E-05	2.66E-03
6639	638036.2	4167248.9	Worker	Scenario 3	3.89E-02	8.99E-05	2.94E-03
6640	638136.2	4167248.9	Worker	Scenario 3	4.60E-02	1.06E-04	3.47E-03
6641	638236.2	4167248.9	Worker	Scenario 3	4.76E-02	1.10E-04	3.61E-03
6642	638336.2	4167248.9	Worker	Scenario 3	5.07E-02	1.17E-04	3.83E-03
6643	638436.2	4167248.9	Worker	Scenario 3	5.17E-02	1.20E-04	3.96E-03
6644	638536.2	4167248.9	Worker	Scenario 3	5.55E-02	1.28E-04	4.23E-03
6645	638636.2	4167248.9	Worker	Scenario 3	5.57E-02	1.29E-04	4.30E-03
6646	638736.2	4167248.9	Worker	Scenario 3	5.89E-02	1.37E-04	4.55E-03
6647	638836.2	4167248.9	Worker	Scenario 3	6.35E-02	1.47E-04	4.92E-03
6648	638936.2	4167248.9	Worker	Scenario 3	6.83E-02	1.59E-04	5.41E-03
6649	639036.2	4167248.9	Worker	Scenario 3	7.31E-02	1.70E-04	5.89E-03
6650	639136.2	4167248.9	Worker	Scenario 3	7.91E-02	1.84E-04	6.45E-03
6651	639236.2	4167248.9	Worker	Scenario 3	8.56E-02	1.99E-04	7.01E-03
6652	639336.2	4167248.9	Worker	Scenario 3	9.33E-02	2.18E-04	7.58E-03
6653	639436.2	4167248.9	Worker	Scenario 3	1.02E-01	2.37E-04	8.11E-03
6654	639536.2	4167248.9	Worker	Scenario 3	1.11E-01	2.60E-04	8.58E-03
6655	639636.2	4167248.9	Worker	Scenario 3	1.21E-01	2.84E-04	9.05E-03
6656	639736.2	4167248.9	Worker	Scenario 3	1.31E-01	3.09E-04	9.54E-03
6657	639836.2	4167248.9	Worker	Scenario 3	1.44E-01	3.40E-04	9.88E-03
6658	639936.2	4167248.9	Worker	Scenario 3	1.59E-01	3.76E-04	1.02E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6659	640036.2	4167248.9	Worker	Scenario 3	1.75E-01	4.17E-04	1.04E-02
6660	640136.2	4167248.9	Worker	Scenario 3	1.93E-01	4.64E-04	1.06E-02
6661	640236.2	4167248.9	Worker	Scenario 3	2.15E-01	5.19E-04	1.09E-02
6662	640336.2	4167248.9	Worker	Scenario 3	2.40E-01	5.87E-04	1.16E-02
6663	640636.2	4167248.9	Worker	Scenario 3	3.49E-01	8.89E-04	1.54E-02
6664	640736.2	4167248.9	Worker	Scenario 3	4.06E-01	1.05E-03	1.76E-02
6665	640836.2	4167248.9	Worker	Scenario 3	4.50E-01	1.20E-03	2.08E-02
6666	640936.2	4167248.9	Worker	Scenario 3	5.25E-01	1.46E-03	2.85E-02
6667	641036.2	4167248.9	Worker	Scenario 3	6.35E-01	1.85E-03	3.70E-02
6668	641136.2	4167248.9	Worker	Scenario 3	8.21E-01	2.54E-03	4.83E-02
6669	645036.2	4167248.9	Worker	Scenario 3	5.95E-01	1.31E-03	1.92E-03
6670	645136.2	4167248.9	Worker	Scenario 3	5.57E-01	1.23E-03	1.85E-03
6671	645336.2	4167248.9	Worker	Scenario 3	4.97E-01	1.10E-03	1.72E-03
6672	645436.2	4167248.9	Worker	Scenario 3	4.72E-01	1.04E-03	1.66E-03
6673	645536.2	4167248.9	Worker	Scenario 3	4.49E-01	9.93E-04	1.61E-03
6674	645636.2	4167248.9	Worker	Scenario 3	4.27E-01	9.46E-04	1.55E-03
6675	645736.2	4167248.9	Worker	Scenario 3	4.08E-01	9.03E-04	1.50E-03
6676	645836.2	4167248.9	Worker	Scenario 3	3.90E-01	8.64E-04	1.45E-03
6677	645936.2	4167248.9	Worker	Scenario 3	3.73E-01	8.28E-04	1.41E-03
6678	646036.2	4167248.9	Worker	Scenario 3	3.58E-01	7.94E-04	1.36E-03
6679	646136.2	4167248.9	Worker	Scenario 3	3.44E-01	7.63E-04	1.32E-03
6680	646336.2	4167248.9	Worker	Scenario 3	3.18E-01	7.07E-04	1.24E-03
6681	646436.2	4167248.9	Worker	Scenario 3	3.06E-01	6.81E-04	1.21E-03
6682	646536.2	4167248.9	Worker	Scenario 3	2.95E-01	6.57E-04	1.17E-03
6683	646636.2	4167248.9	Worker	Scenario 3	2.85E-01	6.34E-04	1.14E-03
6684	646736.2	4167248.9	Worker	Scenario 3	2.75E-01	6.13E-04	1.11E-03
6685	646836.2	4167248.9	Worker	Scenario 3	2.66E-01	5.93E-04	1.08E-03
6686	646936.2	4167248.9	Worker	Scenario 3	2.58E-01	5.74E-04	1.05E-03
6687	647036.2	4167248.9	Worker	Scenario 3	2.50E-01	5.56E-04	1.02E-03
6688	636736.2	4167348.9	Worker	Scenario 3	2.29E-02	5.20E-05	1.60E-03
6689	636836.2	4167348.9	Worker	Scenario 3	2.23E-02	5.07E-05	1.57E-03
6690	636936.2	4167348.9	Worker	Scenario 3	2.57E-02	5.83E-05	1.76E-03
6691	637036.2	4167348.9	Worker	Scenario 3	2.62E-02	5.96E-05	1.80E-03
6692	637136.2	4167348.9	Worker	Scenario 3	2.46E-02	5.59E-05	1.74E-03
6693	637236.2	4167348.9	Worker	Scenario 3	2.52E-02	5.74E-05	1.78E-03
6694	637336.2	4167348.9	Worker	Scenario 3	2.71E-02	6.16E-05	1.91E-03
6695	637436.2	4167348.9	Worker	Scenario 3	3.21E-02	7.30E-05	2.07E-03
6696	637536.2	4167348.9	Worker	Scenario 3	3.31E-02	7.52E-05	2.14E-03
6697	637636.2	4167348.9	Worker	Scenario 3	3.27E-02	7.43E-05	2.20E-03
6698	637736.2	4167348.9	Worker	Scenario 3	3.42E-02	7.78E-05	2.28E-03
6699	637836.2	4167348.9	Worker	Scenario 3	4.15E-02	9.42E-05	2.66E-03
6700	637936.2	4167348.9	Worker	Scenario 3	4.17E-02	9.49E-05	2.67E-03
6701	638036.2	4167348.9	Worker	Scenario 3	4.37E-02	9.94E-05	2.81E-03
6702	638136.2	4167348.9	Worker	Scenario 3	4.66E-02	1.06E-04	3.02E-03
6703	638236.2	4167348.9	Worker	Scenario 3	4.75E-02	1.08E-04	3.08E-03
6704	638336.2	4167348.9	Worker	Scenario 3	5.73E-02	1.30E-04	3.67E-03
6705	638436.2	4167348.9	Worker	Scenario 3	5.91E-02	1.34E-04	3.82E-03
6706	638536.2	4167348.9	Worker	Scenario 3	5.52E-02	1.26E-04	3.62E-03
6707	638636.2	4167348.9	Worker	Scenario 3	5.98E-02	1.36E-04	3.95E-03
6708	638736.2	4167348.9	Worker	Scenario 3	6.32E-02	1.44E-04	4.15E-03
6709	638836.2	4167348.9	Worker	Scenario 3	6.74E-02	1.54E-04	4.43E-03
6710	638936.2	4167348.9	Worker	Scenario 3	7.29E-02	1.66E-04	4.78E-03
6711	639036.2	4167348.9	Worker	Scenario 3	7.77E-02	1.78E-04	5.08E-03
6712	639136.2	4167348.9	Worker	Scenario 3	8.35E-02	1.91E-04	5.45E-03
6713	639236.2	4167348.9	Worker	Scenario 3	9.12E-02	2.09E-04	5.87E-03
6714	639336.2	4167348.9	Worker	Scenario 3	9.96E-02	2.28E-04	6.28E-03
6715	639436.2	4167348.9	Worker	Scenario 3	1.09E-01	2.51E-04	6.67E-03
6716	639536.2	4167348.9	Worker	Scenario 3	1.20E-01	2.76E-04	7.06E-03
6717	639636.2	4167348.9	Worker	Scenario 3	1.32E-01	3.05E-04	7.37E-03
6718	639736.2	4167348.9	Worker	Scenario 3	1.43E-01	3.32E-04	7.83E-03
6719	639836.2	4167348.9	Worker	Scenario 3	1.57E-01	3.66E-04	8.18E-03
6720	639936.2	4167348.9	Worker	Scenario 3	1.74E-01	4.07E-04	8.44E-03
6721	640036.2	4167348.9	Worker	Scenario 3	1.95E-01	4.59E-04	8.42E-03
6722	640136.2	4167348.9	Worker	Scenario 3	2.18E-01	5.17E-04	8.61E-03
6723	640236.2	4167348.9	Worker	Scenario 3	2.44E-01	5.89E-04	8.35E-03
6724	640536.2	4167348.9	Worker	Scenario 3	3.54E-01	8.71E-04	1.23E-02
6725	640636.2	4167348.9	Worker	Scenario 3	4.12E-01	1.02E-03	1.43E-02
6726	640736.2	4167348.9	Worker	Scenario 3	4.53E-01	1.15E-03	1.70E-02
6727	640836.2	4167348.9	Worker	Scenario 3	5.26E-01	1.37E-03	2.08E-02
6728	640936.2	4167348.9	Worker	Scenario 3	6.20E-01	1.68E-03	2.63E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6729	641036.2	4167348.9	Worker	Scenario 3	7.53E-01	2.14E-03	3.47E-02
6730	641136.2	4167348.9	Worker	Scenario 3	9.71E-01	2.97E-03	4.93E-02
6731	644836.2	4167348.9	Worker	Scenario 3	6.84E-01	1.50E-03	2.09E-03
6732	644936.2	4167348.9	Worker	Scenario 3	6.38E-01	1.40E-03	2.00E-03
6733	645036.2	4167348.9	Worker	Scenario 3	5.99E-01	1.32E-03	1.92E-03
6734	645136.2	4167348.9	Worker	Scenario 3	5.63E-01	1.24E-03	1.85E-03
6735	645236.2	4167348.9	Worker	Scenario 3	5.32E-01	1.17E-03	1.78E-03
6736	645336.2	4167348.9	Worker	Scenario 3	5.04E-01	1.11E-03	1.72E-03
6737	645436.2	4167348.9	Worker	Scenario 3	4.78E-01	1.05E-03	1.66E-03
6738	645536.2	4167348.9	Worker	Scenario 3	4.54E-01	1.00E-03	1.60E-03
6739	645636.2	4167348.9	Worker	Scenario 3	4.33E-01	9.57E-04	1.55E-03
6740	645736.2	4167348.9	Worker	Scenario 3	4.13E-01	9.14E-04	1.50E-03
6741	645836.2	4167348.9	Worker	Scenario 3	3.95E-01	8.75E-04	1.45E-03
6742	645936.2	4167348.9	Worker	Scenario 3	3.78E-01	8.38E-04	1.40E-03
6743	646036.2	4167348.9	Worker	Scenario 3	3.62E-01	8.03E-04	1.36E-03
6744	646336.2	4167348.9	Worker	Scenario 3	3.21E-01	7.14E-04	1.24E-03
6745	646436.2	4167348.9	Worker	Scenario 3	3.10E-01	6.88E-04	1.20E-03
6746	646536.2	4167348.9	Worker	Scenario 3	2.99E-01	6.63E-04	1.17E-03
6747	646636.2	4167348.9	Worker	Scenario 3	2.88E-01	6.40E-04	1.13E-03
6748	646736.2	4167348.9	Worker	Scenario 3	2.78E-01	6.19E-04	1.10E-03
6749	646836.2	4167348.9	Worker	Scenario 3	2.69E-01	5.99E-04	1.07E-03
6750	646936.2	4167348.9	Worker	Scenario 3	2.60E-01	5.79E-04	1.04E-03
6751	647036.2	4167348.9	Worker	Scenario 3	2.52E-01	5.61E-04	1.02E-03
6752	636636.2	4167448.9	Worker	Scenario 3	2.20E-02	4.96E-05	1.62E-03
6753	636736.2	4167448.9	Worker	Scenario 3	2.44E-02	5.51E-05	1.75E-03
6754	636836.2	4167448.9	Worker	Scenario 3	2.67E-02	6.02E-05	1.91E-03
6755	636936.2	4167448.9	Worker	Scenario 3	2.72E-02	6.12E-05	1.93E-03
6756	637036.2	4167448.9	Worker	Scenario 3	2.40E-02	5.43E-05	1.75E-03
6757	637136.2	4167448.9	Worker	Scenario 3	2.57E-02	5.79E-05	1.86E-03
6758	637236.2	4167448.9	Worker	Scenario 3	2.69E-02	6.07E-05	1.93E-03
6759	637336.2	4167448.9	Worker	Scenario 3	2.94E-02	6.64E-05	2.06E-03
6760	637436.2	4167448.9	Worker	Scenario 3	3.09E-02	6.98E-05	2.18E-03
6761	637536.2	4167448.9	Worker	Scenario 3	3.56E-02	8.02E-05	2.94E-03
6762	637636.2	4167448.9	Worker	Scenario 3	3.54E-02	7.99E-05	2.81E-03
6763	637736.2	4167448.9	Worker	Scenario 3	3.70E-02	8.34E-05	2.97E-03
6764	637836.2	4167448.9	Worker	Scenario 3	3.71E-02	8.38E-05	2.86E-03
6765	637936.2	4167448.9	Worker	Scenario 3	4.56E-02	1.02E-04	3.93E-03
6766	638036.2	4167448.9	Worker	Scenario 3	4.55E-02	1.03E-04	3.92E-03
6767	638136.2	4167448.9	Worker	Scenario 3	4.71E-02	1.06E-04	4.04E-03
6768	638236.2	4167448.9	Worker	Scenario 3	5.22E-02	1.18E-04	4.47E-03
6769	638336.2	4167448.9	Worker	Scenario 3	5.44E-02	1.23E-04	4.64E-03
6770	638436.2	4167448.9	Worker	Scenario 3	6.29E-02	1.42E-04	4.93E-03
6771	638536.2	4167448.9	Worker	Scenario 3	5.96E-02	1.35E-04	5.00E-03
6772	638636.2	4167448.9	Worker	Scenario 3	6.32E-02	1.43E-04	5.23E-03
6773	638736.2	4167448.9	Worker	Scenario 3	6.80E-02	1.54E-04	5.50E-03
6774	638836.2	4167448.9	Worker	Scenario 3	7.24E-02	1.64E-04	5.74E-03
6775	638936.2	4167448.9	Worker	Scenario 3	7.78E-02	1.76E-04	6.00E-03
6776	639036.2	4167448.9	Worker	Scenario 3	8.33E-02	1.89E-04	6.25E-03
6777	639136.2	4167448.9	Worker	Scenario 3	8.90E-02	2.02E-04	6.51E-03
6778	639236.2	4167448.9	Worker	Scenario 3	9.70E-02	2.20E-04	6.75E-03
6779	639336.2	4167448.9	Worker	Scenario 3	1.06E-01	2.42E-04	6.94E-03
6780	639436.2	4167448.9	Worker	Scenario 3	1.17E-01	2.66E-04	7.10E-03
6781	639536.2	4167448.9	Worker	Scenario 3	1.29E-01	2.95E-04	7.14E-03
6782	639636.2	4167448.9	Worker	Scenario 3	1.46E-01	3.35E-04	6.79E-03
6783	639736.2	4167448.9	Worker	Scenario 3	1.56E-01	3.59E-04	7.26E-03
6784	639836.2	4167448.9	Worker	Scenario 3	1.73E-01	3.98E-04	7.26E-03
6785	639936.2	4167448.9	Worker	Scenario 3	1.93E-01	4.47E-04	7.10E-03
6786	640036.2	4167448.9	Worker	Scenario 3	2.17E-01	5.07E-04	6.70E-03
6787	640136.2	4167448.9	Worker	Scenario 3	2.48E-01	5.85E-04	5.75E-03
6788	640436.2	4167448.9	Worker	Scenario 3	3.58E-01	8.54E-04	9.60E-03
6789	640536.2	4167448.9	Worker	Scenario 3	4.15E-01	9.96E-04	1.15E-02
6790	640636.2	4167448.9	Worker	Scenario 3	4.70E-01	1.14E-03	1.38E-02
6791	640736.2	4167448.9	Worker	Scenario 3	5.40E-01	1.33E-03	1.63E-02
6792	640836.2	4167448.9	Worker	Scenario 3	6.35E-01	1.60E-03	1.87E-02
6793	644836.2	4167448.9	Worker	Scenario 3	6.80E-01	1.49E-03	1.86E-03
6794	644936.2	4167448.9	Worker	Scenario 3	6.36E-01	1.39E-03	1.79E-03
6795	645036.2	4167448.9	Worker	Scenario 3	5.97E-01	1.31E-03	1.73E-03
6796	645136.2	4167448.9	Worker	Scenario 3	5.63E-01	1.24E-03	1.66E-03
6797	645236.2	4167448.9	Worker	Scenario 3	5.32E-01	1.17E-03	1.61E-03
6798	645336.2	4167448.9	Worker	Scenario 3	5.04E-01	1.11E-03	1.55E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6799	645436.2	4167448.9	Worker	Scenario 3	4.79E-01	1.06E-03	1.50E-03
6800	645536.2	4167448.9	Worker	Scenario 3	4.55E-01	1.00E-03	1.45E-03
6801	645636.2	4167448.9	Worker	Scenario 3	4.34E-01	9.58E-04	1.40E-03
6802	645736.2	4167448.9	Worker	Scenario 3	4.14E-01	9.16E-04	1.35E-03
6803	645836.2	4167448.9	Worker	Scenario 3	3.96E-01	8.76E-04	1.31E-03
6804	645936.2	4167448.9	Worker	Scenario 3	3.79E-01	8.40E-04	1.27E-03
6805	646336.2	4167448.9	Worker	Scenario 3	3.23E-01	7.16E-04	1.13E-03
6806	646436.2	4167448.9	Worker	Scenario 3	3.11E-01	6.90E-04	1.09E-03
6807	646536.2	4167448.9	Worker	Scenario 3	3.00E-01	6.65E-04	1.06E-03
6808	646636.2	4167448.9	Worker	Scenario 3	2.89E-01	6.43E-04	1.03E-03
6809	646736.2	4167448.9	Worker	Scenario 3	2.80E-01	6.21E-04	1.01E-03
6810	646836.2	4167448.9	Worker	Scenario 3	2.70E-01	6.01E-04	9.80E-04
6811	646936.2	4167448.9	Worker	Scenario 3	2.62E-01	5.81E-04	9.55E-04
6812	647036.2	4167448.9	Worker	Scenario 3	2.53E-01	5.63E-04	9.30E-04
6813	636536.2	4167548.9	Worker	Scenario 3	2.31E-02	5.19E-05	1.62E-03
6814	636636.2	4167548.9	Worker	Scenario 3	2.50E-02	5.61E-05	1.73E-03
6815	636736.2	4167548.9	Worker	Scenario 3	2.57E-02	5.78E-05	1.77E-03
6816	636836.2	4167548.9	Worker	Scenario 3	2.66E-02	5.98E-05	1.82E-03
6817	636936.2	4167548.9	Worker	Scenario 3	2.50E-02	5.63E-05	1.72E-03
6818	637036.2	4167548.9	Worker	Scenario 3	2.46E-02	5.54E-05	1.67E-03
6819	637136.2	4167548.9	Worker	Scenario 3	2.71E-02	6.09E-05	1.82E-03
6820	637236.2	4167548.9	Worker	Scenario 3	2.91E-02	6.55E-05	1.91E-03
6821	637336.2	4167548.9	Worker	Scenario 3	2.91E-02	6.54E-05	1.91E-03
6822	637436.2	4167548.9	Worker	Scenario 3	3.34E-02	7.50E-05	2.16E-03
6823	637536.2	4167548.9	Worker	Scenario 3	3.34E-02	7.51E-05	2.06E-03
6824	637636.2	4167548.9	Worker	Scenario 3	3.97E-02	8.91E-05	2.72E-03
6825	637736.2	4167548.9	Worker	Scenario 3	3.98E-02	8.95E-05	2.59E-03
6826	637836.2	4167548.9	Worker	Scenario 3	4.09E-02	9.21E-05	2.55E-03
6827	637936.2	4167548.9	Worker	Scenario 3	4.96E-02	1.11E-04	3.16E-03
6828	638036.2	4167548.9	Worker	Scenario 3	5.19E-02	1.17E-04	3.19E-03
6829	638136.2	4167548.9	Worker	Scenario 3	4.83E-02	1.09E-04	2.81E-03
6830	638236.2	4167548.9	Worker	Scenario 3	5.68E-02	1.28E-04	3.24E-03
6831	638336.2	4167548.9	Worker	Scenario 3	5.49E-02	1.24E-04	3.25E-03
6832	638436.2	4167548.9	Worker	Scenario 3	6.50E-02	1.47E-04	3.46E-03
6833	638536.2	4167548.9	Worker	Scenario 3	6.38E-02	1.44E-04	3.72E-03
6834	638636.2	4167548.9	Worker	Scenario 3	6.76E-02	1.53E-04	3.96E-03
6835	638736.2	4167548.9	Worker	Scenario 3	7.39E-02	1.67E-04	4.14E-03
6836	638836.2	4167548.9	Worker	Scenario 3	7.66E-02	1.74E-04	4.43E-03
6837	638936.2	4167548.9	Worker	Scenario 3	8.33E-02	1.89E-04	4.59E-03
6838	639036.2	4167548.9	Worker	Scenario 3	8.87E-02	2.02E-04	4.81E-03
6839	639136.2	4167548.9	Worker	Scenario 3	9.52E-02	2.17E-04	4.99E-03
6840	639236.2	4167548.9	Worker	Scenario 3	1.04E-01	2.37E-04	5.08E-03
6841	639336.2	4167548.9	Worker	Scenario 3	1.14E-01	2.60E-04	5.22E-03
6842	639436.2	4167548.9	Worker	Scenario 3	1.26E-01	2.88E-04	5.24E-03
6843	639536.2	4167548.9	Worker	Scenario 3	1.39E-01	3.18E-04	5.45E-03
6844	639636.2	4167548.9	Worker	Scenario 3	1.55E-01	3.56E-04	5.94E-03
6845	639736.2	4167548.9	Worker	Scenario 3	1.70E-01	3.91E-04	6.56E-03
6846	639836.2	4167548.9	Worker	Scenario 3	1.90E-01	4.37E-04	6.93E-03
6847	639936.2	4167548.9	Worker	Scenario 3	2.15E-01	4.96E-04	6.99E-03
6848	640036.2	4167548.9	Worker	Scenario 3	2.44E-01	5.68E-04	6.44E-03
6849	640236.2	4167548.9	Worker	Scenario 3	3.24E-01	7.52E-04	7.32E-03
6850	640336.2	4167548.9	Worker	Scenario 3	3.76E-01	8.72E-04	8.30E-03
6851	640436.2	4167548.9	Worker	Scenario 3	4.28E-01	9.97E-04	9.36E-03
6852	644536.2	4167548.9	Worker	Scenario 3	8.30E-01	1.80E-03	2.38E-03
6853	644736.2	4167548.9	Worker	Scenario 3	7.15E-01	1.56E-03	2.11E-03
6854	644836.2	4167548.9	Worker	Scenario 3	6.68E-01	1.46E-03	1.99E-03
6855	644936.2	4167548.9	Worker	Scenario 3	6.26E-01	1.37E-03	1.87E-03
6856	645036.2	4167548.9	Worker	Scenario 3	5.89E-01	1.29E-03	1.78E-03
6857	645136.2	4167548.9	Worker	Scenario 3	5.56E-01	1.22E-03	1.70E-03
6858	645236.2	4167548.9	Worker	Scenario 3	5.26E-01	1.16E-03	1.64E-03
6859	645336.2	4167548.9	Worker	Scenario 3	4.99E-01	1.10E-03	1.58E-03
6860	645436.2	4167548.9	Worker	Scenario 3	4.75E-01	1.05E-03	1.52E-03
6861	645536.2	4167548.9	Worker	Scenario 3	4.52E-01	9.96E-04	1.47E-03
6862	645636.2	4167548.9	Worker	Scenario 3	4.31E-01	9.50E-04	1.42E-03
6863	645736.2	4167548.9	Worker	Scenario 3	4.12E-01	9.09E-04	1.37E-03
6864	645836.2	4167548.9	Worker	Scenario 3	3.94E-01	8.70E-04	1.32E-03
6865	645936.2	4167548.9	Worker	Scenario 3	3.77E-01	8.34E-04	1.28E-03
6866	646036.2	4167548.9	Worker	Scenario 3	3.62E-01	8.00E-04	1.24E-03
6867	646236.2	4167548.9	Worker	Scenario 3	3.34E-01	7.40E-04	1.15E-03
6868	646336.2	4167548.9	Worker	Scenario 3	3.22E-01	7.13E-04	1.12E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6869	646436.2	4167548.9	Worker	Scenario 3	3.10E-01	6.87E-04	1.08E-03
6870	646536.2	4167548.9	Worker	Scenario 3	2.99E-01	6.63E-04	1.04E-03
6871	646636.2	4167548.9	Worker	Scenario 3	2.89E-01	6.40E-04	1.01E-03
6872	646736.2	4167548.9	Worker	Scenario 3	2.79E-01	6.19E-04	9.80E-04
6873	646836.2	4167548.9	Worker	Scenario 3	2.70E-01	5.99E-04	9.49E-04
6874	646936.2	4167548.9	Worker	Scenario 3	2.61E-01	5.80E-04	9.20E-04
6875	647036.2	4167548.9	Worker	Scenario 3	2.53E-01	5.62E-04	8.91E-04
6876	636436.2	4167648.9	Worker	Scenario 3	2.35E-02	5.28E-05	1.33E-03
6877	636536.2	4167648.9	Worker	Scenario 3	2.52E-02	5.65E-05	1.37E-03
6878	636636.2	4167648.9	Worker	Scenario 3	2.72E-02	6.12E-05	1.47E-03
6879	636736.2	4167648.9	Worker	Scenario 3	2.68E-02	6.03E-05	1.47E-03
6880	636836.2	4167648.9	Worker	Scenario 3	2.82E-02	6.35E-05	1.63E-03
6881	636936.2	4167648.9	Worker	Scenario 3	2.78E-02	6.27E-05	1.62E-03
6882	637036.2	4167648.9	Worker	Scenario 3	2.70E-02	6.09E-05	1.51E-03
6883	637136.2	4167648.9	Worker	Scenario 3	2.92E-02	6.58E-05	1.79E-03
6884	637236.2	4167648.9	Worker	Scenario 3	2.94E-02	6.63E-05	1.80E-03
6885	637336.2	4167648.9	Worker	Scenario 3	3.20E-02	7.23E-05	2.11E-03
6886	637436.2	4167648.9	Worker	Scenario 3	3.61E-02	8.16E-05	2.47E-03
6887	637536.2	4167648.9	Worker	Scenario 3	3.35E-02	7.59E-05	2.27E-03
6888	637636.2	4167648.9	Worker	Scenario 3	3.95E-02	8.92E-05	2.75E-03
6889	637736.2	4167648.9	Worker	Scenario 3	4.27E-02	9.65E-05	2.93E-03
6890	637836.2	4167648.9	Worker	Scenario 3	4.06E-02	9.23E-05	2.88E-03
6891	637936.2	4167648.9	Worker	Scenario 3	4.74E-02	1.07E-04	3.17E-03
6892	638036.2	4167648.9	Worker	Scenario 3	5.65E-02	1.28E-04	3.09E-03
6893	638136.2	4167648.9	Worker	Scenario 3	5.13E-02	1.17E-04	3.35E-03
6894	638236.2	4167648.9	Worker	Scenario 3	5.54E-02	1.26E-04	3.48E-03
6895	638336.2	4167648.9	Worker	Scenario 3	5.96E-02	1.36E-04	3.64E-03
6896	638436.2	4167648.9	Worker	Scenario 3	6.44E-02	1.47E-04	3.75E-03
6897	638536.2	4167648.9	Worker	Scenario 3	7.18E-02	1.63E-04	3.70E-03
6898	638636.2	4167648.9	Worker	Scenario 3	7.13E-02	1.63E-04	4.07E-03
6899	638736.2	4167648.9	Worker	Scenario 3	7.76E-02	1.77E-04	4.10E-03
6900	638836.2	4167648.9	Worker	Scenario 3	8.19E-02	1.87E-04	4.39E-03
6901	638936.2	4167648.9	Worker	Scenario 3	8.90E-02	2.03E-04	4.70E-03
6902	639036.2	4167648.9	Worker	Scenario 3	9.47E-02	2.16E-04	5.10E-03
6903	639136.2	4167648.9	Worker	Scenario 3	1.02E-01	2.33E-04	5.49E-03
6904	639236.2	4167648.9	Worker	Scenario 3	1.11E-01	2.54E-04	5.79E-03
6905	639336.2	4167648.9	Worker	Scenario 3	1.23E-01	2.81E-04	5.91E-03
6906	639436.2	4167648.9	Worker	Scenario 3	1.39E-01	3.16E-04	5.73E-03
6907	639536.2	4167648.9	Worker	Scenario 3	1.52E-01	3.46E-04	6.00E-03
6908	639636.2	4167648.9	Worker	Scenario 3	1.70E-01	3.88E-04	6.26E-03
6909	639736.2	4167648.9	Worker	Scenario 3	1.92E-01	4.39E-04	6.00E-03
6910	639836.2	4167648.9	Worker	Scenario 3	2.12E-01	4.84E-04	6.60E-03
6911	639936.2	4167648.9	Worker	Scenario 3	2.41E-01	5.55E-04	5.37E-03
6912	640136.2	4167648.9	Worker	Scenario 3	3.24E-01	7.40E-04	5.92E-03
6913	643436.2	4167648.9	Worker	Scenario 3	2.24E+00	4.74E-03	4.47E-03
6914	643536.2	4167648.9	Worker	Scenario 3	2.05E+00	4.34E-03	4.16E-03
6915	643636.2	4167648.9	Worker	Scenario 3	1.82E+00	3.88E-03	3.93E-03
6916	643736.2	4167648.9	Worker	Scenario 3	1.62E+00	3.46E-03	3.71E-03
6917	643836.2	4167648.9	Worker	Scenario 3	1.46E+00	3.11E-03	3.48E-03
6918	643936.2	4167648.9	Worker	Scenario 3	1.31E+00	2.81E-03	3.24E-03
6919	644036.2	4167648.9	Worker	Scenario 3	1.19E+00	2.56E-03	3.01E-03
6920	644136.2	4167648.9	Worker	Scenario 3	1.08E+00	2.33E-03	2.88E-03
6921	644236.2	4167648.9	Worker	Scenario 3	9.94E-01	2.15E-03	2.78E-03
6922	644336.2	4167648.9	Worker	Scenario 3	9.17E-01	1.98E-03	2.67E-03
6923	644436.2	4167648.9	Worker	Scenario 3	8.49E-01	1.84E-03	2.56E-03
6924	644536.2	4167648.9	Worker	Scenario 3	7.89E-01	1.71E-03	2.44E-03
6925	645136.2	4167648.9	Worker	Scenario 3	5.42E-01	1.19E-03	1.99E-03
6926	645336.2	4167648.9	Worker	Scenario 3	4.89E-01	1.07E-03	1.90E-03
6927	645436.2	4167648.9	Worker	Scenario 3	4.65E-01	1.02E-03	1.85E-03
6928	645536.2	4167648.9	Worker	Scenario 3	4.44E-01	9.76E-04	1.80E-03
6929	645636.2	4167648.9	Worker	Scenario 3	4.24E-01	9.33E-04	1.75E-03
6930	645736.2	4167648.9	Worker	Scenario 3	4.06E-01	8.93E-04	1.69E-03
6931	645836.2	4167648.9	Worker	Scenario 3	3.88E-01	8.56E-04	1.64E-03
6932	645936.2	4167648.9	Worker	Scenario 3	3.73E-01	8.22E-04	1.59E-03
6933	646036.2	4167648.9	Worker	Scenario 3	3.58E-01	7.89E-04	1.54E-03
6934	646236.2	4167648.9	Worker	Scenario 3	3.31E-01	7.31E-04	1.44E-03
6935	646336.2	4167648.9	Worker	Scenario 3	3.19E-01	7.04E-04	1.39E-03
6936	646436.2	4167648.9	Worker	Scenario 3	3.07E-01	6.79E-04	1.34E-03
6937	646536.2	4167648.9	Worker	Scenario 3	2.97E-01	6.56E-04	1.29E-03
6938	646636.2	4167648.9	Worker	Scenario 3	2.86E-01	6.34E-04	1.25E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6939	646736.2	4167648.9	Worker	Scenario 3	2.77E-01	6.13E-04	1.21E-03
6940	646836.2	4167648.9	Worker	Scenario 3	2.68E-01	5.94E-04	1.16E-03
6941	646936.2	4167648.9	Worker	Scenario 3	2.60E-01	5.75E-04	1.12E-03
6942	647036.2	4167648.9	Worker	Scenario 3	2.51E-01	5.57E-04	1.08E-03
6943	636336.2	4167748.9	Worker	Scenario 3	2.11E-02	4.76E-05	1.26E-03
6944	636436.2	4167748.9	Worker	Scenario 3	2.36E-02	5.34E-05	1.59E-03
6945	636536.2	4167748.9	Worker	Scenario 3	2.34E-02	5.29E-05	1.53E-03
6946	636636.2	4167748.9	Worker	Scenario 3	2.73E-02	6.17E-05	1.97E-03
6947	636736.2	4167748.9	Worker	Scenario 3	2.96E-02	6.69E-05	2.14E-03
6948	636836.2	4167748.9	Worker	Scenario 3	3.17E-02	7.17E-05	2.25E-03
6949	636936.2	4167748.9	Worker	Scenario 3	3.27E-02	7.40E-05	2.30E-03
6950	637036.2	4167748.9	Worker	Scenario 3	3.18E-02	7.22E-05	2.25E-03
6951	637136.2	4167748.9	Worker	Scenario 3	2.90E-02	6.62E-05	1.95E-03
6952	637236.2	4167748.9	Worker	Scenario 3	3.06E-02	6.99E-05	2.08E-03
6953	637336.2	4167748.9	Worker	Scenario 3	3.18E-02	7.26E-05	2.19E-03
6954	637436.2	4167748.9	Worker	Scenario 3	3.79E-02	8.65E-05	2.66E-03
6955	637536.2	4167748.9	Worker	Scenario 3	3.53E-02	8.08E-05	2.49E-03
6956	637636.2	4167748.9	Worker	Scenario 3	4.16E-02	9.51E-05	2.86E-03
6957	637736.2	4167748.9	Worker	Scenario 3	4.56E-02	1.04E-04	2.95E-03
6958	637836.2	4167748.9	Worker	Scenario 3	4.47E-02	1.02E-04	2.96E-03
6959	637936.2	4167748.9	Worker	Scenario 3	5.33E-02	1.22E-04	3.05E-03
6960	638036.2	4167748.9	Worker	Scenario 3	5.90E-02	1.34E-04	3.05E-03
6961	638136.2	4167748.9	Worker	Scenario 3	5.31E-02	1.22E-04	3.42E-03
6962	638236.2	4167748.9	Worker	Scenario 3	6.29E-02	1.43E-04	3.57E-03
6963	638336.2	4167748.9	Worker	Scenario 3	6.06E-02	1.39E-04	3.94E-03
6964	638436.2	4167748.9	Worker	Scenario 3	7.02E-02	1.60E-04	3.99E-03
6965	638536.2	4167748.9	Worker	Scenario 3	7.69E-02	1.75E-04	4.05E-03
6966	638636.2	4167748.9	Worker	Scenario 3	7.51E-02	1.72E-04	4.43E-03
6967	638736.2	4167748.9	Worker	Scenario 3	8.47E-02	1.93E-04	4.33E-03
6968	638836.2	4167748.9	Worker	Scenario 3	8.79E-02	2.00E-04	4.42E-03
6969	638936.2	4167748.9	Worker	Scenario 3	9.52E-02	2.17E-04	4.66E-03
6970	639036.2	4167748.9	Worker	Scenario 3	1.02E-01	2.32E-04	5.33E-03
6971	639136.2	4167748.9	Worker	Scenario 3	1.10E-01	2.50E-04	5.94E-03
6972	639236.2	4167748.9	Worker	Scenario 3	1.19E-01	2.71E-04	6.45E-03
6973	639336.2	4167748.9	Worker	Scenario 3	1.33E-01	3.02E-04	6.52E-03
6974	639436.2	4167748.9	Worker	Scenario 3	1.49E-01	3.36E-04	6.42E-03
6975	639536.2	4167748.9	Worker	Scenario 3	1.68E-01	3.80E-04	5.87E-03
6976	639636.2	4167748.9	Worker	Scenario 3	1.88E-01	4.26E-04	5.35E-03
6977	639736.2	4167748.9	Worker	Scenario 3	2.20E-01	4.99E-04	3.92E-03
6978	640036.2	4167748.9	Worker	Scenario 3	3.27E-01	7.38E-04	4.88E-03
6979	643336.2	4167748.9	Worker	Scenario 3	1.23E+00	2.70E-03	4.68E-03
6980	643436.2	4167748.9	Worker	Scenario 3	1.29E+00	2.80E-03	4.40E-03
6981	643536.2	4167748.9	Worker	Scenario 3	1.31E+00	2.84E-03	4.11E-03
6982	643636.2	4167748.9	Worker	Scenario 3	1.30E+00	2.80E-03	3.88E-03
6983	643736.2	4167748.9	Worker	Scenario 3	1.24E+00	2.67E-03	3.63E-03
6984	643836.2	4167748.9	Worker	Scenario 3	1.17E+00	2.52E-03	3.46E-03
6985	643936.2	4167748.9	Worker	Scenario 3	1.10E+00	2.37E-03	3.25E-03
6986	644036.2	4167748.9	Worker	Scenario 3	1.03E+00	2.22E-03	3.11E-03
6987	644336.2	4167748.9	Worker	Scenario 3	8.39E-01	1.82E-03	2.69E-03
6988	644436.2	4167748.9	Worker	Scenario 3	7.83E-01	1.70E-03	2.57E-03
6989	644636.2	4167748.9	Worker	Scenario 3	6.91E-01	1.50E-03	2.32E-03
6990	644736.2	4167748.9	Worker	Scenario 3	6.51E-01	1.42E-03	2.19E-03
6991	644836.2	4167748.9	Worker	Scenario 3	6.14E-01	1.34E-03	2.05E-03
6992	644936.2	4167748.9	Worker	Scenario 3	5.80E-01	1.27E-03	1.98E-03
6993	646036.2	4167748.9	Worker	Scenario 3	3.51E-01	7.73E-04	1.67E-03
6994	646236.2	4167748.9	Worker	Scenario 3	3.25E-01	7.17E-04	1.62E-03
6995	646336.2	4167748.9	Worker	Scenario 3	3.14E-01	6.92E-04	1.59E-03
6996	646436.2	4167748.9	Worker	Scenario 3	3.03E-01	6.68E-04	1.55E-03
6997	646536.2	4167748.9	Worker	Scenario 3	2.92E-01	6.45E-04	1.52E-03
6998	646636.2	4167748.9	Worker	Scenario 3	2.83E-01	6.24E-04	1.49E-03
6999	646736.2	4167748.9	Worker	Scenario 3	2.73E-01	6.04E-04	1.46E-03
7000	646836.2	4167748.9	Worker	Scenario 3	2.65E-01	5.85E-04	1.42E-03
7001	646936.2	4167748.9	Worker	Scenario 3	2.56E-01	5.67E-04	1.39E-03
7002	647036.2	4167748.9	Worker	Scenario 3	2.49E-01	5.50E-04	1.35E-03
7003	636236.2	4167848.9	Worker	Scenario 3	2.00E-02	4.56E-05	1.41E-03
7004	636336.2	4167848.9	Worker	Scenario 3	2.16E-02	4.92E-05	1.53E-03
7005	636436.2	4167848.9	Worker	Scenario 3	2.14E-02	4.89E-05	1.53E-03
7006	636536.2	4167848.9	Worker	Scenario 3	2.32E-02	5.31E-05	1.65E-03
7007	636636.2	4167848.9	Worker	Scenario 3	2.30E-02	5.27E-05	1.65E-03
7008	636736.2	4167848.9	Worker	Scenario 3	2.50E-02	5.73E-05	1.75E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7009	636836.2	4167848.9	Worker	Scenario 3	3.10E-02	7.08E-05	2.18E-03
7010	636936.2	4167848.9	Worker	Scenario 3	3.52E-02	8.03E-05	2.29E-03
7011	637036.2	4167848.9	Worker	Scenario 3	3.34E-02	7.65E-05	2.29E-03
7012	637136.2	4167848.9	Worker	Scenario 3	2.93E-02	6.76E-05	1.98E-03
7013	637236.2	4167848.9	Worker	Scenario 3	3.38E-02	7.79E-05	2.39E-03
7014	637336.2	4167848.9	Worker	Scenario 3	3.46E-02	7.98E-05	2.44E-03
7015	637436.2	4167848.9	Worker	Scenario 3	3.77E-02	8.69E-05	2.61E-03
7016	637536.2	4167848.9	Worker	Scenario 3	3.94E-02	9.08E-05	2.78E-03
7017	637636.2	4167848.9	Worker	Scenario 3	4.02E-02	9.29E-05	2.91E-03
7018	637736.2	4167848.9	Worker	Scenario 3	4.80E-02	1.10E-04	3.25E-03
7019	637836.2	4167848.9	Worker	Scenario 3	4.80E-02	1.10E-04	3.36E-03
7020	637936.2	4167848.9	Worker	Scenario 3	5.11E-02	1.17E-04	3.46E-03
7021	638036.2	4167848.9	Worker	Scenario 3	6.26E-02	1.42E-04	3.22E-03
7022	638136.2	4167848.9	Worker	Scenario 3	5.69E-02	1.30E-04	3.51E-03
7023	638236.2	4167848.9	Worker	Scenario 3	6.49E-02	1.48E-04	3.37E-03
7024	638336.2	4167848.9	Worker	Scenario 3	6.68E-02	1.52E-04	3.49E-03
7025	638436.2	4167848.9	Worker	Scenario 3	7.14E-02	1.62E-04	3.99E-03
7026	638536.2	4167848.9	Worker	Scenario 3	8.02E-02	1.82E-04	4.24E-03
7027	638636.2	4167848.9	Worker	Scenario 3	8.07E-02	1.83E-04	4.91E-03
7028	638736.2	4167848.9	Worker	Scenario 3	9.09E-02	2.05E-04	4.95E-03
7029	638836.2	4167848.9	Worker	Scenario 3	9.44E-02	2.13E-04	5.40E-03
7030	638936.2	4167848.9	Worker	Scenario 3	1.03E-01	2.31E-04	5.44E-03
7031	639036.2	4167848.9	Worker	Scenario 3	1.10E-01	2.48E-04	5.47E-03
7032	639136.2	4167848.9	Worker	Scenario 3	1.19E-01	2.67E-04	5.32E-03
7033	639236.2	4167848.9	Worker	Scenario 3	1.31E-01	2.94E-04	4.94E-03
7034	639336.2	4167848.9	Worker	Scenario 3	1.47E-01	3.31E-04	4.41E-03
7035	639436.2	4167848.9	Worker	Scenario 3	1.64E-01	3.69E-04	4.47E-03
7036	639536.2	4167848.9	Worker	Scenario 3	1.87E-01	4.19E-04	4.07E-03
7037	639636.2	4167848.9	Worker	Scenario 3	2.15E-01	4.84E-04	3.05E-03
7038	639836.2	4167848.9	Worker	Scenario 3	2.81E-01	6.30E-04	4.76E-03
7039	643336.2	4167848.9	Worker	Scenario 3	1.02E+00	2.25E-03	4.60E-03
7040	643436.2	4167848.9	Worker	Scenario 3	9.87E-01	2.17E-03	4.31E-03
7041	643536.2	4167848.9	Worker	Scenario 3	9.77E-01	2.14E-03	4.05E-03
7042	643636.2	4167848.9	Worker	Scenario 3	9.77E-01	2.13E-03	3.74E-03
7043	643736.2	4167848.9	Worker	Scenario 3	9.66E-01	2.10E-03	3.51E-03
7044	643836.2	4167848.9	Worker	Scenario 3	9.44E-01	2.05E-03	3.39E-03
7045	643936.2	4167848.9	Worker	Scenario 3	9.12E-01	1.98E-03	3.22E-03
7046	644036.2	4167848.9	Worker	Scenario 3	8.75E-01	1.90E-03	3.05E-03
7047	644136.2	4167848.9	Worker	Scenario 3	8.33E-01	1.81E-03	2.92E-03
7048	644236.2	4167848.9	Worker	Scenario 3	7.92E-01	1.72E-03	2.75E-03
7049	644336.2	4167848.9	Worker	Scenario 3	7.51E-01	1.63E-03	2.66E-03
7050	644436.2	4167848.9	Worker	Scenario 3	7.12E-01	1.55E-03	2.54E-03
7051	644536.2	4167848.9	Worker	Scenario 3	6.75E-01	1.47E-03	2.40E-03
7052	644636.2	4167848.9	Worker	Scenario 3	6.41E-01	1.39E-03	2.32E-03
7053	644736.2	4167848.9	Worker	Scenario 3	6.08E-01	1.32E-03	2.23E-03
7054	644836.2	4167848.9	Worker	Scenario 3	5.77E-01	1.26E-03	2.13E-03
7055	644936.2	4167848.9	Worker	Scenario 3	5.48E-01	1.20E-03	2.04E-03
7056	645036.2	4167848.9	Worker	Scenario 3	5.22E-01	1.14E-03	1.98E-03
7057	645136.2	4167848.9	Worker	Scenario 3	4.98E-01	1.09E-03	1.91E-03
7058	645236.2	4167848.9	Worker	Scenario 3	4.75E-01	1.04E-03	1.83E-03
7059	645336.2	4167848.9	Worker	Scenario 3	4.55E-01	9.94E-04	1.76E-03
7060	645436.2	4167848.9	Worker	Scenario 3	4.36E-01	9.54E-04	1.68E-03
7061	645536.2	4167848.9	Worker	Scenario 3	4.17E-01	9.13E-04	1.60E-03
7062	645636.2	4167848.9	Worker	Scenario 3	4.00E-01	8.76E-04	1.52E-03
7063	645736.2	4167848.9	Worker	Scenario 3	3.84E-01	8.42E-04	1.46E-03
7064	645836.2	4167848.9	Worker	Scenario 3	3.69E-01	8.10E-04	1.44E-03
7065	645936.2	4167848.9	Worker	Scenario 3	3.55E-01	7.80E-04	1.42E-03
7066	646036.2	4167848.9	Worker	Scenario 3	3.42E-01	7.51E-04	1.42E-03
7067	646236.2	4167848.9	Worker	Scenario 3	3.18E-01	6.99E-04	1.45E-03
7068	646336.2	4167848.9	Worker	Scenario 3	3.07E-01	6.75E-04	1.45E-03
7069	646436.2	4167848.9	Worker	Scenario 3	2.96E-01	6.52E-04	1.45E-03
7070	646536.2	4167848.9	Worker	Scenario 3	2.87E-01	6.31E-04	1.45E-03
7071	646636.2	4167848.9	Worker	Scenario 3	2.77E-01	6.11E-04	1.45E-03
7072	646736.2	4167848.9	Worker	Scenario 3	2.68E-01	5.92E-04	1.44E-03
7073	646836.2	4167848.9	Worker	Scenario 3	2.60E-01	5.74E-04	1.43E-03
7074	646936.2	4167848.9	Worker	Scenario 3	2.52E-01	5.57E-04	1.42E-03
7075	636136.2	4167948.9	Worker	Scenario 3	2.13E-02	4.90E-05	1.46E-03
7076	636236.2	4167948.9	Worker	Scenario 3	2.27E-02	5.21E-05	1.51E-03
7077	636336.2	4167948.9	Worker	Scenario 3	2.17E-02	4.99E-05	1.44E-03
7078	636436.2	4167948.9	Worker	Scenario 3	2.28E-02	5.25E-05	1.48E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7079	636536.2	4167948.9	Worker	Scenario 3	2.35E-02	5.42E-05	1.52E-03
7080	636636.2	4167948.9	Worker	Scenario 3	2.53E-02	5.85E-05	1.70E-03
7081	636736.2	4167948.9	Worker	Scenario 3	2.94E-02	6.77E-05	2.05E-03
7082	636836.2	4167948.9	Worker	Scenario 3	3.36E-02	7.73E-05	2.40E-03
7083	636936.2	4167948.9	Worker	Scenario 3	3.51E-02	8.05E-05	2.53E-03
7084	637036.2	4167948.9	Worker	Scenario 3	3.73E-02	8.55E-05	2.64E-03
7085	637136.2	4167948.9	Worker	Scenario 3	3.99E-02	9.12E-05	2.71E-03
7086	637236.2	4167948.9	Worker	Scenario 3	3.54E-02	8.17E-05	2.61E-03
7087	637336.2	4167948.9	Worker	Scenario 3	3.56E-02	8.24E-05	2.55E-03
7088	637436.2	4167948.9	Worker	Scenario 3	4.02E-02	9.26E-05	2.74E-03
7089	637536.2	4167948.9	Worker	Scenario 3	3.89E-02	8.97E-05	2.54E-03
7090	637636.2	4167948.9	Worker	Scenario 3	4.09E-02	9.43E-05	2.59E-03
7091	637736.2	4167948.9	Worker	Scenario 3	5.05E-02	1.15E-04	2.74E-03
7092	637836.2	4167948.9	Worker	Scenario 3	5.15E-02	1.18E-04	3.03E-03
7093	637936.2	4167948.9	Worker	Scenario 3	5.19E-02	1.19E-04	3.36E-03
7094	638036.2	4167948.9	Worker	Scenario 3	6.58E-02	1.48E-04	3.47E-03
7095	638136.2	4167948.9	Worker	Scenario 3	6.25E-02	1.42E-04	4.12E-03
7096	638236.2	4167948.9	Worker	Scenario 3	6.35E-02	1.44E-04	4.44E-03
7097	638336.2	4167948.9	Worker	Scenario 3	7.44E-02	1.68E-04	4.24E-03
7098	638436.2	4167948.9	Worker	Scenario 3	7.49E-02	1.69E-04	4.62E-03
7099	638536.2	4167948.9	Worker	Scenario 3	8.52E-02	1.91E-04	4.20E-03
7100	638636.2	4167948.9	Worker	Scenario 3	8.69E-02	1.95E-04	4.38E-03
7101	638736.2	4167948.9	Worker	Scenario 3	9.67E-02	2.16E-04	3.99E-03
7102	638836.2	4167948.9	Worker	Scenario 3	1.02E-01	2.28E-04	3.80E-03
7103	638936.2	4167948.9	Worker	Scenario 3	1.11E-01	2.49E-04	3.76E-03
7104	639036.2	4167948.9	Worker	Scenario 3	1.19E-01	2.67E-04	4.23E-03
7105	639136.2	4167948.9	Worker	Scenario 3	1.30E-01	2.91E-04	4.46E-03
7106	639236.2	4167948.9	Worker	Scenario 3	1.44E-01	3.22E-04	4.43E-03
7107	639336.2	4167948.9	Worker	Scenario 3	1.63E-01	3.63E-04	3.99E-03
7108	639436.2	4167948.9	Worker	Scenario 3	1.84E-01	4.10E-04	3.77E-03
7109	639536.2	4167948.9	Worker	Scenario 3	2.10E-01	4.71E-04	3.78E-03
7110	639736.2	4167948.9	Worker	Scenario 3	2.85E-01	6.33E-04	4.61E-03
7111	643236.2	4167948.9	Worker	Scenario 3	1.02E+00	2.22E-03	4.82E-03
7112	643336.2	4167948.9	Worker	Scenario 3	9.33E-01	2.04E-03	4.43E-03
7113	643436.2	4167948.9	Worker	Scenario 3	8.77E-01	1.92E-03	4.20E-03
7114	643536.2	4167948.9	Worker	Scenario 3	8.45E-01	1.85E-03	3.93E-03
7115	643636.2	4167948.9	Worker	Scenario 3	8.24E-01	1.80E-03	3.73E-03
7116	643736.2	4167948.9	Worker	Scenario 3	8.08E-01	1.76E-03	3.53E-03
7117	643836.2	4167948.9	Worker	Scenario 3	7.92E-01	1.73E-03	3.31E-03
7118	643936.2	4167948.9	Worker	Scenario 3	7.75E-01	1.69E-03	3.18E-03
7119	644036.2	4167948.9	Worker	Scenario 3	7.54E-01	1.64E-03	2.98E-03
7120	644136.2	4167948.9	Worker	Scenario 3	7.29E-01	1.58E-03	2.76E-03
7121	644236.2	4167948.9	Worker	Scenario 3	7.01E-01	1.52E-03	2.71E-03
7122	644336.2	4167948.9	Worker	Scenario 3	6.73E-01	1.46E-03	2.62E-03
7123	644436.2	4167948.9	Worker	Scenario 3	6.44E-01	1.40E-03	2.49E-03
7124	644536.2	4167948.9	Worker	Scenario 3	6.16E-01	1.34E-03	2.39E-03
7125	644636.2	4167948.9	Worker	Scenario 3	5.89E-01	1.28E-03	2.30E-03
7126	644736.2	4167948.9	Worker	Scenario 3	5.63E-01	1.23E-03	2.19E-03
7127	644836.2	4167948.9	Worker	Scenario 3	5.38E-01	1.17E-03	2.11E-03
7128	644936.2	4167948.9	Worker	Scenario 3	5.14E-01	1.12E-03	2.04E-03
7129	645036.2	4167948.9	Worker	Scenario 3	4.92E-01	1.07E-03	1.95E-03
7130	645136.2	4167948.9	Worker	Scenario 3	4.71E-01	1.03E-03	1.86E-03
7131	645236.2	4167948.9	Worker	Scenario 3	4.52E-01	9.86E-04	1.82E-03
7132	645336.2	4167948.9	Worker	Scenario 3	4.34E-01	9.48E-04	1.76E-03
7133	645436.2	4167948.9	Worker	Scenario 3	4.17E-01	9.11E-04	1.70E-03
7134	645536.2	4167948.9	Worker	Scenario 3	4.00E-01	8.75E-04	1.63E-03
7135	645636.2	4167948.9	Worker	Scenario 3	3.85E-01	8.42E-04	1.58E-03
7136	645736.2	4167948.9	Worker	Scenario 3	3.70E-01	8.11E-04	1.54E-03
7137	645836.2	4167948.9	Worker	Scenario 3	3.57E-01	7.81E-04	1.49E-03
7138	645936.2	4167948.9	Worker	Scenario 3	3.44E-01	7.53E-04	1.45E-03
7139	646036.2	4167948.9	Worker	Scenario 3	3.32E-01	7.27E-04	1.39E-03
7140	646236.2	4167948.9	Worker	Scenario 3	3.09E-01	6.78E-04	1.28E-03
7141	646336.2	4167948.9	Worker	Scenario 3	2.99E-01	6.56E-04	1.23E-03
7142	646436.2	4167948.9	Worker	Scenario 3	2.89E-01	6.35E-04	1.18E-03
7143	646536.2	4167948.9	Worker	Scenario 3	2.80E-01	6.15E-04	1.15E-03
7144	646636.2	4167948.9	Worker	Scenario 3	2.71E-01	5.95E-04	1.16E-03
7145	646736.2	4167948.9	Worker	Scenario 3	2.62E-01	5.77E-04	1.17E-03
7146	646836.2	4167948.9	Worker	Scenario 3	2.55E-01	5.60E-04	1.19E-03
7147	646936.2	4167948.9	Worker	Scenario 3	2.47E-01	5.44E-04	1.21E-03
7148	636036.2	4168048.9	Worker	Scenario 3	2.16E-02	5.00E-05	1.44E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7149	636136.2	4168048.9	Worker	Scenario 3	2.31E-02	5.33E-05	1.57E-03
7150	636236.2	4168048.9	Worker	Scenario 3	2.47E-02	5.71E-05	1.80E-03
7151	636336.2	4168048.9	Worker	Scenario 3	2.59E-02	5.99E-05	1.93E-03
7152	636436.2	4168048.9	Worker	Scenario 3	2.71E-02	6.26E-05	2.03E-03
7153	636536.2	4168048.9	Worker	Scenario 3	2.87E-02	6.63E-05	2.14E-03
7154	636636.2	4168048.9	Worker	Scenario 3	2.97E-02	6.85E-05	2.17E-03
7155	636736.2	4168048.9	Worker	Scenario 3	3.05E-02	7.02E-05	2.15E-03
7156	636836.2	4168048.9	Worker	Scenario 3	3.07E-02	7.08E-05	2.06E-03
7157	636936.2	4168048.9	Worker	Scenario 3	3.20E-02	7.38E-05	2.09E-03
7158	637036.2	4168048.9	Worker	Scenario 3	3.59E-02	8.23E-05	2.22E-03
7159	637136.2	4168048.9	Worker	Scenario 3	3.96E-02	9.03E-05	2.27E-03
7160	637236.2	4168048.9	Worker	Scenario 3	4.33E-02	9.84E-05	2.45E-03
7161	637336.2	4168048.9	Worker	Scenario 3	3.80E-02	8.72E-05	2.37E-03
7162	637436.2	4168048.9	Worker	Scenario 3	4.48E-02	1.02E-04	3.00E-03
7163	637536.2	4168048.9	Worker	Scenario 3	3.99E-02	9.13E-05	2.85E-03
7164	637636.2	4168048.9	Worker	Scenario 3	4.61E-02	1.05E-04	3.46E-03
7165	637736.2	4168048.9	Worker	Scenario 3	5.27E-02	1.19E-04	3.72E-03
7166	637836.2	4168048.9	Worker	Scenario 3	5.23E-02	1.18E-04	3.86E-03
7167	637936.2	4168048.9	Worker	Scenario 3	5.78E-02	1.30E-04	3.90E-03
7168	638036.2	4168048.9	Worker	Scenario 3	6.83E-02	1.53E-04	3.45E-03
7169	638136.2	4168048.9	Worker	Scenario 3	6.73E-02	1.51E-04	3.68E-03
7170	638236.2	4168048.9	Worker	Scenario 3	6.89E-02	1.54E-04	3.56E-03
7171	638336.2	4168048.9	Worker	Scenario 3	7.70E-02	1.72E-04	3.24E-03
7172	638436.2	4168048.9	Worker	Scenario 3	8.05E-02	1.80E-04	3.02E-03
7173	638536.2	4168048.9	Worker	Scenario 3	9.31E-02	2.08E-04	2.83E-03
7174	638636.2	4168048.9	Worker	Scenario 3	9.30E-02	2.07E-04	3.66E-03
7175	638736.2	4168048.9	Worker	Scenario 3	1.06E-01	2.37E-04	3.30E-03
7176	638836.2	4168048.9	Worker	Scenario 3	1.12E-01	2.49E-04	3.70E-03
7177	638936.2	4168048.9	Worker	Scenario 3	1.21E-01	2.70E-04	3.65E-03
7178	639036.2	4168048.9	Worker	Scenario 3	1.31E-01	2.92E-04	3.82E-03
7179	639136.2	4168048.9	Worker	Scenario 3	1.44E-01	3.20E-04	3.94E-03
7180	639236.2	4168048.9	Worker	Scenario 3	1.61E-01	3.57E-04	4.08E-03
7181	639336.2	4168048.9	Worker	Scenario 3	1.81E-01	4.03E-04	4.32E-03
7182	643136.2	4168048.9	Worker	Scenario 3	1.05E+00	2.28E-03	5.02E-03
7183	643236.2	4168048.9	Worker	Scenario 3	9.48E-01	2.06E-03	4.66E-03
7184	643336.2	4168048.9	Worker	Scenario 3	8.71E-01	1.90E-03	4.38E-03
7185	643436.2	4168048.9	Worker	Scenario 3	8.19E-01	1.79E-03	3.97E-03
7186	643536.2	4168048.9	Worker	Scenario 3	7.78E-01	1.70E-03	3.88E-03
7187	643636.2	4168048.9	Worker	Scenario 3	7.46E-01	1.63E-03	3.60E-03
7188	643736.2	4168048.9	Worker	Scenario 3	7.22E-01	1.57E-03	3.44E-03
7189	643836.2	4168048.9	Worker	Scenario 3	7.00E-01	1.53E-03	3.27E-03
7190	643936.2	4168048.9	Worker	Scenario 3	6.82E-01	1.49E-03	3.12E-03
7191	644036.2	4168048.9	Worker	Scenario 3	6.65E-01	1.45E-03	2.94E-03
7192	644136.2	4168048.9	Worker	Scenario 3	6.47E-01	1.41E-03	2.83E-03
7193	644236.2	4168048.9	Worker	Scenario 3	6.27E-01	1.36E-03	2.68E-03
7194	644336.2	4168048.9	Worker	Scenario 3	6.06E-01	1.32E-03	2.58E-03
7195	644436.2	4168048.9	Worker	Scenario 3	5.84E-01	1.27E-03	2.44E-03
7196	644536.2	4168048.9	Worker	Scenario 3	5.63E-01	1.23E-03	2.27E-03
7197	644636.2	4168048.9	Worker	Scenario 3	5.41E-01	1.18E-03	2.21E-03
7198	644736.2	4168048.9	Worker	Scenario 3	5.21E-01	1.13E-03	2.17E-03
7199	644836.2	4168048.9	Worker	Scenario 3	5.00E-01	1.09E-03	2.09E-03
7200	644936.2	4168048.9	Worker	Scenario 3	4.80E-01	1.05E-03	2.00E-03
7201	645036.2	4168048.9	Worker	Scenario 3	4.62E-01	1.01E-03	1.93E-03
7202	645136.2	4168048.9	Worker	Scenario 3	4.44E-01	9.68E-04	1.87E-03
7203	645236.2	4168048.9	Worker	Scenario 3	4.27E-01	9.33E-04	1.80E-03
7204	645336.2	4168048.9	Worker	Scenario 3	4.12E-01	8.99E-04	1.73E-03
7205	645436.2	4168048.9	Worker	Scenario 3	3.97E-01	8.67E-04	1.69E-03
7206	645536.2	4168048.9	Worker	Scenario 3	3.82E-01	8.35E-04	1.63E-03
7207	645636.2	4168048.9	Worker	Scenario 3	3.68E-01	8.05E-04	1.57E-03
7208	645736.2	4168048.9	Worker	Scenario 3	3.56E-01	7.77E-04	1.51E-03
7209	645836.2	4168048.9	Worker	Scenario 3	3.43E-01	7.50E-04	1.48E-03
7210	645936.2	4168048.9	Worker	Scenario 3	3.31E-01	7.25E-04	1.44E-03
7211	646036.2	4168048.9	Worker	Scenario 3	3.20E-01	7.01E-04	1.39E-03
7212	646236.2	4168048.9	Worker	Scenario 3	2.99E-01	6.55E-04	1.29E-03
7213	646336.2	4168048.9	Worker	Scenario 3	2.90E-01	6.35E-04	1.26E-03
7214	646436.2	4168048.9	Worker	Scenario 3	2.80E-01	6.15E-04	1.24E-03
7215	646536.2	4168048.9	Worker	Scenario 3	2.72E-01	5.96E-04	1.20E-03
7216	646636.2	4168048.9	Worker	Scenario 3	2.64E-01	5.78E-04	1.17E-03
7217	646736.2	4168048.9	Worker	Scenario 3	2.56E-01	5.61E-04	1.13E-03
7218	646836.2	4168048.9	Worker	Scenario 3	2.48E-01	5.45E-04	1.10E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7219	646936.2	4168048.9	Worker	Scenario 3	2.41E-01	5.30E-04	1.06E-03
7220	636036.2	4168148.9	Worker	Scenario 3	2.08E-02	4.80E-05	1.40E-03
7221	636136.2	4168148.9	Worker	Scenario 3	2.10E-02	4.85E-05	1.39E-03
7222	636236.2	4168148.9	Worker	Scenario 3	2.09E-02	4.83E-05	1.35E-03
7223	636336.2	4168148.9	Worker	Scenario 3	2.20E-02	5.08E-05	1.43E-03
7224	636436.2	4168148.9	Worker	Scenario 3	2.41E-02	5.55E-05	1.60E-03
7225	636536.2	4168148.9	Worker	Scenario 3	2.50E-02	5.76E-05	1.70E-03
7226	636636.2	4168148.9	Worker	Scenario 3	2.65E-02	6.11E-05	1.80E-03
7227	636736.2	4168148.9	Worker	Scenario 3	2.74E-02	6.31E-05	1.88E-03
7228	636836.2	4168148.9	Worker	Scenario 3	2.93E-02	6.73E-05	1.96E-03
7229	636936.2	4168148.9	Worker	Scenario 3	3.22E-02	7.36E-05	2.21E-03
7230	637036.2	4168148.9	Worker	Scenario 3	3.46E-02	7.90E-05	2.58E-03
7231	637136.2	4168148.9	Worker	Scenario 3	3.86E-02	8.77E-05	2.98E-03
7232	637236.2	4168148.9	Worker	Scenario 3	4.25E-02	9.61E-05	3.20E-03
7233	637336.2	4168148.9	Worker	Scenario 3	4.62E-02	1.04E-04	3.27E-03
7234	637436.2	4168148.9	Worker	Scenario 3	4.81E-02	1.08E-04	3.31E-03
7235	637536.2	4168148.9	Worker	Scenario 3	4.26E-02	9.63E-05	3.06E-03
7236	637636.2	4168148.9	Worker	Scenario 3	4.63E-02	1.04E-04	3.07E-03
7237	637736.2	4168148.9	Worker	Scenario 3	5.43E-02	1.21E-04	3.05E-03
7238	637836.2	4168148.9	Worker	Scenario 3	5.60E-02	1.25E-04	2.83E-03
7239	637936.2	4168148.9	Worker	Scenario 3	6.30E-02	1.40E-04	2.61E-03
7240	638036.2	4168148.9	Worker	Scenario 3	7.31E-02	1.63E-04	2.25E-03
7241	638136.2	4168148.9	Worker	Scenario 3	6.83E-02	1.52E-04	3.00E-03
7242	638236.2	4168148.9	Worker	Scenario 3	7.31E-02	1.63E-04	3.31E-03
7243	638336.2	4168148.9	Worker	Scenario 3	8.47E-02	1.89E-04	2.93E-03
7244	638436.2	4168148.9	Worker	Scenario 3	8.44E-02	1.88E-04	3.62E-03
7245	638536.2	4168148.9	Worker	Scenario 3	9.95E-02	2.22E-04	2.70E-03
7246	638636.2	4168148.9	Worker	Scenario 3	1.00E-01	2.23E-04	3.35E-03
7247	638736.2	4168148.9	Worker	Scenario 3	1.11E-01	2.47E-04	3.27E-03
7248	638836.2	4168148.9	Worker	Scenario 3	1.24E-01	2.76E-04	2.94E-03
7249	638936.2	4168148.9	Worker	Scenario 3	1.33E-01	2.97E-04	3.45E-03
7250	639036.2	4168148.9	Worker	Scenario 3	1.46E-01	3.24E-04	3.84E-03
7251	639136.2	4168148.9	Worker	Scenario 3	1.61E-01	3.57E-04	4.00E-03
7252	639236.2	4168148.9	Worker	Scenario 3	1.80E-01	4.00E-04	3.79E-03
7253	642936.2	4168148.9	Worker	Scenario 3	1.15E+00	2.47E-03	6.15E-03
7254	643036.2	4168148.9	Worker	Scenario 3	1.06E+00	2.28E-03	6.01E-03
7255	643136.2	4168148.9	Worker	Scenario 3	9.72E-01	2.10E-03	5.20E-03
7256	643236.2	4168148.9	Worker	Scenario 3	8.92E-01	1.93E-03	4.54E-03
7257	643336.2	4168148.9	Worker	Scenario 3	8.23E-01	1.79E-03	4.22E-03
7258	643436.2	4168148.9	Worker	Scenario 3	7.73E-01	1.68E-03	3.97E-03
7259	643536.2	4168148.9	Worker	Scenario 3	7.32E-01	1.59E-03	3.75E-03
7260	643636.2	4168148.9	Worker	Scenario 3	6.97E-01	1.52E-03	3.55E-03
7261	643736.2	4168148.9	Worker	Scenario 3	6.68E-01	1.45E-03	3.31E-03
7262	643836.2	4168148.9	Worker	Scenario 3	6.43E-01	1.40E-03	3.21E-03
7263	643936.2	4168148.9	Worker	Scenario 3	6.21E-01	1.35E-03	3.00E-03
7264	644036.2	4168148.9	Worker	Scenario 3	6.02E-01	1.31E-03	2.87E-03
7265	644136.2	4168148.9	Worker	Scenario 3	5.85E-01	1.27E-03	2.78E-03
7266	644236.2	4168148.9	Worker	Scenario 3	5.68E-01	1.24E-03	2.64E-03
7267	644336.2	4168148.9	Worker	Scenario 3	5.51E-01	1.20E-03	2.54E-03
7268	644436.2	4168148.9	Worker	Scenario 3	5.34E-01	1.16E-03	2.42E-03
7269	644536.2	4168148.9	Worker	Scenario 3	5.17E-01	1.12E-03	2.33E-03
7270	644636.2	4168148.9	Worker	Scenario 3	4.99E-01	1.09E-03	2.22E-03
7271	644736.2	4168148.9	Worker	Scenario 3	4.82E-01	1.05E-03	2.15E-03
7272	644836.2	4168148.9	Worker	Scenario 3	4.65E-01	1.01E-03	2.05E-03
7273	644936.2	4168148.9	Worker	Scenario 3	4.49E-01	9.77E-04	1.92E-03
7274	645036.2	4168148.9	Worker	Scenario 3	4.33E-01	9.43E-04	1.84E-03
7275	645136.2	4168148.9	Worker	Scenario 3	4.18E-01	9.10E-04	1.82E-03
7276	645236.2	4168148.9	Worker	Scenario 3	4.03E-01	8.79E-04	1.78E-03
7277	645336.2	4168148.9	Worker	Scenario 3	3.90E-01	8.51E-04	1.73E-03
7278	645436.2	4168148.9	Worker	Scenario 3	3.77E-01	8.22E-04	1.66E-03
7279	645536.2	4168148.9	Worker	Scenario 3	3.64E-01	7.94E-04	1.61E-03
7280	645636.2	4168148.9	Worker	Scenario 3	3.51E-01	7.68E-04	1.57E-03
7281	645736.2	4168148.9	Worker	Scenario 3	3.40E-01	7.42E-04	1.51E-03
7282	645836.2	4168148.9	Worker	Scenario 3	3.29E-01	7.19E-04	1.45E-03
7283	645936.2	4168148.9	Worker	Scenario 3	3.18E-01	6.95E-04	1.42E-03
7284	646036.2	4168148.9	Worker	Scenario 3	3.08E-01	6.73E-04	1.38E-03
7285	646236.2	4168148.9	Worker	Scenario 3	2.89E-01	6.32E-04	1.29E-03
7286	646336.2	4168148.9	Worker	Scenario 3	2.80E-01	6.13E-04	1.24E-03
7287	646436.2	4168148.9	Worker	Scenario 3	2.71E-01	5.94E-04	1.22E-03
7288	646536.2	4168148.9	Worker	Scenario 3	2.63E-01	5.77E-04	1.19E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7289	646636.2	4168148.9	Worker	Scenario 3	2.56E-01	5.60E-04	1.16E-03
7290	646736.2	4168148.9	Worker	Scenario 3	2.48E-01	5.44E-04	1.13E-03
7291	646836.2	4168148.9	Worker	Scenario 3	2.41E-01	5.29E-04	1.09E-03
7292	635936.2	4168248.9	Worker	Scenario 3	1.96E-02	4.51E-05	1.35E-03
7293	636036.2	4168248.9	Worker	Scenario 3	2.01E-02	4.62E-05	1.41E-03
7294	636136.2	4168248.9	Worker	Scenario 3	1.99E-02	4.58E-05	1.41E-03
7295	636236.2	4168248.9	Worker	Scenario 3	2.09E-02	4.80E-05	1.49E-03
7296	636336.2	4168248.9	Worker	Scenario 3	2.19E-02	5.03E-05	1.57E-03
7297	636436.2	4168248.9	Worker	Scenario 3	2.28E-02	5.23E-05	1.62E-03
7298	636536.2	4168248.9	Worker	Scenario 3	2.42E-02	5.53E-05	1.67E-03
7299	636636.2	4168248.9	Worker	Scenario 3	2.55E-02	5.84E-05	1.71E-03
7300	636736.2	4168248.9	Worker	Scenario 3	2.72E-02	6.20E-05	1.83E-03
7301	636836.2	4168248.9	Worker	Scenario 3	2.90E-02	6.61E-05	2.03E-03
7302	636936.2	4168248.9	Worker	Scenario 3	3.12E-02	7.09E-05	2.25E-03
7303	637036.2	4168248.9	Worker	Scenario 3	3.38E-02	7.65E-05	2.41E-03
7304	637136.2	4168248.9	Worker	Scenario 3	3.78E-02	8.51E-05	2.58E-03
7305	637236.2	4168248.9	Worker	Scenario 3	4.21E-02	9.44E-05	2.60E-03
7306	637336.2	4168248.9	Worker	Scenario 3	4.67E-02	1.04E-04	2.49E-03
7307	637436.2	4168248.9	Worker	Scenario 3	5.08E-02	1.13E-04	2.31E-03
7308	637536.2	4168248.9	Worker	Scenario 3	4.55E-02	1.02E-04	2.24E-03
7309	637636.2	4168248.9	Worker	Scenario 3	4.90E-02	1.09E-04	2.29E-03
7310	637736.2	4168248.9	Worker	Scenario 3	5.55E-02	1.24E-04	2.65E-03
7311	637836.2	4168248.9	Worker	Scenario 3	6.21E-02	1.38E-04	2.81E-03
7312	637936.2	4168248.9	Worker	Scenario 3	6.23E-02	1.39E-04	3.21E-03
7313	638036.2	4168248.9	Worker	Scenario 3	7.30E-02	1.62E-04	2.82E-03
7314	638136.2	4168248.9	Worker	Scenario 3	7.51E-02	1.67E-04	3.08E-03
7315	638236.2	4168248.9	Worker	Scenario 3	7.72E-02	1.72E-04	3.23E-03
7316	638336.2	4168248.9	Worker	Scenario 3	8.83E-02	1.96E-04	2.78E-03
7317	638436.2	4168248.9	Worker	Scenario 3	9.19E-02	2.05E-04	3.19E-03
7318	638536.2	4168248.9	Worker	Scenario 3	1.06E-01	2.35E-04	2.49E-03
7319	638636.2	4168248.9	Worker	Scenario 3	1.10E-01	2.44E-04	3.15E-03
7320	638736.2	4168248.9	Worker	Scenario 3	1.20E-01	2.66E-04	3.42E-03
7321	638836.2	4168248.9	Worker	Scenario 3	1.36E-01	3.01E-04	3.17E-03
7322	638936.2	4168248.9	Worker	Scenario 3	1.48E-01	3.29E-04	3.18E-03
7323	639036.2	4168248.9	Worker	Scenario 3	1.64E-01	3.64E-04	3.21E-03
7324	639136.2	4168248.9	Worker	Scenario 3	1.84E-01	4.07E-04	2.96E-03
7325	642836.2	4168248.9	Worker	Scenario 3	1.14E+00	2.45E-03	6.22E-03
7326	642936.2	4168248.9	Worker	Scenario 3	1.06E+00	2.28E-03	5.83E-03
7327	643036.2	4168248.9	Worker	Scenario 3	9.79E-01	2.10E-03	5.31E-03
7328	643136.2	4168248.9	Worker	Scenario 3	9.09E-01	1.96E-03	5.59E-03
7329	643236.2	4168248.9	Worker	Scenario 3	8.41E-01	1.81E-03	5.40E-03
7330	643336.2	4168248.9	Worker	Scenario 3	7.79E-01	1.69E-03	4.72E-03
7331	643436.2	4168248.9	Worker	Scenario 3	7.30E-01	1.58E-03	3.98E-03
7332	643536.2	4168248.9	Worker	Scenario 3	6.92E-01	1.50E-03	3.68E-03
7333	643636.2	4168248.9	Worker	Scenario 3	6.59E-01	1.43E-03	3.49E-03
7334	643736.2	4168248.9	Worker	Scenario 3	6.29E-01	1.37E-03	3.31E-03
7335	643836.2	4168248.9	Worker	Scenario 3	6.01E-01	1.31E-03	3.14E-03
7336	643936.2	4168248.9	Worker	Scenario 3	5.78E-01	1.26E-03	2.93E-03
7337	644036.2	4168248.9	Worker	Scenario 3	5.58E-01	1.21E-03	2.81E-03
7338	644136.2	4168248.9	Worker	Scenario 3	5.39E-01	1.17E-03	2.73E-03
7339	644236.2	4168248.9	Worker	Scenario 3	5.22E-01	1.13E-03	2.56E-03
7340	644336.2	4168248.9	Worker	Scenario 3	5.06E-01	1.10E-03	2.44E-03
7341	644436.2	4168248.9	Worker	Scenario 3	4.91E-01	1.07E-03	2.39E-03
7342	644536.2	4168248.9	Worker	Scenario 3	4.77E-01	1.04E-03	2.28E-03
7343	644636.2	4168248.9	Worker	Scenario 3	4.63E-01	1.01E-03	2.20E-03
7344	644736.2	4168248.9	Worker	Scenario 3	4.48E-01	9.74E-04	2.11E-03
7345	644836.2	4168248.9	Worker	Scenario 3	4.34E-01	9.43E-04	2.04E-03
7346	644936.2	4168248.9	Worker	Scenario 3	4.20E-01	9.13E-04	1.96E-03
7347	645036.2	4168248.9	Worker	Scenario 3	4.06E-01	8.83E-04	1.88E-03
7348	645136.2	4168248.9	Worker	Scenario 3	3.93E-01	8.56E-04	1.83E-03
7349	645236.2	4168248.9	Worker	Scenario 3	3.81E-01	8.29E-04	1.75E-03
7350	645336.2	4168248.9	Worker	Scenario 3	3.69E-01	8.03E-04	1.66E-03
7351	645436.2	4168248.9	Worker	Scenario 3	3.57E-01	7.78E-04	1.57E-03
7352	645536.2	4168248.9	Worker	Scenario 3	3.46E-01	7.54E-04	1.56E-03
7353	645636.2	4168248.9	Worker	Scenario 3	3.35E-01	7.30E-04	1.54E-03
7354	645736.2	4168248.9	Worker	Scenario 3	3.24E-01	7.08E-04	1.50E-03
7355	645836.2	4168248.9	Worker	Scenario 3	3.14E-01	6.87E-04	1.46E-03
7356	645936.2	4168248.9	Worker	Scenario 3	3.04E-01	6.65E-04	1.40E-03
7357	646036.2	4168248.9	Worker	Scenario 3	2.95E-01	6.45E-04	1.36E-03
7358	646236.2	4168248.9	Worker	Scenario 3	2.78E-01	6.07E-04	1.29E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7359	646336.2	4168248.9	Worker	Scenario 3	2.70E-01	5.90E-04	1.24E-03
7360	646436.2	4168248.9	Worker	Scenario 3	2.62E-01	5.73E-04	1.21E-03
7361	646536.2	4168248.9	Worker	Scenario 3	2.54E-01	5.57E-04	1.18E-03
7362	646636.2	4168248.9	Worker	Scenario 3	2.47E-01	5.41E-04	1.16E-03
7363	646736.2	4168248.9	Worker	Scenario 3	2.41E-01	5.27E-04	1.12E-03
7364	646836.2	4168248.9	Worker	Scenario 3	2.34E-01	5.13E-04	1.09E-03
7365	635936.2	4168348.9	Worker	Scenario 3	1.93E-02	4.41E-05	1.35E-03
7366	636036.2	4168348.9	Worker	Scenario 3	1.95E-02	4.46E-05	1.33E-03
7367	636136.2	4168348.9	Worker	Scenario 3	2.05E-02	4.68E-05	1.36E-03
7368	636236.2	4168348.9	Worker	Scenario 3	2.16E-02	4.92E-05	1.39E-03
7369	636336.2	4168348.9	Worker	Scenario 3	2.25E-02	5.12E-05	1.40E-03
7370	636436.2	4168348.9	Worker	Scenario 3	2.39E-02	5.42E-05	1.48E-03
7371	636536.2	4168348.9	Worker	Scenario 3	2.50E-02	5.67E-05	1.50E-03
7372	636636.2	4168348.9	Worker	Scenario 3	2.63E-02	5.95E-05	1.58E-03
7373	636736.2	4168348.9	Worker	Scenario 3	2.81E-02	6.34E-05	1.73E-03
7374	636836.2	4168348.9	Worker	Scenario 3	3.01E-02	6.79E-05	1.87E-03
7375	636936.2	4168348.9	Worker	Scenario 3	3.22E-02	7.22E-05	1.97E-03
7376	637036.2	4168348.9	Worker	Scenario 3	3.42E-02	7.67E-05	2.04E-03
7377	637136.2	4168348.9	Worker	Scenario 3	3.69E-02	8.26E-05	2.06E-03
7378	637236.2	4168348.9	Worker	Scenario 3	4.21E-02	9.40E-05	2.02E-03
7379	637336.2	4168348.9	Worker	Scenario 3	4.76E-02	1.06E-04	2.32E-03
7380	637436.2	4168348.9	Worker	Scenario 3	5.27E-02	1.17E-04	2.47E-03
7381	637536.2	4168348.9	Worker	Scenario 3	4.86E-02	1.08E-04	2.89E-03
7382	637636.2	4168348.9	Worker	Scenario 3	5.39E-02	1.20E-04	3.02E-03
7383	637736.2	4168348.9	Worker	Scenario 3	5.58E-02	1.25E-04	3.14E-03
7384	637836.2	4168348.9	Worker	Scenario 3	6.29E-02	1.40E-04	2.96E-03
7385	637936.2	4168348.9	Worker	Scenario 3	6.98E-02	1.55E-04	2.67E-03
7386	638036.2	4168348.9	Worker	Scenario 3	7.34E-02	1.63E-04	2.87E-03
7387	638136.2	4168348.9	Worker	Scenario 3	8.58E-02	1.91E-04	2.09E-03
7388	638236.2	4168348.9	Worker	Scenario 3	8.44E-02	1.88E-04	2.93E-03
7389	638336.2	4168348.9	Worker	Scenario 3	9.43E-02	2.10E-04	2.71E-03
7390	638436.2	4168348.9	Worker	Scenario 3	9.95E-02	2.21E-04	3.12E-03
7391	638536.2	4168348.9	Worker	Scenario 3	1.17E-01	2.60E-04	2.22E-03
7392	638636.2	4168348.9	Worker	Scenario 3	1.20E-01	2.65E-04	3.05E-03
7393	638736.2	4168348.9	Worker	Scenario 3	1.34E-01	2.97E-04	2.80E-03
7394	638836.2	4168348.9	Worker	Scenario 3	1.51E-01	3.34E-04	2.47E-03
7395	638936.2	4168348.9	Worker	Scenario 3	1.67E-01	3.69E-04	2.66E-03
7396	642636.2	4168348.9	Worker	Scenario 3	1.24E+00	2.65E-03	6.52E-03
7397	642736.2	4168348.9	Worker	Scenario 3	1.15E+00	2.45E-03	6.21E-03
7398	642836.2	4168348.9	Worker	Scenario 3	1.06E+00	2.27E-03	5.94E-03
7399	642936.2	4168348.9	Worker	Scenario 3	9.84E-01	2.11E-03	5.53E-03
7400	643036.2	4168348.9	Worker	Scenario 3	9.12E-01	1.96E-03	5.20E-03
7401	643136.2	4168348.9	Worker	Scenario 3	8.49E-01	1.82E-03	4.88E-03
7402	643236.2	4168348.9	Worker	Scenario 3	7.90E-01	1.70E-03	4.83E-03
7403	643336.2	4168348.9	Worker	Scenario 3	7.36E-01	1.59E-03	5.13E-03
7404	643436.2	4168348.9	Worker	Scenario 3	6.90E-01	1.49E-03	4.92E-03
7405	643536.2	4168348.9	Worker	Scenario 3	6.54E-01	1.41E-03	4.33E-03
7406	643636.2	4168348.9	Worker	Scenario 3	6.23E-01	1.35E-03	3.60E-03
7407	643736.2	4168348.9	Worker	Scenario 3	5.94E-01	1.29E-03	3.26E-03
7408	643836.2	4168348.9	Worker	Scenario 3	5.67E-01	1.23E-03	3.06E-03
7409	643936.2	4168348.9	Worker	Scenario 3	5.44E-01	1.18E-03	2.91E-03
7410	644036.2	4168348.9	Worker	Scenario 3	5.23E-01	1.14E-03	2.77E-03
7411	644136.2	4168348.9	Worker	Scenario 3	5.04E-01	1.09E-03	2.67E-03
7412	644236.2	4168348.9	Worker	Scenario 3	4.87E-01	1.06E-03	2.46E-03
7413	644336.2	4168348.9	Worker	Scenario 3	4.70E-01	1.02E-03	2.42E-03
7414	644436.2	4168348.9	Worker	Scenario 3	4.56E-01	9.89E-04	2.35E-03
7415	644536.2	4168348.9	Worker	Scenario 3	4.43E-01	9.60E-04	2.21E-03
7416	644636.2	4168348.9	Worker	Scenario 3	4.30E-01	9.33E-04	2.13E-03
7417	644736.2	4168348.9	Worker	Scenario 3	4.18E-01	9.07E-04	2.08E-03
7418	644836.2	4168348.9	Worker	Scenario 3	4.05E-01	8.80E-04	2.00E-03
7419	644936.2	4168348.9	Worker	Scenario 3	3.93E-01	8.54E-04	1.93E-03
7420	645036.2	4168348.9	Worker	Scenario 3	3.81E-01	8.28E-04	1.87E-03
7421	645136.2	4168348.9	Worker	Scenario 3	3.70E-01	8.04E-04	1.79E-03
7422	645236.2	4168348.9	Worker	Scenario 3	3.59E-01	7.81E-04	1.75E-03
7423	645336.2	4168348.9	Worker	Scenario 3	3.49E-01	7.59E-04	1.68E-03
7424	645436.2	4168348.9	Worker	Scenario 3	3.38E-01	7.36E-04	1.63E-03
7425	645536.2	4168348.9	Worker	Scenario 3	3.28E-01	7.14E-04	1.59E-03
7426	645636.2	4168348.9	Worker	Scenario 3	3.18E-01	6.94E-04	1.53E-03
7427	645736.2	4168348.9	Worker	Scenario 3	3.09E-01	6.74E-04	1.46E-03
7428	645836.2	4168348.9	Worker	Scenario 3	3.00E-01	6.54E-04	1.37E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7429	645936.2	4168348.9	Worker	Scenario 3	2.91E-01	6.35E-04	1.35E-03
7430	646036.2	4168348.9	Worker	Scenario 3	2.83E-01	6.17E-04	1.34E-03
7431	646236.2	4168348.9	Worker	Scenario 3	2.66E-01	5.82E-04	1.28E-03
7432	646336.2	4168348.9	Worker	Scenario 3	2.59E-01	5.66E-04	1.24E-03
7433	646436.2	4168348.9	Worker	Scenario 3	2.52E-01	5.51E-04	1.19E-03
7434	646536.2	4168348.9	Worker	Scenario 3	2.45E-01	5.36E-04	1.17E-03
7435	646636.2	4168348.9	Worker	Scenario 3	2.39E-01	5.22E-04	1.15E-03
7436	646736.2	4168348.9	Worker	Scenario 3	2.32E-01	5.08E-04	1.12E-03
7437	646836.2	4168348.9	Worker	Scenario 3	2.26E-01	4.95E-04	1.08E-03
7438	635836.2	4168448.9	Worker	Scenario 3	1.82E-02	4.15E-05	1.08E-03
7439	635936.2	4168448.9	Worker	Scenario 3	1.90E-02	4.32E-05	1.07E-03
7440	636036.2	4168448.9	Worker	Scenario 3	1.99E-02	4.52E-05	1.11E-03
7441	636136.2	4168448.9	Worker	Scenario 3	2.09E-02	4.74E-05	1.25E-03
7442	636236.2	4168448.9	Worker	Scenario 3	2.22E-02	5.01E-05	1.40E-03
7443	636336.2	4168448.9	Worker	Scenario 3	2.46E-02	5.54E-05	1.58E-03
7444	636436.2	4168448.9	Worker	Scenario 3	2.42E-02	5.45E-05	1.62E-03
7445	636536.2	4168448.9	Worker	Scenario 3	2.56E-02	5.76E-05	1.73E-03
7446	636636.2	4168448.9	Worker	Scenario 3	2.75E-02	6.18E-05	1.82E-03
7447	636736.2	4168448.9	Worker	Scenario 3	2.89E-02	6.47E-05	1.87E-03
7448	636836.2	4168448.9	Worker	Scenario 3	3.08E-02	6.90E-05	1.89E-03
7449	636936.2	4168448.9	Worker	Scenario 3	3.29E-02	7.36E-05	1.88E-03
7450	637036.2	4168448.9	Worker	Scenario 3	3.65E-02	8.15E-05	2.20E-03
7451	637136.2	4168448.9	Worker	Scenario 3	3.80E-02	8.51E-05	2.45E-03
7452	637236.2	4168448.9	Worker	Scenario 3	4.17E-02	9.33E-05	2.70E-03
7453	637336.2	4168448.9	Worker	Scenario 3	4.85E-02	1.08E-04	2.73E-03
7454	637436.2	4168448.9	Worker	Scenario 3	5.36E-02	1.19E-04	2.60E-03
7455	637536.2	4168448.9	Worker	Scenario 3	5.06E-02	1.13E-04	2.74E-03
7456	637636.2	4168448.9	Worker	Scenario 3	5.64E-02	1.26E-04	2.72E-03
7457	637736.2	4168448.9	Worker	Scenario 3	5.99E-02	1.34E-04	2.92E-03
7458	637836.2	4168448.9	Worker	Scenario 3	6.46E-02	1.44E-04	2.97E-03
7459	637936.2	4168448.9	Worker	Scenario 3	7.23E-02	1.61E-04	2.73E-03
7460	638036.2	4168448.9	Worker	Scenario 3	7.76E-02	1.73E-04	2.77E-03
7461	638136.2	4168448.9	Worker	Scenario 3	8.85E-02	1.97E-04	2.50E-03
7462	638236.2	4168448.9	Worker	Scenario 3	9.18E-02	2.04E-04	2.86E-03
7463	638336.2	4168448.9	Worker	Scenario 3	1.01E-01	2.24E-04	2.67E-03
7464	638436.2	4168448.9	Worker	Scenario 3	1.10E-01	2.44E-04	2.53E-03
7465	638536.2	4168448.9	Worker	Scenario 3	1.26E-01	2.80E-04	2.12E-03
7466	638636.2	4168448.9	Worker	Scenario 3	1.34E-01	2.96E-04	2.58E-03
7467	638736.2	4168448.9	Worker	Scenario 3	1.52E-01	3.36E-04	2.38E-03
7468	638836.2	4168448.9	Worker	Scenario 3	1.70E-01	3.74E-04	2.41E-03
7469	642536.2	4168448.9	Worker	Scenario 3	1.24E+00	2.65E-03	6.74E-03
7470	642636.2	4168448.9	Worker	Scenario 3	1.14E+00	2.43E-03	6.45E-03
7471	642736.2	4168448.9	Worker	Scenario 3	1.05E+00	2.25E-03	5.86E-03
7472	642836.2	4168448.9	Worker	Scenario 3	9.78E-01	2.09E-03	5.46E-03
7473	642936.2	4168448.9	Worker	Scenario 3	9.11E-01	1.95E-03	5.29E-03
7474	643036.2	4168448.9	Worker	Scenario 3	8.47E-01	1.81E-03	4.99E-03
7475	643136.2	4168448.9	Worker	Scenario 3	7.92E-01	1.70E-03	4.69E-03
7476	643236.2	4168448.9	Worker	Scenario 3	7.40E-01	1.59E-03	4.44E-03
7477	643336.2	4168448.9	Worker	Scenario 3	6.92E-01	1.49E-03	4.24E-03
7478	643436.2	4168448.9	Worker	Scenario 3	6.50E-01	1.40E-03	4.56E-03
7479	643536.2	4168448.9	Worker	Scenario 3	6.16E-01	1.33E-03	4.74E-03
7480	643636.2	4168448.9	Worker	Scenario 3	5.87E-01	1.27E-03	4.52E-03
7481	643736.2	4168448.9	Worker	Scenario 3	5.61E-01	1.21E-03	4.00E-03
7482	643836.2	4168448.9	Worker	Scenario 3	5.35E-01	1.16E-03	3.32E-03
7483	643936.2	4168448.9	Worker	Scenario 3	5.13E-01	1.11E-03	2.92E-03
7484	644036.2	4168448.9	Worker	Scenario 3	4.93E-01	1.07E-03	2.71E-03
7485	644136.2	4168448.9	Worker	Scenario 3	4.75E-01	1.03E-03	2.60E-03
7486	644236.2	4168448.9	Worker	Scenario 3	4.58E-01	9.92E-04	2.50E-03
7487	644336.2	4168448.9	Worker	Scenario 3	4.41E-01	9.56E-04	2.39E-03
7488	644436.2	4168448.9	Worker	Scenario 3	4.26E-01	9.24E-04	2.28E-03
7489	644536.2	4168448.9	Worker	Scenario 3	4.13E-01	8.96E-04	2.11E-03
7490	644636.2	4168448.9	Worker	Scenario 3	4.02E-01	8.71E-04	2.12E-03
7491	644736.2	4168448.9	Worker	Scenario 3	3.90E-01	8.47E-04	2.05E-03
7492	644836.2	4168448.9	Worker	Scenario 3	3.79E-01	8.22E-04	1.94E-03
7493	644936.2	4168448.9	Worker	Scenario 3	3.68E-01	7.99E-04	1.87E-03
7494	645036.2	4168448.9	Worker	Scenario 3	3.58E-01	7.77E-04	1.83E-03
7495	645136.2	4168448.9	Worker	Scenario 3	3.48E-01	7.57E-04	1.78E-03
7496	645236.2	4168448.9	Worker	Scenario 3	3.39E-01	7.36E-04	1.70E-03
7497	645336.2	4168448.9	Worker	Scenario 3	3.30E-01	7.16E-04	1.67E-03
7498	645436.2	4168448.9	Worker	Scenario 3	3.20E-01	6.96E-04	1.61E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7499	645536.2	4168448.9	Worker	Scenario 3	3.11E-01	6.77E-04	1.56E-03
7500	645636.2	4168448.9	Worker	Scenario 3	3.03E-01	6.59E-04	1.52E-03
7501	645736.2	4168448.9	Worker	Scenario 3	2.94E-01	6.40E-04	1.46E-03
7502	645836.2	4168448.9	Worker	Scenario 3	2.86E-01	6.23E-04	1.42E-03
7503	645936.2	4168448.9	Worker	Scenario 3	2.78E-01	6.05E-04	1.39E-03
7504	646036.2	4168448.9	Worker	Scenario 3	2.70E-01	5.89E-04	1.34E-03
7505	646236.2	4168448.9	Worker	Scenario 3	2.55E-01	5.57E-04	1.21E-03
7506	646336.2	4168448.9	Worker	Scenario 3	2.48E-01	5.43E-04	1.17E-03
7507	646436.2	4168448.9	Worker	Scenario 3	2.42E-01	5.29E-04	1.17E-03
7508	646536.2	4168448.9	Worker	Scenario 3	2.36E-01	5.15E-04	1.16E-03
7509	646636.2	4168448.9	Worker	Scenario 3	2.30E-01	5.02E-04	1.14E-03
7510	646736.2	4168448.9	Worker	Scenario 3	2.24E-01	4.90E-04	1.11E-03
7511	635836.2	4168548.9	Worker	Scenario 3	1.85E-02	4.18E-05	1.18E-03
7512	635936.2	4168548.9	Worker	Scenario 3	1.97E-02	4.44E-05	1.32E-03
7513	636036.2	4168548.9	Worker	Scenario 3	2.11E-02	4.74E-05	1.45E-03
7514	636136.2	4168548.9	Worker	Scenario 3	2.14E-02	4.81E-05	1.49E-03
7515	636236.2	4168548.9	Worker	Scenario 3	2.25E-02	5.05E-05	1.56E-03
7516	636336.2	4168548.9	Worker	Scenario 3	2.47E-02	5.53E-05	1.64E-03
7517	636436.2	4168548.9	Worker	Scenario 3	2.68E-02	6.00E-05	1.69E-03
7518	636536.2	4168548.9	Worker	Scenario 3	2.71E-02	6.06E-05	1.65E-03
7519	636636.2	4168548.9	Worker	Scenario 3	2.91E-02	6.51E-05	1.66E-03
7520	636736.2	4168548.9	Worker	Scenario 3	3.10E-02	6.94E-05	2.00E-03
7521	636836.2	4168548.9	Worker	Scenario 3	3.33E-02	7.45E-05	2.24E-03
7522	636936.2	4168548.9	Worker	Scenario 3	3.51E-02	7.87E-05	2.39E-03
7523	637036.2	4168548.9	Worker	Scenario 3	3.74E-02	8.41E-05	2.47E-03
7524	637136.2	4168548.9	Worker	Scenario 3	4.16E-02	9.34E-05	2.49E-03
7525	637236.2	4168548.9	Worker	Scenario 3	4.41E-02	9.91E-05	2.39E-03
7526	637336.2	4168548.9	Worker	Scenario 3	4.93E-02	1.11E-04	2.55E-03
7527	637436.2	4168548.9	Worker	Scenario 3	5.55E-02	1.24E-04	2.51E-03
7528	637536.2	4168548.9	Worker	Scenario 3	5.60E-02	1.25E-04	2.72E-03
7529	637636.2	4168548.9	Worker	Scenario 3	5.70E-02	1.28E-04	2.88E-03
7530	637736.2	4168548.9	Worker	Scenario 3	6.47E-02	1.45E-04	2.76E-03
7531	637836.2	4168548.9	Worker	Scenario 3	6.98E-02	1.56E-04	2.74E-03
7532	637936.2	4168548.9	Worker	Scenario 3	7.55E-02	1.68E-04	2.83E-03
7533	638036.2	4168548.9	Worker	Scenario 3	8.24E-02	1.83E-04	2.72E-03
7534	638136.2	4168548.9	Worker	Scenario 3	8.89E-02	1.97E-04	2.56E-03
7535	638236.2	4168548.9	Worker	Scenario 3	1.07E-01	2.37E-04	1.84E-03
7536	638336.2	4168548.9	Worker	Scenario 3	1.12E-01	2.49E-04	1.93E-03
7537	638436.2	4168548.9	Worker	Scenario 3	1.23E-01	2.72E-04	2.06E-03
7538	638536.2	4168548.9	Worker	Scenario 3	1.38E-01	3.03E-04	2.13E-03
7539	638636.2	4168548.9	Worker	Scenario 3	1.57E-01	3.44E-04	2.11E-03
7540	638736.2	4168548.9	Worker	Scenario 3	1.76E-01	3.84E-04	2.09E-03
7541	642336.2	4168548.9	Worker	Scenario 3	1.34E+00	2.86E-03	7.01E-03
7542	642436.2	4168548.9	Worker	Scenario 3	1.22E+00	2.60E-03	6.88E-03
7543	642536.2	4168548.9	Worker	Scenario 3	1.11E+00	2.37E-03	6.15E-03
7544	642636.2	4168548.9	Worker	Scenario 3	1.03E+00	2.19E-03	5.92E-03
7545	642736.2	4168548.9	Worker	Scenario 3	9.56E-01	2.05E-03	5.68E-03
7546	642836.2	4168548.9	Worker	Scenario 3	8.92E-01	1.91E-03	5.30E-03
7547	642936.2	4168548.9	Worker	Scenario 3	8.35E-01	1.79E-03	5.01E-03
7548	643036.2	4168548.9	Worker	Scenario 3	7.80E-01	1.67E-03	4.74E-03
7549	643136.2	4168548.9	Worker	Scenario 3	7.32E-01	1.57E-03	4.55E-03
7550	643236.2	4168548.9	Worker	Scenario 3	6.88E-01	1.48E-03	4.23E-03
7551	643336.2	4168548.9	Worker	Scenario 3	6.47E-01	1.39E-03	4.06E-03
7552	643436.2	4168548.9	Worker	Scenario 3	6.09E-01	1.31E-03	3.84E-03
7553	643536.2	4168548.9	Worker	Scenario 3	5.76E-01	1.24E-03	3.85E-03
7554	643636.2	4168548.9	Worker	Scenario 3	5.50E-01	1.19E-03	4.29E-03
7555	643736.2	4168548.9	Worker	Scenario 3	5.27E-01	1.14E-03	4.39E-03
7556	643836.2	4168548.9	Worker	Scenario 3	5.05E-01	1.09E-03	4.17E-03
7557	643936.2	4168548.9	Worker	Scenario 3	4.84E-01	1.05E-03	3.71E-03
7558	644036.2	4168548.9	Worker	Scenario 3	4.65E-01	1.01E-03	3.12E-03
7559	644136.2	4168548.9	Worker	Scenario 3	4.47E-01	9.68E-04	2.64E-03
7560	644236.2	4168548.9	Worker	Scenario 3	4.31E-01	9.34E-04	2.46E-03
7561	644336.2	4168548.9	Worker	Scenario 3	4.16E-01	9.01E-04	2.35E-03
7562	644436.2	4168548.9	Worker	Scenario 3	4.01E-01	8.70E-04	2.25E-03
7563	644536.2	4168548.9	Worker	Scenario 3	3.89E-01	8.42E-04	2.15E-03
7564	644636.2	4168548.9	Worker	Scenario 3	3.77E-01	8.17E-04	2.10E-03
7565	644736.2	4168548.9	Worker	Scenario 3	3.66E-01	7.93E-04	1.98E-03
7566	645436.2	4168548.9	Worker	Scenario 3	3.03E-01	6.59E-04	1.60E-03
7567	645536.2	4168548.9	Worker	Scenario 3	2.95E-01	6.42E-04	1.54E-03
7568	645636.2	4168548.9	Worker	Scenario 3	2.87E-01	6.25E-04	1.50E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7569	645736.2	4168548.9	Worker	Scenario 3	2.80E-01	6.08E-04	1.46E-03
7570	645836.2	4168548.9	Worker	Scenario 3	2.72E-01	5.92E-04	1.40E-03
7571	645936.2	4168548.9	Worker	Scenario 3	2.65E-01	5.77E-04	1.37E-03
7572	646036.2	4168548.9	Worker	Scenario 3	2.58E-01	5.62E-04	1.33E-03
7573	646236.2	4168548.9	Worker	Scenario 3	2.44E-01	5.33E-04	1.25E-03
7574	646336.2	4168548.9	Worker	Scenario 3	2.38E-01	5.19E-04	1.23E-03
7575	646436.2	4168548.9	Worker	Scenario 3	2.32E-01	5.07E-04	1.19E-03
7576	646536.2	4168548.9	Worker	Scenario 3	2.26E-01	4.94E-04	1.14E-03
7577	646636.2	4168548.9	Worker	Scenario 3	2.21E-01	4.82E-04	1.08E-03
7578	635736.2	4168648.9	Worker	Scenario 3	1.78E-02	3.99E-05	1.21E-03
7579	635836.2	4168648.9	Worker	Scenario 3	1.88E-02	4.21E-05	1.29E-03
7580	635936.2	4168648.9	Worker	Scenario 3	1.97E-02	4.41E-05	1.34E-03
7581	636036.2	4168648.9	Worker	Scenario 3	2.09E-02	4.68E-05	1.39E-03
7582	636136.2	4168648.9	Worker	Scenario 3	2.43E-02	5.44E-05	1.49E-03
7583	636236.2	4168648.9	Worker	Scenario 3	2.39E-02	5.35E-05	1.42E-03
7584	636336.2	4168648.9	Worker	Scenario 3	2.54E-02	5.70E-05	1.50E-03
7585	636436.2	4168648.9	Worker	Scenario 3	2.74E-02	6.15E-05	1.80E-03
7586	636536.2	4168648.9	Worker	Scenario 3	2.87E-02	6.44E-05	1.94E-03
7587	636636.2	4168648.9	Worker	Scenario 3	2.98E-02	6.70E-05	2.01E-03
7588	636736.2	4168648.9	Worker	Scenario 3	3.17E-02	7.14E-05	2.12E-03
7589	636836.2	4168648.9	Worker	Scenario 3	3.46E-02	7.81E-05	2.24E-03
7590	636936.2	4168648.9	Worker	Scenario 3	3.78E-02	8.52E-05	2.27E-03
7591	637036.2	4168648.9	Worker	Scenario 3	4.14E-02	9.33E-05	2.44E-03
7592	637136.2	4168648.9	Worker	Scenario 3	4.24E-02	9.56E-05	2.59E-03
7593	637236.2	4168648.9	Worker	Scenario 3	4.58E-02	1.03E-04	2.64E-03
7594	637336.2	4168648.9	Worker	Scenario 3	5.24E-02	1.18E-04	2.52E-03
7595	637436.2	4168648.9	Worker	Scenario 3	5.86E-02	1.31E-04	2.35E-03
7596	637536.2	4168648.9	Worker	Scenario 3	6.16E-02	1.38E-04	2.42E-03
7597	637636.2	4168648.9	Worker	Scenario 3	6.05E-02	1.36E-04	2.80E-03
7598	637736.2	4168648.9	Worker	Scenario 3	6.55E-02	1.47E-04	2.78E-03
7599	637836.2	4168648.9	Worker	Scenario 3	7.35E-02	1.64E-04	2.50E-03
7600	637936.2	4168648.9	Worker	Scenario 3	7.98E-02	1.77E-04	2.51E-03
7601	638036.2	4168648.9	Worker	Scenario 3	8.83E-02	1.96E-04	2.47E-03
7602	638136.2	4168648.9	Worker	Scenario 3	9.52E-02	2.11E-04	2.57E-03
7603	638236.2	4168648.9	Worker	Scenario 3	1.09E-01	2.43E-04	1.88E-03
7604	638336.2	4168648.9	Worker	Scenario 3	1.24E-01	2.73E-04	1.90E-03
7605	638436.2	4168648.9	Worker	Scenario 3	1.46E-01	3.20E-04	1.86E-03
7606	638536.2	4168648.9	Worker	Scenario 3	1.54E-01	3.37E-04	1.86E-03
7607	642136.2	4168648.9	Worker	Scenario 3	1.37E+00	2.90E-03	7.15E-03
7608	642236.2	4168648.9	Worker	Scenario 3	1.25E+00	2.65E-03	6.84E-03
7609	642336.2	4168648.9	Worker	Scenario 3	1.14E+00	2.43E-03	6.39E-03
7610	642436.2	4168648.9	Worker	Scenario 3	1.05E+00	2.25E-03	6.16E-03
7611	642536.2	4168648.9	Worker	Scenario 3	9.79E-01	2.10E-03	6.07E-03
7612	642636.2	4168648.9	Worker	Scenario 3	9.15E-01	1.96E-03	5.55E-03
7613	642736.2	4168648.9	Worker	Scenario 3	8.59E-01	1.84E-03	5.31E-03
7614	642836.2	4168648.9	Worker	Scenario 3	8.07E-01	1.73E-03	5.08E-03
7615	642936.2	4168648.9	Worker	Scenario 3	7.59E-01	1.63E-03	4.81E-03
7616	643036.2	4168648.9	Worker	Scenario 3	7.15E-01	1.54E-03	4.55E-03
7617	643136.2	4168648.9	Worker	Scenario 3	6.74E-01	1.45E-03	4.31E-03
7618	643236.2	4168648.9	Worker	Scenario 3	6.37E-01	1.37E-03	4.10E-03
7619	643336.2	4168648.9	Worker	Scenario 3	6.01E-01	1.29E-03	3.91E-03
7620	643436.2	4168648.9	Worker	Scenario 3	5.68E-01	1.22E-03	3.72E-03
7621	643536.2	4168648.9	Worker	Scenario 3	5.39E-01	1.16E-03	3.52E-03
7622	643636.2	4168648.9	Worker	Scenario 3	5.15E-01	1.11E-03	3.43E-03
7623	643736.2	4168648.9	Worker	Scenario 3	4.95E-01	1.07E-03	3.72E-03
7624	643836.2	4168648.9	Worker	Scenario 3	4.75E-01	1.02E-03	4.05E-03
7625	643936.2	4168648.9	Worker	Scenario 3	4.56E-01	9.85E-04	4.09E-03
7626	644036.2	4168648.9	Worker	Scenario 3	4.38E-01	9.47E-04	3.87E-03
7627	644136.2	4168648.9	Worker	Scenario 3	4.22E-01	9.12E-04	3.46E-03
7628	644236.2	4168648.9	Worker	Scenario 3	4.06E-01	8.80E-04	2.94E-03
7629	644336.2	4168648.9	Worker	Scenario 3	3.92E-01	8.50E-04	2.46E-03
7630	644436.2	4168648.9	Worker	Scenario 3	3.79E-01	8.22E-04	2.27E-03
7631	644536.2	4168648.9	Worker	Scenario 3	3.67E-01	7.95E-04	2.13E-03
7632	644636.2	4168648.9	Worker	Scenario 3	3.55E-01	7.70E-04	2.03E-03
7633	644736.2	4168648.9	Worker	Scenario 3	3.45E-01	7.47E-04	1.98E-03
7634	644836.2	4168648.9	Worker	Scenario 3	3.35E-01	7.26E-04	1.90E-03
7635	644936.2	4168648.9	Worker	Scenario 3	3.26E-01	7.06E-04	1.84E-03
7636	645036.2	4168648.9	Worker	Scenario 3	3.17E-01	6.88E-04	1.73E-03
7637	645136.2	4168648.9	Worker	Scenario 3	3.09E-01	6.70E-04	1.68E-03
7638	645236.2	4168648.9	Worker	Scenario 3	3.02E-01	6.54E-04	1.67E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7639	645336.2	4168648.9	Worker	Scenario 3	2.94E-01	6.38E-04	1.62E-03
7640	645436.2	4168648.9	Worker	Scenario 3	2.87E-01	6.22E-04	1.54E-03
7641	645536.2	4168648.9	Worker	Scenario 3	2.80E-01	6.07E-04	1.50E-03
7642	645636.2	4168648.9	Worker	Scenario 3	2.73E-01	5.92E-04	1.49E-03
7643	645736.2	4168648.9	Worker	Scenario 3	2.66E-01	5.78E-04	1.49E-03
7644	645836.2	4168648.9	Worker	Scenario 3	2.59E-01	5.63E-04	1.46E-03
7645	645936.2	4168648.9	Worker	Scenario 3	2.53E-01	5.49E-04	1.40E-03
7646	646036.2	4168648.9	Worker	Scenario 3	2.46E-01	5.35E-04	1.33E-03
7647	646236.2	4168648.9	Worker	Scenario 3	2.34E-01	5.09E-04	1.23E-03
7648	646336.2	4168648.9	Worker	Scenario 3	2.28E-01	4.97E-04	1.21E-03
7649	646436.2	4168648.9	Worker	Scenario 3	2.23E-01	4.85E-04	1.18E-03
7650	646536.2	4168648.9	Worker	Scenario 3	2.17E-01	4.74E-04	1.13E-03
7651	635736.2	4168748.9	Worker	Scenario 3	1.82E-02	4.07E-05	1.14E-03
7652	635836.2	4168748.9	Worker	Scenario 3	1.91E-02	4.28E-05	1.14E-03
7653	635936.2	4168748.9	Worker	Scenario 3	2.03E-02	4.56E-05	1.15E-03
7654	636036.2	4168748.9	Worker	Scenario 3	2.17E-02	4.87E-05	1.23E-03
7655	636136.2	4168748.9	Worker	Scenario 3	2.30E-02	5.17E-05	1.42E-03
7656	636236.2	4168748.9	Worker	Scenario 3	2.46E-02	5.55E-05	1.63E-03
7657	636336.2	4168748.9	Worker	Scenario 3	2.65E-02	5.98E-05	1.82E-03
7658	636436.2	4168748.9	Worker	Scenario 3	2.93E-02	6.61E-05	2.00E-03
7659	636536.2	4168748.9	Worker	Scenario 3	3.38E-02	7.62E-05	2.03E-03
7660	636636.2	4168748.9	Worker	Scenario 3	3.24E-02	7.33E-05	2.11E-03
7661	636736.2	4168748.9	Worker	Scenario 3	3.33E-02	7.55E-05	2.16E-03
7662	636836.2	4168748.9	Worker	Scenario 3	3.48E-02	7.90E-05	2.28E-03
7663	636936.2	4168748.9	Worker	Scenario 3	3.76E-02	8.52E-05	2.37E-03
7664	637036.2	4168748.9	Worker	Scenario 3	4.03E-02	9.14E-05	2.50E-03
7665	637136.2	4168748.9	Worker	Scenario 3	4.59E-02	1.03E-04	2.56E-03
7666	637236.2	4168748.9	Worker	Scenario 3	4.95E-02	1.11E-04	2.50E-03
7667	637336.2	4168748.9	Worker	Scenario 3	5.47E-02	1.23E-04	2.49E-03
7668	637436.2	4168748.9	Worker	Scenario 3	5.90E-02	1.32E-04	2.47E-03
7669	637536.2	4168748.9	Worker	Scenario 3	6.47E-02	1.44E-04	2.25E-03
7670	637636.2	4168748.9	Worker	Scenario 3	6.58E-02	1.47E-04	2.37E-03
7671	637736.2	4168748.9	Worker	Scenario 3	7.16E-02	1.60E-04	2.49E-03
7672	637836.2	4168748.9	Worker	Scenario 3	7.87E-02	1.75E-04	2.44E-03
7673	637936.2	4168748.9	Worker	Scenario 3	8.61E-02	1.91E-04	2.48E-03
7674	638036.2	4168748.9	Worker	Scenario 3	9.42E-02	2.08E-04	2.53E-03
7675	638136.2	4168748.9	Worker	Scenario 3	1.04E-01	2.30E-04	2.38E-03
7676	638236.2	4168748.9	Worker	Scenario 3	1.17E-01	2.59E-04	1.67E-03
7677	638336.2	4168748.9	Worker	Scenario 3	1.35E-01	2.96E-04	1.67E-03
7678	638436.2	4168748.9	Worker	Scenario 3	1.61E-01	3.49E-04	1.90E-03
7679	641936.2	4168748.9	Worker	Scenario 3	1.32E+00	2.80E-03	9.40E-03
7680	642036.2	4168748.9	Worker	Scenario 3	1.21E+00	2.56E-03	6.53E-03
7681	642136.2	4168748.9	Worker	Scenario 3	1.12E+00	2.37E-03	6.61E-03
7682	642236.2	4168748.9	Worker	Scenario 3	1.03E+00	2.21E-03	6.28E-03
7683	642336.2	4168748.9	Worker	Scenario 3	9.69E-01	2.08E-03	5.99E-03
7684	642436.2	4168748.9	Worker	Scenario 3	9.11E-01	1.96E-03	5.75E-03
7685	642536.2	4168748.9	Worker	Scenario 3	8.58E-01	1.84E-03	5.51E-03
7686	642636.2	4168748.9	Worker	Scenario 3	8.10E-01	1.74E-03	5.38E-03
7687	642736.2	4168748.9	Worker	Scenario 3	7.67E-01	1.65E-03	5.01E-03
7688	642836.2	4168748.9	Worker	Scenario 3	7.26E-01	1.56E-03	4.78E-03
7689	642936.2	4168748.9	Worker	Scenario 3	6.87E-01	1.48E-03	4.59E-03
7690	643036.2	4168748.9	Worker	Scenario 3	6.51E-01	1.40E-03	4.37E-03
7691	643136.2	4168748.9	Worker	Scenario 3	6.18E-01	1.33E-03	4.12E-03
7692	643236.2	4168748.9	Worker	Scenario 3	5.86E-01	1.26E-03	3.87E-03
7693	643336.2	4168748.9	Worker	Scenario 3	5.57E-01	1.20E-03	3.77E-03
7694	643436.2	4168748.9	Worker	Scenario 3	5.29E-01	1.14E-03	3.62E-03
7695	643536.2	4168748.9	Worker	Scenario 3	5.03E-01	1.08E-03	3.42E-03
7696	643636.2	4168748.9	Worker	Scenario 3	4.81E-01	1.04E-03	3.29E-03
7697	643736.2	4168748.9	Worker	Scenario 3	4.62E-01	9.96E-04	3.16E-03
7698	643836.2	4168748.9	Worker	Scenario 3	4.45E-01	9.59E-04	3.16E-03
7699	643936.2	4168748.9	Worker	Scenario 3	4.29E-01	9.26E-04	3.58E-03
7700	644036.2	4168748.9	Worker	Scenario 3	4.12E-01	8.91E-04	3.82E-03
7701	644136.2	4168748.9	Worker	Scenario 3	3.97E-01	8.59E-04	3.83E-03
7702	644236.2	4168748.9	Worker	Scenario 3	3.83E-01	8.29E-04	3.61E-03
7703	644336.2	4168748.9	Worker	Scenario 3	3.70E-01	8.02E-04	3.24E-03
7704	644436.2	4168748.9	Worker	Scenario 3	3.59E-01	7.77E-04	2.78E-03
7705	644536.2	4168748.9	Worker	Scenario 3	3.47E-01	7.52E-04	2.31E-03
7706	644636.2	4168748.9	Worker	Scenario 3	3.36E-01	7.29E-04	2.10E-03
7707	644736.2	4168748.9	Worker	Scenario 3	3.26E-01	7.07E-04	1.95E-03
7708	644836.2	4168748.9	Worker	Scenario 3	3.16E-01	6.86E-04	1.88E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7709	644936.2	4168748.9	Worker	Scenario 3	3.07E-01	6.67E-04	1.82E-03
7710	645036.2	4168748.9	Worker	Scenario 3	3.00E-01	6.50E-04	1.75E-03
7711	645136.2	4168748.9	Worker	Scenario 3	2.92E-01	6.33E-04	1.71E-03
7712	645236.2	4168748.9	Worker	Scenario 3	2.85E-01	6.18E-04	1.64E-03
7713	645336.2	4168748.9	Worker	Scenario 3	2.78E-01	6.03E-04	1.53E-03
7714	645436.2	4168748.9	Worker	Scenario 3	2.72E-01	5.89E-04	1.52E-03
7715	645536.2	4168748.9	Worker	Scenario 3	2.65E-01	5.75E-04	1.51E-03
7716	645636.2	4168748.9	Worker	Scenario 3	2.59E-01	5.61E-04	1.46E-03
7717	645736.2	4168748.9	Worker	Scenario 3	2.53E-01	5.48E-04	1.39E-03
7718	645836.2	4168748.9	Worker	Scenario 3	2.47E-01	5.36E-04	1.37E-03
7719	645936.2	4168748.9	Worker	Scenario 3	2.41E-01	5.23E-04	1.40E-03
7720	646036.2	4168748.9	Worker	Scenario 3	2.35E-01	5.10E-04	1.40E-03
7721	646236.2	4168748.9	Worker	Scenario 3	2.24E-01	4.86E-04	1.34E-03
7722	646336.2	4168748.9	Worker	Scenario 3	2.18E-01	4.75E-04	1.27E-03
7723	646436.2	4168748.9	Worker	Scenario 3	2.13E-01	4.64E-04	1.20E-03
7724	646536.2	4168748.9	Worker	Scenario 3	2.08E-01	4.53E-04	1.13E-03
7725	635736.2	4168848.9	Worker	Scenario 3	1.88E-02	4.24E-05	1.09E-03
7726	635836.2	4168848.9	Worker	Scenario 3	1.97E-02	4.45E-05	1.25E-03
7727	635936.2	4168848.9	Worker	Scenario 3	2.09E-02	4.72E-05	1.41E-03
7728	636036.2	4168848.9	Worker	Scenario 3	2.33E-02	5.27E-05	1.64E-03
7729	636136.2	4168848.9	Worker	Scenario 3	2.40E-02	5.44E-05	1.71E-03
7730	636236.2	4168848.9	Worker	Scenario 3	2.52E-02	5.73E-05	1.79E-03
7731	636336.2	4168848.9	Worker	Scenario 3	2.67E-02	6.06E-05	1.84E-03
7732	636436.2	4168848.9	Worker	Scenario 3	2.84E-02	6.46E-05	1.87E-03
7733	636536.2	4168848.9	Worker	Scenario 3	3.03E-02	6.91E-05	2.01E-03
7734	636636.2	4168848.9	Worker	Scenario 3	3.38E-02	7.69E-05	2.16E-03
7735	636736.2	4168848.9	Worker	Scenario 3	3.97E-02	8.96E-05	2.29E-03
7736	636836.2	4168848.9	Worker	Scenario 3	3.81E-02	8.65E-05	2.39E-03
7737	636936.2	4168848.9	Worker	Scenario 3	3.94E-02	8.95E-05	2.38E-03
7738	637036.2	4168848.9	Worker	Scenario 3	4.23E-02	9.58E-05	2.37E-03
7739	637136.2	4168848.9	Worker	Scenario 3	4.53E-02	1.02E-04	2.43E-03
7740	637236.2	4168848.9	Worker	Scenario 3	4.92E-02	1.11E-04	2.34E-03
7741	637336.2	4168848.9	Worker	Scenario 3	5.34E-02	1.20E-04	2.20E-03
7742	637436.2	4168848.9	Worker	Scenario 3	5.97E-02	1.34E-04	2.37E-03
7743	637536.2	4168848.9	Worker	Scenario 3	6.77E-02	1.51E-04	2.20E-03
7744	637636.2	4168848.9	Worker	Scenario 3	7.11E-02	1.58E-04	2.37E-03
7745	637736.2	4168848.9	Worker	Scenario 3	7.66E-02	1.70E-04	2.53E-03
7746	637836.2	4168848.9	Worker	Scenario 3	8.56E-02	1.89E-04	2.34E-03
7747	637936.2	4168848.9	Worker	Scenario 3	9.47E-02	2.09E-04	2.08E-03
7748	638036.2	4168848.9	Worker	Scenario 3	1.02E-01	2.25E-04	2.12E-03
7749	638136.2	4168848.9	Worker	Scenario 3	1.14E-01	2.49E-04	1.84E-03
7750	638236.2	4168848.9	Worker	Scenario 3	1.28E-01	2.81E-04	1.74E-03
7751	641636.2	4168848.9	Worker	Scenario 3	1.36E+00	2.88E-03	6.90E-03
7752	641736.2	4168848.9	Worker	Scenario 3	1.26E+00	2.68E-03	6.82E-03
7753	641836.2	4168848.9	Worker	Scenario 3	1.17E+00	2.48E-03	8.82E-03
7754	641936.2	4168848.9	Worker	Scenario 3	1.08E+00	2.31E-03	9.87E-03
7755	642036.2	4168848.9	Worker	Scenario 3	1.00E+00	2.14E-03	6.05E-03
7756	642136.2	4168848.9	Worker	Scenario 3	9.40E-01	2.00E-03	5.97E-03
7757	642236.2	4168848.9	Worker	Scenario 3	8.83E-01	1.89E-03	5.82E-03
7758	642336.2	4168848.9	Worker	Scenario 3	8.35E-01	1.79E-03	5.62E-03
7759	642436.2	4168848.9	Worker	Scenario 3	7.93E-01	1.71E-03	5.33E-03
7760	642536.2	4168848.9	Worker	Scenario 3	7.54E-01	1.62E-03	5.17E-03
7761	642636.2	4168848.9	Worker	Scenario 3	7.18E-01	1.55E-03	4.93E-03
7762	642736.2	4168848.9	Worker	Scenario 3	6.85E-01	1.47E-03	4.75E-03
7763	642836.2	4168848.9	Worker	Scenario 3	6.52E-01	1.40E-03	4.53E-03
7764	642936.2	4168848.9	Worker	Scenario 3	6.21E-01	1.34E-03	4.33E-03
7765	643036.2	4168848.9	Worker	Scenario 3	5.92E-01	1.28E-03	4.16E-03
7766	643136.2	4168848.9	Worker	Scenario 3	5.65E-01	1.22E-03	3.99E-03
7767	643236.2	4168848.9	Worker	Scenario 3	5.39E-01	1.16E-03	3.73E-03
7768	643336.2	4168848.9	Worker	Scenario 3	5.14E-01	1.11E-03	3.47E-03
7769	643436.2	4168848.9	Worker	Scenario 3	4.91E-01	1.06E-03	3.44E-03
7770	643536.2	4168848.9	Worker	Scenario 3	4.69E-01	1.01E-03	3.35E-03
7771	643636.2	4168848.9	Worker	Scenario 3	4.49E-01	9.67E-04	3.19E-03
7772	643736.2	4168848.9	Worker	Scenario 3	4.32E-01	9.30E-04	3.06E-03
7773	643836.2	4168848.9	Worker	Scenario 3	4.16E-01	8.97E-04	2.91E-03
7774	643936.2	4168848.9	Worker	Scenario 3	4.02E-01	8.67E-04	2.84E-03
7775	644036.2	4168848.9	Worker	Scenario 3	3.88E-01	8.37E-04	3.05E-03
7776	644136.2	4168848.9	Worker	Scenario 3	3.74E-01	8.08E-04	3.43E-03
7777	644236.2	4168848.9	Worker	Scenario 3	3.61E-01	7.81E-04	3.62E-03
7778	644336.2	4168848.9	Worker	Scenario 3	3.50E-01	7.56E-04	3.60E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7779	644436.2	4168848.9	Worker	Scenario 3	3.39E-01	7.33E-04	3.39E-03
7780	644536.2	4168848.9	Worker	Scenario 3	3.28E-01	7.11E-04	3.05E-03
7781	644836.2	4168848.9	Worker	Scenario 3	3.00E-01	6.50E-04	1.94E-03
7782	644936.2	4168848.9	Worker	Scenario 3	2.91E-01	6.32E-04	1.81E-03
7783	645036.2	4168848.9	Worker	Scenario 3	2.84E-01	6.15E-04	1.74E-03
7784	645136.2	4168848.9	Worker	Scenario 3	2.76E-01	6.00E-04	1.66E-03
7785	645236.2	4168848.9	Worker	Scenario 3	2.70E-01	5.85E-04	1.63E-03
7786	645336.2	4168848.9	Worker	Scenario 3	2.63E-01	5.71E-04	1.57E-03
7787	645436.2	4168848.9	Worker	Scenario 3	2.57E-01	5.58E-04	1.53E-03
7788	645536.2	4168848.9	Worker	Scenario 3	2.51E-01	5.45E-04	1.46E-03
7789	645636.2	4168848.9	Worker	Scenario 3	2.46E-01	5.33E-04	1.37E-03
7790	645736.2	4168848.9	Worker	Scenario 3	2.40E-01	5.21E-04	1.38E-03
7791	645836.2	4168848.9	Worker	Scenario 3	2.35E-01	5.09E-04	1.39E-03
7792	645936.2	4168848.9	Worker	Scenario 3	2.30E-01	4.98E-04	1.35E-03
7793	646036.2	4168848.9	Worker	Scenario 3	2.24E-01	4.87E-04	1.29E-03
7794	646236.2	4168848.9	Worker	Scenario 3	2.14E-01	4.64E-04	1.31E-03
7795	646336.2	4168848.9	Worker	Scenario 3	2.09E-01	4.54E-04	1.32E-03
7796	646436.2	4168848.9	Worker	Scenario 3	2.04E-01	4.44E-04	1.31E-03
7797	635736.2	4168948.9	Worker	Scenario 3	1.95E-02	4.42E-05	1.36E-03
7798	635836.2	4168948.9	Worker	Scenario 3	2.05E-02	4.67E-05	1.47E-03
7799	635936.2	4168948.9	Worker	Scenario 3	2.21E-02	5.03E-05	1.58E-03
7800	636036.2	4168948.9	Worker	Scenario 3	2.40E-02	5.48E-05	1.66E-03
7801	636136.2	4168948.9	Worker	Scenario 3	2.50E-02	5.70E-05	1.64E-03
7802	636236.2	4168948.9	Worker	Scenario 3	2.75E-02	6.28E-05	1.84E-03
7803	636336.2	4168948.9	Worker	Scenario 3	3.01E-02	6.85E-05	1.94E-03
7804	636436.2	4168948.9	Worker	Scenario 3	3.12E-02	7.12E-05	2.08E-03
7805	636536.2	4168948.9	Worker	Scenario 3	3.31E-02	7.54E-05	2.18E-03
7806	636636.2	4168948.9	Worker	Scenario 3	3.52E-02	8.01E-05	2.18E-03
7807	636736.2	4168948.9	Worker	Scenario 3	3.69E-02	8.37E-05	2.13E-03
7808	636836.2	4168948.9	Worker	Scenario 3	4.15E-02	9.37E-05	2.25E-03
7809	636936.2	4168948.9	Worker	Scenario 3	4.56E-02	1.03E-04	2.16E-03
7810	637036.2	4168948.9	Worker	Scenario 3	4.62E-02	1.04E-04	2.00E-03
7811	637136.2	4168948.9	Worker	Scenario 3	4.82E-02	1.09E-04	2.23E-03
7812	637236.2	4168948.9	Worker	Scenario 3	5.19E-02	1.17E-04	2.39E-03
7813	637336.2	4168948.9	Worker	Scenario 3	5.65E-02	1.27E-04	2.39E-03
7814	637436.2	4168948.9	Worker	Scenario 3	6.14E-02	1.37E-04	2.53E-03
7815	637536.2	4168948.9	Worker	Scenario 3	6.83E-02	1.52E-04	2.59E-03
7816	637636.2	4168948.9	Worker	Scenario 3	7.59E-02	1.68E-04	2.41E-03
7817	637736.2	4168948.9	Worker	Scenario 3	8.16E-02	1.80E-04	2.42E-03
7818	637836.2	4168948.9	Worker	Scenario 3	8.81E-02	1.94E-04	2.33E-03
7819	637936.2	4168948.9	Worker	Scenario 3	1.02E-01	2.25E-04	1.44E-03
7820	638036.2	4168948.9	Worker	Scenario 3	1.13E-01	2.48E-04	1.61E-03
7821	638136.2	4168948.9	Worker	Scenario 3	1.26E-01	2.76E-04	1.72E-03
7822	641636.2	4168948.9	Worker	Scenario 3	1.12E+00	2.39E-03	6.32E-03
7823	641736.2	4168948.9	Worker	Scenario 3	1.05E+00	2.25E-03	6.15E-03
7824	641836.2	4168948.9	Worker	Scenario 3	9.82E-01	2.10E-03	7.25E-03
7825	641936.2	4168948.9	Worker	Scenario 3	9.21E-01	1.97E-03	9.69E-03
7826	642036.2	4168948.9	Worker	Scenario 3	8.67E-01	1.86E-03	6.87E-03
7827	642136.2	4168948.9	Worker	Scenario 3	8.18E-01	1.75E-03	5.58E-03
7828	642236.2	4168948.9	Worker	Scenario 3	7.72E-01	1.65E-03	5.43E-03
7829	642336.2	4168948.9	Worker	Scenario 3	7.33E-01	1.58E-03	5.26E-03
7830	642436.2	4168948.9	Worker	Scenario 3	6.99E-01	1.51E-03	5.05E-03
7831	642536.2	4168948.9	Worker	Scenario 3	6.68E-01	1.44E-03	4.79E-03
7832	642636.2	4168948.9	Worker	Scenario 3	6.41E-01	1.38E-03	4.66E-03
7833	642736.2	4168948.9	Worker	Scenario 3	6.14E-01	1.33E-03	4.51E-03
7834	642836.2	4168948.9	Worker	Scenario 3	5.88E-01	1.27E-03	4.19E-03
7835	642936.2	4168948.9	Worker	Scenario 3	5.63E-01	1.21E-03	4.11E-03
7836	643036.2	4168948.9	Worker	Scenario 3	5.39E-01	1.16E-03	3.95E-03
7837	643136.2	4168948.9	Worker	Scenario 3	5.17E-01	1.12E-03	3.80E-03
7838	643236.2	4168948.9	Worker	Scenario 3	4.95E-01	1.07E-03	3.69E-03
7839	643336.2	4168948.9	Worker	Scenario 3	4.75E-01	1.03E-03	3.37E-03
7840	643436.2	4168948.9	Worker	Scenario 3	4.55E-01	9.84E-04	3.29E-03
7841	643536.2	4168948.9	Worker	Scenario 3	4.36E-01	9.42E-04	3.22E-03
7842	643636.2	4168948.9	Worker	Scenario 3	4.18E-01	9.03E-04	3.09E-03
7843	643736.2	4168948.9	Worker	Scenario 3	4.03E-01	8.69E-04	2.95E-03
7844	643836.2	4168948.9	Worker	Scenario 3	3.89E-01	8.39E-04	2.84E-03
7845	643936.2	4168948.9	Worker	Scenario 3	3.77E-01	8.13E-04	2.74E-03
7846	644036.2	4168948.9	Worker	Scenario 3	3.65E-01	7.87E-04	2.64E-03
7847	644136.2	4168948.9	Worker	Scenario 3	3.53E-01	7.61E-04	2.63E-03
7848	644236.2	4168948.9	Worker	Scenario 3	3.41E-01	7.36E-04	2.98E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7849	644336.2	4168948.9	Worker	Scenario 3	3.30E-01	7.13E-04	3.29E-03
7850	644436.2	4168948.9	Worker	Scenario 3	3.20E-01	6.92E-04	3.43E-03
7851	644536.2	4168948.9	Worker	Scenario 3	3.10E-01	6.72E-04	3.39E-03
7852	644836.2	4168948.9	Worker	Scenario 3	2.84E-01	6.15E-04	2.51E-03
7853	644936.2	4168948.9	Worker	Scenario 3	2.76E-01	5.99E-04	2.11E-03
7854	645036.2	4168948.9	Worker	Scenario 3	2.69E-01	5.84E-04	1.82E-03
7855	645136.2	4168948.9	Worker	Scenario 3	2.62E-01	5.68E-04	1.70E-03
7856	645236.2	4168948.9	Worker	Scenario 3	2.55E-01	5.54E-04	1.60E-03
7857	645336.2	4168948.9	Worker	Scenario 3	2.49E-01	5.41E-04	1.54E-03
7858	645436.2	4168948.9	Worker	Scenario 3	2.43E-01	5.28E-04	1.51E-03
7859	645536.2	4168948.9	Worker	Scenario 3	2.38E-01	5.17E-04	1.45E-03
7860	645636.2	4168948.9	Worker	Scenario 3	2.33E-01	5.05E-04	1.42E-03
7861	645736.2	4168948.9	Worker	Scenario 3	2.28E-01	4.94E-04	1.38E-03
7862	645836.2	4168948.9	Worker	Scenario 3	2.23E-01	4.84E-04	1.30E-03
7863	646036.2	4168948.9	Worker	Scenario 3	2.14E-01	4.63E-04	1.31E-03
7864	646236.2	4168948.9	Worker	Scenario 3	2.04E-01	4.43E-04	1.28E-03
7865	646336.2	4168948.9	Worker	Scenario 3	2.00E-01	4.34E-04	1.22E-03
7866	635636.2	4169048.9	Worker	Scenario 3	1.90E-02	4.33E-05	1.30E-03
7867	635736.2	4169048.9	Worker	Scenario 3	1.98E-02	4.53E-05	1.33E-03
7868	635836.2	4169048.9	Worker	Scenario 3	2.11E-02	4.83E-05	1.36E-03
7869	635936.2	4169048.9	Worker	Scenario 3	2.32E-02	5.30E-05	1.47E-03
7870	636036.2	4169048.9	Worker	Scenario 3	2.47E-02	5.64E-05	1.50E-03
7871	636136.2	4169048.9	Worker	Scenario 3	2.58E-02	5.90E-05	1.65E-03
7872	636236.2	4169048.9	Worker	Scenario 3	2.72E-02	6.21E-05	1.76E-03
7873	636336.2	4169048.9	Worker	Scenario 3	2.89E-02	6.61E-05	1.82E-03
7874	636436.2	4169048.9	Worker	Scenario 3	3.10E-02	7.07E-05	1.81E-03
7875	636536.2	4169048.9	Worker	Scenario 3	3.33E-02	7.58E-05	1.93E-03
7876	636636.2	4169048.9	Worker	Scenario 3	3.58E-02	8.12E-05	1.93E-03
7877	636736.2	4169048.9	Worker	Scenario 3	3.95E-02	8.93E-05	1.85E-03
7878	636836.2	4169048.9	Worker	Scenario 3	4.26E-02	9.62E-05	1.98E-03
7879	636936.2	4169048.9	Worker	Scenario 3	4.47E-02	1.01E-04	2.19E-03
7880	637036.2	4169048.9	Worker	Scenario 3	5.01E-02	1.12E-04	2.20E-03
7881	637136.2	4169048.9	Worker	Scenario 3	5.61E-02	1.25E-04	2.10E-03
7882	637236.2	4169048.9	Worker	Scenario 3	5.66E-02	1.26E-04	2.47E-03
7883	637336.2	4169048.9	Worker	Scenario 3	5.99E-02	1.34E-04	2.73E-03
7884	637436.2	4169048.9	Worker	Scenario 3	6.52E-02	1.45E-04	2.71E-03
7885	637536.2	4169048.9	Worker	Scenario 3	7.09E-02	1.57E-04	2.57E-03
7886	637636.2	4169048.9	Worker	Scenario 3	7.99E-02	1.77E-04	2.06E-03
7887	637736.2	4169048.9	Worker	Scenario 3	8.70E-02	1.92E-04	1.82E-03
7888	637836.2	4169048.9	Worker	Scenario 3	9.57E-02	2.11E-04	1.86E-03
7889	637936.2	4169048.9	Worker	Scenario 3	1.08E-01	2.38E-04	1.58E-03
7890	638036.2	4169048.9	Worker	Scenario 3	1.25E-01	2.72E-04	1.62E-03
7891	640236.2	4169048.9	Worker	Scenario 3	6.79E-01	1.45E-03	3.85E-03
7892	641636.2	4169048.9	Worker	Scenario 3	9.63E-01	2.05E-03	5.74E-03
7893	641736.2	4169048.9	Worker	Scenario 3	9.04E-01	1.93E-03	5.43E-03
7894	641836.2	4169048.9	Worker	Scenario 3	8.55E-01	1.83E-03	6.07E-03
7895	641936.2	4169048.9	Worker	Scenario 3	8.08E-01	1.73E-03	9.07E-03
7896	642036.2	4169048.9	Worker	Scenario 3	7.65E-01	1.64E-03	7.77E-03
7897	642136.2	4169048.9	Worker	Scenario 3	7.25E-01	1.55E-03	4.77E-03
7898	642236.2	4169048.9	Worker	Scenario 3	6.88E-01	1.48E-03	4.92E-03
7899	642336.2	4169048.9	Worker	Scenario 3	6.55E-01	1.41E-03	4.88E-03
7900	642436.2	4169048.9	Worker	Scenario 3	6.26E-01	1.35E-03	4.67E-03
7901	642536.2	4169048.9	Worker	Scenario 3	6.00E-01	1.30E-03	4.56E-03
7902	642636.2	4169048.9	Worker	Scenario 3	5.77E-01	1.25E-03	4.39E-03
7903	642736.2	4169048.9	Worker	Scenario 3	5.55E-01	1.20E-03	4.20E-03
7904	642836.2	4169048.9	Worker	Scenario 3	5.34E-01	1.15E-03	4.17E-03
7905	642936.2	4169048.9	Worker	Scenario 3	5.12E-01	1.11E-03	3.70E-03
7906	643036.2	4169048.9	Worker	Scenario 3	4.92E-01	1.06E-03	3.74E-03
7907	643136.2	4169048.9	Worker	Scenario 3	4.74E-01	1.02E-03	3.62E-03
7908	643236.2	4169048.9	Worker	Scenario 3	4.56E-01	9.87E-04	3.49E-03
7909	643336.2	4169048.9	Worker	Scenario 3	4.39E-01	9.51E-04	3.41E-03
7910	643436.2	4169048.9	Worker	Scenario 3	4.22E-01	9.15E-04	3.09E-03
7911	643536.2	4169048.9	Worker	Scenario 3	4.06E-01	8.79E-04	3.09E-03
7912	643636.2	4169048.9	Worker	Scenario 3	3.90E-01	8.44E-04	2.97E-03
7913	643736.2	4169048.9	Worker	Scenario 3	3.76E-01	8.13E-04	2.88E-03
7914	643836.2	4169048.9	Worker	Scenario 3	3.64E-01	7.86E-04	2.78E-03
7915	643936.2	4169048.9	Worker	Scenario 3	3.53E-01	7.62E-04	2.66E-03
7916	644036.2	4169048.9	Worker	Scenario 3	3.43E-01	7.40E-04	2.56E-03
7917	644236.2	4169048.9	Worker	Scenario 3	3.22E-01	6.95E-04	2.42E-03
7918	644336.2	4169048.9	Worker	Scenario 3	3.12E-01	6.73E-04	2.53E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7919	644436.2	4169048.9	Worker	Scenario 3	3.03E-01	6.54E-04	2.91E-03
7920	644836.2	4169048.9	Worker	Scenario 3	2.69E-01	5.84E-04	3.01E-03
7921	644936.2	4169048.9	Worker	Scenario 3	2.62E-01	5.69E-04	2.73E-03
7922	645036.2	4169048.9	Worker	Scenario 3	2.55E-01	5.54E-04	2.39E-03
7923	645136.2	4169048.9	Worker	Scenario 3	2.49E-01	5.40E-04	2.03E-03
7924	645236.2	4169048.9	Worker	Scenario 3	2.43E-01	5.27E-04	1.73E-03
7925	645336.2	4169048.9	Worker	Scenario 3	2.37E-01	5.14E-04	1.60E-03
7926	645436.2	4169048.9	Worker	Scenario 3	2.31E-01	5.02E-04	1.50E-03
7927	645536.2	4169048.9	Worker	Scenario 3	2.26E-01	4.91E-04	1.44E-03
7928	645636.2	4169048.9	Worker	Scenario 3	2.21E-01	4.81E-04	1.39E-03
7929	645736.2	4169048.9	Worker	Scenario 3	2.17E-01	4.70E-04	1.37E-03
7930	645836.2	4169048.9	Worker	Scenario 3	2.12E-01	4.61E-04	1.32E-03
7931	645936.2	4169048.9	Worker	Scenario 3	2.08E-01	4.51E-04	1.30E-03
7932	646036.2	4169048.9	Worker	Scenario 3	2.04E-01	4.42E-04	1.25E-03
7933	646236.2	4169048.9	Worker	Scenario 3	1.95E-01	4.24E-04	1.22E-03
7934	635636.2	4169148.9	Worker	Scenario 3	2.30E-02	5.25E-05	1.53E-03
7935	635736.2	4169148.9	Worker	Scenario 3	2.17E-02	4.97E-05	1.33E-03
7936	635836.2	4169148.9	Worker	Scenario 3	2.20E-02	5.04E-05	1.37E-03
7937	635936.2	4169148.9	Worker	Scenario 3	2.36E-02	5.41E-05	1.46E-03
7938	636036.2	4169148.9	Worker	Scenario 3	2.52E-02	5.77E-05	1.53E-03
7939	636136.2	4169148.9	Worker	Scenario 3	2.75E-02	6.28E-05	1.60E-03
7940	636236.2	4169148.9	Worker	Scenario 3	2.97E-02	6.76E-05	1.74E-03
7941	636336.2	4169148.9	Worker	Scenario 3	3.13E-02	7.12E-05	1.73E-03
7942	636436.2	4169148.9	Worker	Scenario 3	3.30E-02	7.50E-05	1.62E-03
7943	636536.2	4169148.9	Worker	Scenario 3	3.51E-02	7.96E-05	1.67E-03
7944	636636.2	4169148.9	Worker	Scenario 3	3.70E-02	8.38E-05	1.93E-03
7945	636736.2	4169148.9	Worker	Scenario 3	3.97E-02	8.99E-05	2.09E-03
7946	636836.2	4169148.9	Worker	Scenario 3	4.28E-02	9.64E-05	2.20E-03
7947	636936.2	4169148.9	Worker	Scenario 3	4.59E-02	1.03E-04	2.35E-03
7948	637036.2	4169148.9	Worker	Scenario 3	4.97E-02	1.11E-04	2.55E-03
7949	637136.2	4169148.9	Worker	Scenario 3	5.42E-02	1.21E-04	2.69E-03
7950	637236.2	4169148.9	Worker	Scenario 3	6.04E-02	1.34E-04	2.48E-03
7951	637336.2	4169148.9	Worker	Scenario 3	6.57E-02	1.46E-04	2.24E-03
7952	637436.2	4169148.9	Worker	Scenario 3	6.92E-02	1.53E-04	2.19E-03
7953	637536.2	4169148.9	Worker	Scenario 3	7.62E-02	1.69E-04	1.81E-03
7954	637636.2	4169148.9	Worker	Scenario 3	8.37E-02	1.85E-04	1.85E-03
7955	637736.2	4169148.9	Worker	Scenario 3	9.18E-02	2.02E-04	1.85E-03
7956	637836.2	4169148.9	Worker	Scenario 3	1.02E-01	2.24E-04	1.72E-03
7957	640136.2	4169148.9	Worker	Scenario 3	6.28E-01	1.34E-03	3.50E-03
7958	640236.2	4169148.9	Worker	Scenario 3	6.26E-01	1.34E-03	3.56E-03
7959	641636.2	4169148.9	Worker	Scenario 3	8.52E-01	1.82E-03	5.36E-03
7960	641736.2	4169148.9	Worker	Scenario 3	7.98E-01	1.71E-03	4.95E-03
7961	641836.2	4169148.9	Worker	Scenario 3	7.57E-01	1.62E-03	5.36E-03
7962	641936.2	4169148.9	Worker	Scenario 3	7.19E-01	1.55E-03	8.15E-03
7963	642036.2	4169148.9	Worker	Scenario 3	6.85E-01	1.47E-03	8.24E-03
7964	642136.2	4169148.9	Worker	Scenario 3	6.52E-01	1.40E-03	5.09E-03
7965	642236.2	4169148.9	Worker	Scenario 3	6.20E-01	1.33E-03	4.76E-03
7966	642336.2	4169148.9	Worker	Scenario 3	5.92E-01	1.27E-03	4.58E-03
7967	642436.2	4169148.9	Worker	Scenario 3	5.67E-01	1.22E-03	4.47E-03
7968	642536.2	4169148.9	Worker	Scenario 3	5.45E-01	1.18E-03	4.27E-03
7969	642636.2	4169148.9	Worker	Scenario 3	5.25E-01	1.14E-03	4.06E-03
7970	642736.2	4169148.9	Worker	Scenario 3	5.06E-01	1.10E-03	4.01E-03
7971	642836.2	4169148.9	Worker	Scenario 3	4.88E-01	1.06E-03	3.87E-03
7972	642936.2	4169148.9	Worker	Scenario 3	4.69E-01	1.02E-03	3.84E-03
7973	643036.2	4169148.9	Worker	Scenario 3	4.52E-01	9.79E-04	3.37E-03
7974	643136.2	4169148.9	Worker	Scenario 3	4.37E-01	9.44E-04	3.44E-03
7975	643236.2	4169148.9	Worker	Scenario 3	4.21E-01	9.12E-04	3.33E-03
7976	643336.2	4169148.9	Worker	Scenario 3	4.07E-01	8.81E-04	3.22E-03
7977	643436.2	4169148.9	Worker	Scenario 3	3.93E-01	8.52E-04	3.18E-03
7978	643536.2	4169148.9	Worker	Scenario 3	3.78E-01	8.21E-04	2.92E-03
7979	643636.2	4169148.9	Worker	Scenario 3	3.65E-01	7.91E-04	2.89E-03
7980	643736.2	4169148.9	Worker	Scenario 3	3.52E-01	7.62E-04	2.72E-03
7981	643836.2	4169148.9	Worker	Scenario 3	3.41E-01	7.37E-04	2.66E-03
7982	643936.2	4169148.9	Worker	Scenario 3	3.31E-01	7.15E-04	2.59E-03
7983	644036.2	4169148.9	Worker	Scenario 3	3.22E-01	6.95E-04	2.50E-03
7984	644136.2	4169148.9	Worker	Scenario 3	3.13E-01	6.76E-04	2.41E-03
7985	644636.2	4169148.9	Worker	Scenario 3	2.70E-01	5.84E-04	2.83E-03
7986	644736.2	4169148.9	Worker	Scenario 3	2.63E-01	5.69E-04	3.03E-03
7987	644836.2	4169148.9	Worker	Scenario 3	2.56E-01	5.54E-04	3.10E-03
7988	644936.2	4169148.9	Worker	Scenario 3	2.49E-01	5.40E-04	3.04E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7989	645036.2	4169148.9	Worker	Scenario 3	2.43E-01	5.27E-04	2.86E-03
7990	645136.2	4169148.9	Worker	Scenario 3	2.37E-01	5.14E-04	2.60E-03
7991	645236.2	4169148.9	Worker	Scenario 3	2.31E-01	5.01E-04	2.29E-03
7992	645336.2	4169148.9	Worker	Scenario 3	2.25E-01	4.89E-04	1.96E-03
7993	645436.2	4169148.9	Worker	Scenario 3	2.20E-01	4.78E-04	1.65E-03
7994	645536.2	4169148.9	Worker	Scenario 3	2.15E-01	4.68E-04	1.51E-03
7995	645636.2	4169148.9	Worker	Scenario 3	2.11E-01	4.58E-04	1.41E-03
7996	645736.2	4169148.9	Worker	Scenario 3	2.06E-01	4.48E-04	1.35E-03
7997	645836.2	4169148.9	Worker	Scenario 3	2.02E-01	4.39E-04	1.30E-03
7998	645936.2	4169148.9	Worker	Scenario 3	1.98E-01	4.30E-04	1.28E-03
7999	646036.2	4169148.9	Worker	Scenario 3	1.94E-01	4.21E-04	1.24E-03
8000	635636.2	4169248.9	Worker	Scenario 3	2.45E-02	5.60E-05	1.68E-03
8001	635736.2	4169248.9	Worker	Scenario 3	2.63E-02	6.00E-05	1.72E-03
8002	635836.2	4169248.9	Worker	Scenario 3	2.52E-02	5.76E-05	1.50E-03
8003	635936.2	4169248.9	Worker	Scenario 3	2.48E-02	5.68E-05	1.40E-03
8004	636036.2	4169248.9	Worker	Scenario 3	2.66E-02	6.07E-05	1.43E-03
8005	636136.2	4169248.9	Worker	Scenario 3	2.85E-02	6.49E-05	1.41E-03
8006	636236.2	4169248.9	Worker	Scenario 3	3.02E-02	6.87E-05	1.37E-03
8007	636336.2	4169248.9	Worker	Scenario 3	3.26E-02	7.40E-05	1.69E-03
8008	636436.2	4169248.9	Worker	Scenario 3	3.58E-02	8.09E-05	1.92E-03
8009	636536.2	4169248.9	Worker	Scenario 3	3.89E-02	8.79E-05	2.00E-03
8010	636636.2	4169248.9	Worker	Scenario 3	3.95E-02	8.92E-05	2.16E-03
8011	636736.2	4169248.9	Worker	Scenario 3	4.18E-02	9.43E-05	2.28E-03
8012	636836.2	4169248.9	Worker	Scenario 3	4.56E-02	1.02E-04	2.52E-03
8013	636936.2	4169248.9	Worker	Scenario 3	4.86E-02	1.09E-04	2.65E-03
8014	637036.2	4169248.9	Worker	Scenario 3	5.25E-02	1.17E-04	2.59E-03
8015	637136.2	4169248.9	Worker	Scenario 3	5.65E-02	1.26E-04	2.42E-03
8016	637236.2	4169248.9	Worker	Scenario 3	6.15E-02	1.37E-04	2.11E-03
8017	637336.2	4169248.9	Worker	Scenario 3	6.89E-02	1.53E-04	1.70E-03
8018	637436.2	4169248.9	Worker	Scenario 3	7.38E-02	1.63E-04	1.86E-03
8019	637536.2	4169248.9	Worker	Scenario 3	8.15E-02	1.80E-04	1.73E-03
8020	637636.2	4169248.9	Worker	Scenario 3	8.91E-02	1.96E-04	1.64E-03
8021	637736.2	4169248.9	Worker	Scenario 3	9.83E-02	2.16E-04	1.44E-03
8022	637936.2	4169248.9	Worker	Scenario 3	1.24E-01	2.71E-04	1.38E-03
8023	640036.2	4169248.9	Worker	Scenario 3	5.87E-01	1.25E-03	3.23E-03
8024	640136.2	4169248.9	Worker	Scenario 3	5.78E-01	1.24E-03	3.33E-03
8025	640236.2	4169248.9	Worker	Scenario 3	5.78E-01	1.24E-03	3.43E-03
8026	641636.2	4169248.9	Worker	Scenario 3	7.65E-01	1.64E-03	4.98E-03
8027	641736.2	4169248.9	Worker	Scenario 3	7.15E-01	1.53E-03	4.76E-03
8028	641836.2	4169248.9	Worker	Scenario 3	6.78E-01	1.46E-03	4.81E-03
8029	641936.2	4169248.9	Worker	Scenario 3	6.47E-01	1.39E-03	7.09E-03
8030	642036.2	4169248.9	Worker	Scenario 3	6.19E-01	1.33E-03	8.29E-03
8031	642136.2	4169248.9	Worker	Scenario 3	5.91E-01	1.27E-03	5.89E-03
8032	642236.2	4169248.9	Worker	Scenario 3	5.65E-01	1.21E-03	4.20E-03
8033	642336.2	4169248.9	Worker	Scenario 3	5.41E-01	1.16E-03	4.27E-03
8034	642436.2	4169248.9	Worker	Scenario 3	5.19E-01	1.12E-03	4.18E-03
8035	642536.2	4169248.9	Worker	Scenario 3	5.00E-01	1.08E-03	4.18E-03
8036	642636.2	4169248.9	Worker	Scenario 3	4.82E-01	1.05E-03	3.92E-03
8037	642736.2	4169248.9	Worker	Scenario 3	4.66E-01	1.01E-03	3.76E-03
8038	642836.2	4169248.9	Worker	Scenario 3	4.49E-01	9.75E-04	3.64E-03
8039	642936.2	4169248.9	Worker	Scenario 3	4.33E-01	9.40E-04	3.52E-03
8040	643036.2	4169248.9	Worker	Scenario 3	4.18E-01	9.07E-04	3.52E-03
8041	643136.2	4169248.9	Worker	Scenario 3	4.04E-01	8.76E-04	3.18E-03
8042	643236.2	4169248.9	Worker	Scenario 3	3.91E-01	8.47E-04	3.20E-03
8043	643336.2	4169248.9	Worker	Scenario 3	3.78E-01	8.20E-04	3.09E-03
8044	643436.2	4169248.9	Worker	Scenario 3	3.66E-01	7.94E-04	2.99E-03
8045	643536.2	4169248.9	Worker	Scenario 3	3.53E-01	7.68E-04	2.96E-03
8046	643636.2	4169248.9	Worker	Scenario 3	3.41E-01	7.41E-04	2.75E-03
8047	643736.2	4169248.9	Worker	Scenario 3	3.30E-01	7.16E-04	2.70E-03
8048	643836.2	4169248.9	Worker	Scenario 3	3.19E-01	6.93E-04	2.48E-03
8049	643936.2	4169248.9	Worker	Scenario 3	3.10E-01	6.73E-04	2.52E-03
8050	644036.2	4169248.9	Worker	Scenario 3	3.03E-01	6.55E-04	2.43E-03
8051	644136.2	4169248.9	Worker	Scenario 3	2.94E-01	6.37E-04	2.35E-03
8052	644236.2	4169248.9	Worker	Scenario 3	2.86E-01	6.19E-04	2.26E-03
8053	644636.2	4169248.9	Worker	Scenario 3	2.56E-01	5.53E-04	2.16E-03
8054	644736.2	4169248.9	Worker	Scenario 3	2.49E-01	5.39E-04	2.47E-03
8055	644836.2	4169248.9	Worker	Scenario 3	2.43E-01	5.26E-04	2.75E-03
8056	644936.2	4169248.9	Worker	Scenario 3	2.37E-01	5.13E-04	2.92E-03
8057	645036.2	4169248.9	Worker	Scenario 3	2.31E-01	5.01E-04	2.97E-03
8058	645136.2	4169248.9	Worker	Scenario 3	2.25E-01	4.89E-04	2.89E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8059	645236.2	4169248.9	Worker	Scenario 3	2.20E-01	4.77E-04	2.72E-03
8060	645336.2	4169248.9	Worker	Scenario 3	2.15E-01	4.66E-04	2.48E-03
8061	645436.2	4169248.9	Worker	Scenario 3	2.10E-01	4.56E-04	2.19E-03
8062	645536.2	4169248.9	Worker	Scenario 3	2.05E-01	4.46E-04	1.89E-03
8063	645636.2	4169248.9	Worker	Scenario 3	2.01E-01	4.36E-04	1.59E-03
8064	645736.2	4169248.9	Worker	Scenario 3	1.96E-01	4.27E-04	1.42E-03
8065	645836.2	4169248.9	Worker	Scenario 3	1.93E-01	4.19E-04	1.34E-03
8066	645936.2	4169248.9	Worker	Scenario 3	1.89E-01	4.10E-04	1.27E-03
8067	646036.2	4169248.9	Worker	Scenario 3	1.85E-01	4.02E-04	1.23E-03
8068	635636.2	4169348.9	Worker	Scenario 3	3.26E-02	7.32E-05	1.55E-03
8069	635736.2	4169348.9	Worker	Scenario 3	2.85E-02	6.47E-05	1.66E-03
8070	635836.2	4169348.9	Worker	Scenario 3	2.82E-02	6.42E-05	1.51E-03
8071	635936.2	4169348.9	Worker	Scenario 3	2.85E-02	6.48E-05	1.30E-03
8072	636036.2	4169348.9	Worker	Scenario 3	2.92E-02	6.65E-05	1.49E-03
8073	636136.2	4169348.9	Worker	Scenario 3	3.02E-02	6.86E-05	1.65E-03
8074	636236.2	4169348.9	Worker	Scenario 3	3.17E-02	7.20E-05	1.77E-03
8075	636336.2	4169348.9	Worker	Scenario 3	3.41E-02	7.72E-05	1.94E-03
8076	636436.2	4169348.9	Worker	Scenario 3	3.68E-02	8.31E-05	2.09E-03
8077	636536.2	4169348.9	Worker	Scenario 3	3.92E-02	8.83E-05	2.22E-03
8078	636636.2	4169348.9	Worker	Scenario 3	4.35E-02	9.76E-05	2.39E-03
8079	636736.2	4169348.9	Worker	Scenario 3	4.44E-02	9.97E-05	2.55E-03
8080	636836.2	4169348.9	Worker	Scenario 3	4.76E-02	1.06E-04	2.47E-03
8081	636936.2	4169348.9	Worker	Scenario 3	5.27E-02	1.17E-04	2.17E-03
8082	637036.2	4169348.9	Worker	Scenario 3	5.63E-02	1.25E-04	1.91E-03
8083	637136.2	4169348.9	Worker	Scenario 3	6.20E-02	1.38E-04	1.64E-03
8084	637236.2	4169348.9	Worker	Scenario 3	6.72E-02	1.49E-04	1.68E-03
8085	637336.2	4169348.9	Worker	Scenario 3	7.25E-02	1.61E-04	1.67E-03
8086	637436.2	4169348.9	Worker	Scenario 3	7.93E-02	1.75E-04	1.50E-03
8087	637536.2	4169348.9	Worker	Scenario 3	8.67E-02	1.92E-04	1.34E-03
8088	637636.2	4169348.9	Worker	Scenario 3	9.53E-02	2.10E-04	1.34E-03
8089	637836.2	4169348.9	Worker	Scenario 3	1.17E-01	2.55E-04	1.29E-03
8090	639736.2	4169348.9	Worker	Scenario 3	5.96E-01	1.26E-03	2.74E-03
8091	639836.2	4169348.9	Worker	Scenario 3	5.69E-01	1.21E-03	2.89E-03
8092	639936.2	4169348.9	Worker	Scenario 3	5.51E-01	1.17E-03	2.97E-03
8093	640036.2	4169348.9	Worker	Scenario 3	5.40E-01	1.15E-03	3.05E-03
8094	640136.2	4169348.9	Worker	Scenario 3	5.34E-01	1.14E-03	3.13E-03
8095	640236.2	4169348.9	Worker	Scenario 3	5.35E-01	1.15E-03	3.20E-03
8096	641636.2	4169348.9	Worker	Scenario 3	6.97E-01	1.49E-03	4.62E-03
8097	641736.2	4169348.9	Worker	Scenario 3	6.50E-01	1.39E-03	4.54E-03
8098	641836.2	4169348.9	Worker	Scenario 3	6.16E-01	1.32E-03	4.52E-03
8099	641936.2	4169348.9	Worker	Scenario 3	5.88E-01	1.27E-03	6.02E-03
8100	642036.2	4169348.9	Worker	Scenario 3	5.64E-01	1.22E-03	7.98E-03
8101	642136.2	4169348.9	Worker	Scenario 3	5.40E-01	1.16E-03	6.60E-03
8102	642236.2	4169348.9	Worker	Scenario 3	5.18E-01	1.12E-03	3.90E-03
8103	642336.2	4169348.9	Worker	Scenario 3	4.97E-01	1.07E-03	4.08E-03
8104	642436.2	4169348.9	Worker	Scenario 3	4.78E-01	1.03E-03	3.96E-03
8105	642536.2	4169348.9	Worker	Scenario 3	4.61E-01	9.98E-04	3.90E-03
8106	642636.2	4169348.9	Worker	Scenario 3	4.46E-01	9.67E-04	3.84E-03
8107	642736.2	4169348.9	Worker	Scenario 3	4.31E-01	9.36E-04	3.62E-03
8108	642836.2	4169348.9	Worker	Scenario 3	4.16E-01	9.04E-04	3.50E-03
8109	642936.2	4169348.9	Worker	Scenario 3	4.02E-01	8.73E-04	3.40E-03
8110	643036.2	4169348.9	Worker	Scenario 3	3.88E-01	8.44E-04	3.30E-03
8111	643136.2	4169348.9	Worker	Scenario 3	3.76E-01	8.16E-04	3.22E-03
8112	643236.2	4169348.9	Worker	Scenario 3	3.64E-01	7.89E-04	3.00E-03
8113	643336.2	4169348.9	Worker	Scenario 3	3.53E-01	7.65E-04	2.98E-03
8114	643436.2	4169348.9	Worker	Scenario 3	3.42E-01	7.42E-04	2.88E-03
8115	643536.2	4169348.9	Worker	Scenario 3	3.31E-01	7.19E-04	2.79E-03
8116	643636.2	4169348.9	Worker	Scenario 3	3.20E-01	6.96E-04	2.76E-03
8117	643736.2	4169348.9	Worker	Scenario 3	3.10E-01	6.74E-04	2.60E-03
8118	643836.2	4169348.9	Worker	Scenario 3	3.00E-01	6.53E-04	2.51E-03
8119	643936.2	4169348.9	Worker	Scenario 3	2.92E-01	6.33E-04	2.37E-03
8120	644036.2	4169348.9	Worker	Scenario 3	2.84E-01	6.17E-04	2.37E-03
8121	644136.2	4169348.9	Worker	Scenario 3	2.78E-01	6.01E-04	2.29E-03
8122	644236.2	4169348.9	Worker	Scenario 3	2.71E-01	5.86E-04	2.22E-03
8123	644336.2	4169348.9	Worker	Scenario 3	2.64E-01	5.71E-04	2.15E-03
8124	644636.2	4169348.9	Worker	Scenario 3	2.43E-01	5.26E-04	1.93E-03
8125	644736.2	4169348.9	Worker	Scenario 3	2.37E-01	5.12E-04	1.96E-03
8126	644836.2	4169348.9	Worker	Scenario 3	2.31E-01	5.00E-04	2.12E-03
8127	644936.2	4169348.9	Worker	Scenario 3	2.25E-01	4.88E-04	2.43E-03
8128	645036.2	4169348.9	Worker	Scenario 3	2.20E-01	4.77E-04	2.67E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8129	645136.2	4169348.9	Worker	Scenario 3	2.15E-01	4.66E-04	2.81E-03
8130	645236.2	4169348.9	Worker	Scenario 3	2.10E-01	4.55E-04	2.83E-03
8131	645336.2	4169348.9	Worker	Scenario 3	2.05E-01	4.45E-04	2.76E-03
8132	645436.2	4169348.9	Worker	Scenario 3	2.00E-01	4.35E-04	2.59E-03
8133	645536.2	4169348.9	Worker	Scenario 3	1.96E-01	4.25E-04	2.36E-03
8134	645636.2	4169348.9	Worker	Scenario 3	1.91E-01	4.16E-04	2.10E-03
8135	645736.2	4169348.9	Worker	Scenario 3	1.87E-01	4.08E-04	1.82E-03
8136	645836.2	4169348.9	Worker	Scenario 3	1.84E-01	4.00E-04	1.54E-03
8137	645936.2	4169348.9	Worker	Scenario 3	1.80E-01	3.92E-04	1.36E-03
8138	635636.2	4169448.9	Worker	Scenario 3	3.47E-02	7.80E-05	1.13E-03
8139	635736.2	4169448.9	Worker	Scenario 3	3.46E-02	7.76E-05	1.32E-03
8140	635836.2	4169448.9	Worker	Scenario 3	3.18E-02	7.19E-05	1.63E-03
8141	635936.2	4169448.9	Worker	Scenario 3	3.23E-02	7.30E-05	1.73E-03
8142	636036.2	4169448.9	Worker	Scenario 3	3.25E-02	7.36E-05	1.76E-03
8143	636136.2	4169448.9	Worker	Scenario 3	3.29E-02	7.45E-05	1.91E-03
8144	636236.2	4169448.9	Worker	Scenario 3	3.39E-02	7.67E-05	2.01E-03
8145	636336.2	4169448.9	Worker	Scenario 3	3.55E-02	8.02E-05	2.18E-03
8146	636436.2	4169448.9	Worker	Scenario 3	3.78E-02	8.52E-05	2.38E-03
8147	636536.2	4169448.9	Worker	Scenario 3	4.07E-02	9.14E-05	2.43E-03
8148	636636.2	4169448.9	Worker	Scenario 3	4.41E-02	9.88E-05	2.30E-03
8149	636736.2	4169448.9	Worker	Scenario 3	4.83E-02	1.08E-04	2.02E-03
8150	636836.2	4169448.9	Worker	Scenario 3	5.08E-02	1.13E-04	1.80E-03
8151	636936.2	4169448.9	Worker	Scenario 3	5.56E-02	1.24E-04	1.65E-03
8152	637036.2	4169448.9	Worker	Scenario 3	5.83E-02	1.30E-04	1.87E-03
8153	637136.2	4169448.9	Worker	Scenario 3	6.20E-02	1.38E-04	1.95E-03
8154	637236.2	4169448.9	Worker	Scenario 3	6.74E-02	1.49E-04	1.82E-03
8155	637336.2	4169448.9	Worker	Scenario 3	7.34E-02	1.62E-04	1.76E-03
8156	637436.2	4169448.9	Worker	Scenario 3	8.15E-02	1.80E-04	1.46E-03
8157	637736.2	4169448.9	Worker	Scenario 3	1.12E-01	2.44E-04	1.30E-03
8158	637836.2	4169448.9	Worker	Scenario 3	1.27E-01	2.76E-04	1.46E-03
8159	639736.2	4169448.9	Worker	Scenario 3	5.36E-01	1.13E-03	2.67E-03
8160	639836.2	4169448.9	Worker	Scenario 3	5.18E-01	1.10E-03	2.74E-03
8161	639936.2	4169448.9	Worker	Scenario 3	5.05E-01	1.08E-03	2.85E-03
8162	640036.2	4169448.9	Worker	Scenario 3	4.98E-01	1.06E-03	2.85E-03
8163	640136.2	4169448.9	Worker	Scenario 3	4.95E-01	1.06E-03	2.97E-03
8164	640236.2	4169448.9	Worker	Scenario 3	4.95E-01	1.06E-03	3.34E-03
8165	641636.2	4169448.9	Worker	Scenario 3	6.42E-01	1.37E-03	4.29E-03
8166	641736.2	4169448.9	Worker	Scenario 3	5.96E-01	1.28E-03	4.29E-03
8167	641836.2	4169448.9	Worker	Scenario 3	5.64E-01	1.21E-03	4.24E-03
8168	641936.2	4169448.9	Worker	Scenario 3	5.38E-01	1.16E-03	5.03E-03
8169	642036.2	4169448.9	Worker	Scenario 3	5.17E-01	1.12E-03	7.42E-03
8170	642136.2	4169448.9	Worker	Scenario 3	4.96E-01	1.07E-03	7.03E-03
8171	642236.2	4169448.9	Worker	Scenario 3	4.77E-01	1.03E-03	4.39E-03
8172	642336.2	4169448.9	Worker	Scenario 3	4.59E-01	9.90E-04	3.77E-03
8173	642436.2	4169448.9	Worker	Scenario 3	4.43E-01	9.55E-04	3.73E-03
8174	642536.2	4169448.9	Worker	Scenario 3	4.28E-01	9.25E-04	3.63E-03
8175	642636.2	4169448.9	Worker	Scenario 3	4.14E-01	8.97E-04	3.84E-03
8176	642736.2	4169448.9	Worker	Scenario 3	4.00E-01	8.70E-04	3.46E-03
8177	642836.2	4169448.9	Worker	Scenario 3	3.87E-01	8.42E-04	3.24E-03
8178	642936.2	4169448.9	Worker	Scenario 3	3.74E-01	8.15E-04	3.24E-03
8179	643036.2	4169448.9	Worker	Scenario 3	3.63E-01	7.89E-04	3.12E-03
8180	643136.2	4169448.9	Worker	Scenario 3	3.51E-01	7.64E-04	3.07E-03
8181	643236.2	4169448.9	Worker	Scenario 3	3.41E-01	7.40E-04	2.94E-03
8182	643336.2	4169448.9	Worker	Scenario 3	3.30E-01	7.17E-04	2.83E-03
8183	643436.2	4169448.9	Worker	Scenario 3	3.20E-01	6.96E-04	2.79E-03
8184	643536.2	4169448.9	Worker	Scenario 3	3.11E-01	6.75E-04	2.69E-03
8185	643636.2	4169448.9	Worker	Scenario 3	3.01E-01	6.54E-04	2.60E-03
8186	643736.2	4169448.9	Worker	Scenario 3	2.91E-01	6.34E-04	2.59E-03
8187	643836.2	4169448.9	Worker	Scenario 3	2.82E-01	6.15E-04	2.45E-03
8188	643936.2	4169448.9	Worker	Scenario 3	2.75E-01	5.98E-04	2.33E-03
8189	644036.2	4169448.9	Worker	Scenario 3	2.68E-01	5.83E-04	2.27E-03
8190	644136.2	4169448.9	Worker	Scenario 3	2.62E-01	5.69E-04	2.21E-03
8191	644236.2	4169448.9	Worker	Scenario 3	2.56E-01	5.55E-04	2.15E-03
8192	644336.2	4169448.9	Worker	Scenario 3	2.50E-01	5.41E-04	2.08E-03
8193	644636.2	4169448.9	Worker	Scenario 3	2.31E-01	5.01E-04	1.91E-03
8194	644736.2	4169448.9	Worker	Scenario 3	2.25E-01	4.88E-04	1.86E-03
8195	644836.2	4169448.9	Worker	Scenario 3	2.20E-01	4.76E-04	1.83E-03
8196	644936.2	4169448.9	Worker	Scenario 3	2.15E-01	4.65E-04	1.86E-03
8197	645036.2	4169448.9	Worker	Scenario 3	2.10E-01	4.54E-04	2.11E-03
8198	645136.2	4169448.9	Worker	Scenario 3	2.05E-01	4.44E-04	2.39E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8199	645236.2	4169448.9	Worker	Scenario 3	2.00E-01	4.34E-04	2.59E-03
8200	645336.2	4169448.9	Worker	Scenario 3	1.96E-01	4.24E-04	2.70E-03
8201	645436.2	4169448.9	Worker	Scenario 3	1.91E-01	4.15E-04	2.71E-03
8202	645536.2	4169448.9	Worker	Scenario 3	1.87E-01	4.06E-04	2.63E-03
8203	645636.2	4169448.9	Worker	Scenario 3	1.83E-01	3.97E-04	2.47E-03
8204	645736.2	4169448.9	Worker	Scenario 3	1.79E-01	3.89E-04	2.26E-03
8205	635636.2	4169548.9	Worker	Scenario 3	3.55E-02	7.98E-05	1.08E-03
8206	635736.2	4169548.9	Worker	Scenario 3	3.67E-02	8.25E-05	1.09E-03
8207	635836.2	4169548.9	Worker	Scenario 3	3.74E-02	8.40E-05	1.21E-03
8208	635936.2	4169548.9	Worker	Scenario 3	3.68E-02	8.26E-05	1.59E-03
8209	636036.2	4169548.9	Worker	Scenario 3	3.40E-02	7.67E-05	1.93E-03
8210	636136.2	4169548.9	Worker	Scenario 3	3.54E-02	7.98E-05	2.15E-03
8211	636236.2	4169548.9	Worker	Scenario 3	3.67E-02	8.27E-05	2.28E-03
8212	636336.2	4169548.9	Worker	Scenario 3	3.77E-02	8.49E-05	2.29E-03
8213	636436.2	4169548.9	Worker	Scenario 3	3.96E-02	8.88E-05	2.17E-03
8214	636536.2	4169548.9	Worker	Scenario 3	4.23E-02	9.47E-05	1.95E-03
8215	636636.2	4169548.9	Worker	Scenario 3	4.57E-02	1.02E-04	1.73E-03
8216	636736.2	4169548.9	Worker	Scenario 3	4.87E-02	1.09E-04	1.72E-03
8217	636836.2	4169548.9	Worker	Scenario 3	5.15E-02	1.15E-04	1.92E-03
8218	636936.2	4169548.9	Worker	Scenario 3	5.48E-02	1.22E-04	1.98E-03
8219	637036.2	4169548.9	Worker	Scenario 3	5.91E-02	1.31E-04	1.89E-03
8220	637136.2	4169548.9	Worker	Scenario 3	6.41E-02	1.42E-04	1.85E-03
8221	637236.2	4169548.9	Worker	Scenario 3	6.94E-02	1.54E-04	1.73E-03
8222	637336.2	4169548.9	Worker	Scenario 3	7.61E-02	1.68E-04	1.48E-03
8223	637536.2	4169548.9	Worker	Scenario 3	9.53E-02	2.09E-04	1.18E-03
8224	637636.2	4169548.9	Worker	Scenario 3	1.06E-01	2.32E-04	1.33E-03
8225	637736.2	4169548.9	Worker	Scenario 3	1.20E-01	2.59E-04	1.44E-03
8226	639636.2	4169548.9	Worker	Scenario 3	5.06E-01	1.07E-03	2.50E-03
8227	639736.2	4169548.9	Worker	Scenario 3	4.87E-01	1.03E-03	2.56E-03
8228	639836.2	4169548.9	Worker	Scenario 3	4.74E-01	1.01E-03	2.63E-03
8229	639936.2	4169548.9	Worker	Scenario 3	4.65E-01	9.92E-04	2.71E-03
8230	640036.2	4169548.9	Worker	Scenario 3	4.60E-01	9.84E-04	2.79E-03
8231	640136.2	4169548.9	Worker	Scenario 3	4.58E-01	9.83E-04	2.79E-03
8232	640236.2	4169548.9	Worker	Scenario 3	4.59E-01	9.86E-04	3.42E-03
8233	641536.2	4169548.9	Worker	Scenario 3	6.63E-01	1.41E-03	4.07E-03
8234	641636.2	4169548.9	Worker	Scenario 3	5.93E-01	1.27E-03	4.04E-03
8235	641736.2	4169548.9	Worker	Scenario 3	5.50E-01	1.18E-03	4.02E-03
8236	641836.2	4169548.9	Worker	Scenario 3	5.19E-01	1.12E-03	3.92E-03
8237	641936.2	4169548.9	Worker	Scenario 3	4.95E-01	1.07E-03	4.32E-03
8238	642036.2	4169548.9	Worker	Scenario 3	4.76E-01	1.03E-03	6.71E-03
8239	642136.2	4169548.9	Worker	Scenario 3	4.58E-01	9.90E-04	7.17E-03
8240	642236.2	4169548.9	Worker	Scenario 3	4.41E-01	9.53E-04	5.13E-03
8241	642336.2	4169548.9	Worker	Scenario 3	4.26E-01	9.19E-04	3.33E-03
8242	642436.2	4169548.9	Worker	Scenario 3	4.12E-01	8.88E-04	3.51E-03
8243	642536.2	4169548.9	Worker	Scenario 3	3.98E-01	8.60E-04	3.47E-03
8244	642636.2	4169548.9	Worker	Scenario 3	3.85E-01	8.35E-04	3.56E-03
8245	642736.2	4169548.9	Worker	Scenario 3	3.73E-01	8.11E-04	3.60E-03
8246	642836.2	4169548.9	Worker	Scenario 3	3.61E-01	7.86E-04	3.18E-03
8247	642936.2	4169548.9	Worker	Scenario 3	3.50E-01	7.62E-04	3.07E-03
8248	643036.2	4169548.9	Worker	Scenario 3	3.40E-01	7.40E-04	3.01E-03
8249	643136.2	4169548.9	Worker	Scenario 3	3.30E-01	7.18E-04	2.93E-03
8250	643236.2	4169548.9	Worker	Scenario 3	3.20E-01	6.97E-04	2.90E-03
8251	643336.2	4169548.9	Worker	Scenario 3	3.10E-01	6.74E-04	2.68E-03
8252	643436.2	4169548.9	Worker	Scenario 3	3.01E-01	6.53E-04	2.66E-03
8253	643536.2	4169548.9	Worker	Scenario 3	2.92E-01	6.35E-04	2.60E-03
8254	643636.2	4169548.9	Worker	Scenario 3	2.83E-01	6.16E-04	2.51E-03
8255	643736.2	4169548.9	Worker	Scenario 3	2.75E-01	5.99E-04	2.44E-03
8256	643836.2	4169548.9	Worker	Scenario 3	2.67E-01	5.81E-04	2.43E-03
8257	643936.2	4169548.9	Worker	Scenario 3	2.59E-01	5.65E-04	2.31E-03
8258	644036.2	4169548.9	Worker	Scenario 3	2.53E-01	5.51E-04	2.16E-03
8259	644136.2	4169548.9	Worker	Scenario 3	2.47E-01	5.39E-04	2.16E-03
8260	644236.2	4169548.9	Worker	Scenario 3	2.42E-01	5.26E-04	2.05E-03
8261	644336.2	4169548.9	Worker	Scenario 3	2.37E-01	5.14E-04	2.03E-03
8262	644436.2	4169548.9	Worker	Scenario 3	2.32E-01	5.02E-04	1.98E-03
8263	644636.2	4169548.9	Worker	Scenario 3	2.20E-01	4.78E-04	1.88E-03
8264	644736.2	4169548.9	Worker	Scenario 3	2.15E-01	4.65E-04	1.82E-03
8265	644836.2	4169548.9	Worker	Scenario 3	2.10E-01	4.54E-04	1.76E-03
8266	644936.2	4169548.9	Worker	Scenario 3	2.05E-01	4.43E-04	1.70E-03
8267	645036.2	4169548.9	Worker	Scenario 3	2.00E-01	4.33E-04	1.73E-03
8268	645136.2	4169548.9	Worker	Scenario 3	1.95E-01	4.24E-04	1.82E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8269	645236.2	4169548.9	Worker	Scenario 3	1.91E-01	4.15E-04	2.10E-03
8270	645336.2	4169548.9	Worker	Scenario 3	1.87E-01	4.06E-04	2.34E-03
8271	645436.2	4169548.9	Worker	Scenario 3	1.83E-01	3.97E-04	2.51E-03
8272	645536.2	4169548.9	Worker	Scenario 3	1.79E-01	3.88E-04	2.60E-03
8273	635636.2	4169648.9	Worker	Scenario 3	3.58E-02	8.04E-05	1.09E-03
8274	635736.2	4169648.9	Worker	Scenario 3	3.69E-02	8.28E-05	1.15E-03
8275	635836.2	4169648.9	Worker	Scenario 3	3.83E-02	8.61E-05	1.13E-03
8276	635936.2	4169648.9	Worker	Scenario 3	3.89E-02	8.72E-05	1.41E-03
8277	636036.2	4169648.9	Worker	Scenario 3	3.97E-02	8.88E-05	1.61E-03
8278	636136.2	4169648.9	Worker	Scenario 3	3.97E-02	8.88E-05	1.86E-03
8279	636236.2	4169648.9	Worker	Scenario 3	3.94E-02	8.83E-05	1.93E-03
8280	636336.2	4169648.9	Worker	Scenario 3	4.03E-02	9.03E-05	1.77E-03
8281	636436.2	4169648.9	Worker	Scenario 3	4.13E-02	9.25E-05	1.71E-03
8282	636536.2	4169648.9	Worker	Scenario 3	4.35E-02	9.72E-05	1.73E-03
8283	636636.2	4169648.9	Worker	Scenario 3	4.62E-02	1.03E-04	1.90E-03
8284	636736.2	4169648.9	Worker	Scenario 3	4.95E-02	1.10E-04	1.95E-03
8285	636836.2	4169648.9	Worker	Scenario 3	5.30E-02	1.18E-04	1.87E-03
8286	636936.2	4169648.9	Worker	Scenario 3	5.71E-02	1.27E-04	1.88E-03
8287	637036.2	4169648.9	Worker	Scenario 3	6.16E-02	1.37E-04	1.75E-03
8288	637136.2	4169648.9	Worker	Scenario 3	6.66E-02	1.48E-04	1.54E-03
8289	637436.2	4169648.9	Worker	Scenario 3	9.37E-02	2.05E-04	1.21E-03
8290	637536.2	4169648.9	Worker	Scenario 3	1.02E-01	2.23E-04	1.33E-03
8291	637636.2	4169648.9	Worker	Scenario 3	1.13E-01	2.45E-04	1.39E-03
8292	637736.2	4169648.9	Worker	Scenario 3	1.26E-01	2.73E-04	1.38E-03
8293	639536.2	4169648.9	Worker	Scenario 3	4.73E-01	1.00E-03	2.35E-03
8294	639636.2	4169648.9	Worker	Scenario 3	4.56E-01	9.67E-04	2.41E-03
8295	639736.2	4169648.9	Worker	Scenario 3	4.43E-01	9.42E-04	2.48E-03
8296	639836.2	4169648.9	Worker	Scenario 3	4.34E-01	9.25E-04	2.53E-03
8297	639936.2	4169648.9	Worker	Scenario 3	4.28E-01	9.16E-04	2.57E-03
8298	640036.2	4169648.9	Worker	Scenario 3	4.24E-01	9.10E-04	2.63E-03
8299	640136.2	4169648.9	Worker	Scenario 3	4.24E-01	9.11E-04	3.04E-03
8300	640236.2	4169648.9	Worker	Scenario 3	4.26E-01	9.16E-04	3.24E-03
8301	640336.2	4169648.9	Worker	Scenario 3	4.29E-01	9.24E-04	3.32E-03
8302	640836.2	4169648.9	Worker	Scenario 3	4.67E-01	1.01E-03	3.64E-03
8303	640936.2	4169648.9	Worker	Scenario 3	4.79E-01	1.04E-03	3.73E-03
8304	641036.2	4169648.9	Worker	Scenario 3	4.98E-01	1.07E-03	3.69E-03
8305	641136.2	4169648.9	Worker	Scenario 3	5.34E-01	1.15E-03	3.66E-03
8306	641236.2	4169648.9	Worker	Scenario 3	6.32E-01	1.34E-03	3.73E-03
8307	641336.2	4169648.9	Worker	Scenario 3	1.65E+00	3.40E-03	3.66E-03
8308	641436.2	4169648.9	Worker	Scenario 3	7.72E-01	1.62E-03	3.74E-03
8309	641536.2	4169648.9	Worker	Scenario 3	6.18E-01	1.31E-03	3.81E-03
8310	641636.2	4169648.9	Worker	Scenario 3	5.50E-01	1.18E-03	3.81E-03
8311	641736.2	4169648.9	Worker	Scenario 3	5.09E-01	1.09E-03	3.74E-03
8312	641836.2	4169648.9	Worker	Scenario 3	4.80E-01	1.03E-03	3.57E-03
8313	641936.2	4169648.9	Worker	Scenario 3	4.58E-01	9.88E-04	3.85E-03
8314	642036.2	4169648.9	Worker	Scenario 3	4.40E-01	9.50E-04	5.92E-03
8315	642136.2	4169648.9	Worker	Scenario 3	4.24E-01	9.18E-04	7.06E-03
8316	642236.2	4169648.9	Worker	Scenario 3	4.10E-01	8.86E-04	5.72E-03
8317	642336.2	4169648.9	Worker	Scenario 3	3.96E-01	8.55E-04	3.43E-03
8318	642436.2	4169648.9	Worker	Scenario 3	3.83E-01	8.27E-04	3.36E-03
8319	642536.2	4169648.9	Worker	Scenario 3	3.71E-01	8.02E-04	3.29E-03
8320	642636.2	4169648.9	Worker	Scenario 3	3.60E-01	7.79E-04	3.21E-03
8321	642736.2	4169648.9	Worker	Scenario 3	3.49E-01	7.57E-04	3.55E-03
8322	642836.2	4169648.9	Worker	Scenario 3	3.38E-01	7.36E-04	3.25E-03
8323	642936.2	4169648.9	Worker	Scenario 3	3.28E-01	7.14E-04	2.95E-03
8324	643036.2	4169648.9	Worker	Scenario 3	3.18E-01	6.94E-04	2.89E-03
8325	643136.2	4169648.9	Worker	Scenario 3	3.10E-01	6.76E-04	2.81E-03
8326	643236.2	4169648.9	Worker	Scenario 3	3.01E-01	6.56E-04	2.72E-03
8327	643336.2	4169648.9	Worker	Scenario 3	2.92E-01	6.36E-04	2.72E-03
8328	643436.2	4169648.9	Worker	Scenario 3	2.84E-01	6.17E-04	2.45E-03
8329	643536.2	4169648.9	Worker	Scenario 3	2.76E-01	6.00E-04	2.51E-03
8330	643636.2	4169648.9	Worker	Scenario 3	2.68E-01	5.82E-04	2.45E-03
8331	643736.2	4169648.9	Worker	Scenario 3	2.60E-01	5.66E-04	2.36E-03
8332	643836.2	4169648.9	Worker	Scenario 3	2.52E-01	5.50E-04	2.29E-03
8333	643936.2	4169648.9	Worker	Scenario 3	2.45E-01	5.35E-04	2.28E-03
8334	644036.2	4169648.9	Worker	Scenario 3	2.39E-01	5.22E-04	2.18E-03
8335	644136.2	4169648.9	Worker	Scenario 3	2.34E-01	5.10E-04	2.01E-03
8336	644236.2	4169648.9	Worker	Scenario 3	2.29E-01	4.99E-04	2.05E-03
8337	644336.2	4169648.9	Worker	Scenario 3	2.25E-01	4.89E-04	1.90E-03
8338	644436.2	4169648.9	Worker	Scenario 3	2.20E-01	4.78E-04	1.94E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8339	644636.2	4169648.9	Worker	Scenario 3	2.10E-01	4.56E-04	1.84E-03
8340	644736.2	4169648.9	Worker	Scenario 3	2.05E-01	4.45E-04	1.77E-03
8341	644836.2	4169648.9	Worker	Scenario 3	2.00E-01	4.34E-04	1.71E-03
8342	644936.2	4169648.9	Worker	Scenario 3	1.95E-01	4.24E-04	1.68E-03
8343	645036.2	4169648.9	Worker	Scenario 3	1.91E-01	4.14E-04	1.64E-03
8344	645136.2	4169648.9	Worker	Scenario 3	1.87E-01	4.05E-04	1.62E-03
8345	645236.2	4169648.9	Worker	Scenario 3	1.83E-01	3.97E-04	1.63E-03
8346	635636.2	4169748.9	Worker	Scenario 3	3.72E-02	8.40E-05	7.84E-04
8347	635736.2	4169748.9	Worker	Scenario 3	3.86E-02	8.72E-05	7.77E-04
8348	635836.2	4169748.9	Worker	Scenario 3	3.97E-02	8.96E-05	7.57E-04
8349	635936.2	4169748.9	Worker	Scenario 3	4.01E-02	8.99E-05	1.15E-03
8350	636036.2	4169748.9	Worker	Scenario 3	4.14E-02	9.29E-05	1.15E-03
8351	636136.2	4169748.9	Worker	Scenario 3	4.24E-02	9.49E-05	1.23E-03
8352	636236.2	4169748.9	Worker	Scenario 3	4.32E-02	9.64E-05	1.25E-03
8353	636336.2	4169748.9	Worker	Scenario 3	4.19E-02	9.36E-05	1.60E-03
8354	636436.2	4169748.9	Worker	Scenario 3	4.42E-02	9.88E-05	1.76E-03
8355	636536.2	4169748.9	Worker	Scenario 3	4.62E-02	1.03E-04	1.83E-03
8356	636636.2	4169748.9	Worker	Scenario 3	4.83E-02	1.08E-04	1.82E-03
8357	636736.2	4169748.9	Worker	Scenario 3	5.13E-02	1.15E-04	1.87E-03
8358	636836.2	4169748.9	Worker	Scenario 3	5.51E-02	1.23E-04	1.76E-03
8359	636936.2	4169748.9	Worker	Scenario 3	5.94E-02	1.32E-04	1.60E-03
8360	637036.2	4169748.9	Worker	Scenario 3	6.40E-02	1.42E-04	1.47E-03
8361	637236.2	4169748.9	Worker	Scenario 3	7.57E-02	1.67E-04	1.32E-03
8362	637336.2	4169748.9	Worker	Scenario 3	9.39E-02	2.05E-04	1.21E-03
8363	637436.2	4169748.9	Worker	Scenario 3	9.90E-02	2.16E-04	1.29E-03
8364	637536.2	4169748.9	Worker	Scenario 3	1.08E-01	2.34E-04	1.30E-03
8365	637636.2	4169748.9	Worker	Scenario 3	1.19E-01	2.58E-04	1.26E-03
8366	637836.2	4169748.9	Worker	Scenario 3	1.61E-01	3.43E-04	1.43E-03
8367	639336.2	4169748.9	Worker	Scenario 3	4.62E-01	9.72E-04	1.94E-03
8368	639436.2	4169748.9	Worker	Scenario 3	4.40E-01	9.29E-04	2.20E-03
8369	639536.2	4169748.9	Worker	Scenario 3	4.23E-01	8.97E-04	2.27E-03
8370	639636.2	4169748.9	Worker	Scenario 3	4.12E-01	8.76E-04	2.32E-03
8371	639736.2	4169748.9	Worker	Scenario 3	4.04E-01	8.61E-04	2.37E-03
8372	639836.2	4169748.9	Worker	Scenario 3	3.98E-01	8.50E-04	2.35E-03
8373	639936.2	4169748.9	Worker	Scenario 3	3.94E-01	8.44E-04	2.46E-03
8374	640036.2	4169748.9	Worker	Scenario 3	3.93E-01	8.43E-04	2.56E-03
8375	640136.2	4169748.9	Worker	Scenario 3	3.93E-01	8.46E-04	3.04E-03
8376	640236.2	4169748.9	Worker	Scenario 3	3.95E-01	8.51E-04	2.97E-03
8377	640336.2	4169748.9	Worker	Scenario 3	3.98E-01	8.59E-04	3.16E-03
8378	640436.2	4169748.9	Worker	Scenario 3	4.03E-01	8.68E-04	3.22E-03
8379	640536.2	4169748.9	Worker	Scenario 3	4.08E-01	8.80E-04	3.17E-03
8380	640636.2	4169748.9	Worker	Scenario 3	4.15E-01	8.96E-04	3.34E-03
8381	640736.2	4169748.9	Worker	Scenario 3	4.23E-01	9.14E-04	3.39E-03
8382	640836.2	4169748.9	Worker	Scenario 3	4.32E-01	9.34E-04	3.53E-03
8383	640936.2	4169748.9	Worker	Scenario 3	4.44E-01	9.60E-04	3.45E-03
8384	641036.2	4169748.9	Worker	Scenario 3	4.62E-01	9.97E-04	3.41E-03
8385	641136.2	4169748.9	Worker	Scenario 3	4.96E-01	1.06E-03	3.33E-03
8386	641236.2	4169748.9	Worker	Scenario 3	5.99E-01	1.27E-03	3.50E-03
8387	641336.2	4169748.9	Worker	Scenario 3	1.56E+00	3.21E-03	3.42E-03
8388	641436.2	4169748.9	Worker	Scenario 3	7.27E-01	1.53E-03	3.53E-03
8389	641536.2	4169748.9	Worker	Scenario 3	5.77E-01	1.23E-03	3.59E-03
8390	641636.2	4169748.9	Worker	Scenario 3	5.11E-01	1.09E-03	3.59E-03
8391	641736.2	4169748.9	Worker	Scenario 3	4.72E-01	1.01E-03	3.55E-03
8392	641836.2	4169748.9	Worker	Scenario 3	4.45E-01	9.59E-04	3.24E-03
8393	641936.2	4169748.9	Worker	Scenario 3	4.24E-01	9.16E-04	3.49E-03
8394	642036.2	4169748.9	Worker	Scenario 3	4.07E-01	8.81E-04	5.13E-03
8395	642136.2	4169748.9	Worker	Scenario 3	3.94E-01	8.52E-04	6.74E-03
8396	642236.2	4169748.9	Worker	Scenario 3	3.81E-01	8.25E-04	6.12E-03
8397	642336.2	4169748.9	Worker	Scenario 3	3.70E-01	8.00E-04	3.95E-03
8398	642436.2	4169748.9	Worker	Scenario 3	3.58E-01	7.73E-04	3.00E-03
8399	642536.2	4169748.9	Worker	Scenario 3	3.47E-01	7.50E-04	3.04E-03
8400	642636.2	4169748.9	Worker	Scenario 3	3.37E-01	7.29E-04	3.07E-03
8401	642736.2	4169748.9	Worker	Scenario 3	3.26E-01	7.08E-04	3.27E-03
8402	642836.2	4169748.9	Worker	Scenario 3	3.16E-01	6.88E-04	3.38E-03
8403	642936.2	4169748.9	Worker	Scenario 3	3.07E-01	6.70E-04	2.88E-03
8404	643036.2	4169748.9	Worker	Scenario 3	2.99E-01	6.53E-04	2.68E-03
8405	643136.2	4169748.9	Worker	Scenario 3	2.92E-01	6.37E-04	2.69E-03
8406	643236.2	4169748.9	Worker	Scenario 3	2.84E-01	6.20E-04	2.63E-03
8407	643336.2	4169748.9	Worker	Scenario 3	2.76E-01	6.02E-04	2.56E-03
8408	643436.2	4169748.9	Worker	Scenario 3	2.68E-01	5.85E-04	2.55E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8409	643536.2	4169748.9	Worker	Scenario 3	2.61E-01	5.68E-04	2.23E-03
8410	643636.2	4169748.9	Worker	Scenario 3	2.54E-01	5.52E-04	2.37E-03
8411	643736.2	4169748.9	Worker	Scenario 3	2.46E-01	5.36E-04	2.30E-03
8412	643836.2	4169748.9	Worker	Scenario 3	2.39E-01	5.21E-04	2.22E-03
8413	643936.2	4169748.9	Worker	Scenario 3	2.32E-01	5.07E-04	2.16E-03
8414	644036.2	4169748.9	Worker	Scenario 3	2.27E-01	4.95E-04	2.15E-03
8415	644136.2	4169748.9	Worker	Scenario 3	2.22E-01	4.84E-04	2.06E-03
8416	644236.2	4169748.9	Worker	Scenario 3	2.17E-01	4.74E-04	1.91E-03
8417	644336.2	4169748.9	Worker	Scenario 3	2.13E-01	4.65E-04	1.95E-03
8418	644436.2	4169748.9	Worker	Scenario 3	2.09E-01	4.55E-04	1.81E-03
8419	644636.2	4169748.9	Worker	Scenario 3	2.00E-01	4.35E-04	1.78E-03
8420	644736.2	4169748.9	Worker	Scenario 3	1.96E-01	4.25E-04	1.73E-03
8421	644836.2	4169748.9	Worker	Scenario 3	1.91E-01	4.15E-04	1.69E-03
8422	644936.2	4169748.9	Worker	Scenario 3	1.87E-01	4.05E-04	1.65E-03
8423	635636.2	4169848.9	Worker	Scenario 3	3.76E-02	8.48E-05	7.08E-04
8424	635736.2	4169848.9	Worker	Scenario 3	3.89E-02	8.76E-05	7.03E-04
8425	635836.2	4169848.9	Worker	Scenario 3	4.06E-02	9.14E-05	6.95E-04
8426	635936.2	4169848.9	Worker	Scenario 3	4.25E-02	9.57E-05	7.14E-04
8427	636036.2	4169848.9	Worker	Scenario 3	4.30E-02	9.68E-05	7.85E-04
8428	636136.2	4169848.9	Worker	Scenario 3	4.42E-02	9.91E-05	1.00E-03
8429	636236.2	4169848.9	Worker	Scenario 3	4.58E-02	1.03E-04	1.09E-03
8430	636336.2	4169848.9	Worker	Scenario 3	4.66E-02	1.04E-04	1.33E-03
8431	636436.2	4169848.9	Worker	Scenario 3	4.55E-02	1.02E-04	1.69E-03
8432	636536.2	4169848.9	Worker	Scenario 3	4.84E-02	1.08E-04	1.71E-03
8433	636636.2	4169848.9	Worker	Scenario 3	5.04E-02	1.13E-04	1.72E-03
8434	636736.2	4169848.9	Worker	Scenario 3	5.35E-02	1.19E-04	1.66E-03
8435	636836.2	4169848.9	Worker	Scenario 3	5.73E-02	1.28E-04	1.55E-03
8436	636936.2	4169848.9	Worker	Scenario 3	6.15E-02	1.37E-04	1.47E-03
8437	637136.2	4169848.9	Worker	Scenario 3	7.18E-02	1.59E-04	1.42E-03
8438	637236.2	4169848.9	Worker	Scenario 3	7.83E-02	1.73E-04	1.20E-03
8439	637336.2	4169848.9	Worker	Scenario 3	9.66E-02	2.10E-04	1.22E-03
8440	637436.2	4169848.9	Worker	Scenario 3	1.04E-01	2.27E-04	1.20E-03
8441	637536.2	4169848.9	Worker	Scenario 3	1.12E-01	2.42E-04	1.16E-03
8442	637836.2	4169848.9	Worker	Scenario 3	1.69E-01	3.60E-04	1.38E-03
8443	639236.2	4169848.9	Worker	Scenario 3	4.21E-01	8.87E-04	1.82E-03
8444	639336.2	4169848.9	Worker	Scenario 3	4.04E-01	8.53E-04	2.06E-03
8445	639436.2	4169848.9	Worker	Scenario 3	3.90E-01	8.27E-04	2.13E-03
8446	639536.2	4169848.9	Worker	Scenario 3	3.80E-01	8.09E-04	2.26E-03
8447	639636.2	4169848.9	Worker	Scenario 3	3.73E-01	7.96E-04	2.24E-03
8448	639736.2	4169848.9	Worker	Scenario 3	3.71E-01	7.92E-04	2.29E-03
8449	639836.2	4169848.9	Worker	Scenario 3	3.65E-01	7.82E-04	2.34E-03
8450	639936.2	4169848.9	Worker	Scenario 3	3.63E-01	7.80E-04	2.33E-03
8451	640036.2	4169848.9	Worker	Scenario 3	3.63E-01	7.81E-04	2.78E-03
8452	640136.2	4169848.9	Worker	Scenario 3	3.64E-01	7.85E-04	2.90E-03
8453	640236.2	4169848.9	Worker	Scenario 3	3.67E-01	7.91E-04	2.96E-03
8454	640336.2	4169848.9	Worker	Scenario 3	3.70E-01	7.98E-04	2.94E-03
8455	640436.2	4169848.9	Worker	Scenario 3	3.74E-01	8.07E-04	3.04E-03
8456	640536.2	4169848.9	Worker	Scenario 3	3.79E-01	8.18E-04	2.84E-03
8457	640636.2	4169848.9	Worker	Scenario 3	3.85E-01	8.32E-04	3.11E-03
8458	640736.2	4169848.9	Worker	Scenario 3	3.92E-01	8.49E-04	3.20E-03
8459	640836.2	4169848.9	Worker	Scenario 3	4.01E-01	8.68E-04	3.41E-03
8460	640936.2	4169848.9	Worker	Scenario 3	4.12E-01	8.92E-04	3.29E-03
8461	641036.2	4169848.9	Worker	Scenario 3	4.30E-01	9.27E-04	3.22E-03
8462	641136.2	4169848.9	Worker	Scenario 3	4.63E-01	9.94E-04	3.03E-03
8463	641236.2	4169848.9	Worker	Scenario 3	5.68E-01	1.20E-03	3.33E-03
8464	641336.2	4169848.9	Worker	Scenario 3	1.46E+00	3.01E-03	3.20E-03
8465	641436.2	4169848.9	Worker	Scenario 3	6.83E-01	1.44E-03	3.34E-03
8466	641536.2	4169848.9	Worker	Scenario 3	5.37E-01	1.14E-03	3.38E-03
8467	641636.2	4169848.9	Worker	Scenario 3	4.74E-01	1.01E-03	3.39E-03
8468	641736.2	4169848.9	Worker	Scenario 3	4.38E-01	9.41E-04	3.37E-03
8469	641836.2	4169848.9	Worker	Scenario 3	4.12E-01	8.89E-04	3.08E-03
8470	641936.2	4169848.9	Worker	Scenario 3	3.93E-01	8.50E-04	3.30E-03
8471	642036.2	4169848.9	Worker	Scenario 3	3.78E-01	8.18E-04	4.38E-03
8472	642136.2	4169848.9	Worker	Scenario 3	3.65E-01	7.92E-04	6.26E-03
8473	642236.2	4169848.9	Worker	Scenario 3	3.54E-01	7.68E-04	6.31E-03
8474	642336.2	4169848.9	Worker	Scenario 3	3.44E-01	7.46E-04	4.54E-03
8475	642436.2	4169848.9	Worker	Scenario 3	3.35E-01	7.24E-04	2.80E-03
8476	642536.2	4169848.9	Worker	Scenario 3	3.25E-01	7.02E-04	2.99E-03
8477	642636.2	4169848.9	Worker	Scenario 3	3.15E-01	6.81E-04	2.93E-03
8478	642736.2	4169848.9	Worker	Scenario 3	3.06E-01	6.63E-04	2.89E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8479	642836.2	4169848.9	Worker	Scenario 3	2.97E-01	6.46E-04	3.29E-03
8480	642936.2	4169848.9	Worker	Scenario 3	2.89E-01	6.30E-04	3.11E-03
8481	643036.2	4169848.9	Worker	Scenario 3	2.82E-01	6.15E-04	2.67E-03
8482	643136.2	4169848.9	Worker	Scenario 3	2.75E-01	6.01E-04	2.57E-03
8483	643236.2	4169848.9	Worker	Scenario 3	2.68E-01	5.86E-04	2.54E-03
8484	643336.2	4169848.9	Worker	Scenario 3	2.61E-01	5.70E-04	2.45E-03
8485	643436.2	4169848.9	Worker	Scenario 3	2.54E-01	5.55E-04	2.42E-03
8486	643536.2	4169848.9	Worker	Scenario 3	2.47E-01	5.39E-04	2.38E-03
8487	643636.2	4169848.9	Worker	Scenario 3	2.41E-01	5.24E-04	2.10E-03
8488	643736.2	4169848.9	Worker	Scenario 3	2.34E-01	5.09E-04	2.23E-03
8489	643836.2	4169848.9	Worker	Scenario 3	2.27E-01	4.95E-04	2.16E-03
8490	643936.2	4169848.9	Worker	Scenario 3	2.21E-01	4.82E-04	2.09E-03
8491	644036.2	4169848.9	Worker	Scenario 3	2.15E-01	4.70E-04	2.04E-03
8492	644136.2	4169848.9	Worker	Scenario 3	2.10E-01	4.60E-04	2.03E-03
8493	644236.2	4169848.9	Worker	Scenario 3	2.06E-01	4.50E-04	1.95E-03
8494	644336.2	4169848.9	Worker	Scenario 3	2.02E-01	4.42E-04	1.83E-03
8495	644436.2	4169848.9	Worker	Scenario 3	1.99E-01	4.34E-04	1.84E-03
8496	635636.2	4169948.9	Worker	Scenario 3	3.84E-02	8.66E-05	6.51E-04
8497	635736.2	4169948.9	Worker	Scenario 3	4.01E-02	9.01E-05	6.85E-04
8498	635836.2	4169948.9	Worker	Scenario 3	4.06E-02	9.14E-05	7.49E-04
8499	635936.2	4169948.9	Worker	Scenario 3	4.29E-02	9.64E-05	8.05E-04
8500	636036.2	4169948.9	Worker	Scenario 3	4.44E-02	9.97E-05	8.46E-04
8501	636136.2	4169948.9	Worker	Scenario 3	4.55E-02	1.02E-04	8.70E-04
8502	636236.2	4169948.9	Worker	Scenario 3	4.71E-02	1.06E-04	8.78E-04
8503	636336.2	4169948.9	Worker	Scenario 3	4.88E-02	1.09E-04	1.05E-03
8504	636436.2	4169948.9	Worker	Scenario 3	5.01E-02	1.12E-04	1.22E-03
8505	636536.2	4169948.9	Worker	Scenario 3	4.97E-02	1.11E-04	1.56E-03
8506	636636.2	4169948.9	Worker	Scenario 3	5.25E-02	1.17E-04	1.52E-03
8507	636736.2	4169948.9	Worker	Scenario 3	5.53E-02	1.23E-04	1.55E-03
8508	637036.2	4169948.9	Worker	Scenario 3	6.84E-02	1.52E-04	1.53E-03
8509	637136.2	4169948.9	Worker	Scenario 3	7.38E-02	1.63E-04	1.44E-03
8510	637236.2	4169948.9	Worker	Scenario 3	8.03E-02	1.77E-04	1.16E-03
8511	637336.2	4169948.9	Worker	Scenario 3	9.76E-02	2.12E-04	1.09E-03
8512	637436.2	4169948.9	Worker	Scenario 3	1.05E-01	2.29E-04	1.17E-03
8513	637536.2	4169948.9	Worker	Scenario 3	1.10E-01	2.38E-04	1.28E-03
8514	637736.2	4169948.9	Worker	Scenario 3	1.46E-01	3.12E-04	1.28E-03
8515	637836.2	4169948.9	Worker	Scenario 3	1.74E-01	3.70E-04	1.21E-03
8516	639136.2	4169948.9	Worker	Scenario 3	3.80E-01	8.01E-04	1.72E-03
8517	639236.2	4169948.9	Worker	Scenario 3	3.66E-01	7.75E-04	1.93E-03
8518	639336.2	4169948.9	Worker	Scenario 3	3.56E-01	7.56E-04	2.00E-03
8519	639436.2	4169948.9	Worker	Scenario 3	3.49E-01	7.42E-04	2.22E-03
8520	639536.2	4169948.9	Worker	Scenario 3	3.43E-01	7.32E-04	2.08E-03
8521	639736.2	4169948.9	Worker	Scenario 3	3.37E-01	7.22E-04	2.17E-03
8522	639836.2	4169948.9	Worker	Scenario 3	3.36E-01	7.22E-04	2.23E-03
8523	639936.2	4169948.9	Worker	Scenario 3	3.36E-01	7.22E-04	2.41E-03
8524	640036.2	4169948.9	Worker	Scenario 3	3.37E-01	7.26E-04	2.72E-03
8525	640136.2	4169948.9	Worker	Scenario 3	3.38E-01	7.31E-04	2.65E-03
8526	640236.2	4169948.9	Worker	Scenario 3	3.41E-01	7.36E-04	2.82E-03
8527	640336.2	4169948.9	Worker	Scenario 3	3.44E-01	7.43E-04	2.85E-03
8528	640436.2	4169948.9	Worker	Scenario 3	3.48E-01	7.51E-04	2.89E-03
8529	640536.2	4169948.9	Worker	Scenario 3	3.53E-01	7.62E-04	2.91E-03
8530	640636.2	4169948.9	Worker	Scenario 3	3.58E-01	7.75E-04	2.94E-03
8531	640736.2	4169948.9	Worker	Scenario 3	3.65E-01	7.90E-04	3.04E-03
8532	640836.2	4169948.9	Worker	Scenario 3	3.72E-01	8.08E-04	3.22E-03
8533	640936.2	4169948.9	Worker	Scenario 3	3.83E-01	8.29E-04	3.09E-03
8534	641036.2	4169948.9	Worker	Scenario 3	4.00E-01	8.62E-04	3.12E-03
8535	641136.2	4169948.9	Worker	Scenario 3	4.31E-01	9.25E-04	2.91E-03
8536	641236.2	4169948.9	Worker	Scenario 3	5.36E-01	1.14E-03	3.17E-03
8537	641336.2	4169948.9	Worker	Scenario 3	1.37E+00	2.83E-03	3.03E-03
8538	641436.2	4169948.9	Worker	Scenario 3	6.32E-01	1.33E-03	3.17E-03
8539	641536.2	4169948.9	Worker	Scenario 3	4.93E-01	1.05E-03	3.21E-03
8540	641636.2	4169948.9	Worker	Scenario 3	4.36E-01	9.34E-04	3.20E-03
8541	641736.2	4169948.9	Worker	Scenario 3	4.04E-01	8.69E-04	3.19E-03
8542	641836.2	4169948.9	Worker	Scenario 3	3.81E-01	8.22E-04	3.02E-03
8543	641936.2	4169948.9	Worker	Scenario 3	3.64E-01	7.87E-04	3.13E-03
8544	642036.2	4169948.9	Worker	Scenario 3	3.51E-01	7.61E-04	3.72E-03
8545	642136.2	4169948.9	Worker	Scenario 3	3.39E-01	7.35E-04	5.69E-03
8546	642236.2	4169948.9	Worker	Scenario 3	3.29E-01	7.15E-04	6.30E-03
8547	643236.2	4169948.9	Worker	Scenario 3	2.53E-01	5.54E-04	2.45E-03
8548	643336.2	4169948.9	Worker	Scenario 3	2.47E-01	5.41E-04	2.36E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8549	643436.2	4169948.9	Worker	Scenario 3	2.41E-01	5.27E-04	2.33E-03
8550	643536.2	4169948.9	Worker	Scenario 3	2.35E-01	5.13E-04	2.28E-03
8551	643636.2	4169948.9	Worker	Scenario 3	2.29E-01	4.99E-04	2.22E-03
8552	643736.2	4169948.9	Worker	Scenario 3	2.23E-01	4.85E-04	2.02E-03
8553	643836.2	4169948.9	Worker	Scenario 3	2.16E-01	4.71E-04	2.10E-03
8554	643936.2	4169948.9	Worker	Scenario 3	2.10E-01	4.59E-04	2.04E-03
8555	644036.2	4169948.9	Worker	Scenario 3	2.05E-01	4.47E-04	1.98E-03
8556	644236.2	4169948.9	Worker	Scenario 3	1.96E-01	4.29E-04	1.92E-03
8557	635636.2	4170048.9	Worker	Scenario 3	3.89E-02	8.75E-05	7.17E-04
8558	635736.2	4170048.9	Worker	Scenario 3	3.67E-02	8.21E-05	1.32E-03
8559	635836.2	4170048.9	Worker	Scenario 3	3.87E-02	8.65E-05	1.34E-03
8560	635936.2	4170048.9	Worker	Scenario 3	4.24E-02	9.54E-05	8.24E-04
8561	636036.2	4170048.9	Worker	Scenario 3	4.51E-02	1.01E-04	8.31E-04
8562	636136.2	4170048.9	Worker	Scenario 3	4.70E-02	1.05E-04	8.61E-04
8563	636236.2	4170048.9	Worker	Scenario 3	4.85E-02	1.09E-04	8.72E-04
8564	636336.2	4170048.9	Worker	Scenario 3	5.05E-02	1.13E-04	8.63E-04
8565	636436.2	4170048.9	Worker	Scenario 3	5.31E-02	1.19E-04	8.75E-04
8566	636536.2	4170048.9	Worker	Scenario 3	5.48E-02	1.22E-04	9.92E-04
8567	636636.2	4170048.9	Worker	Scenario 3	5.48E-02	1.22E-04	1.33E-03
8568	636936.2	4170048.9	Worker	Scenario 3	7.18E-02	1.58E-04	1.09E-03
8569	637036.2	4170048.9	Worker	Scenario 3	7.66E-02	1.68E-04	1.10E-03
8570	637136.2	4170048.9	Worker	Scenario 3	8.23E-02	1.80E-04	1.07E-03
8571	637236.2	4170048.9	Worker	Scenario 3	8.88E-02	1.94E-04	1.05E-03
8572	637336.2	4170048.9	Worker	Scenario 3	9.59E-02	2.09E-04	1.16E-03
8573	637436.2	4170048.9	Worker	Scenario 3	1.03E-01	2.23E-04	1.23E-03
8574	637636.2	4170048.9	Worker	Scenario 3	1.33E-01	2.84E-04	1.17E-03
8575	637736.2	4170048.9	Worker	Scenario 3	1.51E-01	3.22E-04	1.11E-03
8576	637836.2	4170048.9	Worker	Scenario 3	1.76E-01	3.73E-04	1.23E-03
8577	639036.2	4170048.9	Worker	Scenario 3	3.38E-01	7.14E-04	1.63E-03
8578	639136.2	4170048.9	Worker	Scenario 3	3.30E-01	7.00E-04	1.81E-03
8579	639236.2	4170048.9	Worker	Scenario 3	3.23E-01	6.87E-04	1.89E-03
8580	639336.2	4170048.9	Worker	Scenario 3	3.18E-01	6.78E-04	2.15E-03
8581	639436.2	4170048.9	Worker	Scenario 3	3.14E-01	6.71E-04	2.00E-03
8582	639536.2	4170048.9	Worker	Scenario 3	3.12E-01	6.68E-04	2.01E-03
8583	639636.2	4170048.9	Worker	Scenario 3	3.10E-01	6.66E-04	1.99E-03
8584	639736.2	4170048.9	Worker	Scenario 3	3.10E-01	6.65E-04	2.10E-03
8585	639836.2	4170048.9	Worker	Scenario 3	3.10E-01	6.67E-04	2.08E-03
8586	639936.2	4170048.9	Worker	Scenario 3	3.11E-01	6.71E-04	2.54E-03
8587	640036.2	4170048.9	Worker	Scenario 3	3.13E-01	6.75E-04	2.61E-03
8588	640136.2	4170048.9	Worker	Scenario 3	3.15E-01	6.80E-04	2.66E-03
8589	640236.2	4170048.9	Worker	Scenario 3	3.17E-01	6.86E-04	2.67E-03
8590	640336.2	4170048.9	Worker	Scenario 3	3.20E-01	6.93E-04	2.74E-03
8591	640436.2	4170048.9	Worker	Scenario 3	3.24E-01	7.01E-04	2.61E-03
8592	640536.2	4170048.9	Worker	Scenario 3	3.29E-01	7.11E-04	2.83E-03
8593	640636.2	4170048.9	Worker	Scenario 3	3.34E-01	7.23E-04	2.87E-03
8594	640736.2	4170048.9	Worker	Scenario 3	3.40E-01	7.37E-04	2.93E-03
8595	640836.2	4170048.9	Worker	Scenario 3	3.47E-01	7.53E-04	3.00E-03
8596	640936.2	4170048.9	Worker	Scenario 3	3.56E-01	7.72E-04	2.96E-03
8597	641036.2	4170048.9	Worker	Scenario 3	3.71E-01	8.01E-04	2.99E-03
8598	641136.2	4170048.9	Worker	Scenario 3	3.98E-01	8.55E-04	2.85E-03
8599	641236.2	4170048.9	Worker	Scenario 3	4.91E-01	1.04E-03	3.01E-03
8600	641336.2	4170048.9	Worker	Scenario 3	1.23E+00	2.54E-03	2.90E-03
8601	641436.2	4170048.9	Worker	Scenario 3	5.46E-01	1.15E-03	3.01E-03
8602	641536.2	4170048.9	Worker	Scenario 3	4.35E-01	9.29E-04	3.05E-03
8603	641636.2	4170048.9	Worker	Scenario 3	3.91E-01	8.40E-04	3.02E-03
8604	641736.2	4170048.9	Worker	Scenario 3	3.66E-01	7.89E-04	3.01E-03
8605	641836.2	4170048.9	Worker	Scenario 3	3.48E-01	7.54E-04	2.94E-03
8606	641936.2	4170048.9	Worker	Scenario 3	3.35E-01	7.26E-04	2.97E-03
8607	642036.2	4170048.9	Worker	Scenario 3	3.23E-01	7.02E-04	3.27E-03
8608	642136.2	4170048.9	Worker	Scenario 3	3.14E-01	6.82E-04	5.08E-03
8609	635736.2	4170148.9	Worker	Scenario 3	3.76E-02	8.42E-05	1.35E-03
8610	635836.2	4170148.9	Worker	Scenario 3	3.68E-02	8.23E-05	1.53E-03
8611	635936.2	4170148.9	Worker	Scenario 3	4.01E-02	8.97E-05	1.45E-03
8612	636036.2	4170148.9	Worker	Scenario 3	4.46E-02	1.00E-04	8.31E-04
8613	636136.2	4170148.9	Worker	Scenario 3	4.79E-02	1.07E-04	8.16E-04
8614	636236.2	4170148.9	Worker	Scenario 3	4.95E-02	1.11E-04	8.41E-04
8615	636336.2	4170148.9	Worker	Scenario 3	5.21E-02	1.16E-04	8.82E-04
8616	636436.2	4170148.9	Worker	Scenario 3	5.47E-02	1.22E-04	9.17E-04
8617	636536.2	4170148.9	Worker	Scenario 3	5.74E-02	1.28E-04	9.43E-04
8618	636736.2	4170148.9	Worker	Scenario 3	6.08E-02	1.35E-04	1.23E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8619	636836.2	4170148.9	Worker	Scenario 3	7.06E-02	1.55E-04	1.04E-03
8620	636936.2	4170148.9	Worker	Scenario 3	7.54E-02	1.65E-04	1.03E-03
8621	637036.2	4170148.9	Worker	Scenario 3	8.01E-02	1.75E-04	9.69E-04
8622	637136.2	4170148.9	Worker	Scenario 3	8.59E-02	1.87E-04	1.05E-03
8623	637236.2	4170148.9	Worker	Scenario 3	9.24E-02	2.01E-04	1.14E-03
8624	637336.2	4170148.9	Worker	Scenario 3	9.79E-02	2.13E-04	1.18E-03
8625	637636.2	4170148.9	Worker	Scenario 3	1.33E-01	2.85E-04	1.05E-03
8626	637736.2	4170148.9	Worker	Scenario 3	1.50E-01	3.19E-04	1.21E-03
8627	637836.2	4170148.9	Worker	Scenario 3	1.70E-01	3.62E-04	1.32E-03
8628	639036.2	4170148.9	Worker	Scenario 3	2.95E-01	6.27E-04	1.70E-03
8629	639136.2	4170148.9	Worker	Scenario 3	2.92E-01	6.22E-04	1.80E-03
8630	639236.2	4170148.9	Worker	Scenario 3	2.90E-01	6.18E-04	2.07E-03
8631	639336.2	4170148.9	Worker	Scenario 3	2.88E-01	6.15E-04	2.03E-03
8632	639436.2	4170148.9	Worker	Scenario 3	2.86E-01	6.13E-04	1.92E-03
8633	639536.2	4170148.9	Worker	Scenario 3	2.85E-01	6.13E-04	1.94E-03
8634	639636.2	4170148.9	Worker	Scenario 3	2.85E-01	6.13E-04	2.00E-03
8635	639736.2	4170148.9	Worker	Scenario 3	2.86E-01	6.15E-04	2.01E-03
8636	639836.2	4170148.9	Worker	Scenario 3	2.87E-01	6.19E-04	2.26E-03
8637	639936.2	4170148.9	Worker	Scenario 3	2.89E-01	6.24E-04	2.45E-03
8638	640036.2	4170148.9	Worker	Scenario 3	2.91E-01	6.29E-04	2.38E-03
8639	640136.2	4170148.9	Worker	Scenario 3	2.93E-01	6.35E-04	2.54E-03
8640	640236.2	4170148.9	Worker	Scenario 3	2.96E-01	6.41E-04	2.54E-03
8641	640336.2	4170148.9	Worker	Scenario 3	2.99E-01	6.48E-04	2.63E-03
8642	640436.2	4170148.9	Worker	Scenario 3	3.03E-01	6.55E-04	2.48E-03
8643	640536.2	4170148.9	Worker	Scenario 3	3.07E-01	6.64E-04	2.65E-03
8644	640636.2	4170148.9	Worker	Scenario 3	3.11E-01	6.76E-04	2.71E-03
8645	640736.2	4170148.9	Worker	Scenario 3	3.16E-01	6.88E-04	2.85E-03
8646	640836.2	4170148.9	Worker	Scenario 3	3.22E-01	7.01E-04	2.79E-03
8647	640936.2	4170148.9	Worker	Scenario 3	3.30E-01	7.17E-04	2.81E-03
8648	641036.2	4170148.9	Worker	Scenario 3	3.42E-01	7.40E-04	2.83E-03
8649	641136.2	4170148.9	Worker	Scenario 3	3.62E-01	7.80E-04	2.77E-03
8650	641236.2	4170148.9	Worker	Scenario 3	4.09E-01	8.73E-04	2.85E-03
8651	641336.2	4170148.9	Worker	Scenario 3	4.38E-01	9.31E-04	2.78E-03
8652	641436.2	4170148.9	Worker	Scenario 3	3.91E-01	8.37E-04	2.87E-03
8653	641536.2	4170148.9	Worker	Scenario 3	3.62E-01	7.79E-04	2.91E-03
8654	641636.2	4170148.9	Worker	Scenario 3	3.43E-01	7.40E-04	2.89E-03
8655	641736.2	4170148.9	Worker	Scenario 3	3.29E-01	7.12E-04	2.87E-03
8656	641836.2	4170148.9	Worker	Scenario 3	3.18E-01	6.89E-04	2.85E-03
8657	641936.2	4170148.9	Worker	Scenario 3	3.07E-01	6.68E-04	2.79E-03
8658	642036.2	4170148.9	Worker	Scenario 3	2.98E-01	6.48E-04	2.95E-03
8659	642436.2	4170148.9	Worker	Scenario 3	2.72E-01	5.92E-04	4.06E-03
8660	642536.2	4170148.9	Worker	Scenario 3	2.67E-01	5.78E-04	2.51E-03
8661	642636.2	4170148.9	Worker	Scenario 3	2.60E-01	5.64E-04	2.53E-03
8662	642736.2	4170148.9	Worker	Scenario 3	2.53E-01	5.49E-04	2.44E-03
8663	642836.2	4170148.9	Worker	Scenario 3	2.47E-01	5.36E-04	2.47E-03
8664	642936.2	4170148.9	Worker	Scenario 3	2.41E-01	5.26E-04	2.81E-03
8665	643036.2	4170148.9	Worker	Scenario 3	2.36E-01	5.16E-04	3.00E-03
8666	643136.2	4170148.9	Worker	Scenario 3	2.31E-01	5.05E-04	2.69E-03
8667	643236.2	4170148.9	Worker	Scenario 3	2.26E-01	4.96E-04	2.29E-03
8668	643336.2	4170148.9	Worker	Scenario 3	2.22E-01	4.85E-04	2.20E-03
8669	635836.2	4170248.9	Worker	Scenario 3	3.80E-02	8.53E-05	1.50E-03
8670	635936.2	4170248.9	Worker	Scenario 3	3.83E-02	8.61E-05	1.62E-03
8671	636036.2	4170248.9	Worker	Scenario 3	4.18E-02	9.37E-05	1.45E-03
8672	636136.2	4170248.9	Worker	Scenario 3	4.63E-02	1.03E-04	9.85E-04
8673	636236.2	4170248.9	Worker	Scenario 3	5.31E-02	1.18E-04	8.53E-04
8674	636336.2	4170248.9	Worker	Scenario 3	5.34E-02	1.19E-04	9.06E-04
8675	636636.2	4170248.9	Worker	Scenario 3	5.97E-02	1.33E-04	9.93E-04
8676	636736.2	4170248.9	Worker	Scenario 3	6.60E-02	1.46E-04	9.88E-04
8677	636836.2	4170248.9	Worker	Scenario 3	7.20E-02	1.58E-04	9.46E-04
8678	636936.2	4170248.9	Worker	Scenario 3	7.70E-02	1.69E-04	9.48E-04
8679	637036.2	4170248.9	Worker	Scenario 3	8.17E-02	1.78E-04	1.05E-03
8680	637136.2	4170248.9	Worker	Scenario 3	8.72E-02	1.90E-04	1.10E-03
8681	637236.2	4170248.9	Worker	Scenario 3	9.25E-02	2.01E-04	1.12E-03
8682	637536.2	4170248.9	Worker	Scenario 3	1.20E-01	2.58E-04	1.05E-03
8683	637636.2	4170248.9	Worker	Scenario 3	1.32E-01	2.83E-04	1.19E-03
8684	637736.2	4170248.9	Worker	Scenario 3	1.47E-01	3.13E-04	1.27E-03
8685	637836.2	4170248.9	Worker	Scenario 3	1.64E-01	3.48E-04	1.27E-03
8686	637936.2	4170248.9	Worker	Scenario 3	1.82E-01	3.87E-04	1.29E-03
8687	638036.2	4170248.9	Worker	Scenario 3	2.03E-01	4.30E-04	1.34E-03
8688	638936.2	4170248.9	Worker	Scenario 3	2.65E-01	5.65E-04	1.59E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8689	639036.2	4170248.9	Worker	Scenario 3	2.64E-01	5.63E-04	1.71E-03
8690	639136.2	4170248.9	Worker	Scenario 3	2.63E-01	5.63E-04	1.97E-03
8691	639236.2	4170248.9	Worker	Scenario 3	2.63E-01	5.64E-04	2.03E-03
8692	639336.2	4170248.9	Worker	Scenario 3	2.63E-01	5.64E-04	1.82E-03
8693	639436.2	4170248.9	Worker	Scenario 3	2.57E-01	5.52E-04	1.83E-03
8694	639536.2	4170248.9	Worker	Scenario 3	2.64E-01	5.67E-04	1.87E-03
8695	639636.2	4170248.9	Worker	Scenario 3	2.64E-01	5.70E-04	1.91E-03
8696	639736.2	4170248.9	Worker	Scenario 3	2.66E-01	5.73E-04	1.93E-03
8697	639836.2	4170248.9	Worker	Scenario 3	2.68E-01	5.78E-04	2.33E-03
8698	639936.2	4170248.9	Worker	Scenario 3	2.70E-01	5.84E-04	2.37E-03
8699	640036.2	4170248.9	Worker	Scenario 3	2.72E-01	5.89E-04	2.41E-03
8700	640136.2	4170248.9	Worker	Scenario 3	2.74E-01	5.94E-04	2.44E-03
8701	640236.2	4170248.9	Worker	Scenario 3	2.77E-01	6.00E-04	2.50E-03
8702	640336.2	4170248.9	Worker	Scenario 3	2.80E-01	6.07E-04	2.45E-03
8703	640436.2	4170248.9	Worker	Scenario 3	2.84E-01	6.15E-04	2.52E-03
8704	640536.2	4170248.9	Worker	Scenario 3	2.87E-01	6.23E-04	2.51E-03
8705	640636.2	4170248.9	Worker	Scenario 3	2.91E-01	6.33E-04	2.62E-03
8706	640736.2	4170248.9	Worker	Scenario 3	2.96E-01	6.44E-04	2.77E-03
8707	640836.2	4170248.9	Worker	Scenario 3	3.01E-01	6.55E-04	2.66E-03
8708	640936.2	4170248.9	Worker	Scenario 3	3.08E-01	6.68E-04	2.64E-03
8709	641036.2	4170248.9	Worker	Scenario 3	3.16E-01	6.84E-04	2.67E-03
8710	641136.2	4170248.9	Worker	Scenario 3	3.27E-01	7.05E-04	2.68E-03
8711	641236.2	4170248.9	Worker	Scenario 3	3.37E-01	7.26E-04	2.70E-03
8712	641336.2	4170248.9	Worker	Scenario 3	3.35E-01	7.21E-04	2.66E-03
8713	641436.2	4170248.9	Worker	Scenario 3	3.25E-01	7.01E-04	2.74E-03
8714	641536.2	4170248.9	Worker	Scenario 3	3.15E-01	6.80E-04	2.78E-03
8715	641636.2	4170248.9	Worker	Scenario 3	3.06E-01	6.62E-04	2.77E-03
8716	641736.2	4170248.9	Worker	Scenario 3	2.98E-01	6.46E-04	2.75E-03
8717	641836.2	4170248.9	Worker	Scenario 3	2.91E-01	6.31E-04	2.74E-03
8718	641936.2	4170248.9	Worker	Scenario 3	2.83E-01	6.17E-04	2.60E-03
8719	642036.2	4170248.9	Worker	Scenario 3	2.76E-01	6.02E-04	2.69E-03
8720	642136.2	4170248.9	Worker	Scenario 3	2.70E-01	5.88E-04	3.88E-03
8721	642236.2	4170248.9	Worker	Scenario 3	2.65E-01	5.77E-04	5.40E-03
8722	642336.2	4170248.9	Worker	Scenario 3	2.60E-01	5.67E-04	5.66E-03
8723	642436.2	4170248.9	Worker	Scenario 3	2.55E-01	5.55E-04	4.49E-03
8724	642536.2	4170248.9	Worker	Scenario 3	2.50E-01	5.43E-04	2.90E-03
8725	642636.2	4170248.9	Worker	Scenario 3	2.45E-01	5.30E-04	2.28E-03
8726	642736.2	4170248.9	Worker	Scenario 3	2.39E-01	5.18E-04	2.39E-03
8727	642836.2	4170248.9	Worker	Scenario 3	2.33E-01	5.06E-04	2.37E-03
8728	642936.2	4170248.9	Worker	Scenario 3	2.28E-01	4.97E-04	2.46E-03
8729	643036.2	4170248.9	Worker	Scenario 3	2.23E-01	4.88E-04	2.88E-03
8730	643136.2	4170248.9	Worker	Scenario 3	2.19E-01	4.79E-04	2.84E-03
8731	643236.2	4170248.9	Worker	Scenario 3	2.15E-01	4.70E-04	2.39E-03
8732	643336.2	4170248.9	Worker	Scenario 3	2.10E-01	4.61E-04	2.10E-03
8733	635636.2	4170348.9	Worker	Scenario 3	3.71E-02	8.30E-05	1.34E-03
8734	635936.2	4170348.9	Worker	Scenario 3	4.07E-02	9.13E-05	1.41E-03
8735	636036.2	4170348.9	Worker	Scenario 3	4.07E-02	9.15E-05	1.64E-03
8736	636136.2	4170348.9	Worker	Scenario 3	4.53E-02	1.01E-04	1.30E-03
8737	636236.2	4170348.9	Worker	Scenario 3	5.10E-02	1.14E-04	9.10E-04
8738	636536.2	4170348.9	Worker	Scenario 3	5.91E-02	1.31E-04	9.46E-04
8739	636636.2	4170348.9	Worker	Scenario 3	6.24E-02	1.38E-04	9.23E-04
8740	636736.2	4170348.9	Worker	Scenario 3	6.68E-02	1.47E-04	8.65E-04
8741	636836.2	4170348.9	Worker	Scenario 3	7.16E-02	1.57E-04	9.62E-04
8742	636936.2	4170348.9	Worker	Scenario 3	7.73E-02	1.69E-04	1.03E-03
8743	637036.2	4170348.9	Worker	Scenario 3	8.25E-02	1.80E-04	1.06E-03
8744	637136.2	4170348.9	Worker	Scenario 3	8.75E-02	1.90E-04	1.04E-03
8745	637236.2	4170348.9	Worker	Scenario 3	9.18E-02	2.00E-04	9.88E-04
8746	637436.2	4170348.9	Worker	Scenario 3	1.05E-01	2.27E-04	1.07E-03
8747	637536.2	4170348.9	Worker	Scenario 3	1.18E-01	2.53E-04	1.15E-03
8748	637636.2	4170348.9	Worker	Scenario 3	1.30E-01	2.79E-04	1.21E-03
8749	637736.2	4170348.9	Worker	Scenario 3	1.42E-01	3.04E-04	1.19E-03
8750	637836.2	4170348.9	Worker	Scenario 3	1.56E-01	3.33E-04	1.24E-03
8751	637936.2	4170348.9	Worker	Scenario 3	1.71E-01	3.64E-04	1.27E-03
8752	638036.2	4170348.9	Worker	Scenario 3	1.86E-01	3.95E-04	1.32E-03
8753	638136.2	4170348.9	Worker	Scenario 3	1.96E-01	4.17E-04	1.35E-03
8754	638236.2	4170348.9	Worker	Scenario 3	2.01E-01	4.28E-04	1.29E-03
8755	638336.2	4170348.9	Worker	Scenario 3	2.15E-01	4.57E-04	1.41E-03
8756	638436.2	4170348.9	Worker	Scenario 3	2.29E-01	4.87E-04	1.46E-03
8757	638736.2	4170348.9	Worker	Scenario 3	2.39E-01	5.09E-04	1.41E-03
8758	638836.2	4170348.9	Worker	Scenario 3	2.40E-01	5.12E-04	1.49E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8759	638936.2	4170348.9	Worker	Scenario 3	2.41E-01	5.14E-04	1.63E-03
8760	639036.2	4170348.9	Worker	Scenario 3	2.40E-01	5.15E-04	1.87E-03
8761	639136.2	4170348.9	Worker	Scenario 3	2.41E-01	5.17E-04	2.00E-03
8762	639236.2	4170348.9	Worker	Scenario 3	2.36E-01	5.07E-04	1.72E-03
8763	639336.2	4170348.9	Worker	Scenario 3	2.36E-01	5.08E-04	1.72E-03
8764	639436.2	4170348.9	Worker	Scenario 3	2.37E-01	5.11E-04	1.68E-03
8765	639536.2	4170348.9	Worker	Scenario 3	2.45E-01	5.29E-04	1.83E-03
8766	639636.2	4170348.9	Worker	Scenario 3	2.47E-01	5.33E-04	1.81E-03
8767	639736.2	4170348.9	Worker	Scenario 3	2.48E-01	5.37E-04	2.12E-03
8768	639836.2	4170348.9	Worker	Scenario 3	2.51E-01	5.43E-04	2.23E-03
8769	639936.2	4170348.9	Worker	Scenario 3	2.53E-01	5.48E-04	2.17E-03
8770	640036.2	4170348.9	Worker	Scenario 3	2.55E-01	5.53E-04	2.30E-03
8771	640136.2	4170348.9	Worker	Scenario 3	2.57E-01	5.58E-04	2.27E-03
8772	640236.2	4170348.9	Worker	Scenario 3	2.60E-01	5.64E-04	2.38E-03
8773	640336.2	4170348.9	Worker	Scenario 3	2.63E-01	5.70E-04	2.19E-03
8774	640436.2	4170348.9	Worker	Scenario 3	2.66E-01	5.78E-04	2.46E-03
8775	640536.2	4170348.9	Worker	Scenario 3	2.70E-01	5.86E-04	2.48E-03
8776	640636.2	4170348.9	Worker	Scenario 3	2.73E-01	5.95E-04	2.48E-03
8777	640736.2	4170348.9	Worker	Scenario 3	2.77E-01	6.04E-04	2.64E-03
8778	640836.2	4170348.9	Worker	Scenario 3	2.82E-01	6.13E-04	2.55E-03
8779	640936.2	4170348.9	Worker	Scenario 3	2.86E-01	6.22E-04	2.45E-03
8780	641036.2	4170348.9	Worker	Scenario 3	2.91E-01	6.32E-04	2.50E-03
8781	641136.2	4170348.9	Worker	Scenario 3	2.96E-01	6.41E-04	2.58E-03
8782	641236.2	4170348.9	Worker	Scenario 3	2.98E-01	6.44E-04	2.57E-03
8783	641336.2	4170348.9	Worker	Scenario 3	2.95E-01	6.39E-04	2.56E-03
8784	641436.2	4170348.9	Worker	Scenario 3	2.90E-01	6.29E-04	2.62E-03
8785	641536.2	4170348.9	Worker	Scenario 3	2.85E-01	6.18E-04	2.66E-03
8786	641636.2	4170348.9	Worker	Scenario 3	2.79E-01	6.07E-04	2.65E-03
8787	641736.2	4170348.9	Worker	Scenario 3	2.74E-01	5.96E-04	2.64E-03
8788	641836.2	4170348.9	Worker	Scenario 3	2.69E-01	5.85E-04	2.62E-03
8789	641936.2	4170348.9	Worker	Scenario 3	2.63E-01	5.74E-04	2.41E-03
8790	642036.2	4170348.9	Worker	Scenario 3	2.58E-01	5.62E-04	2.58E-03
8791	642136.2	4170348.9	Worker	Scenario 3	2.52E-01	5.51E-04	3.34E-03
8792	642236.2	4170348.9	Worker	Scenario 3	2.48E-01	5.41E-04	4.94E-03
8793	642336.2	4170348.9	Worker	Scenario 3	2.44E-01	5.33E-04	5.59E-03
8794	642436.2	4170348.9	Worker	Scenario 3	2.40E-01	5.23E-04	4.83E-03
8795	642536.2	4170348.9	Worker	Scenario 3	2.35E-01	5.12E-04	3.26E-03
8796	642636.2	4170348.9	Worker	Scenario 3	2.31E-01	5.01E-04	2.17E-03
8797	642736.2	4170348.9	Worker	Scenario 3	2.26E-01	4.90E-04	2.33E-03
8798	642836.2	4170348.9	Worker	Scenario 3	2.20E-01	4.79E-04	2.24E-03
8799	642936.2	4170348.9	Worker	Scenario 3	2.16E-01	4.70E-04	2.28E-03
8800	643036.2	4170348.9	Worker	Scenario 3	2.12E-01	4.62E-04	2.63E-03
8801	643136.2	4170348.9	Worker	Scenario 3	2.08E-01	4.54E-04	2.84E-03
8802	643236.2	4170348.9	Worker	Scenario 3	2.04E-01	4.46E-04	2.61E-03
8803	643336.2	4170348.9	Worker	Scenario 3	2.00E-01	4.38E-04	2.14E-03
8804	643436.2	4170348.9	Worker	Scenario 3	1.96E-01	4.30E-04	1.97E-03
8805	643536.2	4170348.9	Worker	Scenario 3	1.92E-01	4.22E-04	1.98E-03
8806	643636.2	4170348.9	Worker	Scenario 3	1.89E-01	4.14E-04	1.95E-03
8807	635636.2	4170448.9	Worker	Scenario 3	3.79E-02	8.48E-05	1.23E-03
8808	635836.2	4170448.9	Worker	Scenario 3	4.11E-02	9.20E-05	1.21E-03
8809	636036.2	4170448.9	Worker	Scenario 3	4.47E-02	9.99E-05	1.28E-03
8810	636336.2	4170448.9	Worker	Scenario 3	5.38E-02	1.20E-04	9.03E-04
8811	636436.2	4170448.9	Worker	Scenario 3	5.79E-02	1.28E-04	8.91E-04
8812	636536.2	4170448.9	Worker	Scenario 3	6.07E-02	1.34E-04	8.50E-04
8813	636636.2	4170448.9	Worker	Scenario 3	6.34E-02	1.40E-04	8.76E-04
8814	636736.2	4170448.9	Worker	Scenario 3	6.71E-02	1.48E-04	9.59E-04
8815	636836.2	4170448.9	Worker	Scenario 3	7.19E-02	1.58E-04	1.01E-03
8816	636936.2	4170448.9	Worker	Scenario 3	7.70E-02	1.68E-04	1.01E-03
8817	637036.2	4170448.9	Worker	Scenario 3	8.23E-02	1.79E-04	9.74E-04
8818	637136.2	4170448.9	Worker	Scenario 3	8.81E-02	1.91E-04	9.22E-04
8819	637436.2	4170448.9	Worker	Scenario 3	1.09E-01	2.35E-04	1.13E-03
8820	637536.2	4170448.9	Worker	Scenario 3	1.17E-01	2.53E-04	1.16E-03
8821	637636.2	4170448.9	Worker	Scenario 3	1.27E-01	2.73E-04	1.12E-03
8822	637736.2	4170448.9	Worker	Scenario 3	1.37E-01	2.95E-04	1.20E-03
8823	637836.2	4170448.9	Worker	Scenario 3	1.49E-01	3.18E-04	1.22E-03
8824	637936.2	4170448.9	Worker	Scenario 3	1.60E-01	3.43E-04	1.25E-03
8825	638036.2	4170448.9	Worker	Scenario 3	1.72E-01	3.67E-04	1.31E-03
8826	638136.2	4170448.9	Worker	Scenario 3	1.74E-01	3.71E-04	1.23E-03
8827	638236.2	4170448.9	Worker	Scenario 3	1.76E-01	3.78E-04	1.29E-03
8828	638336.2	4170448.9	Worker	Scenario 3	2.00E-01	4.27E-04	1.40E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8829	638636.2	4170448.9	Worker	Scenario 3	2.15E-01	4.59E-04	1.38E-03
8830	638736.2	4170448.9	Worker	Scenario 3	2.09E-01	4.47E-04	1.36E-03
8831	638836.2	4170448.9	Worker	Scenario 3	2.10E-01	4.51E-04	1.51E-03
8832	638936.2	4170448.9	Worker	Scenario 3	2.04E-01	4.39E-04	1.64E-03
8833	639036.2	4170448.9	Worker	Scenario 3	2.06E-01	4.43E-04	1.83E-03
8834	639136.2	4170448.9	Worker	Scenario 3	2.08E-01	4.48E-04	1.68E-03
8835	639236.2	4170448.9	Worker	Scenario 3	2.11E-01	4.55E-04	1.59E-03
8836	639336.2	4170448.9	Worker	Scenario 3	2.09E-01	4.53E-04	1.57E-03
8837	639436.2	4170448.9	Worker	Scenario 3	2.16E-01	4.67E-04	1.67E-03
8838	639536.2	4170448.9	Worker	Scenario 3	2.30E-01	4.96E-04	1.76E-03
8839	639636.2	4170448.9	Worker	Scenario 3	2.32E-01	5.01E-04	1.85E-03
8840	639736.2	4170448.9	Worker	Scenario 3	2.33E-01	5.06E-04	2.15E-03
8841	639836.2	4170448.9	Worker	Scenario 3	2.36E-01	5.11E-04	2.17E-03
8842	639936.2	4170448.9	Worker	Scenario 3	2.38E-01	5.16E-04	2.21E-03
8843	640036.2	4170448.9	Worker	Scenario 3	2.40E-01	5.21E-04	2.24E-03
8844	640136.2	4170448.9	Worker	Scenario 3	2.42E-01	5.26E-04	2.27E-03
8845	640236.2	4170448.9	Worker	Scenario 3	2.45E-01	5.31E-04	2.28E-03
8846	640336.2	4170448.9	Worker	Scenario 3	2.48E-01	5.37E-04	2.20E-03
8847	640436.2	4170448.9	Worker	Scenario 3	2.51E-01	5.45E-04	2.31E-03
8848	640536.2	4170448.9	Worker	Scenario 3	2.54E-01	5.52E-04	2.37E-03
8849	640636.2	4170448.9	Worker	Scenario 3	2.57E-01	5.60E-04	2.43E-03
8850	640736.2	4170448.9	Worker	Scenario 3	2.60E-01	5.67E-04	2.47E-03
8851	640836.2	4170448.9	Worker	Scenario 3	2.64E-01	5.74E-04	2.41E-03
8852	640936.2	4170448.9	Worker	Scenario 3	2.67E-01	5.80E-04	2.38E-03
8853	641036.2	4170448.9	Worker	Scenario 3	2.70E-01	5.85E-04	2.32E-03
8854	641136.2	4170448.9	Worker	Scenario 3	2.71E-01	5.88E-04	2.47E-03
8855	641236.2	4170448.9	Worker	Scenario 3	2.71E-01	5.88E-04	2.47E-03
8856	641336.2	4170448.9	Worker	Scenario 3	2.69E-01	5.84E-04	2.46E-03
8857	641436.2	4170448.9	Worker	Scenario 3	2.66E-01	5.78E-04	2.51E-03
8858	641536.2	4170448.9	Worker	Scenario 3	2.62E-01	5.70E-04	2.54E-03
8859	641636.2	4170448.9	Worker	Scenario 3	2.59E-01	5.63E-04	2.54E-03
8860	641736.2	4170448.9	Worker	Scenario 3	2.55E-01	5.54E-04	2.52E-03
8861	641836.2	4170448.9	Worker	Scenario 3	2.50E-01	5.46E-04	2.50E-03
8862	641936.2	4170448.9	Worker	Scenario 3	2.46E-01	5.36E-04	2.25E-03
8863	642036.2	4170448.9	Worker	Scenario 3	2.42E-01	5.27E-04	2.46E-03
8864	642136.2	4170448.9	Worker	Scenario 3	2.37E-01	5.18E-04	2.89E-03
8865	642236.2	4170448.9	Worker	Scenario 3	2.33E-01	5.10E-04	4.46E-03
8866	642336.2	4170448.9	Worker	Scenario 3	2.30E-01	5.02E-04	5.40E-03
8867	642436.2	4170448.9	Worker	Scenario 3	2.26E-01	4.93E-04	5.05E-03
8868	642536.2	4170448.9	Worker	Scenario 3	2.22E-01	4.84E-04	3.70E-03
8869	642636.2	4170448.9	Worker	Scenario 3	2.18E-01	4.74E-04	2.41E-03
8870	642736.2	4170448.9	Worker	Scenario 3	2.13E-01	4.64E-04	2.15E-03
8871	642836.2	4170448.9	Worker	Scenario 3	2.09E-01	4.54E-04	2.15E-03
8872	642936.2	4170448.9	Worker	Scenario 3	2.05E-01	4.45E-04	2.17E-03
8873	643036.2	4170448.9	Worker	Scenario 3	2.01E-01	4.38E-04	2.30E-03
8874	643136.2	4170448.9	Worker	Scenario 3	1.97E-01	4.31E-04	2.70E-03
8875	643236.2	4170448.9	Worker	Scenario 3	1.94E-01	4.24E-04	2.72E-03
8876	643336.2	4170448.9	Worker	Scenario 3	1.90E-01	4.17E-04	2.35E-03
8877	643436.2	4170448.9	Worker	Scenario 3	1.87E-01	4.10E-04	2.00E-03
8878	643536.2	4170448.9	Worker	Scenario 3	1.83E-01	4.02E-04	1.92E-03
8879	635836.2	4170548.9	Worker	Scenario 3	4.19E-02	9.38E-05	1.19E-03
8880	635936.2	4170548.9	Worker	Scenario 3	4.38E-02	9.80E-05	1.30E-03
8881	636236.2	4170548.9	Worker	Scenario 3	5.17E-02	1.15E-04	8.92E-04
8882	636336.2	4170548.9	Worker	Scenario 3	5.46E-02	1.21E-04	8.30E-04
8883	636436.2	4170548.9	Worker	Scenario 3	5.69E-02	1.26E-04	8.02E-04
8884	636536.2	4170548.9	Worker	Scenario 3	6.07E-02	1.34E-04	8.81E-04
8885	636636.2	4170548.9	Worker	Scenario 3	6.42E-02	1.42E-04	9.45E-04
8886	636736.2	4170548.9	Worker	Scenario 3	6.70E-02	1.47E-04	9.73E-04
8887	636836.2	4170548.9	Worker	Scenario 3	7.24E-02	1.59E-04	9.59E-04
8888	636936.2	4170548.9	Worker	Scenario 3	7.73E-02	1.69E-04	9.03E-04
8889	637036.2	4170548.9	Worker	Scenario 3	8.27E-02	1.80E-04	8.67E-04
8890	637136.2	4170548.9	Worker	Scenario 3	8.63E-02	1.88E-04	9.25E-04
8891	637336.2	4170548.9	Worker	Scenario 3	9.72E-02	2.11E-04	1.11E-03
8892	637436.2	4170548.9	Worker	Scenario 3	1.08E-01	2.32E-04	1.10E-03
8893	637536.2	4170548.9	Worker	Scenario 3	1.15E-01	2.48E-04	1.09E-03
8894	637636.2	4170548.9	Worker	Scenario 3	1.23E-01	2.66E-04	1.16E-03
8895	637736.2	4170548.9	Worker	Scenario 3	1.33E-01	2.85E-04	1.18E-03
8896	637836.2	4170548.9	Worker	Scenario 3	1.42E-01	3.05E-04	1.21E-03
8897	637936.2	4170548.9	Worker	Scenario 3	1.51E-01	3.25E-04	1.25E-03
8898	638036.2	4170548.9	Worker	Scenario 3	1.61E-01	3.44E-04	1.22E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8899	638136.2	4170548.9	Worker	Scenario 3	1.59E-01	3.42E-04	1.26E-03
8900	638236.2	4170548.9	Worker	Scenario 3	1.64E-01	3.53E-04	1.27E-03
8901	638336.2	4170548.9	Worker	Scenario 3	1.84E-01	3.94E-04	1.36E-03
8902	638536.2	4170548.9	Worker	Scenario 3	1.94E-01	4.17E-04	1.36E-03
8903	638636.2	4170548.9	Worker	Scenario 3	1.91E-01	4.09E-04	1.28E-03
8904	638736.2	4170548.9	Worker	Scenario 3	1.93E-01	4.14E-04	1.44E-03
8905	638836.2	4170548.9	Worker	Scenario 3	1.96E-01	4.22E-04	1.60E-03
8906	638936.2	4170548.9	Worker	Scenario 3	1.90E-01	4.11E-04	1.77E-03
8907	639036.2	4170548.9	Worker	Scenario 3	1.93E-01	4.16E-04	1.71E-03
8908	639136.2	4170548.9	Worker	Scenario 3	1.95E-01	4.22E-04	1.52E-03
8909	639236.2	4170548.9	Worker	Scenario 3	1.93E-01	4.18E-04	1.51E-03
8910	639336.2	4170548.9	Worker	Scenario 3	1.98E-01	4.29E-04	1.53E-03
8911	639436.2	4170548.9	Worker	Scenario 3	2.14E-01	4.64E-04	1.67E-03
8912	639536.2	4170548.9	Worker	Scenario 3	2.16E-01	4.68E-04	1.65E-03
8913	639636.2	4170548.9	Worker	Scenario 3	2.18E-01	4.73E-04	1.99E-03
8914	639736.2	4170548.9	Worker	Scenario 3	2.20E-01	4.77E-04	2.06E-03
8915	639836.2	4170548.9	Worker	Scenario 3	2.22E-01	4.83E-04	2.00E-03
8916	639936.2	4170548.9	Worker	Scenario 3	2.25E-01	4.88E-04	2.11E-03
8917	640036.2	4170548.9	Worker	Scenario 3	2.27E-01	4.93E-04	2.06E-03
8918	640136.2	4170548.9	Worker	Scenario 3	2.29E-01	4.97E-04	2.18E-03
8919	640236.2	4170548.9	Worker	Scenario 3	2.31E-01	5.02E-04	2.10E-03
8920	640336.2	4170548.9	Worker	Scenario 3	2.34E-01	5.08E-04	2.22E-03
8921	640436.2	4170548.9	Worker	Scenario 3	2.36E-01	5.14E-04	2.18E-03
8922	640536.2	4170548.9	Worker	Scenario 3	2.39E-01	5.21E-04	2.28E-03
8923	640636.2	4170548.9	Worker	Scenario 3	2.42E-01	5.28E-04	2.38E-03
8924	640736.2	4170548.9	Worker	Scenario 3	2.45E-01	5.34E-04	2.33E-03
8925	640836.2	4170548.9	Worker	Scenario 3	2.47E-01	5.39E-04	2.34E-03
8926	640936.2	4170548.9	Worker	Scenario 3	2.49E-01	5.42E-04	2.33E-03
8927	641036.2	4170548.9	Worker	Scenario 3	2.51E-01	5.45E-04	2.23E-03
8928	641136.2	4170548.9	Worker	Scenario 3	2.51E-01	5.45E-04	2.37E-03
8929	641236.2	4170548.9	Worker	Scenario 3	2.50E-01	5.43E-04	2.37E-03
8930	641336.2	4170548.9	Worker	Scenario 3	2.49E-01	5.40E-04	2.36E-03
8931	641436.2	4170548.9	Worker	Scenario 3	2.47E-01	5.36E-04	2.40E-03
8932	641536.2	4170548.9	Worker	Scenario 3	2.44E-01	5.31E-04	2.44E-03
8933	641636.2	4170548.9	Worker	Scenario 3	2.41E-01	5.25E-04	2.44E-03
8934	641736.2	4170548.9	Worker	Scenario 3	2.38E-01	5.18E-04	2.41E-03
8935	641836.2	4170548.9	Worker	Scenario 3	2.35E-01	5.12E-04	2.37E-03
8936	641936.2	4170548.9	Worker	Scenario 3	2.31E-01	5.04E-04	2.19E-03
8937	642036.2	4170548.9	Worker	Scenario 3	2.27E-01	4.97E-04	2.37E-03
8938	642136.2	4170548.9	Worker	Scenario 3	2.24E-01	4.89E-04	2.60E-03
8939	642236.2	4170548.9	Worker	Scenario 3	2.20E-01	4.82E-04	3.97E-03
8940	642336.2	4170548.9	Worker	Scenario 3	2.17E-01	4.74E-04	5.12E-03
8941	642436.2	4170548.9	Worker	Scenario 3	2.13E-01	4.67E-04	5.15E-03
8942	642536.2	4170548.9	Worker	Scenario 3	2.10E-01	4.58E-04	4.08E-03
8943	642636.2	4170548.9	Worker	Scenario 3	2.06E-01	4.49E-04	2.73E-03
8944	642736.2	4170548.9	Worker	Scenario 3	2.02E-01	4.40E-04	1.97E-03
8945	642836.2	4170548.9	Worker	Scenario 3	1.98E-01	4.31E-04	2.14E-03
8946	642936.2	4170548.9	Worker	Scenario 3	1.94E-01	4.23E-04	2.07E-03
8947	643036.2	4170548.9	Worker	Scenario 3	1.91E-01	4.16E-04	2.10E-03
8948	643136.2	4170548.9	Worker	Scenario 3	1.88E-01	4.10E-04	2.47E-03
8949	643236.2	4170548.9	Worker	Scenario 3	1.85E-01	4.04E-04	2.69E-03
8950	643336.2	4170548.9	Worker	Scenario 3	1.81E-01	3.97E-04	2.53E-03
8951	643436.2	4170548.9	Worker	Scenario 3	1.78E-01	3.91E-04	2.08E-03
8952	643536.2	4170548.9	Worker	Scenario 3	1.75E-01	3.84E-04	1.84E-03
8953	635736.2	4170648.9	Worker	Scenario 3	4.11E-02	9.19E-05	1.23E-03
8954	635836.2	4170648.9	Worker	Scenario 3	4.28E-02	9.57E-05	1.31E-03
8955	636236.2	4170648.9	Worker	Scenario 3	5.19E-02	1.16E-04	8.16E-04
8956	636336.2	4170648.9	Worker	Scenario 3	5.46E-02	1.21E-04	8.06E-04
8957	636436.2	4170648.9	Worker	Scenario 3	5.74E-02	1.27E-04	8.78E-04
8958	636536.2	4170648.9	Worker	Scenario 3	6.44E-02	1.41E-04	9.14E-04
8959	636636.2	4170648.9	Worker	Scenario 3	6.72E-02	1.47E-04	9.24E-04
8960	636736.2	4170648.9	Worker	Scenario 3	6.74E-02	1.48E-04	9.00E-04
8961	636836.2	4170648.9	Worker	Scenario 3	7.28E-02	1.59E-04	8.49E-04
8962	636936.2	4170648.9	Worker	Scenario 3	7.58E-02	1.66E-04	8.25E-04
8963	637036.2	4170648.9	Worker	Scenario 3	8.17E-02	1.78E-04	9.23E-04
8964	637336.2	4170648.9	Worker	Scenario 3	9.94E-02	2.15E-04	1.05E-03
8965	637436.2	4170648.9	Worker	Scenario 3	1.06E-01	2.29E-04	1.06E-03
8966	637536.2	4170648.9	Worker	Scenario 3	1.13E-01	2.44E-04	1.11E-03
8967	637636.2	4170648.9	Worker	Scenario 3	1.20E-01	2.58E-04	1.14E-03
8968	637736.2	4170648.9	Worker	Scenario 3	1.28E-01	2.75E-04	1.17E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8969	637836.2	4170648.9	Worker	Scenario 3	1.36E-01	2.92E-04	1.20E-03
8970	637936.2	4170648.9	Worker	Scenario 3	1.43E-01	3.09E-04	1.18E-03
8971	638036.2	4170648.9	Worker	Scenario 3	1.51E-01	3.25E-04	1.26E-03
8972	638136.2	4170648.9	Worker	Scenario 3	1.52E-01	3.27E-04	1.24E-03
8973	638236.2	4170648.9	Worker	Scenario 3	1.57E-01	3.39E-04	1.26E-03
8974	638336.2	4170648.9	Worker	Scenario 3	1.71E-01	3.67E-04	1.34E-03
8975	638536.2	4170648.9	Worker	Scenario 3	1.81E-01	3.88E-04	1.24E-03
8976	638636.2	4170648.9	Worker	Scenario 3	1.80E-01	3.88E-04	1.38E-03
8977	638736.2	4170648.9	Worker	Scenario 3	1.82E-01	3.93E-04	1.51E-03
8978	638836.2	4170648.9	Worker	Scenario 3	1.85E-01	3.99E-04	1.79E-03
8979	638936.2	4170648.9	Worker	Scenario 3	1.79E-01	3.87E-04	1.71E-03
8980	639036.2	4170648.9	Worker	Scenario 3	1.82E-01	3.94E-04	1.47E-03
8981	639136.2	4170648.9	Worker	Scenario 3	1.85E-01	4.00E-04	1.48E-03
8982	639236.2	4170648.9	Worker	Scenario 3	1.80E-01	3.90E-04	1.37E-03
8983	639336.2	4170648.9	Worker	Scenario 3	1.94E-01	4.21E-04	1.57E-03
8984	639436.2	4170648.9	Worker	Scenario 3	2.02E-01	4.38E-04	1.61E-03
8985	639536.2	4170648.9	Worker	Scenario 3	2.04E-01	4.43E-04	1.77E-03
8986	639636.2	4170648.9	Worker	Scenario 3	2.06E-01	4.48E-04	1.98E-03
8987	639736.2	4170648.9	Worker	Scenario 3	2.08E-01	4.52E-04	1.99E-03
8988	639836.2	4170648.9	Worker	Scenario 3	2.10E-01	4.57E-04	2.03E-03
8989	639936.2	4170648.9	Worker	Scenario 3	2.13E-01	4.62E-04	2.07E-03
8990	640036.2	4170648.9	Worker	Scenario 3	2.15E-01	4.67E-04	2.08E-03
8991	640136.2	4170648.9	Worker	Scenario 3	2.17E-01	4.71E-04	2.11E-03
8992	640236.2	4170648.9	Worker	Scenario 3	2.19E-01	4.76E-04	1.90E-03
8993	640336.2	4170648.9	Worker	Scenario 3	2.21E-01	4.81E-04	2.16E-03
8994	640436.2	4170648.9	Worker	Scenario 3	2.24E-01	4.87E-04	2.17E-03
8995	640536.2	4170648.9	Worker	Scenario 3	2.26E-01	4.93E-04	2.20E-03
8996	640636.2	4170648.9	Worker	Scenario 3	2.28E-01	4.99E-04	2.32E-03
8997	640736.2	4170648.9	Worker	Scenario 3	2.30E-01	5.03E-04	2.21E-03
8998	640836.2	4170648.9	Worker	Scenario 3	2.32E-01	5.07E-04	2.25E-03
8999	640936.2	4170648.9	Worker	Scenario 3	2.34E-01	5.09E-04	2.26E-03
9000	641036.2	4170648.9	Worker	Scenario 3	2.34E-01	5.10E-04	2.19E-03
9001	641136.2	4170648.9	Worker	Scenario 3	2.34E-01	5.09E-04	2.26E-03
9002	641236.2	4170648.9	Worker	Scenario 3	2.33E-01	5.07E-04	2.28E-03
9003	641336.2	4170648.9	Worker	Scenario 3	2.32E-01	5.04E-04	2.26E-03
9004	641436.2	4170648.9	Worker	Scenario 3	2.30E-01	5.01E-04	2.30E-03
9005	641536.2	4170648.9	Worker	Scenario 3	2.28E-01	4.96E-04	2.34E-03
9006	641636.2	4170648.9	Worker	Scenario 3	2.25E-01	4.91E-04	2.33E-03
9007	641736.2	4170648.9	Worker	Scenario 3	2.23E-01	4.86E-04	2.30E-03
9008	641836.2	4170648.9	Worker	Scenario 3	2.20E-01	4.81E-04	2.30E-03
9009	641936.2	4170648.9	Worker	Scenario 3	2.18E-01	4.75E-04	2.16E-03
9010	642036.2	4170648.9	Worker	Scenario 3	2.15E-01	4.69E-04	2.26E-03
9011	642136.2	4170648.9	Worker	Scenario 3	2.12E-01	4.63E-04	2.38E-03
9012	642236.2	4170648.9	Worker	Scenario 3	2.08E-01	4.56E-04	3.50E-03
9013	642336.2	4170648.9	Worker	Scenario 3	2.05E-01	4.50E-04	4.77E-03
9014	642436.2	4170648.9	Worker	Scenario 3	2.02E-01	4.43E-04	5.14E-03
9015	642536.2	4170648.9	Worker	Scenario 3	1.99E-01	4.35E-04	4.38E-03
9016	642636.2	4170648.9	Worker	Scenario 3	1.95E-01	4.26E-04	3.01E-03
9017	642736.2	4170648.9	Worker	Scenario 3	1.92E-01	4.18E-04	2.00E-03
9018	642836.2	4170648.9	Worker	Scenario 3	1.89E-01	4.10E-04	2.02E-03
9019	642936.2	4170648.9	Worker	Scenario 3	1.85E-01	4.03E-04	1.94E-03
9020	643036.2	4170648.9	Worker	Scenario 3	1.82E-01	3.96E-04	1.99E-03
9021	643136.2	4170648.9	Worker	Scenario 3	1.79E-01	3.91E-04	2.17E-03
9022	643236.2	4170648.9	Worker	Scenario 3	1.76E-01	3.85E-04	2.55E-03
9023	643336.2	4170648.9	Worker	Scenario 3	1.73E-01	3.79E-04	2.59E-03
9024	643436.2	4170648.9	Worker	Scenario 3	1.70E-01	3.73E-04	2.31E-03
9025	635736.2	4170748.9	Worker	Scenario 3	4.19E-02	9.36E-05	1.29E-03
9026	636336.2	4170748.9	Worker	Scenario 3	5.49E-02	1.22E-04	8.65E-04
9027	636436.2	4170748.9	Worker	Scenario 3	5.78E-02	1.28E-04	8.91E-04
9028	636536.2	4170748.9	Worker	Scenario 3	6.42E-02	1.41E-04	8.77E-04
9029	636636.2	4170748.9	Worker	Scenario 3	6.75E-02	1.48E-04	8.32E-04
9030	636736.2	4170748.9	Worker	Scenario 3	7.10E-02	1.55E-04	7.96E-04
9031	636836.2	4170748.9	Worker	Scenario 3	7.47E-02	1.63E-04	8.00E-04
9032	636936.2	4170748.9	Worker	Scenario 3	7.82E-02	1.70E-04	9.13E-04
9033	637236.2	4170748.9	Worker	Scenario 3	9.09E-02	1.98E-04	9.97E-04
9034	637336.2	4170748.9	Worker	Scenario 3	9.81E-02	2.13E-04	1.03E-03
9035	637436.2	4170748.9	Worker	Scenario 3	1.04E-01	2.25E-04	1.06E-03
9036	637536.2	4170748.9	Worker	Scenario 3	1.10E-01	2.38E-04	1.09E-03
9037	637636.2	4170748.9	Worker	Scenario 3	1.17E-01	2.52E-04	1.12E-03
9038	637736.2	4170748.9	Worker	Scenario 3	1.23E-01	2.66E-04	1.15E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9039	637836.2	4170748.9	Worker	Scenario 3	1.30E-01	2.80E-04	1.14E-03
9040	637936.2	4170748.9	Worker	Scenario 3	1.36E-01	2.95E-04	1.21E-03
9041	638036.2	4170748.9	Worker	Scenario 3	1.43E-01	3.08E-04	1.23E-03
9042	638136.2	4170748.9	Worker	Scenario 3	1.49E-01	3.21E-04	1.24E-03
9043	638236.2	4170748.9	Worker	Scenario 3	1.55E-01	3.34E-04	1.31E-03
9044	638336.2	4170748.9	Worker	Scenario 3	1.60E-01	3.45E-04	1.32E-03
9045	638636.2	4170748.9	Worker	Scenario 3	1.70E-01	3.67E-04	1.43E-03
9046	638736.2	4170748.9	Worker	Scenario 3	1.74E-01	3.75E-04	1.74E-03
9047	638836.2	4170748.9	Worker	Scenario 3	1.79E-01	3.86E-04	1.84E-03
9048	638936.2	4170748.9	Worker	Scenario 3	1.69E-01	3.66E-04	1.49E-03
9049	639036.2	4170748.9	Worker	Scenario 3	1.72E-01	3.73E-04	1.40E-03
9050	639136.2	4170748.9	Worker	Scenario 3	1.76E-01	3.81E-04	1.42E-03
9051	639236.2	4170748.9	Worker	Scenario 3	1.71E-01	3.72E-04	1.41E-03
9052	639336.2	4170748.9	Worker	Scenario 3	1.84E-01	3.98E-04	1.51E-03
9053	639436.2	4170748.9	Worker	Scenario 3	1.91E-01	4.15E-04	1.52E-03
9054	639536.2	4170748.9	Worker	Scenario 3	1.94E-01	4.20E-04	1.86E-03
9055	639636.2	4170748.9	Worker	Scenario 3	1.96E-01	4.26E-04	1.91E-03
9056	639736.2	4170748.9	Worker	Scenario 3	1.98E-01	4.30E-04	1.84E-03
9057	639836.2	4170748.9	Worker	Scenario 3	2.00E-01	4.34E-04	1.95E-03
9058	639936.2	4170748.9	Worker	Scenario 3	2.02E-01	4.38E-04	1.92E-03
9059	640036.2	4170748.9	Worker	Scenario 3	2.04E-01	4.43E-04	2.02E-03
9060	640136.2	4170748.9	Worker	Scenario 3	2.06E-01	4.47E-04	1.99E-03
9061	640236.2	4170748.9	Worker	Scenario 3	2.08E-01	4.52E-04	1.98E-03
9062	640336.2	4170748.9	Worker	Scenario 3	2.10E-01	4.57E-04	2.04E-03
9063	640436.2	4170748.9	Worker	Scenario 3	2.12E-01	4.63E-04	2.11E-03
9064	640536.2	4170748.9	Worker	Scenario 3	2.14E-01	4.68E-04	2.12E-03
9065	640636.2	4170748.9	Worker	Scenario 3	2.16E-01	4.72E-04	2.22E-03
9066	640736.2	4170748.9	Worker	Scenario 3	2.18E-01	4.76E-04	2.15E-03
9067	640836.2	4170748.9	Worker	Scenario 3	2.19E-01	4.78E-04	2.14E-03
9068	640936.2	4170748.9	Worker	Scenario 3	2.20E-01	4.79E-04	2.17E-03
9069	641036.2	4170748.9	Worker	Scenario 3	2.20E-01	4.79E-04	2.15E-03
9070	641136.2	4170748.9	Worker	Scenario 3	2.19E-01	4.78E-04	2.16E-03
9071	641236.2	4170748.9	Worker	Scenario 3	2.18E-01	4.75E-04	2.19E-03
9072	641336.2	4170748.9	Worker	Scenario 3	2.17E-01	4.73E-04	2.18E-03
9073	641436.2	4170748.9	Worker	Scenario 3	2.16E-01	4.70E-04	2.21E-03
9074	641536.2	4170748.9	Worker	Scenario 3	2.14E-01	4.67E-04	2.25E-03
9075	641636.2	4170748.9	Worker	Scenario 3	2.12E-01	4.62E-04	2.23E-03
9076	641736.2	4170748.9	Worker	Scenario 3	2.10E-01	4.58E-04	2.20E-03
9077	641836.2	4170748.9	Worker	Scenario 3	2.08E-01	4.54E-04	2.22E-03
9078	641936.2	4170748.9	Worker	Scenario 3	2.06E-01	4.50E-04	2.13E-03
9079	642036.2	4170748.9	Worker	Scenario 3	2.03E-01	4.45E-04	2.14E-03
9080	642136.2	4170748.9	Worker	Scenario 3	2.01E-01	4.39E-04	2.19E-03
9081	642236.2	4170748.9	Worker	Scenario 3	1.98E-01	4.33E-04	3.06E-03
9082	642336.2	4170748.9	Worker	Scenario 3	1.95E-01	4.27E-04	4.39E-03
9083	642436.2	4170748.9	Worker	Scenario 3	1.92E-01	4.21E-04	5.03E-03
9084	642536.2	4170748.9	Worker	Scenario 3	1.89E-01	4.13E-04	4.60E-03
9085	642636.2	4170748.9	Worker	Scenario 3	1.86E-01	4.06E-04	3.39E-03
9086	642736.2	4170748.9	Worker	Scenario 3	1.82E-01	3.98E-04	2.31E-03
9087	642836.2	4170748.9	Worker	Scenario 3	1.79E-01	3.91E-04	1.84E-03
9088	642936.2	4170748.9	Worker	Scenario 3	1.76E-01	3.83E-04	1.95E-03
9089	643036.2	4170748.9	Worker	Scenario 3	1.74E-01	3.78E-04	1.92E-03
9090	643136.2	4170748.9	Worker	Scenario 3	1.71E-01	3.72E-04	1.95E-03
9091	643236.2	4170748.9	Worker	Scenario 3	1.68E-01	3.67E-04	2.32E-03
9092	643336.2	4170748.9	Worker	Scenario 3	1.65E-01	3.62E-04	2.55E-03
9093	636436.2	4170848.9	Worker	Scenario 3	5.82E-02	1.29E-04	8.30E-04
9094	636536.2	4170848.9	Worker	Scenario 3	6.12E-02	1.35E-04	7.83E-04
9095	636936.2	4170848.9	Worker	Scenario 3	7.52E-02	1.65E-04	9.68E-04
9096	637336.2	4170848.9	Worker	Scenario 3	9.59E-02	2.08E-04	1.02E-03
9097	637436.2	4170848.9	Worker	Scenario 3	1.02E-01	2.21E-04	1.05E-03
9098	637536.2	4170848.9	Worker	Scenario 3	1.07E-01	2.33E-04	1.09E-03
9099	637636.2	4170848.9	Worker	Scenario 3	1.13E-01	2.44E-04	1.08E-03
9100	637736.2	4170848.9	Worker	Scenario 3	1.18E-01	2.57E-04	1.09E-03
9101	637836.2	4170848.9	Worker	Scenario 3	1.25E-01	2.70E-04	1.15E-03
9102	637936.2	4170848.9	Worker	Scenario 3	1.30E-01	2.82E-04	1.17E-03
9103	638036.2	4170848.9	Worker	Scenario 3	1.36E-01	2.94E-04	1.20E-03
9104	638136.2	4170848.9	Worker	Scenario 3	1.42E-01	3.06E-04	1.28E-03
9105	638236.2	4170848.9	Worker	Scenario 3	1.47E-01	3.17E-04	1.30E-03
9106	638336.2	4170848.9	Worker	Scenario 3	1.51E-01	3.27E-04	1.19E-03
9107	638536.2	4170848.9	Worker	Scenario 3	1.60E-01	3.45E-04	1.37E-03
9108	638636.2	4170848.9	Worker	Scenario 3	1.63E-01	3.52E-04	1.69E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9109	638736.2	4170848.9	Worker	Scenario 3	1.66E-01	3.60E-04	1.82E-03
9110	638836.2	4170848.9	Worker	Scenario 3	1.67E-01	3.61E-04	1.62E-03
9111	638936.2	4170848.9	Worker	Scenario 3	1.60E-01	3.48E-04	1.35E-03
9112	639036.2	4170848.9	Worker	Scenario 3	1.64E-01	3.55E-04	1.37E-03
9113	639136.2	4170848.9	Worker	Scenario 3	1.66E-01	3.61E-04	1.37E-03
9114	639236.2	4170848.9	Worker	Scenario 3	1.63E-01	3.55E-04	1.36E-03
9115	639336.2	4170848.9	Worker	Scenario 3	1.74E-01	3.79E-04	1.42E-03
9116	639436.2	4170848.9	Worker	Scenario 3	1.80E-01	3.92E-04	1.67E-03
9117	639536.2	4170848.9	Worker	Scenario 3	1.82E-01	3.97E-04	1.81E-03
9118	639636.2	4170848.9	Worker	Scenario 3	1.86E-01	4.05E-04	1.83E-03
9119	639736.2	4170848.9	Worker	Scenario 3	1.88E-01	4.09E-04	1.88E-03
9120	639836.2	4170848.9	Worker	Scenario 3	1.90E-01	4.13E-04	1.91E-03
9121	639936.2	4170848.9	Worker	Scenario 3	1.92E-01	4.17E-04	1.89E-03
9122	640036.2	4170848.9	Worker	Scenario 3	1.94E-01	4.21E-04	1.95E-03
9123	640136.2	4170848.9	Worker	Scenario 3	1.95E-01	4.25E-04	1.81E-03
9124	640236.2	4170848.9	Worker	Scenario 3	1.98E-01	4.30E-04	1.98E-03
9125	640336.2	4170848.9	Worker	Scenario 3	2.00E-01	4.35E-04	1.92E-03
9126	640436.2	4170848.9	Worker	Scenario 3	2.01E-01	4.40E-04	2.01E-03
9127	640536.2	4170848.9	Worker	Scenario 3	2.03E-01	4.44E-04	2.06E-03
9128	640636.2	4170848.9	Worker	Scenario 3	2.05E-01	4.48E-04	2.10E-03
9129	640736.2	4170848.9	Worker	Scenario 3	2.06E-01	4.51E-04	2.07E-03
9130	640836.2	4170848.9	Worker	Scenario 3	2.07E-01	4.52E-04	2.01E-03
9131	640936.2	4170848.9	Worker	Scenario 3	2.07E-01	4.53E-04	2.07E-03
9132	641036.2	4170848.9	Worker	Scenario 3	2.07E-01	4.52E-04	2.10E-03
9133	641136.2	4170848.9	Worker	Scenario 3	2.07E-01	4.50E-04	2.08E-03
9134	641236.2	4170848.9	Worker	Scenario 3	2.05E-01	4.48E-04	2.10E-03
9135	641336.2	4170848.9	Worker	Scenario 3	2.04E-01	4.45E-04	2.10E-03
9136	641436.2	4170848.9	Worker	Scenario 3	2.03E-01	4.43E-04	2.13E-03
9137	641536.2	4170848.9	Worker	Scenario 3	2.01E-01	4.40E-04	2.16E-03
9138	641636.2	4170848.9	Worker	Scenario 3	2.00E-01	4.36E-04	2.14E-03
9139	641736.2	4170848.9	Worker	Scenario 3	1.98E-01	4.33E-04	2.13E-03
9140	641836.2	4170848.9	Worker	Scenario 3	1.97E-01	4.30E-04	2.13E-03
9141	641936.2	4170848.9	Worker	Scenario 3	1.95E-01	4.27E-04	2.09E-03
9142	642036.2	4170848.9	Worker	Scenario 3	1.93E-01	4.23E-04	2.02E-03
9143	642136.2	4170848.9	Worker	Scenario 3	1.91E-01	4.17E-04	2.10E-03
9144	642236.2	4170848.9	Worker	Scenario 3	1.88E-01	4.12E-04	2.66E-03
9145	642336.2	4170848.9	Worker	Scenario 3	1.86E-01	4.07E-04	3.98E-03
9146	642436.2	4170848.9	Worker	Scenario 3	1.83E-01	4.01E-04	4.84E-03
9147	642536.2	4170848.9	Worker	Scenario 3	1.80E-01	3.94E-04	4.72E-03
9148	642636.2	4170848.9	Worker	Scenario 3	1.77E-01	3.87E-04	3.72E-03
9149	642736.2	4170848.9	Worker	Scenario 3	1.74E-01	3.80E-04	2.57E-03
9150	642836.2	4170848.9	Worker	Scenario 3	1.71E-01	3.73E-04	1.75E-03
9151	642936.2	4170848.9	Worker	Scenario 3	1.68E-01	3.66E-04	1.88E-03
9152	643036.2	4170848.9	Worker	Scenario 3	1.66E-01	3.61E-04	1.76E-03
9153	643136.2	4170848.9	Worker	Scenario 3	1.63E-01	3.56E-04	1.83E-03
9154	643236.2	4170848.9	Worker	Scenario 3	1.61E-01	3.51E-04	2.05E-03
9155	643336.2	4170848.9	Worker	Scenario 3	1.58E-01	3.46E-04	2.40E-03
9156	637336.2	4170948.9	Worker	Scenario 3	9.44E-02	2.05E-04	1.02E-03
9157	637436.2	4170948.9	Worker	Scenario 3	9.94E-02	2.16E-04	1.05E-03
9158	637536.2	4170948.9	Worker	Scenario 3	1.05E-01	2.28E-04	1.04E-03
9159	637636.2	4170948.9	Worker	Scenario 3	1.06E-01	2.31E-04	1.02E-03
9160	637736.2	4170948.9	Worker	Scenario 3	1.11E-01	2.41E-04	1.07E-03
9161	637836.2	4170948.9	Worker	Scenario 3	1.17E-01	2.53E-04	1.10E-03
9162	637936.2	4170948.9	Worker	Scenario 3	1.23E-01	2.68E-04	1.13E-03
9163	638036.2	4170948.9	Worker	Scenario 3	1.30E-01	2.82E-04	1.26E-03
9164	638136.2	4170948.9	Worker	Scenario 3	1.35E-01	2.92E-04	1.28E-03
9165	638236.2	4170948.9	Worker	Scenario 3	1.39E-01	3.02E-04	1.18E-03
9166	638536.2	4170948.9	Worker	Scenario 3	1.51E-01	3.27E-04	1.60E-03
9167	638636.2	4170948.9	Worker	Scenario 3	1.54E-01	3.34E-04	1.77E-03
9168	638736.2	4170948.9	Worker	Scenario 3	1.57E-01	3.41E-04	1.68E-03
9169	638836.2	4170948.9	Worker	Scenario 3	1.53E-01	3.32E-04	1.34E-03
9170	638936.2	4170948.9	Worker	Scenario 3	1.53E-01	3.32E-04	1.31E-03
9171	639036.2	4170948.9	Worker	Scenario 3	1.56E-01	3.38E-04	1.27E-03
9172	639136.2	4170948.9	Worker	Scenario 3	1.52E-01	3.30E-04	1.30E-03
9173	639236.2	4170948.9	Worker	Scenario 3	1.54E-01	3.35E-04	1.30E-03
9174	639336.2	4170948.9	Worker	Scenario 3	1.67E-01	3.63E-04	1.44E-03
9175	639436.2	4170948.9	Worker	Scenario 3	1.71E-01	3.72E-04	1.72E-03
9176	639536.2	4170948.9	Worker	Scenario 3	1.74E-01	3.79E-04	1.76E-03
9177	639636.2	4170948.9	Worker	Scenario 3	1.76E-01	3.84E-04	1.70E-03
9178	639736.2	4170948.9	Worker	Scenario 3	1.79E-01	3.90E-04	1.81E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9179	639836.2	4170948.9	Worker	Scenario 3	1.81E-01	3.94E-04	1.80E-03
9180	639936.2	4170948.9	Worker	Scenario 3	1.83E-01	3.97E-04	1.87E-03
9181	640036.2	4170948.9	Worker	Scenario 3	1.84E-01	4.01E-04	1.87E-03
9182	640136.2	4170948.9	Worker	Scenario 3	1.86E-01	4.05E-04	1.73E-03
9183	640236.2	4170948.9	Worker	Scenario 3	1.88E-01	4.10E-04	1.93E-03
9184	640336.2	4170948.9	Worker	Scenario 3	1.90E-01	4.14E-04	1.93E-03
9185	640436.2	4170948.9	Worker	Scenario 3	1.92E-01	4.19E-04	1.96E-03
9186	640536.2	4170948.9	Worker	Scenario 3	1.93E-01	4.23E-04	2.03E-03
9187	640636.2	4170948.9	Worker	Scenario 3	1.95E-01	4.26E-04	2.00E-03
9188	640736.2	4170948.9	Worker	Scenario 3	1.96E-01	4.28E-04	1.97E-03
9189	640836.2	4170948.9	Worker	Scenario 3	1.96E-01	4.29E-04	1.90E-03
9190	640936.2	4170948.9	Worker	Scenario 3	1.96E-01	4.29E-04	1.97E-03
9191	641036.2	4170948.9	Worker	Scenario 3	1.96E-01	4.28E-04	2.05E-03
9192	641136.2	4170948.9	Worker	Scenario 3	1.95E-01	4.26E-04	2.01E-03
9193	641236.2	4170948.9	Worker	Scenario 3	1.94E-01	4.23E-04	2.01E-03
9194	641336.2	4170948.9	Worker	Scenario 3	1.92E-01	4.20E-04	2.01E-03
9195	641436.2	4170948.9	Worker	Scenario 3	1.91E-01	4.18E-04	2.04E-03
9196	641536.2	4170948.9	Worker	Scenario 3	1.90E-01	4.16E-04	2.07E-03
9197	641636.2	4170948.9	Worker	Scenario 3	1.89E-01	4.13E-04	2.05E-03
9198	641736.2	4170948.9	Worker	Scenario 3	1.87E-01	4.10E-04	2.05E-03
9199	641836.2	4170948.9	Worker	Scenario 3	1.86E-01	4.07E-04	2.04E-03
9200	641936.2	4170948.9	Worker	Scenario 3	1.85E-01	4.05E-04	2.03E-03
9201	642036.2	4170948.9	Worker	Scenario 3	1.83E-01	4.02E-04	1.89E-03
9202	642136.2	4170948.9	Worker	Scenario 3	1.81E-01	3.98E-04	2.01E-03
9203	642236.2	4170948.9	Worker	Scenario 3	1.79E-01	3.93E-04	2.36E-03
9204	642336.2	4170948.9	Worker	Scenario 3	1.77E-01	3.87E-04	3.58E-03
9205	642436.2	4170948.9	Worker	Scenario 3	1.74E-01	3.82E-04	4.57E-03
9206	642536.2	4170948.9	Worker	Scenario 3	1.71E-01	3.76E-04	4.74E-03
9207	642636.2	4170948.9	Worker	Scenario 3	1.68E-01	3.69E-04	4.00E-03
9208	642736.2	4170948.9	Worker	Scenario 3	1.66E-01	3.62E-04	2.80E-03
9209	642836.2	4170948.9	Worker	Scenario 3	1.63E-01	3.56E-04	1.95E-03
9210	642936.2	4170948.9	Worker	Scenario 3	1.61E-01	3.50E-04	1.74E-03
9211	643036.2	4170948.9	Worker	Scenario 3	1.59E-01	3.45E-04	1.79E-03
9212	643136.2	4170948.9	Worker	Scenario 3	1.56E-01	3.41E-04	1.78E-03
9213	643236.2	4170948.9	Worker	Scenario 3	1.54E-01	3.36E-04	1.82E-03
9214	636836.2	4171048.9	Worker	Scenario 3	7.15E-02	1.57E-04	8.92E-04
9215	637036.2	4171048.9	Worker	Scenario 3	7.97E-02	1.74E-04	9.41E-04
9216	637136.2	4171048.9	Worker	Scenario 3	8.44E-02	1.84E-04	9.33E-04
9217	637236.2	4171048.9	Worker	Scenario 3	8.89E-02	1.94E-04	9.63E-04
9218	637336.2	4171048.9	Worker	Scenario 3	9.08E-02	1.98E-04	9.78E-04
9219	637436.2	4171048.9	Worker	Scenario 3	9.67E-02	2.11E-04	9.88E-04
9220	637536.2	4171048.9	Worker	Scenario 3	1.02E-01	2.22E-04	1.02E-03
9221	637636.2	4171048.9	Worker	Scenario 3	1.06E-01	2.32E-04	1.07E-03
9222	637736.2	4171048.9	Worker	Scenario 3	1.07E-01	2.34E-04	1.05E-03
9223	637836.2	4171048.9	Worker	Scenario 3	1.12E-01	2.43E-04	1.06E-03
9224	637936.2	4171048.9	Worker	Scenario 3	1.20E-01	2.61E-04	1.21E-03
9225	638036.2	4171048.9	Worker	Scenario 3	1.25E-01	2.71E-04	1.23E-03
9226	638136.2	4171048.9	Worker	Scenario 3	1.29E-01	2.80E-04	1.17E-03
9227	638236.2	4171048.9	Worker	Scenario 3	1.33E-01	2.89E-04	1.12E-03
9228	638436.2	4171048.9	Worker	Scenario 3	1.41E-01	3.05E-04	1.52E-03
9229	638536.2	4171048.9	Worker	Scenario 3	1.44E-01	3.13E-04	1.73E-03
9230	638636.2	4171048.9	Worker	Scenario 3	1.47E-01	3.20E-04	1.72E-03
9231	638736.2	4171048.9	Worker	Scenario 3	1.51E-01	3.26E-04	1.43E-03
9232	638836.2	4171048.9	Worker	Scenario 3	1.44E-01	3.13E-04	1.26E-03
9233	638936.2	4171048.9	Worker	Scenario 3	1.45E-01	3.16E-04	1.24E-03
9234	639036.2	4171048.9	Worker	Scenario 3	1.50E-01	3.26E-04	1.31E-03
9235	639136.2	4171048.9	Worker	Scenario 3	1.52E-01	3.30E-04	1.32E-03
9236	639236.2	4171048.9	Worker	Scenario 3	1.53E-01	3.34E-04	1.28E-03
9237	639336.2	4171048.9	Worker	Scenario 3	1.61E-01	3.50E-04	1.57E-03
9238	639436.2	4171048.9	Worker	Scenario 3	1.60E-01	3.48E-04	1.63E-03
9239	639536.2	4171048.9	Worker	Scenario 3	1.62E-01	3.53E-04	1.64E-03
9240	639636.2	4171048.9	Worker	Scenario 3	1.68E-01	3.67E-04	1.73E-03
9241	639736.2	4171048.9	Worker	Scenario 3	1.71E-01	3.73E-04	1.77E-03
9242	639836.2	4171048.9	Worker	Scenario 3	1.73E-01	3.76E-04	1.73E-03
9243	639936.2	4171048.9	Worker	Scenario 3	1.74E-01	3.79E-04	1.79E-03
9244	640036.2	4171048.9	Worker	Scenario 3	1.76E-01	3.83E-04	1.74E-03
9245	640136.2	4171048.9	Worker	Scenario 3	1.78E-01	3.87E-04	1.78E-03
9246	640236.2	4171048.9	Worker	Scenario 3	1.79E-01	3.91E-04	1.82E-03
9247	640336.2	4171048.9	Worker	Scenario 3	1.81E-01	3.95E-04	1.88E-03
9248	640436.2	4171048.9	Worker	Scenario 3	1.83E-01	3.99E-04	1.87E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9249	640536.2	4171048.9	Worker	Scenario 3	1.84E-01	4.03E-04	1.98E-03
9250	640636.2	4171048.9	Worker	Scenario 3	1.85E-01	4.05E-04	1.91E-03
9251	640736.2	4171048.9	Worker	Scenario 3	1.86E-01	4.07E-04	1.93E-03
9252	640836.2	4171048.9	Worker	Scenario 3	1.86E-01	4.08E-04	1.88E-03
9253	640936.2	4171048.9	Worker	Scenario 3	1.86E-01	4.07E-04	1.91E-03
9254	641036.2	4171048.9	Worker	Scenario 3	1.86E-01	4.06E-04	2.00E-03
9255	641136.2	4171048.9	Worker	Scenario 3	1.85E-01	4.04E-04	1.95E-03
9256	641236.2	4171048.9	Worker	Scenario 3	1.84E-01	4.01E-04	1.93E-03
9257	641336.2	4171048.9	Worker	Scenario 3	1.83E-01	3.99E-04	1.95E-03
9258	641436.2	4171048.9	Worker	Scenario 3	1.81E-01	3.97E-04	1.97E-03
9259	641536.2	4171048.9	Worker	Scenario 3	1.80E-01	3.95E-04	2.00E-03
9260	641636.2	4171048.9	Worker	Scenario 3	1.79E-01	3.92E-04	1.97E-03
9261	641736.2	4171048.9	Worker	Scenario 3	1.78E-01	3.89E-04	1.98E-03
9262	641836.2	4171048.9	Worker	Scenario 3	1.77E-01	3.87E-04	1.96E-03
9263	641936.2	4171048.9	Worker	Scenario 3	1.76E-01	3.85E-04	1.97E-03
9264	642036.2	4171048.9	Worker	Scenario 3	1.75E-01	3.83E-04	1.78E-03
9265	642136.2	4171048.9	Worker	Scenario 3	1.73E-01	3.79E-04	1.94E-03
9266	642236.2	4171048.9	Worker	Scenario 3	1.71E-01	3.75E-04	2.13E-03
9267	642336.2	4171048.9	Worker	Scenario 3	1.69E-01	3.70E-04	3.18E-03
9268	642436.2	4171048.9	Worker	Scenario 3	1.66E-01	3.64E-04	4.26E-03
9269	642536.2	4171048.9	Worker	Scenario 3	1.63E-01	3.59E-04	4.68E-03
9270	642636.2	4171048.9	Worker	Scenario 3	1.61E-01	3.53E-04	4.20E-03
9271	642736.2	4171048.9	Worker	Scenario 3	1.58E-01	3.47E-04	3.12E-03
9272	642836.2	4171048.9	Worker	Scenario 3	1.56E-01	3.41E-04	2.22E-03
9273	642936.2	4171048.9	Worker	Scenario 3	1.54E-01	3.35E-04	1.61E-03
9274	643036.2	4171048.9	Worker	Scenario 3	1.52E-01	3.31E-04	1.76E-03
9275	643136.2	4171048.9	Worker	Scenario 3	1.50E-01	3.26E-04	1.66E-03
9276	636936.2	4171148.9	Worker	Scenario 3	7.63E-02	1.67E-04	9.07E-04
9277	637036.2	4171148.9	Worker	Scenario 3	7.94E-02	1.73E-04	9.02E-04
9278	637136.2	4171148.9	Worker	Scenario 3	8.27E-02	1.80E-04	9.15E-04
9279	637236.2	4171148.9	Worker	Scenario 3	8.65E-02	1.89E-04	9.55E-04
9280	637336.2	4171148.9	Worker	Scenario 3	8.78E-02	1.92E-04	9.18E-04
9281	637436.2	4171148.9	Worker	Scenario 3	9.14E-02	2.00E-04	9.40E-04
9282	637536.2	4171148.9	Worker	Scenario 3	9.54E-02	2.08E-04	9.85E-04
9283	637636.2	4171148.9	Worker	Scenario 3	1.03E-01	2.25E-04	1.05E-03
9284	637736.2	4171148.9	Worker	Scenario 3	1.08E-01	2.34E-04	1.07E-03
9285	637836.2	4171148.9	Worker	Scenario 3	1.11E-01	2.43E-04	1.20E-03
9286	637936.2	4171148.9	Worker	Scenario 3	1.11E-01	2.42E-04	1.13E-03
9287	638036.2	4171148.9	Worker	Scenario 3	1.20E-01	2.61E-04	1.16E-03
9288	638136.2	4171148.9	Worker	Scenario 3	1.24E-01	2.69E-04	1.06E-03
9289	638436.2	4171148.9	Worker	Scenario 3	1.35E-01	2.93E-04	1.68E-03
9290	638536.2	4171148.9	Worker	Scenario 3	1.38E-01	3.00E-04	1.71E-03
9291	638636.2	4171148.9	Worker	Scenario 3	1.41E-01	3.06E-04	1.50E-03
9292	638736.2	4171148.9	Worker	Scenario 3	1.44E-01	3.12E-04	1.29E-03
9293	638836.2	4171148.9	Worker	Scenario 3	1.37E-01	2.98E-04	1.22E-03
9294	638936.2	4171148.9	Worker	Scenario 3	1.40E-01	3.05E-04	1.23E-03
9295	639036.2	4171148.9	Worker	Scenario 3	1.43E-01	3.10E-04	1.26E-03
9296	639136.2	4171148.9	Worker	Scenario 3	1.43E-01	3.12E-04	1.24E-03
9297	639236.2	4171148.9	Worker	Scenario 3	1.45E-01	3.17E-04	1.33E-03
9298	639336.2	4171148.9	Worker	Scenario 3	1.56E-01	3.40E-04	1.62E-03
9299	639436.2	4171148.9	Worker	Scenario 3	1.53E-01	3.35E-04	1.59E-03
9300	639536.2	4171148.9	Worker	Scenario 3	1.55E-01	3.38E-04	1.53E-03
9301	639636.2	4171148.9	Worker	Scenario 3	1.61E-01	3.51E-04	1.68E-03
9302	639736.2	4171148.9	Worker	Scenario 3	1.63E-01	3.56E-04	1.69E-03
9303	639836.2	4171148.9	Worker	Scenario 3	1.65E-01	3.60E-04	1.74E-03
9304	639936.2	4171148.9	Worker	Scenario 3	1.67E-01	3.63E-04	1.75E-03
9305	640036.2	4171148.9	Worker	Scenario 3	1.68E-01	3.66E-04	1.57E-03
9306	640136.2	4171148.9	Worker	Scenario 3	1.70E-01	3.70E-04	1.78E-03
9307	640236.2	4171148.9	Worker	Scenario 3	1.71E-01	3.74E-04	1.71E-03
9308	640336.2	4171148.9	Worker	Scenario 3	1.73E-01	3.78E-04	1.80E-03
9309	640436.2	4171148.9	Worker	Scenario 3	1.74E-01	3.81E-04	1.83E-03
9310	640536.2	4171148.9	Worker	Scenario 3	1.75E-01	3.84E-04	1.91E-03
9311	640636.2	4171148.9	Worker	Scenario 3	1.76E-01	3.86E-04	1.84E-03
9312	640736.2	4171148.9	Worker	Scenario 3	1.77E-01	3.88E-04	1.86E-03
9313	640836.2	4171148.9	Worker	Scenario 3	1.77E-01	3.88E-04	1.85E-03
9314	640936.2	4171148.9	Worker	Scenario 3	1.77E-01	3.87E-04	1.90E-03
9315	641036.2	4171148.9	Worker	Scenario 3	1.77E-01	3.86E-04	1.95E-03
9316	641136.2	4171148.9	Worker	Scenario 3	1.76E-01	3.84E-04	1.88E-03
9317	641236.2	4171148.9	Worker	Scenario 3	1.75E-01	3.82E-04	1.86E-03
9318	641336.2	4171148.9	Worker	Scenario 3	1.74E-01	3.80E-04	1.88E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9319	641436.2	4171148.9	Worker	Scenario 3	1.73E-01	3.78E-04	1.91E-03
9320	641536.2	4171148.9	Worker	Scenario 3	1.71E-01	3.75E-04	1.93E-03
9321	641636.2	4171148.9	Worker	Scenario 3	1.70E-01	3.73E-04	1.90E-03
9322	641736.2	4171148.9	Worker	Scenario 3	1.69E-01	3.71E-04	1.92E-03
9323	641836.2	4171148.9	Worker	Scenario 3	1.68E-01	3.69E-04	1.88E-03
9324	641936.2	4171148.9	Worker	Scenario 3	1.68E-01	3.67E-04	1.90E-03
9325	642036.2	4171148.9	Worker	Scenario 3	1.67E-01	3.65E-04	1.70E-03
9326	642136.2	4171148.9	Worker	Scenario 3	1.65E-01	3.62E-04	1.87E-03
9327	642236.2	4171148.9	Worker	Scenario 3	1.63E-01	3.58E-04	1.97E-03
9328	642336.2	4171148.9	Worker	Scenario 3	1.61E-01	3.53E-04	2.81E-03
9329	642436.2	4171148.9	Worker	Scenario 3	1.59E-01	3.48E-04	3.93E-03
9330	642536.2	4171148.9	Worker	Scenario 3	1.56E-01	3.43E-04	4.54E-03
9331	642636.2	4171148.9	Worker	Scenario 3	1.54E-01	3.38E-04	4.32E-03
9332	642736.2	4171148.9	Worker	Scenario 3	1.51E-01	3.32E-04	3.41E-03
9333	642836.2	4171148.9	Worker	Scenario 3	1.49E-01	3.26E-04	2.42E-03
9334	642936.2	4171148.9	Worker	Scenario 3	1.47E-01	3.22E-04	1.63E-03
9335	643036.2	4171148.9	Worker	Scenario 3	1.45E-01	3.16E-04	1.65E-03
9336	636836.2	4171248.9	Worker	Scenario 3	7.09E-02	1.55E-04	8.78E-04
9337	636936.2	4171248.9	Worker	Scenario 3	7.51E-02	1.64E-04	8.72E-04
9338	637036.2	4171248.9	Worker	Scenario 3	7.81E-02	1.71E-04	8.81E-04
9339	637136.2	4171248.9	Worker	Scenario 3	8.11E-02	1.77E-04	9.16E-04
9340	637236.2	4171248.9	Worker	Scenario 3	8.47E-02	1.85E-04	9.01E-04
9341	637336.2	4171248.9	Worker	Scenario 3	8.54E-02	1.87E-04	9.02E-04
9342	637436.2	4171248.9	Worker	Scenario 3	8.86E-02	1.94E-04	9.38E-04
9343	637536.2	4171248.9	Worker	Scenario 3	9.20E-02	2.01E-04	9.55E-04
9344	637636.2	4171248.9	Worker	Scenario 3	9.79E-02	2.14E-04	9.88E-04
9345	637736.2	4171248.9	Worker	Scenario 3	1.04E-01	2.27E-04	1.17E-03
9346	637836.2	4171248.9	Worker	Scenario 3	1.08E-01	2.35E-04	1.22E-03
9347	637936.2	4171248.9	Worker	Scenario 3	1.12E-01	2.44E-04	1.14E-03
9348	638336.2	4171248.9	Worker	Scenario 3	1.26E-01	2.74E-04	1.62E-03
9349	638436.2	4171248.9	Worker	Scenario 3	1.29E-01	2.81E-04	1.69E-03
9350	638536.2	4171248.9	Worker	Scenario 3	1.32E-01	2.87E-04	1.55E-03
9351	638636.2	4171248.9	Worker	Scenario 3	1.35E-01	2.94E-04	1.27E-03
9352	638736.2	4171248.9	Worker	Scenario 3	1.38E-01	2.99E-04	1.25E-03
9353	638836.2	4171248.9	Worker	Scenario 3	1.32E-01	2.87E-04	1.14E-03
9354	638936.2	4171248.9	Worker	Scenario 3	1.39E-01	3.02E-04	1.26E-03
9355	639036.2	4171248.9	Worker	Scenario 3	1.36E-01	2.96E-04	1.22E-03
9356	639136.2	4171248.9	Worker	Scenario 3	1.37E-01	3.00E-04	1.17E-03
9357	639236.2	4171248.9	Worker	Scenario 3	1.39E-01	3.04E-04	1.41E-03
9358	639336.2	4171248.9	Worker	Scenario 3	1.50E-01	3.27E-04	1.58E-03
9359	639436.2	4171248.9	Worker	Scenario 3	1.47E-01	3.21E-04	1.52E-03
9360	639536.2	4171248.9	Worker	Scenario 3	1.49E-01	3.25E-04	1.57E-03
9361	639636.2	4171248.9	Worker	Scenario 3	1.54E-01	3.36E-04	1.64E-03
9362	639736.2	4171248.9	Worker	Scenario 3	1.56E-01	3.41E-04	1.58E-03
9363	639836.2	4171248.9	Worker	Scenario 3	1.58E-01	3.44E-04	1.67E-03
9364	639936.2	4171248.9	Worker	Scenario 3	1.59E-01	3.47E-04	1.66E-03
9365	640036.2	4171248.9	Worker	Scenario 3	1.61E-01	3.50E-04	1.58E-03
9366	640136.2	4171248.9	Worker	Scenario 3	1.62E-01	3.54E-04	1.73E-03
9367	640236.2	4171248.9	Worker	Scenario 3	1.64E-01	3.58E-04	1.72E-03
9368	640336.2	4171248.9	Worker	Scenario 3	1.65E-01	3.61E-04	1.76E-03
9369	640436.2	4171248.9	Worker	Scenario 3	1.66E-01	3.64E-04	1.79E-03
9370	640536.2	4171248.9	Worker	Scenario 3	1.67E-01	3.67E-04	1.82E-03
9371	640636.2	4171248.9	Worker	Scenario 3	1.68E-01	3.69E-04	1.79E-03
9372	640736.2	4171248.9	Worker	Scenario 3	1.69E-01	3.70E-04	1.79E-03
9373	640836.2	4171248.9	Worker	Scenario 3	1.69E-01	3.70E-04	1.80E-03
9374	640936.2	4171248.9	Worker	Scenario 3	1.69E-01	3.69E-04	1.89E-03
9375	641036.2	4171248.9	Worker	Scenario 3	1.68E-01	3.68E-04	1.90E-03
9376	641136.2	4171248.9	Worker	Scenario 3	1.67E-01	3.66E-04	1.82E-03
9377	641236.2	4171248.9	Worker	Scenario 3	1.66E-01	3.64E-04	1.78E-03
9378	641336.2	4171248.9	Worker	Scenario 3	1.66E-01	3.62E-04	1.82E-03
9379	641436.2	4171248.9	Worker	Scenario 3	1.65E-01	3.61E-04	1.85E-03
9380	641536.2	4171248.9	Worker	Scenario 3	1.63E-01	3.58E-04	1.86E-03
9381	641636.2	4171248.9	Worker	Scenario 3	1.63E-01	3.56E-04	1.84E-03
9382	641736.2	4171248.9	Worker	Scenario 3	1.62E-01	3.54E-04	1.85E-03
9383	641836.2	4171248.9	Worker	Scenario 3	1.61E-01	3.53E-04	1.83E-03
9384	641936.2	4171248.9	Worker	Scenario 3	1.60E-01	3.51E-04	1.83E-03
9385	642036.2	4171248.9	Worker	Scenario 3	1.59E-01	3.49E-04	1.66E-03
9386	642136.2	4171248.9	Worker	Scenario 3	1.58E-01	3.46E-04	1.80E-03
9387	642236.2	4171248.9	Worker	Scenario 3	1.56E-01	3.42E-04	1.82E-03
9388	642336.2	4171248.9	Worker	Scenario 3	1.54E-01	3.38E-04	2.46E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9389	642436.2	4171248.9	Worker	Scenario 3	1.52E-01	3.34E-04	3.58E-03
9390	642536.2	4171248.9	Worker	Scenario 3	1.50E-01	3.29E-04	4.35E-03
9391	642636.2	4171248.9	Worker	Scenario 3	1.47E-01	3.24E-04	4.37E-03
9392	642736.2	4171248.9	Worker	Scenario 3	1.45E-01	3.18E-04	3.66E-03
9393	642836.2	4171248.9	Worker	Scenario 3	1.43E-01	3.13E-04	2.61E-03
9394	642936.2	4171248.9	Worker	Scenario 3	1.41E-01	3.08E-04	1.90E-03
9395	636736.2	4171348.9	Worker	Scenario 3	6.76E-02	1.48E-04	8.45E-04
9396	636836.2	4171348.9	Worker	Scenario 3	7.24E-02	1.58E-04	8.56E-04
9397	636936.2	4171348.9	Worker	Scenario 3	7.41E-02	1.62E-04	8.56E-04
9398	637036.2	4171348.9	Worker	Scenario 3	7.66E-02	1.68E-04	8.81E-04
9399	637136.2	4171348.9	Worker	Scenario 3	7.98E-02	1.75E-04	8.61E-04
9400	637236.2	4171348.9	Worker	Scenario 3	8.26E-02	1.81E-04	8.95E-04
9401	637336.2	4171348.9	Worker	Scenario 3	8.35E-02	1.83E-04	9.03E-04
9402	637436.2	4171348.9	Worker	Scenario 3	8.66E-02	1.90E-04	9.20E-04
9403	637536.2	4171348.9	Worker	Scenario 3	9.29E-02	2.03E-04	9.65E-04
9404	637636.2	4171348.9	Worker	Scenario 3	9.74E-02	2.13E-04	1.15E-03
9405	637736.2	4171348.9	Worker	Scenario 3	1.01E-01	2.21E-04	1.16E-03
9406	637836.2	4171348.9	Worker	Scenario 3	1.04E-01	2.28E-04	1.10E-03
9407	638136.2	4171348.9	Worker	Scenario 3	1.15E-01	2.50E-04	1.26E-03
9408	638236.2	4171348.9	Worker	Scenario 3	1.18E-01	2.57E-04	1.55E-03
9409	638336.2	4171348.9	Worker	Scenario 3	1.21E-01	2.64E-04	1.65E-03
9410	638436.2	4171348.9	Worker	Scenario 3	1.24E-01	2.70E-04	1.54E-03
9411	638536.2	4171348.9	Worker	Scenario 3	1.27E-01	2.76E-04	1.29E-03
9412	638636.2	4171348.9	Worker	Scenario 3	1.30E-01	2.82E-04	1.20E-03
9413	638736.2	4171348.9	Worker	Scenario 3	1.31E-01	2.86E-04	1.17E-03
9414	638836.2	4171348.9	Worker	Scenario 3	1.34E-01	2.92E-04	1.23E-03
9415	638936.2	4171348.9	Worker	Scenario 3	1.34E-01	2.91E-04	1.21E-03
9416	639036.2	4171348.9	Worker	Scenario 3	1.30E-01	2.85E-04	1.15E-03
9417	639136.2	4171348.9	Worker	Scenario 3	1.32E-01	2.88E-04	1.28E-03
9418	639236.2	4171348.9	Worker	Scenario 3	1.34E-01	2.94E-04	1.44E-03
9419	639336.2	4171348.9	Worker	Scenario 3	1.44E-01	3.14E-04	1.55E-03
9420	639436.2	4171348.9	Worker	Scenario 3	1.40E-01	3.06E-04	1.43E-03
9421	639536.2	4171348.9	Worker	Scenario 3	1.42E-01	3.11E-04	1.52E-03
9422	639636.2	4171348.9	Worker	Scenario 3	1.48E-01	3.22E-04	1.57E-03
9423	639736.2	4171348.9	Worker	Scenario 3	1.50E-01	3.27E-04	1.61E-03
9424	639836.2	4171348.9	Worker	Scenario 3	1.51E-01	3.30E-04	1.63E-03
9425	639936.2	4171348.9	Worker	Scenario 3	1.53E-01	3.33E-04	1.53E-03
9426	640036.2	4171348.9	Worker	Scenario 3	1.54E-01	3.36E-04	1.62E-03
9427	640136.2	4171348.9	Worker	Scenario 3	1.55E-01	3.39E-04	1.64E-03
9428	640236.2	4171348.9	Worker	Scenario 3	1.57E-01	3.43E-04	1.69E-03
9429	640336.2	4171348.9	Worker	Scenario 3	1.58E-01	3.46E-04	1.70E-03
9430	640436.2	4171348.9	Worker	Scenario 3	1.59E-01	3.49E-04	1.76E-03
9431	640536.2	4171348.9	Worker	Scenario 3	1.60E-01	3.51E-04	1.73E-03
9432	640636.2	4171348.9	Worker	Scenario 3	1.61E-01	3.53E-04	1.73E-03
9433	640736.2	4171348.9	Worker	Scenario 3	1.61E-01	3.53E-04	1.70E-03
9434	640836.2	4171348.9	Worker	Scenario 3	1.61E-01	3.53E-04	1.75E-03
9435	640936.2	4171348.9	Worker	Scenario 3	1.61E-01	3.53E-04	1.87E-03
9436	641036.2	4171348.9	Worker	Scenario 3	1.61E-01	3.51E-04	1.85E-03
9437	641136.2	4171348.9	Worker	Scenario 3	1.60E-01	3.49E-04	1.75E-03
9438	641236.2	4171348.9	Worker	Scenario 3	1.59E-01	3.47E-04	1.71E-03
9439	641336.2	4171348.9	Worker	Scenario 3	1.58E-01	3.46E-04	1.76E-03
9440	641436.2	4171348.9	Worker	Scenario 3	1.57E-01	3.44E-04	1.79E-03
9441	641536.2	4171348.9	Worker	Scenario 3	1.56E-01	3.43E-04	1.81E-03
9442	641636.2	4171348.9	Worker	Scenario 3	1.56E-01	3.41E-04	1.79E-03
9443	641736.2	4171348.9	Worker	Scenario 3	1.55E-01	3.40E-04	1.79E-03
9444	641836.2	4171348.9	Worker	Scenario 3	1.54E-01	3.38E-04	1.78E-03
9445	641936.2	4171348.9	Worker	Scenario 3	1.54E-01	3.37E-04	1.76E-03
9446	642036.2	4171348.9	Worker	Scenario 3	1.53E-01	3.35E-04	1.65E-03
9447	642136.2	4171348.9	Worker	Scenario 3	1.51E-01	3.31E-04	1.71E-03
9448	642236.2	4171348.9	Worker	Scenario 3	1.49E-01	3.28E-04	1.74E-03
9449	642336.2	4171348.9	Worker	Scenario 3	1.48E-01	3.24E-04	2.15E-03
9450	642436.2	4171348.9	Worker	Scenario 3	1.46E-01	3.20E-04	3.24E-03
9451	642536.2	4171348.9	Worker	Scenario 3	1.43E-01	3.15E-04	4.11E-03
9452	642636.2	4171348.9	Worker	Scenario 3	1.41E-01	3.10E-04	4.35E-03
9453	642736.2	4171348.9	Worker	Scenario 3	1.39E-01	3.06E-04	3.85E-03
9454	642836.2	4171348.9	Worker	Scenario 3	1.37E-01	3.01E-04	2.88E-03
9455	636236.2	4171448.9	Worker	Scenario 3	5.46E-02	1.20E-04	7.80E-04
9456	636636.2	4171448.9	Worker	Scenario 3	6.63E-02	1.45E-04	8.09E-04
9457	636736.2	4171448.9	Worker	Scenario 3	6.92E-02	1.52E-04	8.31E-04
9458	636836.2	4171448.9	Worker	Scenario 3	7.07E-02	1.55E-04	8.35E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9459	636936.2	4171448.9	Worker	Scenario 3	7.34E-02	1.61E-04	8.57E-04
9460	637036.2	4171448.9	Worker	Scenario 3	7.52E-02	1.65E-04	8.22E-04
9461	637136.2	4171448.9	Worker	Scenario 3	7.87E-02	1.73E-04	8.72E-04
9462	637236.2	4171448.9	Worker	Scenario 3	8.31E-02	1.82E-04	9.21E-04
9463	637336.2	4171448.9	Worker	Scenario 3	8.56E-02	1.88E-04	9.43E-04
9464	638036.2	4171448.9	Worker	Scenario 3	1.08E-01	2.36E-04	1.18E-03
9465	638136.2	4171448.9	Worker	Scenario 3	1.11E-01	2.42E-04	1.48E-03
9466	638236.2	4171448.9	Worker	Scenario 3	1.14E-01	2.49E-04	1.61E-03
9467	638336.2	4171448.9	Worker	Scenario 3	1.17E-01	2.55E-04	1.57E-03
9468	638436.2	4171448.9	Worker	Scenario 3	1.20E-01	2.61E-04	1.32E-03
9469	638536.2	4171448.9	Worker	Scenario 3	1.22E-01	2.66E-04	1.14E-03
9470	638636.2	4171448.9	Worker	Scenario 3	1.25E-01	2.72E-04	1.16E-03
9471	638736.2	4171448.9	Worker	Scenario 3	1.27E-01	2.76E-04	1.16E-03
9472	638836.2	4171448.9	Worker	Scenario 3	1.29E-01	2.82E-04	1.20E-03
9473	638936.2	4171448.9	Worker	Scenario 3	1.31E-01	2.85E-04	1.20E-03
9474	639036.2	4171448.9	Worker	Scenario 3	1.32E-01	2.88E-04	1.21E-03
9475	639136.2	4171448.9	Worker	Scenario 3	1.34E-01	2.92E-04	1.43E-03
9476	639236.2	4171448.9	Worker	Scenario 3	1.36E-01	2.97E-04	1.46E-03
9477	639336.2	4171448.9	Worker	Scenario 3	1.38E-01	3.02E-04	1.47E-03
9478	639436.2	4171448.9	Worker	Scenario 3	1.40E-01	3.05E-04	1.51E-03
9479	639536.2	4171448.9	Worker	Scenario 3	1.40E-01	3.07E-04	1.53E-03
9480	639636.2	4171448.9	Worker	Scenario 3	1.43E-01	3.12E-04	1.47E-03
9481	639736.2	4171448.9	Worker	Scenario 3	1.44E-01	3.14E-04	1.57E-03
9482	639836.2	4171448.9	Worker	Scenario 3	1.45E-01	3.17E-04	1.57E-03
9483	639936.2	4171448.9	Worker	Scenario 3	1.47E-01	3.20E-04	1.40E-03
9484	640036.2	4171448.9	Worker	Scenario 3	1.48E-01	3.23E-04	1.61E-03
9485	640136.2	4171448.9	Worker	Scenario 3	1.49E-01	3.26E-04	1.53E-03
9486	640236.2	4171448.9	Worker	Scenario 3	1.50E-01	3.29E-04	1.63E-03
9487	640336.2	4171448.9	Worker	Scenario 3	1.52E-01	3.32E-04	1.64E-03
9488	640436.2	4171448.9	Worker	Scenario 3	1.53E-01	3.35E-04	1.72E-03
9489	640536.2	4171448.9	Worker	Scenario 3	1.53E-01	3.37E-04	1.67E-03
9490	640636.2	4171448.9	Worker	Scenario 3	1.54E-01	3.38E-04	1.66E-03
9491	640736.2	4171448.9	Worker	Scenario 3	1.54E-01	3.38E-04	1.61E-03
9492	640836.2	4171448.9	Worker	Scenario 3	1.54E-01	3.38E-04	1.69E-03
9493	640936.2	4171448.9	Worker	Scenario 3	1.54E-01	3.37E-04	1.84E-03
9494	641036.2	4171448.9	Worker	Scenario 3	1.53E-01	3.36E-04	1.79E-03
9495	641136.2	4171448.9	Worker	Scenario 3	1.52E-01	3.34E-04	1.69E-03
9496	641236.2	4171448.9	Worker	Scenario 3	1.52E-01	3.32E-04	1.65E-03
9497	641336.2	4171448.9	Worker	Scenario 3	1.51E-01	3.30E-04	1.70E-03
9498	641436.2	4171448.9	Worker	Scenario 3	1.50E-01	3.29E-04	1.73E-03
9499	641536.2	4171448.9	Worker	Scenario 3	1.49E-01	3.28E-04	1.75E-03
9500	641636.2	4171448.9	Worker	Scenario 3	1.49E-01	3.27E-04	1.73E-03
9501	641736.2	4171448.9	Worker	Scenario 3	1.48E-01	3.25E-04	1.73E-03
9502	641836.2	4171448.9	Worker	Scenario 3	1.48E-01	3.24E-04	1.73E-03
9503	641936.2	4171448.9	Worker	Scenario 3	1.47E-01	3.23E-04	1.70E-03
9504	642036.2	4171448.9	Worker	Scenario 3	1.46E-01	3.21E-04	1.64E-03
9505	642136.2	4171448.9	Worker	Scenario 3	1.45E-01	3.19E-04	1.63E-03
9506	642236.2	4171448.9	Worker	Scenario 3	1.44E-01	3.16E-04	1.69E-03
9507	642336.2	4171448.9	Worker	Scenario 3	1.42E-01	3.12E-04	1.96E-03
9508	642436.2	4171448.9	Worker	Scenario 3	1.40E-01	3.07E-04	2.90E-03
9509	642536.2	4171448.9	Worker	Scenario 3	1.38E-01	3.03E-04	3.84E-03
9510	642636.2	4171448.9	Worker	Scenario 3	1.35E-01	2.98E-04	4.27E-03
9511	636536.2	4171548.9	Worker	Scenario 3	6.38E-02	1.40E-04	7.77E-04
9512	636636.2	4171548.9	Worker	Scenario 3	6.62E-02	1.45E-04	8.04E-04
9513	636736.2	4171548.9	Worker	Scenario 3	6.85E-02	1.50E-04	8.23E-04
9514	636836.2	4171548.9	Worker	Scenario 3	7.10E-02	1.56E-04	8.38E-04
9515	636936.2	4171548.9	Worker	Scenario 3	7.27E-02	1.60E-04	8.02E-04
9516	637036.2	4171548.9	Worker	Scenario 3	7.59E-02	1.67E-04	8.56E-04
9517	637136.2	4171548.9	Worker	Scenario 3	7.73E-02	1.70E-04	8.69E-04
9518	637236.2	4171548.9	Worker	Scenario 3	8.11E-02	1.78E-04	9.10E-04
9519	637936.2	4171548.9	Worker	Scenario 3	1.02E-01	2.22E-04	1.11E-03
9520	638036.2	4171548.9	Worker	Scenario 3	1.05E-01	2.29E-04	1.40E-03
9521	638136.2	4171548.9	Worker	Scenario 3	1.04E-01	2.27E-04	1.46E-03
9522	638236.2	4171548.9	Worker	Scenario 3	1.10E-01	2.41E-04	1.57E-03
9523	638336.2	4171548.9	Worker	Scenario 3	1.13E-01	2.47E-04	1.37E-03
9524	638436.2	4171548.9	Worker	Scenario 3	1.16E-01	2.52E-04	1.14E-03
9525	638536.2	4171548.9	Worker	Scenario 3	1.11E-01	2.43E-04	1.06E-03
9526	638636.2	4171548.9	Worker	Scenario 3	1.19E-01	2.60E-04	1.07E-03
9527	638736.2	4171548.9	Worker	Scenario 3	1.22E-01	2.67E-04	1.16E-03
9528	638836.2	4171548.9	Worker	Scenario 3	1.24E-01	2.70E-04	1.16E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9529	638936.2	4171548.9	Worker	Scenario 3	1.26E-01	2.74E-04	1.12E-03
9530	639036.2	4171548.9	Worker	Scenario 3	1.27E-01	2.77E-04	1.31E-03
9531	639136.2	4171548.9	Worker	Scenario 3	1.29E-01	2.82E-04	1.43E-03
9532	639236.2	4171548.9	Worker	Scenario 3	1.30E-01	2.84E-04	1.43E-03
9533	639336.2	4171548.9	Worker	Scenario 3	1.33E-01	2.90E-04	1.39E-03
9534	639436.2	4171548.9	Worker	Scenario 3	1.34E-01	2.94E-04	1.48E-03
9535	639536.2	4171548.9	Worker	Scenario 3	1.36E-01	2.96E-04	1.49E-03
9536	639636.2	4171548.9	Worker	Scenario 3	1.37E-01	2.99E-04	1.49E-03
9537	639736.2	4171548.9	Worker	Scenario 3	1.38E-01	3.01E-04	1.51E-03
9538	639836.2	4171548.9	Worker	Scenario 3	1.39E-01	3.04E-04	1.48E-03
9539	639936.2	4171548.9	Worker	Scenario 3	1.41E-01	3.07E-04	1.46E-03
9540	640036.2	4171548.9	Worker	Scenario 3	1.42E-01	3.10E-04	1.57E-03
9541	640136.2	4171548.9	Worker	Scenario 3	1.43E-01	3.13E-04	1.55E-03
9542	640236.2	4171548.9	Worker	Scenario 3	1.44E-01	3.16E-04	1.58E-03
9543	640336.2	4171548.9	Worker	Scenario 3	1.45E-01	3.19E-04	1.61E-03
9544	640436.2	4171548.9	Worker	Scenario 3	1.46E-01	3.21E-04	1.67E-03
9545	640536.2	4171548.9	Worker	Scenario 3	1.47E-01	3.23E-04	1.60E-03
9546	640636.2	4171548.9	Worker	Scenario 3	1.48E-01	3.24E-04	1.63E-03
9547	640736.2	4171548.9	Worker	Scenario 3	1.48E-01	3.25E-04	1.55E-03
9548	640836.2	4171548.9	Worker	Scenario 3	1.48E-01	3.24E-04	1.66E-03
9549	640936.2	4171548.9	Worker	Scenario 3	1.48E-01	3.23E-04	1.82E-03
9550	641036.2	4171548.9	Worker	Scenario 3	1.47E-01	3.21E-04	1.74E-03
9551	641136.2	4171548.9	Worker	Scenario 3	1.46E-01	3.20E-04	1.63E-03
9552	641236.2	4171548.9	Worker	Scenario 3	1.45E-01	3.18E-04	1.58E-03
9553	641336.2	4171548.9	Worker	Scenario 3	1.44E-01	3.16E-04	1.65E-03
9554	641436.2	4171548.9	Worker	Scenario 3	1.44E-01	3.16E-04	1.68E-03
9555	641536.2	4171548.9	Worker	Scenario 3	1.43E-01	3.14E-04	1.69E-03
9556	641636.2	4171548.9	Worker	Scenario 3	1.43E-01	3.13E-04	1.68E-03
9557	641736.2	4171548.9	Worker	Scenario 3	1.42E-01	3.12E-04	1.67E-03
9558	641836.2	4171548.9	Worker	Scenario 3	1.42E-01	3.11E-04	1.68E-03
9559	641936.2	4171548.9	Worker	Scenario 3	1.41E-01	3.10E-04	1.66E-03
9560	642036.2	4171548.9	Worker	Scenario 3	1.41E-01	3.09E-04	1.62E-03
9561	642136.2	4171548.9	Worker	Scenario 3	1.39E-01	3.06E-04	1.54E-03
9562	642236.2	4171548.9	Worker	Scenario 3	1.38E-01	3.04E-04	1.63E-03
9563	642336.2	4171548.9	Worker	Scenario 3	1.37E-01	3.00E-04	1.79E-03
9564	642436.2	4171548.9	Worker	Scenario 3	1.35E-01	2.96E-04	2.60E-03
9565	642536.2	4171548.9	Worker	Scenario 3	1.33E-01	2.92E-04	3.57E-03
9566	636336.2	4171648.9	Worker	Scenario 3	5.71E-02	1.26E-04	7.59E-04
9567	636536.2	4171648.9	Worker	Scenario 3	6.31E-02	1.39E-04	7.75E-04
9568	636636.2	4171648.9	Worker	Scenario 3	6.54E-02	1.44E-04	7.98E-04
9569	636736.2	4171648.9	Worker	Scenario 3	6.75E-02	1.48E-04	8.07E-04
9570	636836.2	4171648.9	Worker	Scenario 3	7.01E-02	1.54E-04	7.78E-04
9571	636936.2	4171648.9	Worker	Scenario 3	7.23E-02	1.59E-04	8.30E-04
9572	637036.2	4171648.9	Worker	Scenario 3	7.38E-02	1.62E-04	8.42E-04
9573	637136.2	4171648.9	Worker	Scenario 3	7.62E-02	1.68E-04	8.58E-04
9574	637236.2	4171648.9	Worker	Scenario 3	7.95E-02	1.75E-04	9.48E-04
9575	637536.2	4171648.9	Worker	Scenario 3	8.74E-02	1.92E-04	1.11E-03
9576	637636.2	4171648.9	Worker	Scenario 3	9.03E-02	1.98E-04	9.97E-04
9577	637736.2	4171648.9	Worker	Scenario 3	9.32E-02	2.04E-04	9.26E-04
9578	637836.2	4171648.9	Worker	Scenario 3	9.61E-02	2.10E-04	1.05E-03
9579	637936.2	4171648.9	Worker	Scenario 3	9.89E-02	2.16E-04	1.32E-03
9580	638036.2	4171648.9	Worker	Scenario 3	1.02E-01	2.22E-04	1.52E-03
9581	638136.2	4171648.9	Worker	Scenario 3	9.97E-02	2.18E-04	1.43E-03
9582	638236.2	4171648.9	Worker	Scenario 3	1.02E-01	2.23E-04	1.30E-03
9583	638336.2	4171648.9	Worker	Scenario 3	1.09E-01	2.37E-04	1.13E-03
9584	638436.2	4171648.9	Worker	Scenario 3	1.11E-01	2.42E-04	1.08E-03
9585	638536.2	4171648.9	Worker	Scenario 3	1.07E-01	2.35E-04	1.00E-03
9586	638636.2	4171648.9	Worker	Scenario 3	1.11E-01	2.42E-04	1.06E-03
9587	638736.2	4171648.9	Worker	Scenario 3	1.12E-01	2.45E-04	1.06E-03
9588	638836.2	4171648.9	Worker	Scenario 3	1.19E-01	2.60E-04	1.11E-03
9589	638936.2	4171648.9	Worker	Scenario 3	1.21E-01	2.64E-04	1.17E-03
9590	639036.2	4171648.9	Worker	Scenario 3	1.23E-01	2.68E-04	1.36E-03
9591	639136.2	4171648.9	Worker	Scenario 3	1.25E-01	2.73E-04	1.38E-03
9592	639236.2	4171648.9	Worker	Scenario 3	1.26E-01	2.77E-04	1.38E-03
9593	639336.2	4171648.9	Worker	Scenario 3	1.28E-01	2.79E-04	1.42E-03
9594	639436.2	4171648.9	Worker	Scenario 3	1.29E-01	2.83E-04	1.44E-03
9595	639536.2	4171648.9	Worker	Scenario 3	1.31E-01	2.85E-04	1.39E-03
9596	639636.2	4171648.9	Worker	Scenario 3	1.32E-01	2.88E-04	1.48E-03
9597	639736.2	4171648.9	Worker	Scenario 3	1.33E-01	2.90E-04	1.48E-03
9598	639836.2	4171648.9	Worker	Scenario 3	1.34E-01	2.92E-04	1.35E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9599	639936.2	4171648.9	Worker	Scenario 3	1.35E-01	2.95E-04	1.48E-03
9600	640036.2	4171648.9	Worker	Scenario 3	1.36E-01	2.98E-04	1.49E-03
9601	640136.2	4171648.9	Worker	Scenario 3	1.38E-01	3.01E-04	1.53E-03
9602	640236.2	4171648.9	Worker	Scenario 3	1.39E-01	3.04E-04	1.55E-03
9603	640336.2	4171648.9	Worker	Scenario 3	1.40E-01	3.07E-04	1.57E-03
9604	640436.2	4171648.9	Worker	Scenario 3	1.40E-01	3.09E-04	1.60E-03
9605	640536.2	4171648.9	Worker	Scenario 3	1.41E-01	3.10E-04	1.57E-03
9606	640636.2	4171648.9	Worker	Scenario 3	1.42E-01	3.11E-04	1.58E-03
9607	640736.2	4171648.9	Worker	Scenario 3	1.42E-01	3.11E-04	1.54E-03
9608	640836.2	4171648.9	Worker	Scenario 3	1.42E-01	3.11E-04	1.66E-03
9609	640936.2	4171648.9	Worker	Scenario 3	1.41E-01	3.10E-04	1.79E-03
9610	641036.2	4171648.9	Worker	Scenario 3	1.41E-01	3.08E-04	1.68E-03
9611	641136.2	4171648.9	Worker	Scenario 3	1.40E-01	3.06E-04	1.58E-03
9612	641236.2	4171648.9	Worker	Scenario 3	1.39E-01	3.05E-04	1.52E-03
9613	641336.2	4171648.9	Worker	Scenario 3	1.39E-01	3.04E-04	1.59E-03
9614	641436.2	4171648.9	Worker	Scenario 3	1.38E-01	3.03E-04	1.63E-03
9615	641536.2	4171648.9	Worker	Scenario 3	1.37E-01	3.02E-04	1.64E-03
9616	641636.2	4171648.9	Worker	Scenario 3	1.37E-01	3.01E-04	1.63E-03
9617	641736.2	4171648.9	Worker	Scenario 3	1.37E-01	3.00E-04	1.61E-03
9618	641836.2	4171648.9	Worker	Scenario 3	1.36E-01	2.99E-04	1.62E-03
9619	641936.2	4171648.9	Worker	Scenario 3	1.36E-01	2.98E-04	1.61E-03
9620	642036.2	4171648.9	Worker	Scenario 3	1.35E-01	2.97E-04	1.59E-03
9621	642136.2	4171648.9	Worker	Scenario 3	1.34E-01	2.95E-04	1.46E-03
9622	642236.2	4171648.9	Worker	Scenario 3	1.33E-01	2.92E-04	1.59E-03
9623	642336.2	4171648.9	Worker	Scenario 3	1.32E-01	2.89E-04	1.68E-03
9624	636336.2	4171748.9	Worker	Scenario 3	5.72E-02	1.26E-04	7.45E-04
9625	636536.2	4171748.9	Worker	Scenario 3	6.25E-02	1.37E-04	7.73E-04
9626	636636.2	4171748.9	Worker	Scenario 3	6.46E-02	1.42E-04	7.79E-04
9627	636736.2	4171748.9	Worker	Scenario 3	6.67E-02	1.47E-04	7.45E-04
9628	636836.2	4171748.9	Worker	Scenario 3	6.90E-02	1.52E-04	8.05E-04
9629	636936.2	4171748.9	Worker	Scenario 3	7.11E-02	1.56E-04	8.23E-04
9630	637036.2	4171748.9	Worker	Scenario 3	7.32E-02	1.61E-04	8.36E-04
9631	637136.2	4171748.9	Worker	Scenario 3	7.59E-02	1.67E-04	9.15E-04
9632	637336.2	4171748.9	Worker	Scenario 3	8.06E-02	1.77E-04	1.10E-03
9633	637436.2	4171748.9	Worker	Scenario 3	8.29E-02	1.82E-04	1.09E-03
9634	637536.2	4171748.9	Worker	Scenario 3	8.56E-02	1.88E-04	9.91E-04
9635	637636.2	4171748.9	Worker	Scenario 3	8.82E-02	1.93E-04	8.84E-04
9636	637736.2	4171748.9	Worker	Scenario 3	9.08E-02	1.99E-04	9.99E-04
9637	637836.2	4171748.9	Worker	Scenario 3	9.36E-02	2.05E-04	1.25E-03
9638	637936.2	4171748.9	Worker	Scenario 3	9.63E-02	2.11E-04	1.46E-03
9639	638036.2	4171748.9	Worker	Scenario 3	9.88E-02	2.16E-04	1.54E-03
9640	638136.2	4171748.9	Worker	Scenario 3	9.66E-02	2.11E-04	1.31E-03
9641	638236.2	4171748.9	Worker	Scenario 3	9.90E-02	2.17E-04	1.09E-03
9642	638336.2	4171748.9	Worker	Scenario 3	1.01E-01	2.21E-04	9.90E-04
9643	638436.2	4171748.9	Worker	Scenario 3	1.07E-01	2.34E-04	1.04E-03
9644	638536.2	4171748.9	Worker	Scenario 3	1.07E-01	2.34E-04	1.02E-03
9645	638636.2	4171748.9	Worker	Scenario 3	1.07E-01	2.34E-04	1.04E-03
9646	638736.2	4171748.9	Worker	Scenario 3	1.09E-01	2.37E-04	1.04E-03
9647	638836.2	4171748.9	Worker	Scenario 3	1.15E-01	2.52E-04	1.04E-03
9648	638936.2	4171748.9	Worker	Scenario 3	1.15E-01	2.51E-04	1.23E-03
9649	639036.2	4171748.9	Worker	Scenario 3	1.15E-01	2.52E-04	1.30E-03
9650	639136.2	4171748.9	Worker	Scenario 3	1.17E-01	2.57E-04	1.32E-03
9651	639236.2	4171748.9	Worker	Scenario 3	1.17E-01	2.56E-04	1.25E-03
9652	639336.2	4171748.9	Worker	Scenario 3	1.23E-01	2.69E-04	1.38E-03
9653	639436.2	4171748.9	Worker	Scenario 3	1.24E-01	2.70E-04	1.39E-03
9654	639536.2	4171748.9	Worker	Scenario 3	1.25E-01	2.73E-04	1.37E-03
9655	639636.2	4171748.9	Worker	Scenario 3	1.27E-01	2.76E-04	1.42E-03
9656	639736.2	4171748.9	Worker	Scenario 3	1.28E-01	2.79E-04	1.41E-03
9657	639836.2	4171748.9	Worker	Scenario 3	1.28E-01	2.80E-04	1.28E-03
9658	639936.2	4171748.9	Worker	Scenario 3	1.29E-01	2.83E-04	1.46E-03
9659	640036.2	4171748.9	Worker	Scenario 3	1.30E-01	2.85E-04	1.37E-03
9660	640136.2	4171748.9	Worker	Scenario 3	1.31E-01	2.87E-04	1.47E-03
9661	640236.2	4171748.9	Worker	Scenario 3	1.31E-01	2.88E-04	1.46E-03
9662	640336.2	4171748.9	Worker	Scenario 3	1.32E-01	2.91E-04	1.52E-03
9663	640436.2	4171748.9	Worker	Scenario 3	1.35E-01	2.97E-04	1.53E-03
9664	640536.2	4171748.9	Worker	Scenario 3	1.36E-01	2.98E-04	1.53E-03
9665	640636.2	4171748.9	Worker	Scenario 3	1.36E-01	2.99E-04	1.52E-03
9666	640736.2	4171748.9	Worker	Scenario 3	1.36E-01	2.99E-04	1.52E-03
9667	640836.2	4171748.9	Worker	Scenario 3	1.36E-01	2.99E-04	1.66E-03
9668	640936.2	4171748.9	Worker	Scenario 3	1.36E-01	2.97E-04	1.75E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9669	641036.2	4171748.9	Worker	Scenario 3	1.35E-01	2.95E-04	1.63E-03
9670	641136.2	4171748.9	Worker	Scenario 3	1.34E-01	2.94E-04	1.54E-03
9671	641236.2	4171748.9	Worker	Scenario 3	1.33E-01	2.93E-04	1.46E-03
9672	641336.2	4171748.9	Worker	Scenario 3	1.33E-01	2.92E-04	1.54E-03
9673	641436.2	4171748.9	Worker	Scenario 3	1.33E-01	2.91E-04	1.58E-03
9674	641536.2	4171748.9	Worker	Scenario 3	1.32E-01	2.90E-04	1.59E-03
9675	641636.2	4171748.9	Worker	Scenario 3	1.32E-01	2.90E-04	1.59E-03
9676	641736.2	4171748.9	Worker	Scenario 3	1.32E-01	2.89E-04	1.56E-03
9677	641836.2	4171748.9	Worker	Scenario 3	1.31E-01	2.88E-04	1.57E-03
9678	641936.2	4171748.9	Worker	Scenario 3	1.31E-01	2.87E-04	1.57E-03
9679	642036.2	4171748.9	Worker	Scenario 3	1.30E-01	2.86E-04	1.55E-03
9680	636536.2	4171848.9	Worker	Scenario 3	6.20E-02	1.36E-04	7.53E-04
9681	636636.2	4171848.9	Worker	Scenario 3	6.39E-02	1.41E-04	7.24E-04
9682	636736.2	4171848.9	Worker	Scenario 3	6.56E-02	1.44E-04	7.76E-04
9683	636836.2	4171848.9	Worker	Scenario 3	6.77E-02	1.49E-04	7.94E-04
9684	636936.2	4171848.9	Worker	Scenario 3	7.03E-02	1.55E-04	8.15E-04
9685	637036.2	4171848.9	Worker	Scenario 3	7.22E-02	1.59E-04	9.04E-04
9686	637236.2	4171848.9	Worker	Scenario 3	7.67E-02	1.69E-04	1.08E-03
9687	637336.2	4171848.9	Worker	Scenario 3	7.91E-02	1.74E-04	1.07E-03
9688	637436.2	4171848.9	Worker	Scenario 3	8.14E-02	1.79E-04	9.81E-04
9689	637536.2	4171848.9	Worker	Scenario 3	8.38E-02	1.84E-04	8.53E-04
9690	637636.2	4171848.9	Worker	Scenario 3	8.62E-02	1.89E-04	9.51E-04
9691	637736.2	4171848.9	Worker	Scenario 3	8.88E-02	1.94E-04	1.17E-03
9692	637836.2	4171848.9	Worker	Scenario 3	9.14E-02	2.00E-04	1.40E-03
9693	637936.2	4171848.9	Worker	Scenario 3	9.37E-02	2.05E-04	1.50E-03
9694	638036.2	4171848.9	Worker	Scenario 3	9.60E-02	2.10E-04	1.44E-03
9695	638136.2	4171848.9	Worker	Scenario 3	9.38E-02	2.05E-04	1.13E-03
9696	638236.2	4171848.9	Worker	Scenario 3	9.64E-02	2.11E-04	9.76E-04
9697	638336.2	4171848.9	Worker	Scenario 3	9.89E-02	2.16E-04	9.83E-04
9698	638436.2	4171848.9	Worker	Scenario 3	1.01E-01	2.20E-04	9.45E-04
9699	638536.2	4171848.9	Worker	Scenario 3	1.05E-01	2.30E-04	1.04E-03
9700	638636.2	4171848.9	Worker	Scenario 3	1.05E-01	2.30E-04	1.03E-03
9701	638736.2	4171848.9	Worker	Scenario 3	1.06E-01	2.32E-04	9.89E-04
9702	638836.2	4171848.9	Worker	Scenario 3	1.12E-01	2.44E-04	1.14E-03
9703	638936.2	4171848.9	Worker	Scenario 3	1.12E-01	2.45E-04	1.27E-03
9704	639036.2	4171848.9	Worker	Scenario 3	1.12E-01	2.46E-04	1.27E-03
9705	639136.2	4171848.9	Worker	Scenario 3	1.13E-01	2.48E-04	1.25E-03
9706	639236.2	4171848.9	Worker	Scenario 3	1.14E-01	2.49E-04	1.28E-03
9707	639336.2	4171848.9	Worker	Scenario 3	1.17E-01	2.57E-04	1.33E-03
9708	639436.2	4171848.9	Worker	Scenario 3	1.19E-01	2.59E-04	1.30E-03
9709	639536.2	4171848.9	Worker	Scenario 3	1.20E-01	2.62E-04	1.37E-03
9710	639636.2	4171848.9	Worker	Scenario 3	1.22E-01	2.66E-04	1.39E-03
9711	639736.2	4171848.9	Worker	Scenario 3	1.23E-01	2.69E-04	1.31E-03
9712	639836.2	4171848.9	Worker	Scenario 3	1.20E-01	2.63E-04	1.29E-03
9713	639936.2	4171848.9	Worker	Scenario 3	1.21E-01	2.65E-04	1.37E-03
9714	640036.2	4171848.9	Worker	Scenario 3	1.22E-01	2.68E-04	1.35E-03
9715	640136.2	4171848.9	Worker	Scenario 3	1.23E-01	2.71E-04	1.38E-03
9716	640236.2	4171848.9	Worker	Scenario 3	1.25E-01	2.74E-04	1.40E-03
9717	640336.2	4171848.9	Worker	Scenario 3	1.26E-01	2.76E-04	1.47E-03
9718	640436.2	4171848.9	Worker	Scenario 3	1.30E-01	2.86E-04	1.48E-03
9719	640536.2	4171848.9	Worker	Scenario 3	1.31E-01	2.87E-04	1.47E-03
9720	640636.2	4171848.9	Worker	Scenario 3	1.31E-01	2.88E-04	1.46E-03
9721	640736.2	4171848.9	Worker	Scenario 3	1.31E-01	2.88E-04	1.49E-03
9722	640836.2	4171848.9	Worker	Scenario 3	1.31E-01	2.87E-04	1.66E-03
9723	640936.2	4171848.9	Worker	Scenario 3	1.30E-01	2.86E-04	1.72E-03
9724	641036.2	4171848.9	Worker	Scenario 3	1.30E-01	2.84E-04	1.58E-03
9725	641136.2	4171848.9	Worker	Scenario 3	1.29E-01	2.82E-04	1.50E-03
9726	641236.2	4171848.9	Worker	Scenario 3	1.28E-01	2.81E-04	1.41E-03
9727	641336.2	4171848.9	Worker	Scenario 3	1.28E-01	2.80E-04	1.49E-03
9728	641436.2	4171848.9	Worker	Scenario 3	1.27E-01	2.80E-04	1.53E-03
9729	641536.2	4171848.9	Worker	Scenario 3	1.27E-01	2.79E-04	1.54E-03
9730	641636.2	4171848.9	Worker	Scenario 3	1.27E-01	2.79E-04	1.54E-03
9731	636536.2	4171948.9	Worker	Scenario 3	6.13E-02	1.35E-04	7.05E-04
9732	636636.2	4171948.9	Worker	Scenario 3	6.29E-02	1.39E-04	7.54E-04
9733	636736.2	4171948.9	Worker	Scenario 3	6.46E-02	1.42E-04	7.66E-04
9734	636836.2	4171948.9	Worker	Scenario 3	6.69E-02	1.47E-04	7.86E-04
9735	636936.2	4171948.9	Worker	Scenario 3	6.89E-02	1.52E-04	8.84E-04
9736	637236.2	4171948.9	Worker	Scenario 3	7.54E-02	1.66E-04	1.05E-03
9737	637336.2	4171948.9	Worker	Scenario 3	7.76E-02	1.71E-04	9.74E-04
9738	637436.2	4171948.9	Worker	Scenario 3	7.98E-02	1.75E-04	8.42E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9739	637536.2	4171948.9	Worker	Scenario 3	8.21E-02	1.80E-04	9.09E-04
9740	637636.2	4171948.9	Worker	Scenario 3	8.44E-02	1.85E-04	1.10E-03
9741	637736.2	4171948.9	Worker	Scenario 3	8.68E-02	1.90E-04	1.34E-03
9742	637836.2	4171948.9	Worker	Scenario 3	8.91E-02	1.95E-04	1.47E-03
9743	637936.2	4171948.9	Worker	Scenario 3	9.12E-02	2.00E-04	1.45E-03
9744	638136.2	4171948.9	Worker	Scenario 3	9.13E-02	2.00E-04	9.61E-04
9745	638236.2	4171948.9	Worker	Scenario 3	9.36E-02	2.05E-04	9.46E-04
9746	638336.2	4171948.9	Worker	Scenario 3	9.61E-02	2.10E-04	9.26E-04
9747	638436.2	4171948.9	Worker	Scenario 3	9.82E-02	2.15E-04	9.76E-04
9748	638536.2	4171948.9	Worker	Scenario 3	9.93E-02	2.17E-04	9.71E-04
9749	638636.2	4171948.9	Worker	Scenario 3	1.03E-01	2.24E-04	9.96E-04
9750	638736.2	4171948.9	Worker	Scenario 3	1.04E-01	2.28E-04	9.89E-04
9751	638836.2	4171948.9	Worker	Scenario 3	1.08E-01	2.36E-04	1.20E-03
9752	638936.2	4171948.9	Worker	Scenario 3	1.06E-01	2.33E-04	1.22E-03
9753	639036.2	4171948.9	Worker	Scenario 3	1.06E-01	2.32E-04	1.21E-03
9754	639136.2	4171948.9	Worker	Scenario 3	1.07E-01	2.35E-04	1.16E-03
9755	639236.2	4171948.9	Worker	Scenario 3	1.10E-01	2.41E-04	1.26E-03
9756	639336.2	4171948.9	Worker	Scenario 3	1.13E-01	2.47E-04	1.30E-03
9757	639436.2	4171948.9	Worker	Scenario 3	1.14E-01	2.50E-04	1.26E-03
9758	639536.2	4171948.9	Worker	Scenario 3	1.15E-01	2.52E-04	1.33E-03
9759	639636.2	4171948.9	Worker	Scenario 3	1.18E-01	2.57E-04	1.35E-03
9760	639736.2	4171948.9	Worker	Scenario 3	1.19E-01	2.59E-04	1.19E-03
9761	639836.2	4171948.9	Worker	Scenario 3	1.16E-01	2.54E-04	1.31E-03
9762	639936.2	4171948.9	Worker	Scenario 3	1.17E-01	2.56E-04	1.31E-03
9763	640036.2	4171948.9	Worker	Scenario 3	1.18E-01	2.59E-04	1.35E-03
9764	640136.2	4171948.9	Worker	Scenario 3	1.19E-01	2.62E-04	1.36E-03
9765	640236.2	4171948.9	Worker	Scenario 3	1.20E-01	2.64E-04	1.38E-03
9766	640336.2	4171948.9	Worker	Scenario 3	1.21E-01	2.67E-04	1.42E-03
9767	636736.2	4172048.9	Worker	Scenario 3	6.43E-02	1.42E-04	7.80E-04
9768	636836.2	4172048.9	Worker	Scenario 3	6.66E-02	1.47E-04	8.41E-04
9769	637236.2	4172048.9	Worker	Scenario 3	7.42E-02	1.63E-04	9.62E-04
9770	637336.2	4172048.9	Worker	Scenario 3	7.62E-02	1.67E-04	8.40E-04
9771	637436.2	4172048.9	Worker	Scenario 3	7.82E-02	1.72E-04	8.68E-04
9772	637536.2	4172048.9	Worker	Scenario 3	8.04E-02	1.76E-04	1.03E-03
9773	637636.2	4172048.9	Worker	Scenario 3	8.26E-02	1.81E-04	1.28E-03
9774	637736.2	4172048.9	Worker	Scenario 3	8.47E-02	1.86E-04	1.43E-03
9775	637836.2	4172048.9	Worker	Scenario 3	8.68E-02	1.90E-04	1.44E-03
9776	637936.2	4172048.9	Worker	Scenario 3	8.88E-02	1.95E-04	1.30E-03
9777	638136.2	4172048.9	Worker	Scenario 3	8.88E-02	1.95E-04	9.05E-04
9778	638236.2	4172048.9	Worker	Scenario 3	9.09E-02	1.99E-04	9.09E-04
9779	638336.2	4172048.9	Worker	Scenario 3	9.33E-02	2.04E-04	9.21E-04
9780	638436.2	4172048.9	Worker	Scenario 3	9.52E-02	2.08E-04	9.57E-04
9781	638536.2	4172048.9	Worker	Scenario 3	9.68E-02	2.12E-04	9.63E-04
9782	638636.2	4172048.9	Worker	Scenario 3	9.84E-02	2.15E-04	9.22E-04
9783	638736.2	4172048.9	Worker	Scenario 3	1.00E-01	2.19E-04	1.07E-03
9784	638836.2	4172048.9	Worker	Scenario 3	1.04E-01	2.28E-04	1.22E-03
9785	638936.2	4172048.9	Worker	Scenario 3	1.00E-01	2.20E-04	1.15E-03
9786	639036.2	4172048.9	Worker	Scenario 3	1.05E-01	2.30E-04	1.17E-03
9787	639136.2	4172048.9	Worker	Scenario 3	1.04E-01	2.27E-04	1.19E-03
9788	639236.2	4172048.9	Worker	Scenario 3	1.10E-01	2.40E-04	1.26E-03
9789	639336.2	4172048.9	Worker	Scenario 3	1.09E-01	2.39E-04	1.23E-03
9790	639436.2	4172048.9	Worker	Scenario 3	1.10E-01	2.41E-04	1.27E-03
9791	639536.2	4172048.9	Worker	Scenario 3	1.11E-01	2.43E-04	1.28E-03
9792	639636.2	4172048.9	Worker	Scenario 3	1.14E-01	2.48E-04	1.27E-03
9793	639736.2	4172048.9	Worker	Scenario 3	1.14E-01	2.50E-04	1.20E-03
9794	639836.2	4172048.9	Worker	Scenario 3	1.12E-01	2.45E-04	1.29E-03
9795	639936.2	4172048.9	Worker	Scenario 3	1.13E-01	2.48E-04	1.22E-03
9796	640036.2	4172048.9	Worker	Scenario 3	1.14E-01	2.50E-04	1.32E-03
9797	640136.2	4172048.9	Worker	Scenario 3	1.15E-01	2.53E-04	1.32E-03
9798	637136.2	4172148.9	Worker	Scenario 3	7.11E-02	1.56E-04	9.50E-04
9799	637236.2	4172148.9	Worker	Scenario 3	7.30E-02	1.60E-04	8.35E-04
9800	637336.2	4172148.9	Worker	Scenario 3	7.47E-02	1.64E-04	8.30E-04
9801	637436.2	4172148.9	Worker	Scenario 3	7.68E-02	1.69E-04	9.65E-04
9802	637536.2	4172148.9	Worker	Scenario 3	7.88E-02	1.73E-04	1.21E-03
9803	637636.2	4172148.9	Worker	Scenario 3	8.08E-02	1.77E-04	1.39E-03
9804	637736.2	4172148.9	Worker	Scenario 3	8.28E-02	1.82E-04	1.43E-03
9805	637836.2	4172148.9	Worker	Scenario 3	8.46E-02	1.85E-04	1.32E-03
9806	637936.2	4172148.9	Worker	Scenario 3	8.65E-02	1.90E-04	1.10E-03
9807	638136.2	4172148.9	Worker	Scenario 3	8.62E-02	1.89E-04	8.85E-04
9808	638236.2	4172148.9	Worker	Scenario 3	8.83E-02	1.93E-04	8.57E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9809	638336.2	4172148.9	Worker	Scenario 3	9.04E-02	1.98E-04	9.23E-04
9810	638436.2	4172148.9	Worker	Scenario 3	9.25E-02	2.03E-04	9.29E-04
9811	638536.2	4172148.9	Worker	Scenario 3	9.43E-02	2.07E-04	9.22E-04
9812	638636.2	4172148.9	Worker	Scenario 3	9.59E-02	2.10E-04	9.58E-04
9813	638736.2	4172148.9	Worker	Scenario 3	9.78E-02	2.14E-04	1.12E-03
9814	638836.2	4172148.9	Worker	Scenario 3	1.00E-01	2.20E-04	1.17E-03
9815	638936.2	4172148.9	Worker	Scenario 3	1.02E-01	2.24E-04	1.20E-03
9816	639036.2	4172148.9	Worker	Scenario 3	9.93E-02	2.18E-04	1.10E-03
9817	639136.2	4172148.9	Worker	Scenario 3	1.04E-01	2.27E-04	1.21E-03
9818	639236.2	4172148.9	Worker	Scenario 3	1.04E-01	2.29E-04	1.22E-03
9819	639336.2	4172148.9	Worker	Scenario 3	1.05E-01	2.30E-04	1.16E-03
9820	639436.2	4172148.9	Worker	Scenario 3	1.06E-01	2.32E-04	1.25E-03
9821	639536.2	4172148.9	Worker	Scenario 3	1.07E-01	2.34E-04	1.25E-03
9822	639636.2	4172148.9	Worker	Scenario 3	1.10E-01	2.40E-04	1.17E-03
9823	639736.2	4172148.9	Worker	Scenario 3	1.10E-01	2.42E-04	1.24E-03
9824	639836.2	4172148.9	Worker	Scenario 3	1.08E-01	2.37E-04	1.26E-03
9825	639936.2	4172148.9	Worker	Scenario 3	1.09E-01	2.40E-04	1.23E-03
9826	640036.2	4172148.9	Worker	Scenario 3	1.10E-01	2.42E-04	1.27E-03
9827	637036.2	4172248.9	Worker	Scenario 3	6.80E-02	1.50E-04	9.46E-04
9828	637136.2	4172248.9	Worker	Scenario 3	6.98E-02	1.54E-04	8.34E-04
9829	637236.2	4172248.9	Worker	Scenario 3	7.15E-02	1.57E-04	7.88E-04
9830	637336.2	4172248.9	Worker	Scenario 3	7.33E-02	1.61E-04	9.02E-04
9831	637436.2	4172248.9	Worker	Scenario 3	7.51E-02	1.65E-04	1.14E-03
9832	637536.2	4172248.9	Worker	Scenario 3	7.71E-02	1.69E-04	1.34E-03
9833	637636.2	4172248.9	Worker	Scenario 3	7.89E-02	1.73E-04	1.41E-03
9834	637736.2	4172248.9	Worker	Scenario 3	8.08E-02	1.77E-04	1.34E-03
9835	637836.2	4172248.9	Worker	Scenario 3	8.25E-02	1.81E-04	1.14E-03
9836	637936.2	4172248.9	Worker	Scenario 3	8.42E-02	1.85E-04	9.22E-04
9837	638136.2	4172248.9	Worker	Scenario 3	8.40E-02	1.84E-04	8.31E-04
9838	638236.2	4172248.9	Worker	Scenario 3	8.60E-02	1.89E-04	8.81E-04
9839	638336.2	4172248.9	Worker	Scenario 3	8.79E-02	1.93E-04	8.91E-04
9840	638436.2	4172248.9	Worker	Scenario 3	8.99E-02	1.97E-04	9.07E-04
9841	638536.2	4172248.9	Worker	Scenario 3	9.18E-02	2.01E-04	8.65E-04
9842	638636.2	4172248.9	Worker	Scenario 3	9.48E-02	2.08E-04	1.05E-03
9843	638736.2	4172248.9	Worker	Scenario 3	9.44E-02	2.07E-04	1.12E-03
9844	638836.2	4172248.9	Worker	Scenario 3	9.59E-02	2.10E-04	1.13E-03
9845	638936.2	4172248.9	Worker	Scenario 3	9.79E-02	2.15E-04	1.11E-03
9846	639036.2	4172248.9	Worker	Scenario 3	1.00E-01	2.20E-04	1.18E-03
9847	639136.2	4172248.9	Worker	Scenario 3	1.01E-01	2.22E-04	1.18E-03
9848	639236.2	4172248.9	Worker	Scenario 3	1.02E-01	2.24E-04	1.18E-03
9849	639336.2	4172248.9	Worker	Scenario 3	1.03E-01	2.25E-04	1.20E-03
9850	639436.2	4172248.9	Worker	Scenario 3	1.04E-01	2.27E-04	1.21E-03
9851	639536.2	4172248.9	Worker	Scenario 3	1.04E-01	2.28E-04	1.21E-03
9852	639736.2	4172248.9	Worker	Scenario 3	1.06E-01	2.33E-04	1.24E-03
9853	639836.2	4172248.9	Worker	Scenario 3	1.05E-01	2.30E-04	1.20E-03
9854	637236.2	4172348.9	Worker	Scenario 3	7.01E-02	1.54E-04	8.56E-04
9855	637336.2	4172348.9	Worker	Scenario 3	7.19E-02	1.58E-04	1.08E-03
9856	637436.2	4172348.9	Worker	Scenario 3	7.36E-02	1.62E-04	1.28E-03
9857	637536.2	4172348.9	Worker	Scenario 3	7.54E-02	1.66E-04	1.38E-03
9858	637636.2	4172348.9	Worker	Scenario 3	7.72E-02	1.69E-04	1.34E-03
9859	637736.2	4172348.9	Worker	Scenario 3	7.89E-02	1.73E-04	1.18E-03
9860	637836.2	4172348.9	Worker	Scenario 3	8.05E-02	1.77E-04	9.40E-04
9861	637936.2	4172348.9	Worker	Scenario 3	8.21E-02	1.80E-04	8.69E-04
9862	638136.2	4172348.9	Worker	Scenario 3	8.09E-02	1.78E-04	8.20E-04
9863	638236.2	4172348.9	Worker	Scenario 3	8.41E-02	1.84E-04	8.72E-04
9864	638336.2	4172348.9	Worker	Scenario 3	8.56E-02	1.88E-04	8.78E-04
9865	638436.2	4172348.9	Worker	Scenario 3	8.65E-02	1.90E-04	8.45E-04
9866	638536.2	4172348.9	Worker	Scenario 3	9.06E-02	1.99E-04	9.52E-04
9867	638636.2	4172348.9	Worker	Scenario 3	9.02E-02	1.98E-04	1.06E-03
9868	638736.2	4172348.9	Worker	Scenario 3	9.16E-02	2.01E-04	1.08E-03
9869	638836.2	4172348.9	Worker	Scenario 3	9.29E-02	2.04E-04	1.10E-03
9870	638936.2	4172348.9	Worker	Scenario 3	9.51E-02	2.09E-04	1.08E-03
9871	639036.2	4172348.9	Worker	Scenario 3	9.71E-02	2.13E-04	1.16E-03
9872	639136.2	4172348.9	Worker	Scenario 3	9.83E-02	2.16E-04	1.17E-03
9873	639236.2	4172348.9	Worker	Scenario 3	9.95E-02	2.18E-04	1.11E-03
9874	639336.2	4172348.9	Worker	Scenario 3	9.93E-02	2.17E-04	1.19E-03
9875	639436.2	4172348.9	Worker	Scenario 3	9.95E-02	2.18E-04	1.18E-03
9876	639536.2	4172348.9	Worker	Scenario 3	1.00E-01	2.20E-04	1.13E-03
9877	637636.2	4172448.9	Worker	Scenario 3	7.53E-02	1.65E-04	1.20E-03
9878	637736.2	4172448.9	Worker	Scenario 3	7.70E-02	1.69E-04	9.81E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9879	637836.2	4172448.9	Worker	Scenario 3	7.85E-02	1.72E-04	8.51E-04
9880	637936.2	4172448.9	Worker	Scenario 3	8.00E-02	1.75E-04	8.42E-04
9881	638136.2	4172448.9	Worker	Scenario 3	7.80E-02	1.71E-04	8.17E-04
9882	638236.2	4172448.9	Worker	Scenario 3	7.97E-02	1.75E-04	8.18E-04
9883	638336.2	4172448.9	Worker	Scenario 3	8.19E-02	1.80E-04	8.30E-04
9884	638436.2	4172448.9	Worker	Scenario 3	8.68E-02	1.90E-04	8.48E-04
9885	638536.2	4172448.9	Worker	Scenario 3	8.65E-02	1.90E-04	9.91E-04
9886	638636.2	4172448.9	Worker	Scenario 3	8.78E-02	1.93E-04	1.06E-03
9887	638736.2	4172448.9	Worker	Scenario 3	8.92E-02	1.96E-04	1.07E-03
9888	638836.2	4172448.9	Worker	Scenario 3	9.06E-02	1.99E-04	1.04E-03
9889	638936.2	4172448.9	Worker	Scenario 3	9.20E-02	2.02E-04	1.10E-03
9890	639036.2	4172448.9	Worker	Scenario 3	9.37E-02	2.06E-04	1.11E-03
9891	639136.2	4172448.9	Worker	Scenario 3	9.51E-02	2.09E-04	1.13E-03
9892	639236.2	4172448.9	Worker	Scenario 3	9.61E-02	2.11E-04	1.13E-03
9893	639336.2	4172448.9	Worker	Scenario 3	9.67E-02	2.12E-04	1.16E-03
9894	639657.4	4168449.3	Resident	Scenario 3	1.20E+01	2.25E-03	3.92E-03
9895	639682.4	4168449.8	Resident	Scenario 3	1.42E+01	2.66E-03	3.89E-03
9896	639707.4	4168450.2	Resident	Scenario 3	1.97E+01	3.65E-03	3.82E-03
9897	639719.4	4168437.2	Resident	Scenario 3	1.88E+01	3.49E-03	3.92E-03
9898	639719.8	4168412.2	Resident	Scenario 3	1.78E+01	3.31E-03	4.11E-03
9899	639720.3	4168387.2	Resident	Scenario 3	1.72E+01	3.21E-03	4.20E-03
9900	639720.7	4168362.2	Resident	Scenario 3	1.82E+01	3.39E-03	4.19E-03
9901	639721.2	4168337.2	Resident	Scenario 3	1.64E+01	3.06E-03	4.07E-03
9902	639721.6	4168312.2	Resident	Scenario 3	1.31E+01	2.46E-03	3.85E-03
9903	639722.1	4168287.2	Resident	Scenario 3	1.01E+01	1.90E-03	3.81E-03
9904	639722.5	4168262.2	Resident	Scenario 3	8.20E+00	1.56E-03	4.06E-03
9905	641271.3	4168602.3	Resident	Scenario 3	2.76E+01	5.23E-03	8.68E-03
9906	641272.0	4168577.4	Resident	Scenario 3	2.77E+01	5.24E-03	8.92E-03
9907	641272.7	4168552.4	Resident	Scenario 3	2.79E+01	5.29E-03	9.16E-03
9908	641273.4	4168527.4	Resident	Scenario 3	2.82E+01	5.35E-03	9.39E-03
9909	641274.1	4168502.4	Resident	Scenario 3	2.85E+01	5.42E-03	9.63E-03
9910	641288.1	4168491.5	Resident	Scenario 3	3.03E+01	5.76E-03	9.88E-03
9911	641313.1	4168492.2	Resident	Scenario 3	3.52E+01	6.65E-03	9.46E-03
9912	641329.9	4168500.8	Resident	Scenario 3	4.13E+01	7.75E-03	9.62E-03
9913	641329.4	4168525.7	Resident	Scenario 3	4.10E+01	7.69E-03	9.39E-03
9914	641328.8	4168550.7	Resident	Scenario 3	4.01E+01	7.53E-03	9.17E-03
9915	641328.3	4168575.7	Resident	Scenario 3	3.89E+01	7.30E-03	8.94E-03
9916	641327.8	4168600.7	Resident	Scenario 3	3.75E+01	7.03E-03	8.73E-03
9917	641327.3	4168625.7	Resident	Scenario 3	3.58E+01	6.71E-03	8.52E-03
9918	644628.2	4167344.9	Resident	Scenario 3	8.92E+00	1.76E-03	2.29E-03
9919	644603.2	4167344.6	Resident	Scenario 3	9.12E+00	1.80E-03	2.32E-03
9920	644595.5	4167361.9	Resident	Scenario 3	9.12E+00	1.80E-03	2.30E-03
9921	644608.1	4167373.7	Resident	Scenario 3	9.00E+00	1.78E-03	2.26E-03
9922	644633.0	4167372.9	Resident	Scenario 3	8.82E+00	1.74E-03	2.23E-03
9923	644644.0	4167386.8	Resident	Scenario 3	8.72E+00	1.72E-03	2.18E-03
9924	644641.0	4167411.5	Resident	Scenario 3	8.71E+00	1.72E-03	2.10E-03
9925	644572.2	4167547.1	Resident	Scenario 3	8.91E+00	1.76E-03	2.32E-03
9926	644564.9	4167529.8	Resident	Scenario 3	9.01E+00	1.78E-03	2.24E-03
9927	644585.7	4167544.7	Resident	Scenario 3	8.83E+00	1.74E-03	2.29E-03
9928	644607.0	4167541.3	Resident	Scenario 3	8.69E+00	1.71E-03	2.24E-03
9929	644631.9	4167541.8	Resident	Scenario 3	8.53E+00	1.68E-03	2.21E-03
9930	644656.9	4167542.4	Resident	Scenario 3	8.37E+00	1.65E-03	2.18E-03
9931	644681.9	4167543.0	Resident	Scenario 3	8.21E+00	1.62E-03	2.15E-03
9932	643875.3	4167591.4	Resident	Scenario 3	1.68E+01	3.26E-03	3.40E-03
9933	643900.3	4167591.5	Resident	Scenario 3	1.63E+01	3.16E-03	3.36E-03
9934	643925.3	4167591.5	Resident	Scenario 3	1.58E+01	3.07E-03	3.31E-03
9935	640593.1	4166856.1	Resident	Scenario 3	2.22E+00	5.04E-04	1.49E-02
9936	640618.1	4166856.5	Resident	Scenario 3	2.28E+00	5.20E-04	1.66E-02
9937	640643.1	4166856.9	Resident	Scenario 3	2.35E+00	5.37E-04	1.78E-02
9938	640668.1	4166857.3	Resident	Scenario 3	2.43E+00	5.58E-04	1.84E-02
9939	640693.1	4166857.7	Resident	Scenario 3	2.50E+00	5.75E-04	1.90E-02
9940	640718.1	4166858.1	Resident	Scenario 3	2.58E+00	5.97E-04	1.92E-02
9941	640743.1	4166858.4	Resident	Scenario 3	2.64E+00	6.11E-04	1.93E-02
9942	640768.1	4166858.8	Resident	Scenario 3	2.68E+00	6.21E-04	1.97E-02
9943	640793.1	4166859.2	Resident	Scenario 3	2.74E+00	6.34E-04	1.90E-02
9944	640818.1	4166859.6	Resident	Scenario 3	2.81E+00	6.52E-04	1.74E-02
9945	640843.1	4166860.0	Resident	Scenario 3	2.88E+00	6.70E-04	1.69E-02
9946	640868.1	4166860.3	Resident	Scenario 3	2.96E+00	6.93E-04	1.98E-02
9947	640893.1	4166860.7	Resident	Scenario 3	3.04E+00	7.12E-04	2.32E-02
9948	640918.1	4166861.1	Resident	Scenario 3	3.13E+00	7.37E-04	2.53E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9949	640943.1	4166861.5	Resident	Scenario 3	3.22E+00	7.58E-04	2.59E-02
9950	640968.0	4166861.4	Resident	Scenario 3	3.32E+00	7.84E-04	2.41E-02
9951	640992.8	4166858.1	Resident	Scenario 3	3.39E+00	8.01E-04	2.12E-02
9952	641015.9	4166849.2	Resident	Scenario 3	3.45E+00	8.16E-04	2.46E-02
9953	641038.0	4166837.5	Resident	Scenario 3	3.48E+00	8.25E-04	2.58E-02
9954	641058.4	4166823.1	Resident	Scenario 3	3.50E+00	8.28E-04	2.61E-02
9955	641078.8	4166808.7	Resident	Scenario 3	3.53E+00	8.33E-04	2.95E-02
9956	641099.0	4166793.9	Resident	Scenario 3	3.53E+00	8.34E-04	3.13E-02
9957	641117.9	4166777.7	Resident	Scenario 3	3.54E+00	8.36E-04	3.24E-02
9958	641136.9	4166761.4	Resident	Scenario 3	3.55E+00	8.37E-04	3.17E-02
9959	641155.9	4166745.1	Resident	Scenario 3	3.54E+00	8.34E-04	3.59E-02
9960	641174.9	4166728.9	Resident	Scenario 3	3.54E+00	8.31E-04	3.14E-02
9961	641193.9	4166712.6	Resident	Scenario 3	3.54E+00	8.28E-04	3.04E-02
9962	641210.2	4166693.8	Resident	Scenario 3	3.50E+00	8.15E-04	2.65E-02
9963	641225.7	4166674.2	Resident	Scenario 3	3.48E+00	8.07E-04	2.66E-02
9964	641241.2	4166654.5	Resident	Scenario 3	3.48E+00	8.01E-04	2.65E-02
9965	641256.7	4166634.9	Resident	Scenario 3	3.43E+00	7.85E-04	2.49E-02
9966	641272.2	4166615.3	Resident	Scenario 3	3.45E+00	7.85E-04	2.53E-02
9967	641287.7	4166595.7	Resident	Scenario 3	3.43E+00	7.74E-04	2.69E-02
9968	641302.9	4166575.9	Resident	Scenario 3	3.39E+00	7.60E-04	2.64E-02
9969	641317.9	4166555.9	Resident	Scenario 3	3.32E+00	7.40E-04	2.35E-02
9970	641330.9	4166534.8	Resident	Scenario 3	3.20E+00	7.09E-04	2.46E-02
9971	641338.1	4166510.9	Resident	Scenario 3	2.99E+00	6.62E-04	2.43E-02
1	639723.5	4168261.2	Resident	Scenario 4	2.29E+00	9.03E-03	4.07E-03
2	639698.5	4168286.2	Resident	Scenario 4	2.14E+00	8.41E-03	3.88E-03
3	639723.5	4168286.2	Resident	Scenario 4	2.91E+00	1.16E-02	3.82E-03
4	639648.5	4168311.2	Resident	Scenario 4	1.70E+00	6.73E-03	3.75E-03
5	639673.5	4168311.2	Resident	Scenario 4	1.99E+00	7.87E-03	3.69E-03
6	639698.5	4168311.2	Resident	Scenario 4	2.55E+00	1.01E-02	3.63E-03
7	639648.5	4168336.2	Resident	Scenario 4	1.89E+00	7.56E-03	3.50E-03
8	639673.5	4168336.2	Resident	Scenario 4	2.27E+00	9.02E-03	3.67E-03
9	639698.5	4168336.2	Resident	Scenario 4	3.09E+00	1.23E-02	3.88E-03
10	639648.5	4168361.2	Resident	Scenario 4	2.11E+00	8.50E-03	3.70E-03
11	639673.5	4168361.2	Resident	Scenario 4	2.55E+00	1.02E-02	3.89E-03
12	639698.5	4168361.2	Resident	Scenario 4	3.58E+00	1.43E-02	4.06E-03
13	639648.5	4168386.2	Resident	Scenario 4	2.34E+00	9.58E-03	3.88E-03
14	639673.5	4168386.2	Resident	Scenario 4	2.83E+00	1.14E-02	4.02E-03
15	639698.5	4168386.2	Resident	Scenario 4	3.89E+00	1.55E-02	4.13E-03
16	639648.5	4168411.2	Resident	Scenario 4	2.63E+00	1.10E-02	3.97E-03
17	639673.5	4168411.2	Resident	Scenario 4	3.12E+00	1.27E-02	4.05E-03
18	639698.5	4168411.2	Resident	Scenario 4	4.19E+00	1.68E-02	4.10E-03
19	639648.5	4168436.2	Resident	Scenario 4	3.05E+00	1.29E-02	3.96E-03
20	639673.5	4168436.2	Resident	Scenario 4	3.53E+00	1.46E-02	3.98E-03
21	639698.5	4168436.2	Resident	Scenario 4	4.60E+00	1.87E-02	3.97E-03
22	641298.5	4168511.2	Resident	Scenario 4	6.76E+00	1.79E-02	9.54E-03
23	641323.5	4168511.2	Resident	Scenario 4	8.38E+00	2.26E-02	9.33E-03
24	641298.5	4168536.2	Resident	Scenario 4	6.72E+00	1.77E-02	9.21E-03
25	641323.5	4168536.2	Resident	Scenario 4	8.34E+00	2.26E-02	9.16E-03
26	641298.5	4168561.2	Resident	Scenario 4	6.65E+00	1.76E-02	8.85E-03
27	641323.5	4168561.2	Resident	Scenario 4	8.23E+00	2.25E-02	8.95E-03
28	641298.5	4168586.2	Resident	Scenario 4	6.58E+00	1.75E-02	8.50E-03
29	641323.5	4168586.2	Resident	Scenario 4	8.08E+00	2.24E-02	8.76E-03
30	641298.5	4168611.2	Resident	Scenario 4	6.51E+00	1.75E-02	8.19E-03
31	641323.5	4168611.2	Resident	Scenario 4	7.91E+00	2.23E-02	8.57E-03
32	641298.5	4168636.2	Resident	Scenario 4	6.39E+00	1.75E-02	7.85E-03
33	641323.5	4168636.2	Resident	Scenario 4	7.70E+00	2.22E-02	8.38E-03
34	641298.5	4168661.2	Resident	Scenario 4	6.22E+00	1.74E-02	7.68E-03
35	641323.5	4168661.2	Resident	Scenario 4	7.45E+00	2.21E-02	8.19E-03
36	642036.2	4165948.9	Resident	Scenario 4	4.78E-01	1.57E-03	1.13E-02
37	640636.2	4166448.9	Resident	Scenario 4	3.60E-01	1.18E-03	1.12E-02
38	640836.2	4166448.9	Resident	Scenario 4	3.99E-01	1.32E-03	1.63E-02
39	640936.2	4166448.9	Resident	Scenario 4	4.27E-01	1.42E-03	1.76E-02
40	641036.2	4166448.9	Resident	Scenario 4	4.59E-01	1.54E-03	1.84E-02
41	641136.2	4166448.9	Resident	Scenario 4	5.11E-01	1.71E-03	1.83E-02
42	641236.2	4166448.9	Resident	Scenario 4	5.68E-01	1.90E-03	1.94E-02
43	640636.2	4166548.9	Resident	Scenario 4	3.98E-01	1.29E-03	1.26E-02
44	640736.2	4166548.9	Resident	Scenario 4	4.27E-01	1.39E-03	1.35E-02
45	640836.2	4166548.9	Resident	Scenario 4	4.54E-01	1.48E-03	1.54E-02
46	641036.2	4166548.9	Resident	Scenario 4	5.30E-01	1.77E-03	2.36E-02
47	641136.2	4166548.9	Resident	Scenario 4	5.95E-01	1.99E-03	2.05E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
48	641236.2	4166548.9	Resident	Scenario 4	6.97E-01	2.35E-03	2.08E-02
49	640636.2	4166648.9	Resident	Scenario 4	4.44E-01	1.43E-03	1.51E-02
50	640736.2	4166648.9	Resident	Scenario 4	4.81E-01	1.55E-03	1.55E-02
51	640836.2	4166648.9	Resident	Scenario 4	5.16E-01	1.67E-03	1.65E-02
52	640936.2	4166648.9	Resident	Scenario 4	5.57E-01	1.82E-03	1.93E-02
53	641036.2	4166648.9	Resident	Scenario 4	6.17E-01	2.04E-03	2.52E-02
54	641136.2	4166648.9	Resident	Scenario 4	7.03E-01	2.35E-03	2.69E-02
55	641236.2	4166648.9	Resident	Scenario 4	8.47E-01	2.88E-03	2.59E-02
56	640636.2	4166748.9	Resident	Scenario 4	4.88E-01	1.57E-03	1.50E-02
57	640736.2	4166748.9	Resident	Scenario 4	5.46E-01	1.74E-03	1.55E-02
58	640836.2	4166748.9	Resident	Scenario 4	5.81E-01	1.87E-03	1.95E-02
59	640936.2	4166748.9	Resident	Scenario 4	6.41E-01	2.08E-03	2.05E-02
60	641036.2	4166748.9	Resident	Scenario 4	7.19E-01	2.35E-03	2.62E-02
61	641136.2	4166748.9	Resident	Scenario 4	8.35E-01	2.77E-03	3.28E-02
62	640636.2	4166848.9	Resident	Scenario 4	5.40E-01	1.73E-03	1.79E-02
63	640736.2	4166848.9	Resident	Scenario 4	6.10E-01	1.94E-03	1.82E-02
64	640836.2	4166848.9	Resident	Scenario 4	6.60E-01	2.11E-03	1.68E-02
65	640936.2	4166848.9	Resident	Scenario 4	7.37E-01	2.37E-03	2.46E-02
66	644636.2	4167548.9	Resident	Scenario 4	1.52E+00	2.83E-03	2.24E-03
67	644636.2	4167648.9	Resident	Scenario 4	1.45E+00	2.67E-03	2.33E-03
68	644736.2	4167648.9	Resident	Scenario 4	1.36E+00	2.50E-03	2.25E-03
69	644836.2	4167648.9	Resident	Scenario 4	1.27E+00	2.35E-03	2.17E-03
70	644936.2	4167648.9	Resident	Scenario 4	1.20E+00	2.21E-03	2.09E-03
71	645036.2	4167648.9	Resident	Scenario 4	1.13E+00	2.08E-03	2.04E-03
72	645236.2	4167648.9	Resident	Scenario 4	1.01E+00	1.87E-03	1.95E-03
73	644536.2	4167748.9	Resident	Scenario 4	1.45E+00	2.66E-03	2.45E-03
74	644636.2	4168848.9	Resident	Scenario 4	6.53E-01	1.32E-03	2.64E-03
75	644736.2	4168848.9	Resident	Scenario 4	6.32E-01	1.27E-03	2.20E-03
76	644636.2	4168948.9	Resident	Scenario 4	6.20E-01	1.26E-03	3.20E-03
77	644536.2	4169048.9	Resident	Scenario 4	6.05E-01	1.24E-03	3.16E-03
78	644636.2	4169048.9	Resident	Scenario 4	5.87E-01	1.20E-03	3.26E-03
79	644736.2	4169048.9	Resident	Scenario 4	5.70E-01	1.16E-03	3.20E-03
80	644336.2	4169148.9	Resident	Scenario 4	6.11E-01	1.26E-03	2.24E-03
81	644436.2	4169148.9	Resident	Scenario 4	5.92E-01	1.22E-03	2.24E-03
82	644536.2	4169148.9	Resident	Scenario 4	5.74E-01	1.18E-03	2.51E-03
83	644336.2	4169248.9	Resident	Scenario 4	5.79E-01	1.21E-03	2.19E-03
84	644436.2	4169248.9	Resident	Scenario 4	5.62E-01	1.17E-03	2.13E-03
85	644436.2	4169348.9	Resident	Scenario 4	5.35E-01	1.12E-03	2.08E-03
86	642336.2	4169948.9	Resident	Scenario 4	7.03E-01	1.65E-03	5.04E-03
87	642436.2	4169948.9	Resident	Scenario 4	6.81E-01	1.59E-03	3.12E-03
88	642536.2	4169948.9	Resident	Scenario 4	6.61E-01	1.52E-03	2.76E-03
89	642636.2	4169948.9	Resident	Scenario 4	6.40E-01	1.47E-03	2.67E-03
90	642736.2	4169948.9	Resident	Scenario 4	6.20E-01	1.42E-03	2.74E-03
91	642836.2	4169948.9	Resident	Scenario 4	6.02E-01	1.37E-03	3.02E-03
92	642936.2	4169948.9	Resident	Scenario 4	5.85E-01	1.33E-03	3.18E-03
93	643036.2	4169948.9	Resident	Scenario 4	5.70E-01	1.29E-03	2.77E-03
94	643136.2	4169948.9	Resident	Scenario 4	5.55E-01	1.25E-03	2.47E-03
95	644136.2	4169948.9	Resident	Scenario 4	4.24E-01	9.32E-04	1.93E-03
96	642236.2	4170048.9	Resident	Scenario 4	6.74E-01	1.60E-03	6.13E-03
97	642336.2	4170048.9	Resident	Scenario 4	6.55E-01	1.54E-03	5.40E-03
98	642436.2	4170048.9	Resident	Scenario 4	6.37E-01	1.49E-03	3.57E-03
99	642536.2	4170048.9	Resident	Scenario 4	6.20E-01	1.43E-03	2.50E-03
100	642636.2	4170048.9	Resident	Scenario 4	6.01E-01	1.38E-03	2.67E-03
101	642736.2	4170048.9	Resident	Scenario 4	5.83E-01	1.33E-03	2.63E-03
102	642836.2	4170048.9	Resident	Scenario 4	5.67E-01	1.29E-03	2.65E-03
103	642936.2	4170048.9	Resident	Scenario 4	5.52E-01	1.25E-03	3.07E-03
104	643036.2	4170048.9	Resident	Scenario 4	5.38E-01	1.22E-03	2.97E-03
105	643136.2	4170048.9	Resident	Scenario 4	5.25E-01	1.19E-03	2.46E-03
106	643236.2	4170048.9	Resident	Scenario 4	5.13E-01	1.15E-03	2.28E-03
107	643336.2	4170048.9	Resident	Scenario 4	5.01E-01	1.12E-03	2.28E-03
108	643436.2	4170048.9	Resident	Scenario 4	4.89E-01	1.09E-03	2.25E-03
109	643536.2	4170048.9	Resident	Scenario 4	4.77E-01	1.06E-03	2.19E-03
110	643636.2	4170048.9	Resident	Scenario 4	4.66E-01	1.04E-03	2.18E-03
111	643736.2	4170048.9	Resident	Scenario 4	4.52E-01	1.00E-03	2.06E-03
112	643836.2	4170048.9	Resident	Scenario 4	4.39E-01	9.74E-04	1.95E-03
113	643936.2	4170048.9	Resident	Scenario 4	4.27E-01	9.46E-04	1.99E-03
114	644036.2	4170048.9	Resident	Scenario 4	4.16E-01	9.20E-04	1.93E-03
115	642136.2	4170148.9	Resident	Scenario 4	6.42E-01	1.55E-03	4.45E-03
116	642236.2	4170148.9	Resident	Scenario 4	6.24E-01	1.49E-03	5.79E-03
117	642336.2	4170148.9	Resident	Scenario 4	6.10E-01	1.44E-03	5.61E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
118	643436.2	4170148.9	Resident	Scenario 4	4.64E-01	1.04E-03	2.18E-03
119	643536.2	4170148.9	Resident	Scenario 4	4.54E-01	1.02E-03	2.12E-03
120	643636.2	4170148.9	Resident	Scenario 4	4.43E-01	9.90E-04	2.06E-03
121	643736.2	4170148.9	Resident	Scenario 4	4.32E-01	9.63E-04	2.07E-03
122	643836.2	4170148.9	Resident	Scenario 4	4.20E-01	9.36E-04	1.91E-03
123	643936.2	4170148.9	Resident	Scenario 4	4.09E-01	9.10E-04	1.87E-03
124	643436.2	4170248.9	Resident	Scenario 4	4.42E-01	9.96E-04	2.11E-03
125	643536.2	4170248.9	Resident	Scenario 4	4.32E-01	9.73E-04	2.05E-03
126	643636.2	4170248.9	Resident	Scenario 4	4.22E-01	9.48E-04	2.00E-03
127	643736.2	4170248.9	Resident	Scenario 4	4.13E-01	9.25E-04	1.97E-03
128	643836.2	4170248.9	Resident	Scenario 4	4.02E-01	9.00E-04	1.96E-03
129	635936.2	4170748.9	Resident	Scenario 4	1.11E-01	3.30E-04	1.26E-03
130	636036.2	4170748.9	Resident	Scenario 4	1.15E-01	3.42E-04	1.19E-03
131	636136.2	4170748.9	Resident	Scenario 4	1.20E-01	3.58E-04	1.03E-03
132	635936.2	4170848.9	Resident	Scenario 4	1.12E-01	3.32E-04	1.08E-03
133	636036.2	4170848.9	Resident	Scenario 4	1.16E-01	3.46E-04	1.05E-03
134	636136.2	4170848.9	Resident	Scenario 4	1.21E-01	3.62E-04	1.13E-03
135	636236.2	4170848.9	Resident	Scenario 4	1.27E-01	3.79E-04	1.12E-03
136	636836.2	4170848.9	Resident	Scenario 4	1.74E-01	5.32E-04	9.08E-04
137	636036.2	4170948.9	Resident	Scenario 4	1.18E-01	3.49E-04	1.14E-03
138	636136.2	4170948.9	Resident	Scenario 4	1.23E-01	3.65E-04	1.12E-03
139	636236.2	4170948.9	Resident	Scenario 4	1.28E-01	3.83E-04	1.02E-03
140	636336.2	4170948.9	Resident	Scenario 4	1.35E-01	4.04E-04	7.77E-04
141	636636.2	4170948.9	Resident	Scenario 4	1.58E-01	4.78E-04	8.13E-04
142	636736.2	4170948.9	Resident	Scenario 4	1.66E-01	5.06E-04	8.93E-04
143	636836.2	4170948.9	Resident	Scenario 4	1.75E-01	5.35E-04	9.38E-04
144	635936.2	4171048.9	Resident	Scenario 4	1.14E-01	3.39E-04	1.08E-03
145	636036.2	4171048.9	Resident	Scenario 4	1.19E-01	3.53E-04	1.06E-03
146	636136.2	4171048.9	Resident	Scenario 4	1.24E-01	3.70E-04	9.69E-04
147	636236.2	4171048.9	Resident	Scenario 4	1.30E-01	3.88E-04	7.25E-04
148	636336.2	4171048.9	Resident	Scenario 4	1.36E-01	4.08E-04	7.00E-04
149	636536.2	4171048.9	Resident	Scenario 4	1.50E-01	4.53E-04	8.09E-04
150	636636.2	4171048.9	Resident	Scenario 4	1.58E-01	4.80E-04	8.75E-04
151	636736.2	4171048.9	Resident	Scenario 4	1.67E-01	5.08E-04	9.05E-04
152	635936.2	4171148.9	Resident	Scenario 4	1.16E-01	3.43E-04	9.58E-04
153	636036.2	4171148.9	Resident	Scenario 4	1.20E-01	3.58E-04	9.18E-04
154	636136.2	4171148.9	Resident	Scenario 4	1.26E-01	3.74E-04	6.86E-04
155	636236.2	4171148.9	Resident	Scenario 4	1.31E-01	3.91E-04	6.64E-04
156	636336.2	4171148.9	Resident	Scenario 4	1.37E-01	4.12E-04	7.20E-04
157	636536.2	4171148.9	Resident	Scenario 4	1.51E-01	4.57E-04	8.54E-04
158	636636.2	4171148.9	Resident	Scenario 4	1.58E-01	4.81E-04	8.72E-04
159	636136.2	4171248.9	Resident	Scenario 4	1.27E-01	3.79E-04	6.37E-04
160	636236.2	4171248.9	Resident	Scenario 4	1.32E-01	3.97E-04	7.20E-04
161	636336.2	4171248.9	Resident	Scenario 4	1.38E-01	4.16E-04	7.90E-04
162	636536.2	4171248.9	Resident	Scenario 4	1.51E-01	4.59E-04	8.37E-04
163	636036.2	4171348.9	Resident	Scenario 4	1.23E-01	3.67E-04	6.39E-04
164	636136.2	4171348.9	Resident	Scenario 4	1.28E-01	3.83E-04	7.18E-04
165	636236.2	4171348.9	Resident	Scenario 4	1.33E-01	4.01E-04	7.76E-04
166	636336.2	4171348.9	Resident	Scenario 4	1.39E-01	4.20E-04	8.06E-04
167	636136.2	4171448.9	Resident	Scenario 4	1.29E-01	3.87E-04	7.60E-04
168	642573.5	4166836.2	Roadway/Waterway	Scenario 4	--	--	--
169	644323.5	4166836.2	Roadway/Waterway	Scenario 4	--	--	--
170	641523.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
171	641548.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
172	641573.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
173	642048.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
174	642073.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
175	642098.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
176	642198.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
177	642223.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
178	642248.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
179	642273.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
180	642548.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
181	642573.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
182	642598.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
183	642623.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
184	642648.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
185	642673.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
186	642698.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
187	642723.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
188	642748.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
189	642773.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
190	642798.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
191	642823.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
192	642848.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
193	642873.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
194	642898.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
195	642923.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
196	642948.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
197	642973.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
198	642998.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
199	643023.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
200	643048.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
201	643073.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
202	643098.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
203	643123.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
204	643148.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
205	643173.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
206	643198.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
207	643223.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
208	643248.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
209	643273.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
210	643298.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
211	643323.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
212	643348.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
213	643373.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
214	643398.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
215	643423.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
216	643448.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
217	643473.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
218	643498.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
219	643523.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
220	643548.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
221	643573.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
222	643598.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
223	643623.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
224	643648.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
225	643673.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
226	643698.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
227	643723.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
228	643748.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
229	643773.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
230	643798.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
231	643823.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
232	643848.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
233	643873.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
234	643898.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
235	643923.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
236	643948.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
237	643973.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
238	643998.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
239	644023.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
240	644048.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
241	644073.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
242	644098.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
243	644123.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
244	644148.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
245	644173.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
246	644198.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
247	644223.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
248	644248.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
249	644273.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
250	644298.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
251	644323.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
252	644348.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
253	644373.5	4166861.2	Roadway/Waterway	Scenario 4	--	--	--
254	641423.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
255	641448.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
256	641473.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
257	641498.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
258	641523.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
259	641548.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
260	641573.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
261	641598.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
262	641623.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
263	641648.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
264	641673.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
265	641698.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
266	641723.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
267	641748.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
268	641773.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
269	641798.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
270	641823.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
271	641848.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
272	641873.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
273	641898.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
274	641923.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
275	641948.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
276	641973.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
277	641998.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
278	642023.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
279	642048.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
280	642073.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
281	642098.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
282	642123.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
283	642148.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
284	642173.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
285	642198.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
286	642223.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
287	642248.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
288	642273.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
289	642298.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
290	642323.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
291	642348.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
292	642373.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
293	642398.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
294	642423.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
295	642448.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
296	642473.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
297	642498.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
298	642523.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
299	642548.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
300	642573.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
301	642598.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
302	642623.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
303	642648.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
304	642673.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
305	642698.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
306	642723.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
307	642748.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
308	642773.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
309	642798.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
310	642823.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
311	642848.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
312	642873.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
313	642898.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
314	642923.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
315	642948.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
316	642973.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
317	642998.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
318	643023.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
319	643048.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
320	643073.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
321	643098.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
322	643123.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
323	643148.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
324	643173.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
325	643198.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
326	643223.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
327	643248.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
328	643273.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
329	643298.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
330	643323.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
331	643348.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
332	643373.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
333	643398.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
334	643423.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
335	643448.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
336	643473.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
337	643498.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
338	643523.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
339	643548.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
340	643573.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
341	643598.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
342	643623.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
343	643648.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
344	643673.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
345	643698.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
346	643723.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
347	643748.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
348	643773.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
349	643798.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
350	643823.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
351	643848.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
352	643873.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
353	643898.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
354	643923.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
355	643948.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
356	643973.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
357	643998.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
358	644023.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
359	644048.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
360	644073.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
361	644098.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
362	644123.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
363	644148.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
364	644173.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
365	644198.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
366	644223.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
367	644248.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
368	644273.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
369	644298.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
370	644323.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
371	644348.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
372	644373.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
373	644398.5	4166886.2	Roadway/Waterway	Scenario 4	--	--	--
374	641348.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
375	641373.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
376	641398.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
377	641423.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
378	641448.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
379	641473.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
380	641498.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
381	641523.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
382	641548.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
383	641573.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
384	641598.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
385	641623.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
386	641648.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
387	641673.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
388	641698.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
389	641723.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
390	641748.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
391	641773.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
392	641798.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
393	641823.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
394	641848.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
395	641873.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
396	641898.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
397	641923.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
398	641948.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
399	641973.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
400	641998.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
401	642023.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
402	642048.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
403	642073.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
404	642098.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
405	642123.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
406	642148.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
407	642173.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
408	642198.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
409	642223.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
410	642248.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
411	642273.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
412	642298.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
413	642323.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
414	642348.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
415	642373.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
416	642398.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
417	642423.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
418	642448.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
419	642473.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
420	642498.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
421	642523.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
422	642548.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
423	642573.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
424	642598.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
425	642623.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
426	642648.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
427	642673.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
428	642698.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
429	642723.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
430	642748.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
431	642773.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
432	643548.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
433	643573.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
434	643598.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
435	643623.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
436	643648.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
437	643673.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
438	643698.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
439	643723.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
440	643748.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
441	643773.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
442	643798.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
443	643823.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
444	643848.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
445	643873.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
446	643898.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
447	643923.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
448	643948.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
449	643973.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
450	643998.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
451	644023.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
452	644048.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
453	644073.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
454	644098.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
455	644123.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
456	644148.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
457	644173.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
458	644198.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
459	644223.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
460	644248.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
461	644273.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
462	644298.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
463	644323.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
464	644348.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
465	644373.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
466	644398.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
467	644423.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
468	644448.5	4166911.2	Roadway/Waterway	Scenario 4	--	--	--
469	641323.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
470	641348.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
471	641373.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
472	641398.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
473	641423.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
474	641448.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
475	641473.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
476	641498.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
477	641523.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
478	641548.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
479	641573.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
480	641598.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
481	641623.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
482	641648.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
483	641673.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
484	641698.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
485	641723.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
486	641748.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
487	641773.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
488	641798.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
489	641823.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
490	641848.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
491	641873.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
492	641898.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
493	641923.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
494	641948.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
495	642223.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
496	642248.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
497	642273.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
498	642298.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
499	642323.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
500	642348.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
501	642373.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
502	642398.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
503	642423.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
504	642448.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
505	642473.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
506	642498.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
507	642523.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
508	642548.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
509	642573.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
510	644323.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
511	644348.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
512	644373.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
513	644398.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
514	644423.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
515	644448.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
516	644473.5	4166936.2	Roadway/Waterway	Scenario 4	--	--	--
517	641323.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
518	641348.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
519	641373.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
520	641398.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
521	641423.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
522	641448.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
523	641473.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
524	641498.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
525	641523.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
526	642198.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
527	642223.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
528	642248.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
529	642273.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
530	642298.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
531	642323.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
532	642348.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
533	642373.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
534	642398.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
535	642423.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
536	642448.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
537	642473.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
538	642498.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
539	642523.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
540	642548.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
541	644373.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
542	644398.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
543	644423.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
544	644448.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
545	644473.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
546	644498.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
547	644523.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
548	644548.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
549	644573.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
550	644598.5	4166961.2	Roadway/Waterway	Scenario 4	--	--	--
551	641298.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
552	641323.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
553	641348.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
554	641373.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
555	641398.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
556	641423.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
557	642173.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
558	642198.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
559	642223.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
560	642248.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
561	642273.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
562	642298.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
563	642323.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
564	642348.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
565	644398.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
566	644423.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
567	644448.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
568	644473.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
569	644498.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
570	644523.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
571	644548.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
572	644573.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
573	644598.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
574	644623.5	4166986.2	Roadway/Waterway	Scenario 4	--	--	--
575	641348.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
576	641373.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
577	642148.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
578	642173.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
579	642198.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
580	642223.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
581	642248.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
582	642273.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
583	642298.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
584	642323.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
585	644423.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
586	644448.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
587	644473.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
588	644498.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
589	644523.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
590	644548.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
591	644573.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
592	644598.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
593	644623.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
594	644648.5	4167011.2	Roadway/Waterway	Scenario 4	--	--	--
595	641348.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
596	641373.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
597	642123.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
598	642148.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
599	642173.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
600	642198.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
601	642223.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
602	642248.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
603	642273.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
604	642298.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
605	644473.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
606	644498.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
607	644523.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
608	644548.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
609	644573.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
610	644598.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
611	644623.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
612	644648.5	4167036.2	Roadway/Waterway	Scenario 4	--	--	--
613	641373.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
614	642098.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
615	642123.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
616	642148.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
617	642173.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
618	642198.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
619	642223.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
620	642248.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
621	642273.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
622	644573.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
623	644598.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
624	644623.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
625	644648.5	4167061.2	Roadway/Waterway	Scenario 4	--	--	--
626	641373.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
627	642073.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
628	642098.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
629	642123.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
630	642148.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
631	642173.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
632	642198.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
633	642223.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
634	642248.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
635	644598.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
636	644623.5	4167086.2	Roadway/Waterway	Scenario 4	--	--	--
637	641373.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
638	642048.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
639	642073.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
640	642098.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
641	642123.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
642	642148.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
643	642173.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
644	642198.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
645	642223.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
646	644598.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
647	644623.5	4167111.2	Roadway/Waterway	Scenario 4	--	--	--
648	641373.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
649	642023.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
650	642048.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
651	642073.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
652	642098.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
653	642123.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
654	642148.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
655	642173.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
656	642198.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
657	644598.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
658	644623.5	4167136.2	Roadway/Waterway	Scenario 4	--	--	--
659	641373.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
660	641998.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
661	642023.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
662	642048.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
663	642073.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
664	642098.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
665	642123.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
666	642148.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
667	644598.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
668	644623.5	4167161.2	Roadway/Waterway	Scenario 4	--	--	--
669	641373.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
670	641948.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
671	641973.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
672	641998.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
673	642023.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
674	642048.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
675	642073.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
676	642098.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
677	642123.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
678	644598.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
679	644623.5	4167186.2	Roadway/Waterway	Scenario 4	--	--	--
680	641373.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
681	641923.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
682	641948.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
683	641973.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
684	641998.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
685	642023.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
686	642048.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
687	642073.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
688	642098.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
689	644598.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
690	644623.5	4167211.2	Roadway/Waterway	Scenario 4	--	--	--
691	641373.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
692	641898.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
693	641923.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
694	641948.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
695	641973.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
696	641998.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
697	642023.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
698	642048.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
699	642073.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
700	644598.5	4167236.2	Roadway/Waterway	Scenario 4	--	--	--
701	641373.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
702	641873.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
703	641898.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
704	641923.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
705	641948.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
706	641973.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
707	641998.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
708	642023.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
709	642048.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
710	644548.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
711	644573.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
712	644598.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
713	644623.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
714	644648.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
715	644673.5	4167261.2	Roadway/Waterway	Scenario 4	--	--	--
716	641373.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
717	641823.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
718	641848.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
719	641873.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
720	641898.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
721	641923.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
722	641948.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
723	641973.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
724	641998.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
725	642023.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
726	644448.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
727	644473.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
728	644498.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
729	644523.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
730	644548.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
731	644573.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
732	644598.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
733	644623.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
734	644648.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
735	644673.5	4167286.2	Roadway/Waterway	Scenario 4	--	--	--
736	641373.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
737	641748.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
738	641773.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
739	641798.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
740	641823.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
741	641848.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
742	641873.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
743	641898.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
744	641923.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
745	641948.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
746	641973.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
747	641998.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
748	644373.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
749	644398.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
750	644423.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
751	644448.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
752	644473.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
753	644498.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
754	644523.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
755	644548.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
756	644573.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
757	644598.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
758	644623.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
759	644648.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
760	641373.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
761	641673.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
762	641698.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
763	641723.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
764	641748.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
765	641773.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
766	641798.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
767	641823.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
768	641848.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
769	641873.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
770	641898.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
771	641923.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
772	641948.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
773	641973.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
774	644298.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
775	644323.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
776	644348.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
777	644373.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
778	644398.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
779	644423.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
780	644448.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
781	644473.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
782	644498.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
783	644523.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
784	644548.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
785	644573.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
786	644598.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
787	644623.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
788	641373.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
789	641573.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
790	641598.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
791	641623.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
792	641648.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
793	641673.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
794	641698.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
795	641723.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
796	641748.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
797	641773.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
798	641798.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
799	641823.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
800	641848.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
801	641873.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
802	641898.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
803	641923.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
804	643348.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
805	643373.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
806	643398.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
807	643423.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
808	643448.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
809	643473.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
810	643498.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
811	643523.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
812	643548.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
813	643573.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
814	643598.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
815	643623.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
816	643648.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
817	643673.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
818	643698.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
819	643723.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
820	643748.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
821	643773.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
822	643798.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
823	643823.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
824	643848.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
825	643873.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
826	644248.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
827	644273.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
828	644298.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
829	644323.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
830	644348.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
831	644373.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
832	644398.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
833	644423.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
834	644448.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
835	644473.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
836	644498.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
837	641373.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
838	641498.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
839	641523.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
840	641548.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
841	641573.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
842	641598.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
843	641623.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
844	641648.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
845	641673.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
846	641698.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
847	641723.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
848	641748.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
849	641773.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
850	641798.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
851	641823.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
852	641848.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
853	641873.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
854	643323.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
855	643348.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
856	643373.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
857	643398.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
858	643423.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
859	643448.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
860	643473.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
861	643498.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
862	643523.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
863	643548.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
864	643573.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
865	643598.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
866	643623.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
867	643648.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
868	643673.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
869	643698.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
870	643723.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
871	643748.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
872	643773.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
873	643798.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
874	643823.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
875	643848.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
876	643873.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
877	643898.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
878	643923.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
879	643948.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
880	643973.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
881	643998.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
882	644023.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
883	644048.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
884	644073.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
885	644148.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
886	644173.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
887	644198.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
888	644223.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
889	644248.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
890	644273.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
891	644298.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
892	644323.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
893	644348.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
894	644373.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
895	644398.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
896	644423.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
897	641373.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
898	641398.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
899	641423.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
900	641448.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
901	641473.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
902	641498.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
903	641523.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
904	641548.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
905	641573.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
906	641598.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
907	641623.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
908	641648.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
909	641673.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
910	641698.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
911	641723.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
912	641748.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
913	641773.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
914	641798.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
915	641823.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
916	641848.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
917	643298.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
918	643323.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
919	643348.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
920	643373.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
921	643398.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
922	643423.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
923	643448.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
924	643473.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
925	643498.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
926	643523.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
927	643548.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
928	643573.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
929	643598.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
930	643623.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
931	643648.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
932	643673.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
933	643698.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
934	643723.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
935	643748.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
936	643773.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
937	643798.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
938	643823.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
939	643848.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
940	643873.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
941	643898.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
942	643923.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
943	643948.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
944	643973.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
945	643998.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
946	644023.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
947	644048.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
948	644073.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
949	644098.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
950	644123.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
951	644148.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
952	644173.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
953	644198.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
954	644223.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
955	644248.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
956	644273.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
957	644298.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
958	644323.5	4167411.2	Roadway/Waterway	Scenario 4	--	--	--
959	641298.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
960	641323.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
961	641348.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
962	641373.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
963	641398.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
964	641423.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
965	641448.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
966	641473.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
967	641498.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
968	641523.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
969	641548.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
970	641573.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
971	641598.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
972	641623.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
973	641648.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
974	641673.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
975	641698.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
976	641723.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
977	641748.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
978	641773.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
979	643273.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
980	643298.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
981	643323.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
982	643773.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
983	643798.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
984	643823.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
985	643848.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
986	643873.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
987	643898.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
988	643923.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
989	643948.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
990	643973.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
991	643998.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
992	644023.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
993	644048.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
994	644073.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
995	644098.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
996	644123.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
997	644148.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
998	644173.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
999	644198.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
1000	644223.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
1001	644248.5	4167436.2	Roadway/Waterway	Scenario 4	--	--	--
1002	641323.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1003	641348.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1004	641373.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1005	641398.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1006	641423.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1007	641448.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1008	641473.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1009	641498.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1010	641523.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1011	641548.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1012	641573.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1013	641598.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1014	641623.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1015	641648.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1016	641673.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1017	641698.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1018	643248.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1019	643273.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1020	643298.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1021	643923.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1022	643948.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1023	643973.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1024	643998.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1025	644023.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1026	644048.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1027	644073.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1028	644098.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1029	644123.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1030	644148.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1031	644173.5	4167461.2	Roadway/Waterway	Scenario 4	--	--	--
1032	641273.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1033	641298.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1034	641323.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1035	641348.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1036	641373.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1037	641398.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1038	641423.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1039	641448.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1040	641473.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1041	641498.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1042	641523.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1043	641548.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1044	641573.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1045	641598.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1046	643223.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1047	643248.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1048	643273.5	4167486.2	Roadway/Waterway	Scenario 4	--	--	--
1049	641198.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1050	641223.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1051	641248.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1052	641273.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1053	641298.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1054	641323.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1055	641348.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1056	641373.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1057	641398.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1058	641423.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1059	641448.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1060	641473.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1061	641498.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1062	641523.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1063	643223.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1064	643248.5	4167511.2	Roadway/Waterway	Scenario 4	--	--	--
1065	641098.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1066	641123.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1067	641148.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1068	641173.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1069	641198.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1070	641223.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1071	641248.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1072	641273.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1073	641298.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1074	641323.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1075	641348.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1076	641373.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1077	641398.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1078	641423.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1079	643198.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1080	643223.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1081	643248.5	4167536.2	Roadway/Waterway	Scenario 4	--	--	--
1082	641023.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1083	641048.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1084	641073.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1085	641098.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1086	641123.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1087	641148.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1088	641173.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1089	641198.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1090	641223.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1091	641248.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1092	641273.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1093	641298.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1094	641323.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1095	641348.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1096	643173.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1097	643198.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1098	643223.5	4167561.2	Roadway/Waterway	Scenario 4	--	--	--
1099	640923.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1100	640948.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1101	640973.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1102	640998.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1103	641023.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1104	641048.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1105	641073.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1106	641098.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1107	641123.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1108	641148.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1109	641173.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1110	641198.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1111	641223.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1112	641248.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1113	641273.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1114	643148.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1115	643173.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1116	643198.5	4167586.2	Roadway/Waterway	Scenario 4	--	--	--
1117	640823.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1118	640848.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1119	640873.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1120	640898.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1121	640923.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1122	640948.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1123	640973.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1124	640998.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1125	641023.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1126	641048.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1127	641073.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1128	641098.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1129	641123.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1130	641148.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1131	641173.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1132	643123.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1133	643148.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1134	643173.5	4167611.2	Roadway/Waterway	Scenario 4	--	--	--
1135	640723.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1136	640748.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1137	640773.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1138	640798.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1139	640823.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1140	640848.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1141	640873.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1142	640898.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1143	640923.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1144	640948.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1145	640973.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1146	640998.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1147	641023.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1148	641048.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1149	641073.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1150	641098.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1151	643123.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1152	643148.5	4167636.2	Roadway/Waterway	Scenario 4	--	--	--
1153	640623.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1154	640648.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1155	640673.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1156	640698.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1157	640723.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1158	640748.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1159	640773.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1160	640798.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1161	640823.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1162	640848.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1163	640873.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1164	640898.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1165	640923.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1166	640948.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1167	640973.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1168	640998.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1169	643098.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1170	643123.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1171	643148.5	4167661.2	Roadway/Waterway	Scenario 4	--	--	--
1172	640523.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1173	640548.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1174	640573.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1175	640598.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1176	640623.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1177	640648.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1178	640673.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1179	640698.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1180	640723.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1181	640748.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1182	640773.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1183	640798.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1184	640823.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1185	640848.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1186	640873.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1187	640898.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1188	643073.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1189	643098.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1190	643123.5	4167686.2	Roadway/Waterway	Scenario 4	--	--	--
1191	640423.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1192	640448.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1193	640473.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1194	640498.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1195	640523.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1196	640548.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1197	640573.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1198	640598.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1199	640623.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1200	640648.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1201	640673.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1202	640698.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1203	640723.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1204	640748.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1205	640773.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1206	640798.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1207	643048.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1208	643073.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1209	643098.5	4167711.2	Roadway/Waterway	Scenario 4	--	--	--
1210	640373.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1211	640398.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1212	640423.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1213	640448.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1214	640473.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1215	640498.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1216	640523.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1217	640548.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1218	640573.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1219	640598.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1220	640623.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1221	640648.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1222	640673.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1223	640698.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1224	640723.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1225	643023.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1226	643048.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1227	643073.5	4167736.2	Roadway/Waterway	Scenario 4	--	--	--
1228	640323.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1229	640348.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1230	640373.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1231	640398.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1232	640423.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1233	640448.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1234	640473.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1235	640498.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1236	640523.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1237	640548.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1238	640573.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1239	640598.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1240	640623.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1241	643023.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1242	643048.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1243	643073.5	4167761.2	Roadway/Waterway	Scenario 4	--	--	--
1244	640273.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1245	640298.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1246	640323.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1247	640348.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1248	640373.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1249	640398.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1250	640423.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1251	640448.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1252	640473.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1253	640498.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1254	640523.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1255	642998.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1256	643023.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1257	643048.5	4167786.2	Roadway/Waterway	Scenario 4	--	--	--
1258	640223.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1259	640248.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1260	640273.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1261	640298.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1262	640323.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1263	640348.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1264	640373.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1265	640398.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1266	640423.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1267	642973.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1268	642998.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1269	643023.5	4167811.2	Roadway/Waterway	Scenario 4	--	--	--
1270	640198.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1271	640223.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1272	640248.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1273	640273.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1274	640298.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1275	640323.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1276	640348.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1277	640373.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1278	642923.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1279	642948.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1280	642973.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1281	642998.5	4167836.2	Roadway/Waterway	Scenario 4	--	--	--
1282	640148.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1283	640173.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1284	640198.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1285	640223.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1286	640248.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1287	640273.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1288	640298.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1289	640323.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1290	642898.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1291	642923.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1292	642948.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1293	642973.5	4167861.2	Roadway/Waterway	Scenario 4	--	--	--
1294	640123.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1295	640148.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1296	640173.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1297	640198.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1298	640223.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1299	640248.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1300	640273.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1301	642848.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1302	642873.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1303	642898.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1304	642923.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1305	642948.5	4167886.2	Roadway/Waterway	Scenario 4	--	--	--
1306	640073.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1307	640098.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1308	640123.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1309	640148.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1310	640173.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1311	640198.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1312	640223.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1313	640248.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1314	642823.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1315	642848.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1316	642873.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1317	642898.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1318	642923.5	4167911.2	Roadway/Waterway	Scenario 4	--	--	--
1319	640048.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1320	640073.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1321	640098.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1322	640123.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1323	640148.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1324	640173.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1325	640198.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1326	642773.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1327	642798.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1328	642823.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1329	642848.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1330	642873.5	4167936.2	Roadway/Waterway	Scenario 4	--	--	--
1331	639998.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1332	640023.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1333	640048.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1334	640073.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1335	640098.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1336	640123.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1337	640148.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1338	640173.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1339	642748.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1340	642773.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1341	642798.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1342	642823.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1343	642848.5	4167961.2	Roadway/Waterway	Scenario 4	--	--	--
1344	639973.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1345	639998.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1346	640023.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1347	640048.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1348	640073.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1349	640098.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1350	640123.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1351	642698.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1352	642723.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1353	642748.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1354	642773.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1355	642798.5	4167986.2	Roadway/Waterway	Scenario 4	--	--	--
1356	639923.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1357	639948.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1358	639973.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1359	639998.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1360	640023.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1361	640048.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1362	640073.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1363	640098.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1364	642648.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1365	642673.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1366	642698.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1367	642723.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1368	642748.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1369	642773.5	4168011.2	Roadway/Waterway	Scenario 4	--	--	--
1370	639898.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1371	639923.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1372	639948.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1373	639973.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1374	639998.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1375	640023.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1376	640048.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1377	642623.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1378	642648.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1379	642673.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1380	642698.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1381	642723.5	4168036.2	Roadway/Waterway	Scenario 4	--	--	--
1382	639848.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1383	639873.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1384	639898.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1385	639923.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1386	639948.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1387	639973.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1388	639998.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1389	642573.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1390	642598.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1391	642623.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1392	642648.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1393	642673.5	4168061.2	Roadway/Waterway	Scenario 4	--	--	--
1394	639823.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1395	639848.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1396	639873.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1397	639898.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1398	639923.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1399	639948.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1400	639973.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1401	642548.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1402	642573.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1403	642598.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1404	642623.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1405	642648.5	4168086.2	Roadway/Waterway	Scenario 4	--	--	--
1406	639773.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1407	639798.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1408	639823.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1409	639848.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1410	639873.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1411	639898.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1412	639923.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1413	642498.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1414	642523.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1415	642548.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1416	642573.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1417	642598.5	4168111.2	Roadway/Waterway	Scenario 4	--	--	--
1418	639748.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1419	639773.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1420	639798.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1421	639823.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1422	639848.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1423	639873.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1424	639898.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1425	642473.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1426	642498.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1427	642523.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1428	642548.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1429	642573.5	4168136.2	Roadway/Waterway	Scenario 4	--	--	--
1430	639698.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1431	639723.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1432	639748.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1433	639773.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1434	639798.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1435	639823.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1436	639848.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1437	642448.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1438	642473.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1439	642498.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1440	642523.5	4168161.2	Roadway/Waterway	Scenario 4	--	--	--
1441	639673.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1442	639698.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1443	639723.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1444	639748.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1445	639773.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1446	639798.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1447	639823.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1448	642423.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1449	642448.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1450	642473.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1451	642498.5	4168186.2	Roadway/Waterway	Scenario 4	--	--	--
1452	639648.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1453	639673.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1454	639698.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1455	639723.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1456	639748.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1457	639773.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1458	642398.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1459	642423.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1460	642448.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1461	642473.5	4168211.2	Roadway/Waterway	Scenario 4	--	--	--
1462	639648.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1463	639673.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1464	639698.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1465	639723.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1466	639748.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1467	642373.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1468	642398.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1469	642423.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1470	642448.5	4168236.2	Roadway/Waterway	Scenario 4	--	--	--
1471	639648.5	4168261.2	Roadway/Waterway	Scenario 4	--	--	--
1472	639673.5	4168261.2	Roadway/Waterway	Scenario 4	--	--	--
1473	639698.5	4168261.2	Roadway/Waterway	Scenario 4	--	--	--
1474	642348.5	4168261.2	Roadway/Waterway	Scenario 4	--	--	--
1475	642373.5	4168261.2	Roadway/Waterway	Scenario 4	--	--	--
1476	642398.5	4168261.2	Roadway/Waterway	Scenario 4	--	--	--
1477	642423.5	4168261.2	Roadway/Waterway	Scenario 4	--	--	--
1478	639648.5	4168286.2	Roadway/Waterway	Scenario 4	--	--	--
1479	639673.5	4168286.2	Roadway/Waterway	Scenario 4	--	--	--
1480	642298.5	4168286.2	Roadway/Waterway	Scenario 4	--	--	--
1481	642323.5	4168286.2	Roadway/Waterway	Scenario 4	--	--	--
1482	642348.5	4168286.2	Roadway/Waterway	Scenario 4	--	--	--
1483	642373.5	4168286.2	Roadway/Waterway	Scenario 4	--	--	--
1484	642398.5	4168286.2	Roadway/Waterway	Scenario 4	--	--	--
1485	639723.5	4168311.2	Roadway/Waterway	Scenario 4	--	--	--
1486	642248.5	4168311.2	Roadway/Waterway	Scenario 4	--	--	--
1487	642273.5	4168311.2	Roadway/Waterway	Scenario 4	--	--	--
1488	642298.5	4168311.2	Roadway/Waterway	Scenario 4	--	--	--
1489	642323.5	4168311.2	Roadway/Waterway	Scenario 4	--	--	--
1490	642348.5	4168311.2	Roadway/Waterway	Scenario 4	--	--	--
1491	642373.5	4168311.2	Roadway/Waterway	Scenario 4	--	--	--
1492	639723.5	4168336.2	Roadway/Waterway	Scenario 4	--	--	--
1493	642198.5	4168336.2	Roadway/Waterway	Scenario 4	--	--	--
1494	642223.5	4168336.2	Roadway/Waterway	Scenario 4	--	--	--
1495	642248.5	4168336.2	Roadway/Waterway	Scenario 4	--	--	--
1496	642273.5	4168336.2	Roadway/Waterway	Scenario 4	--	--	--
1497	642298.5	4168336.2	Roadway/Waterway	Scenario 4	--	--	--
1498	642323.5	4168336.2	Roadway/Waterway	Scenario 4	--	--	--
1499	639373.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1500	639398.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1501	639423.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1502	639448.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1503	639473.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1504	639498.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1505	639523.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1506	639548.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1507	639723.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1508	642148.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1509	642173.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1510	642198.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1511	642223.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1512	642248.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1513	642273.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1514	642298.5	4168361.2	Roadway/Waterway	Scenario 4	--	--	--
1515	639323.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1516	639348.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1517	639373.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1518	639398.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1519	639423.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1520	639448.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1521	639473.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1522	639498.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1523	639723.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1524	642098.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1525	642123.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1526	642148.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1527	642173.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1528	642198.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1529	642223.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1530	642248.5	4168386.2	Roadway/Waterway	Scenario 4	--	--	--
1531	639298.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1532	639323.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1533	639348.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1534	639373.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1535	639398.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1536	639423.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1537	639448.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1538	639473.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1539	639723.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1540	642023.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1541	642048.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1542	642073.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1543	642098.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1544	642123.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1545	642148.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1546	642173.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1547	642198.5	4168411.2	Roadway/Waterway	Scenario 4	--	--	--
1548	639248.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1549	639273.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1550	639298.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1551	639323.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1552	639348.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1553	639373.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1554	639398.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1555	639423.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1556	639723.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1557	641973.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1558	641998.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1559	642023.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1560	642048.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1561	642073.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1562	642098.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1563	642123.5	4168436.2	Roadway/Waterway	Scenario 4	--	--	--
1564	639198.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1565	639223.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1566	639248.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1567	639273.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1568	639298.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1569	639323.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1570	639348.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1571	639373.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1572	641923.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1573	641948.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1574	641973.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1575	641998.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1576	642023.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1577	642048.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1578	642073.5	4168461.2	Roadway/Waterway	Scenario 4	--	--	--
1579	639173.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1580	639198.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1581	639223.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1582	639248.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1583	639273.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1584	639298.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1585	639323.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1586	641848.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1587	641873.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1588	641898.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1589	641923.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1590	641948.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1591	641973.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1592	641998.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1593	642023.5	4168486.2	Roadway/Waterway	Scenario 4	--	--	--
1594	639123.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1595	639148.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1596	639173.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1597	639198.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1598	639223.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1599	639248.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1600	639273.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1601	639298.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1602	641348.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1603	641798.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1604	641823.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1605	641848.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1606	641873.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1607	641898.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1608	641923.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1609	641948.5	4168511.2	Roadway/Waterway	Scenario 4	--	--	--
1610	639073.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1611	639098.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1612	639123.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1613	639148.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1614	639173.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1615	639198.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1616	639223.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1617	639248.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1618	641348.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1619	641723.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1620	641748.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1621	641773.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1622	641798.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1623	641823.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1624	641848.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1625	641873.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1626	641898.5	4168536.2	Roadway/Waterway	Scenario 4	--	--	--
1627	639048.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1628	639073.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1629	639098.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1630	639123.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1631	639148.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1632	639173.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1633	639198.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1634	641348.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1635	641648.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1636	641673.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1637	641698.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1638	641723.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1639	641748.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1640	641773.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1641	641798.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1642	641823.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1643	641848.5	4168561.2	Roadway/Waterway	Scenario 4	--	--	--
1644	638998.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1645	639023.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1646	639048.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1647	639073.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1648	639098.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1649	639123.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1650	639148.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1651	639173.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1652	641348.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1653	641573.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1654	641598.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1655	641623.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1656	641648.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1657	641673.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1658	641698.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1659	641723.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1660	641748.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1661	641773.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1662	641798.5	4168586.2	Roadway/Waterway	Scenario 4	--	--	--
1663	638948.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1664	638973.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1665	638998.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1666	639023.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1667	639048.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1668	639073.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1669	639098.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1670	639123.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1671	641348.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1672	641498.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1673	641523.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1674	641548.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1675	641573.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1676	641598.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1677	641623.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1678	641648.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1679	641673.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1680	641698.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1681	641723.5	4168611.2	Roadway/Waterway	Scenario 4	--	--	--
1682	638923.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1683	638948.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1684	638973.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1685	638998.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1686	639023.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1687	639048.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1688	639073.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1689	641348.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1690	641423.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1691	641448.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1692	641473.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1693	641498.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1694	641523.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1695	641548.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1696	641573.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1697	641598.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1698	641623.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1699	641648.5	4168636.2	Roadway/Waterway	Scenario 4	--	--	--
1700	638873.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1701	638898.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1702	638923.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1703	638948.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1704	638973.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1705	638998.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1706	639023.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1707	639048.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1708	641348.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1709	641373.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1710	641398.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1711	641423.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1712	641448.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1713	641473.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1714	641498.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1715	641523.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1716	641548.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1717	641573.5	4168661.2	Roadway/Waterway	Scenario 4	--	--	--
1718	638823.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1719	638848.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1720	638873.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1721	638898.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1722	638923.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1723	638948.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1724	638973.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1725	638998.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1726	641273.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1727	641298.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1728	641323.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1729	641348.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1730	641373.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1731	641398.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1732	641423.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1733	641448.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1734	641473.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1735	641498.5	4168686.2	Roadway/Waterway	Scenario 4	--	--	--
1736	638773.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1737	638798.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1738	638823.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1739	638848.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1740	638873.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1741	638898.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1742	638923.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1743	638948.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1744	641198.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1745	641223.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1746	641248.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1747	641273.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1748	641298.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1749	641323.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1750	641348.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1751	641373.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1752	641398.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1753	641423.5	4168711.2	Roadway/Waterway	Scenario 4	--	--	--
1754	638748.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1755	638773.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1756	638798.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1757	638823.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1758	638848.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1759	638873.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1760	638898.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1761	638923.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1762	640123.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1763	640148.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1764	640173.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1765	640198.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1766	640223.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1767	640248.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1768	640273.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1769	640298.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1770	641123.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1771	641148.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1772	641173.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1773	641198.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1774	641223.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1775	641248.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1776	641273.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1777	641298.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1778	641323.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1779	641348.5	4168736.2	Roadway/Waterway	Scenario 4	--	--	--
1780	638698.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1781	638723.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1782	638748.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1783	638773.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1784	638798.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1785	638823.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1786	638848.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1787	638873.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1788	640098.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1789	640123.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1790	640148.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1791	640173.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1792	640198.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1793	640223.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1794	640248.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1795	640273.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1796	640298.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1797	640323.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1798	640348.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1799	641048.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1800	641073.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1801	641098.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1802	641123.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1803	641148.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1804	641173.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1805	641198.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1806	641223.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1807	641248.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1808	641273.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
1809	638673.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1810	638698.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1811	638723.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1812	638748.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1813	638773.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1814	638798.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1815	638823.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1816	640048.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1817	640073.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1818	640098.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1819	640123.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1820	640148.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1821	640173.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1822	640198.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1823	640223.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1824	640248.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1825	640273.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1826	640298.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1827	640323.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1828	640348.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1829	640373.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1830	640398.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1831	640973.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1832	640998.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1833	641023.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1834	641048.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1835	641073.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1836	641098.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1837	641123.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1838	641148.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1839	641173.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1840	641198.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1841	641223.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
1842	638648.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1843	638673.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1844	638698.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1845	638723.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1846	638748.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1847	638773.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1848	638798.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1849	640048.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1850	640073.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1851	640098.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1852	640123.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1853	640148.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1854	640173.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1855	640198.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1856	640223.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1857	640248.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1858	640273.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1859	640298.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1860	640323.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1861	640348.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1862	640373.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1863	640398.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1864	640423.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1865	640448.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1866	640898.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1867	640923.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1868	640948.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1869	640973.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1870	640998.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1871	641023.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1872	641048.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1873	641073.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1874	641098.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1875	641123.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1876	641148.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
1877	638598.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1878	638623.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1879	638648.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1880	638673.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1881	638698.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1882	638723.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1883	638748.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1884	640023.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1885	640048.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1886	640073.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1887	640098.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1888	640123.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1889	640148.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1890	640298.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1891	640323.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1892	640348.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1893	640373.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1894	640398.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1895	640423.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1896	640448.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1897	640473.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1898	640498.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1899	640823.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1900	640848.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1901	640873.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1902	640898.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1903	640923.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1904	640948.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1905	640973.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1906	640998.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1907	641023.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1908	641048.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1909	641073.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
1910	638573.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1911	638598.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1912	638623.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1913	638648.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1914	638673.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1915	638698.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1916	638723.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1917	639998.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1918	640023.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1919	640048.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1920	640073.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1921	640098.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1922	640348.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1923	640373.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1924	640398.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1925	640423.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1926	640448.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1927	640473.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1928	640498.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1929	640523.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1930	640548.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1931	640748.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1932	640773.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1933	640798.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1934	640823.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1935	640848.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1936	640873.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1937	640898.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
1938	640923.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1939	640948.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1940	640973.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1941	640998.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
1942	638548.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1943	638573.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1944	638598.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1945	638623.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1946	638648.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1947	638673.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1948	639973.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1949	639998.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1950	640023.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1951	640048.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1952	640073.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1953	640398.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1954	640423.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1955	640448.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1956	640473.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1957	640498.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1958	640523.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1959	640548.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1960	640573.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1961	640598.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1962	640623.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1963	640648.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1964	640673.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1965	640698.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1966	640723.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1967	640748.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1968	640773.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1969	640798.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1970	640823.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1971	640848.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1972	640873.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1973	640898.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1974	640923.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
1975	638523.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1976	638548.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1977	638573.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1978	638598.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1979	638623.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1980	638648.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1981	639948.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1982	639973.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1983	639998.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1984	640023.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1985	640048.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1986	640448.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1987	640473.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1988	640498.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1989	640523.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1990	640548.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1991	640573.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1992	640598.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1993	640623.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1994	640648.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1995	640673.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1996	640698.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1997	640723.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1998	640748.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
1999	640773.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
2000	640798.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
2001	640823.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
2002	640848.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
2003	638473.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2004	638498.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2005	638523.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2006	638548.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2007	638573.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2008	638598.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2009	638623.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2010	639923.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2011	639948.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2012	639973.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2013	639998.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2014	640023.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2015	640448.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2016	640473.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2017	640498.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2018	640523.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2019	640548.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2020	640573.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2021	640598.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2022	640623.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2023	640648.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2024	640673.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2025	640698.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2026	640723.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2027	640748.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
2028	638448.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2029	638473.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2030	638498.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2031	638523.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2032	638548.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2033	638573.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2034	639898.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2035	639923.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2036	639948.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2037	639973.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2038	639998.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2039	640023.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2040	640448.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2041	640473.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2042	640498.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2043	640523.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2044	640598.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2045	640623.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2046	640648.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2047	640673.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
2048	638423.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2049	638448.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2050	638473.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2051	638498.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2052	638523.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2053	638548.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2054	639873.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2055	639898.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2056	639923.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2057	639948.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2058	639973.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2059	639998.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2060	640448.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2061	640473.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2062	640498.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2063	640523.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
2064	638398.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2065	638423.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2066	638448.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2067	638473.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2068	638498.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2069	638523.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2070	639848.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2071	639873.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2072	639898.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2073	639923.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2074	639948.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2075	639973.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2076	640473.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--
2077	640498.5	4169011.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2078	638373.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2079	638398.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2080	638423.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2081	638448.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2082	638473.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2083	638498.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2084	639823.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2085	639848.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2086	639873.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2087	639898.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2088	639923.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2089	639948.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2090	640498.5	4169036.2	Roadway/Waterway	Scenario 4	--	--	--
2091	638348.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2092	638373.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2093	638398.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2094	638423.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2095	638448.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2096	639823.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2097	639848.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2098	639873.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2099	639898.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2100	639923.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2101	640498.5	4169061.2	Roadway/Waterway	Scenario 4	--	--	--
2102	638323.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2103	638348.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2104	638373.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2105	638398.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2106	638423.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2107	638448.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2108	639648.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2109	639673.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2110	639698.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2111	639723.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2112	639748.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2113	639773.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2114	639798.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2115	639823.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2116	639848.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2117	639873.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2118	639898.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2119	640498.5	4169086.2	Roadway/Waterway	Scenario 4	--	--	--
2120	638298.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2121	638323.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2122	638348.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2123	638373.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2124	638398.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2125	638423.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2126	639598.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2127	639623.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2128	639648.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2129	639673.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2130	639698.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2131	639723.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2132	639748.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2133	639773.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2134	639798.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2135	639823.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2136	639848.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2137	639873.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2138	640498.5	4169111.2	Roadway/Waterway	Scenario 4	--	--	--
2139	638273.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2140	638298.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2141	638323.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2142	638348.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2143	638373.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2144	638398.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2145	639573.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2146	639598.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2147	639623.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2148	639648.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2149	639673.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2150	639698.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2151	639723.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2152	639748.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2153	639773.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2154	639798.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2155	639823.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2156	639848.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2157	640498.5	4169136.2	Roadway/Waterway	Scenario 4	--	--	--
2158	638248.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2159	638273.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2160	638298.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2161	638323.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2162	638348.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2163	638373.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2164	639548.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2165	639573.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2166	639598.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2167	639623.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2168	639648.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2169	639673.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2170	639698.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2171	639723.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2172	639748.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2173	639773.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2174	639798.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2175	639823.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2176	640498.5	4169161.2	Roadway/Waterway	Scenario 4	--	--	--
2177	638223.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2178	638248.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2179	638273.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2180	638298.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2181	638323.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2182	638348.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2183	639548.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2184	639573.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2185	639598.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2186	639623.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2187	639648.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2188	640498.5	4169186.2	Roadway/Waterway	Scenario 4	--	--	--
2189	638198.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2190	638223.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2191	638248.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2192	638273.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2193	638298.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2194	638323.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2195	639523.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2196	639548.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2197	639573.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2198	639598.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2199	639623.5	4169211.2	Roadway/Waterway	Scenario 4	--	--	--
2200	638173.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2201	638198.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2202	638223.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2203	638248.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2204	638273.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2205	638298.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2206	639523.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2207	639548.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2208	639573.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2209	639598.5	4169236.2	Roadway/Waterway	Scenario 4	--	--	--
2210	638148.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2211	638173.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2212	638198.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2213	638223.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2214	638248.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2215	638273.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2216	639498.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2217	639523.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2218	639548.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2219	639573.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2220	639598.5	4169261.2	Roadway/Waterway	Scenario 4	--	--	--
2221	638123.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2222	638148.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2223	638173.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2224	638198.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2225	638223.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2226	638248.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2227	639473.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2228	639498.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2229	639523.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2230	639548.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2231	639573.5	4169286.2	Roadway/Waterway	Scenario 4	--	--	--
2232	638098.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2233	638123.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2234	638148.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2235	638173.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2236	638198.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2237	638223.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2238	639473.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2239	639498.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2240	639523.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2241	639548.5	4169311.2	Roadway/Waterway	Scenario 4	--	--	--
2242	638073.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2243	638098.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2244	638123.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2245	638148.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2246	638173.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2247	638198.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2248	639448.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2249	639473.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2250	639498.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2251	639523.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2252	639548.5	4169336.2	Roadway/Waterway	Scenario 4	--	--	--
2253	638048.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2254	638073.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2255	638098.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2256	638123.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2257	638148.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2258	638173.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2259	639398.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2260	639423.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2261	639448.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2262	639473.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2263	639498.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2264	639523.5	4169361.2	Roadway/Waterway	Scenario 4	--	--	--
2265	638023.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2266	638048.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2267	638073.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2268	638098.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2269	638123.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2270	638148.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2271	639373.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2272	639398.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2273	639423.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2274	639448.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2275	639473.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2276	639498.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2277	641323.5	4169386.2	Roadway/Waterway	Scenario 4	--	--	--
2278	638023.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2279	638048.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2280	638073.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2281	638098.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2282	638123.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2283	639348.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2284	639373.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2285	639398.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2286	639423.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2287	639448.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2288	639473.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2289	641323.5	4169411.2	Roadway/Waterway	Scenario 4	--	--	--
2290	637998.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2291	638023.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2292	638048.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2293	638073.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2294	638098.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2295	639323.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2296	639348.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2297	639373.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2298	639398.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2299	639423.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2300	639448.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2301	641323.5	4169436.2	Roadway/Waterway	Scenario 4	--	--	--
2302	637998.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2303	638023.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2304	638048.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2305	638073.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2306	639298.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2307	639323.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2308	639348.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2309	639373.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2310	639398.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2311	639423.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2312	641323.5	4169461.2	Roadway/Waterway	Scenario 4	--	--	--
2313	637998.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2314	638023.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2315	638048.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2316	639248.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2317	639273.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2318	639298.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2319	639323.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2320	639348.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2321	639373.5	4169486.2	Roadway/Waterway	Scenario 4	--	--	--
2322	637998.5	4169511.2	Roadway/Waterway	Scenario 4	--	--	--
2323	638023.5	4169511.2	Roadway/Waterway	Scenario 4	--	--	--
2324	639223.5	4169511.2	Roadway/Waterway	Scenario 4	--	--	--
2325	639248.5	4169511.2	Roadway/Waterway	Scenario 4	--	--	--
2326	639273.5	4169511.2	Roadway/Waterway	Scenario 4	--	--	--
2327	639298.5	4169511.2	Roadway/Waterway	Scenario 4	--	--	--
2328	639323.5	4169511.2	Roadway/Waterway	Scenario 4	--	--	--
2329	639348.5	4169511.2	Roadway/Waterway	Scenario 4	--	--	--
2330	637998.5	4169536.2	Roadway/Waterway	Scenario 4	--	--	--
2331	639198.5	4169536.2	Roadway/Waterway	Scenario 4	--	--	--
2332	639223.5	4169536.2	Roadway/Waterway	Scenario 4	--	--	--
2333	639248.5	4169536.2	Roadway/Waterway	Scenario 4	--	--	--
2334	639273.5	4169536.2	Roadway/Waterway	Scenario 4	--	--	--
2335	639298.5	4169536.2	Roadway/Waterway	Scenario 4	--	--	--
2336	639323.5	4169536.2	Roadway/Waterway	Scenario 4	--	--	--
2337	639173.5	4169561.2	Roadway/Waterway	Scenario 4	--	--	--
2338	639198.5	4169561.2	Roadway/Waterway	Scenario 4	--	--	--
2339	639223.5	4169561.2	Roadway/Waterway	Scenario 4	--	--	--
2340	639248.5	4169561.2	Roadway/Waterway	Scenario 4	--	--	--
2341	639273.5	4169561.2	Roadway/Waterway	Scenario 4	--	--	--
2342	639298.5	4169561.2	Roadway/Waterway	Scenario 4	--	--	--
2343	639123.5	4169586.2	Roadway/Waterway	Scenario 4	--	--	--
2344	639148.5	4169586.2	Roadway/Waterway	Scenario 4	--	--	--
2345	639173.5	4169586.2	Roadway/Waterway	Scenario 4	--	--	--
2346	639198.5	4169586.2	Roadway/Waterway	Scenario 4	--	--	--
2347	639223.5	4169586.2	Roadway/Waterway	Scenario 4	--	--	--
2348	639248.5	4169586.2	Roadway/Waterway	Scenario 4	--	--	--
2349	639273.5	4169586.2	Roadway/Waterway	Scenario 4	--	--	--
2350	639098.5	4169611.2	Roadway/Waterway	Scenario 4	--	--	--
2351	639123.5	4169611.2	Roadway/Waterway	Scenario 4	--	--	--
2352	639148.5	4169611.2	Roadway/Waterway	Scenario 4	--	--	--
2353	639173.5	4169611.2	Roadway/Waterway	Scenario 4	--	--	--
2354	639198.5	4169611.2	Roadway/Waterway	Scenario 4	--	--	--
2355	639223.5	4169611.2	Roadway/Waterway	Scenario 4	--	--	--
2356	639073.5	4169636.2	Roadway/Waterway	Scenario 4	--	--	--
2357	639098.5	4169636.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2358	639123.5	4169636.2	Roadway/Waterway	Scenario 4	--	--	--
2359	639148.5	4169636.2	Roadway/Waterway	Scenario 4	--	--	--
2360	639173.5	4169636.2	Roadway/Waterway	Scenario 4	--	--	--
2361	639198.5	4169636.2	Roadway/Waterway	Scenario 4	--	--	--
2362	639048.5	4169661.2	Roadway/Waterway	Scenario 4	--	--	--
2363	639073.5	4169661.2	Roadway/Waterway	Scenario 4	--	--	--
2364	639098.5	4169661.2	Roadway/Waterway	Scenario 4	--	--	--
2365	639123.5	4169661.2	Roadway/Waterway	Scenario 4	--	--	--
2366	639148.5	4169661.2	Roadway/Waterway	Scenario 4	--	--	--
2367	639173.5	4169661.2	Roadway/Waterway	Scenario 4	--	--	--
2368	639023.5	4169686.2	Roadway/Waterway	Scenario 4	--	--	--
2369	639048.5	4169686.2	Roadway/Waterway	Scenario 4	--	--	--
2370	639073.5	4169686.2	Roadway/Waterway	Scenario 4	--	--	--
2371	639098.5	4169686.2	Roadway/Waterway	Scenario 4	--	--	--
2372	639123.5	4169686.2	Roadway/Waterway	Scenario 4	--	--	--
2373	639148.5	4169686.2	Roadway/Waterway	Scenario 4	--	--	--
2374	638998.5	4169711.2	Roadway/Waterway	Scenario 4	--	--	--
2375	639023.5	4169711.2	Roadway/Waterway	Scenario 4	--	--	--
2376	639048.5	4169711.2	Roadway/Waterway	Scenario 4	--	--	--
2377	639073.5	4169711.2	Roadway/Waterway	Scenario 4	--	--	--
2378	639098.5	4169711.2	Roadway/Waterway	Scenario 4	--	--	--
2379	639123.5	4169711.2	Roadway/Waterway	Scenario 4	--	--	--
2380	638973.5	4169736.2	Roadway/Waterway	Scenario 4	--	--	--
2381	638998.5	4169736.2	Roadway/Waterway	Scenario 4	--	--	--
2382	639023.5	4169736.2	Roadway/Waterway	Scenario 4	--	--	--
2383	639048.5	4169736.2	Roadway/Waterway	Scenario 4	--	--	--
2384	639073.5	4169736.2	Roadway/Waterway	Scenario 4	--	--	--
2385	638948.5	4169761.2	Roadway/Waterway	Scenario 4	--	--	--
2386	638973.5	4169761.2	Roadway/Waterway	Scenario 4	--	--	--
2387	638998.5	4169761.2	Roadway/Waterway	Scenario 4	--	--	--
2388	639023.5	4169761.2	Roadway/Waterway	Scenario 4	--	--	--
2389	639048.5	4169761.2	Roadway/Waterway	Scenario 4	--	--	--
2390	638948.5	4169786.2	Roadway/Waterway	Scenario 4	--	--	--
2391	638973.5	4169786.2	Roadway/Waterway	Scenario 4	--	--	--
2392	638998.5	4169786.2	Roadway/Waterway	Scenario 4	--	--	--
2393	639023.5	4169786.2	Roadway/Waterway	Scenario 4	--	--	--
2394	638923.5	4169811.2	Roadway/Waterway	Scenario 4	--	--	--
2395	638948.5	4169811.2	Roadway/Waterway	Scenario 4	--	--	--
2396	638973.5	4169811.2	Roadway/Waterway	Scenario 4	--	--	--
2397	638998.5	4169811.2	Roadway/Waterway	Scenario 4	--	--	--
2398	639023.5	4169811.2	Roadway/Waterway	Scenario 4	--	--	--
2399	638898.5	4169836.2	Roadway/Waterway	Scenario 4	--	--	--
2400	638923.5	4169836.2	Roadway/Waterway	Scenario 4	--	--	--
2401	638948.5	4169836.2	Roadway/Waterway	Scenario 4	--	--	--
2402	638973.5	4169836.2	Roadway/Waterway	Scenario 4	--	--	--
2403	638998.5	4169836.2	Roadway/Waterway	Scenario 4	--	--	--
2404	638873.5	4169861.2	Roadway/Waterway	Scenario 4	--	--	--
2405	638898.5	4169861.2	Roadway/Waterway	Scenario 4	--	--	--
2406	638923.5	4169861.2	Roadway/Waterway	Scenario 4	--	--	--
2407	638948.5	4169861.2	Roadway/Waterway	Scenario 4	--	--	--
2408	638973.5	4169861.2	Roadway/Waterway	Scenario 4	--	--	--
2409	638848.5	4169886.2	Roadway/Waterway	Scenario 4	--	--	--
2410	638873.5	4169886.2	Roadway/Waterway	Scenario 4	--	--	--
2411	638898.5	4169886.2	Roadway/Waterway	Scenario 4	--	--	--
2412	638923.5	4169886.2	Roadway/Waterway	Scenario 4	--	--	--
2413	638948.5	4169886.2	Roadway/Waterway	Scenario 4	--	--	--
2414	638823.5	4169911.2	Roadway/Waterway	Scenario 4	--	--	--
2415	638848.5	4169911.2	Roadway/Waterway	Scenario 4	--	--	--
2416	638873.5	4169911.2	Roadway/Waterway	Scenario 4	--	--	--
2417	638898.5	4169911.2	Roadway/Waterway	Scenario 4	--	--	--
2418	638923.5	4169911.2	Roadway/Waterway	Scenario 4	--	--	--
2419	638798.5	4169936.2	Roadway/Waterway	Scenario 4	--	--	--
2420	638823.5	4169936.2	Roadway/Waterway	Scenario 4	--	--	--
2421	638848.5	4169936.2	Roadway/Waterway	Scenario 4	--	--	--
2422	638873.5	4169936.2	Roadway/Waterway	Scenario 4	--	--	--
2423	638898.5	4169936.2	Roadway/Waterway	Scenario 4	--	--	--
2424	638798.5	4169961.2	Roadway/Waterway	Scenario 4	--	--	--
2425	638823.5	4169961.2	Roadway/Waterway	Scenario 4	--	--	--
2426	638848.5	4169961.2	Roadway/Waterway	Scenario 4	--	--	--
2427	638873.5	4169961.2	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2428	638798.5	4169986.2	Roadway/Waterway	Scenario 4	--	--	--
2429	638823.5	4169986.2	Roadway/Waterway	Scenario 4	--	--	--
2430	638848.5	4169986.2	Roadway/Waterway	Scenario 4	--	--	--
2431	638873.5	4169986.2	Roadway/Waterway	Scenario 4	--	--	--
2432	638098.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2433	638123.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2434	638148.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2435	638173.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2436	638198.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2437	638223.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2438	638248.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2439	638273.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2440	638298.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2441	638773.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2442	638798.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2443	638823.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2444	638848.5	4170011.2	Roadway/Waterway	Scenario 4	--	--	--
2445	638773.5	4170036.2	Roadway/Waterway	Scenario 4	--	--	--
2446	638798.5	4170036.2	Roadway/Waterway	Scenario 4	--	--	--
2447	638823.5	4170036.2	Roadway/Waterway	Scenario 4	--	--	--
2448	638848.5	4170036.2	Roadway/Waterway	Scenario 4	--	--	--
2449	638773.5	4170061.2	Roadway/Waterway	Scenario 4	--	--	--
2450	638798.5	4170061.2	Roadway/Waterway	Scenario 4	--	--	--
2451	638823.5	4170061.2	Roadway/Waterway	Scenario 4	--	--	--
2452	638848.5	4170061.2	Roadway/Waterway	Scenario 4	--	--	--
2453	638748.5	4170086.2	Roadway/Waterway	Scenario 4	--	--	--
2454	638773.5	4170086.2	Roadway/Waterway	Scenario 4	--	--	--
2455	638798.5	4170086.2	Roadway/Waterway	Scenario 4	--	--	--
2456	638823.5	4170086.2	Roadway/Waterway	Scenario 4	--	--	--
2457	638723.5	4170111.2	Roadway/Waterway	Scenario 4	--	--	--
2458	638748.5	4170111.2	Roadway/Waterway	Scenario 4	--	--	--
2459	638773.5	4170111.2	Roadway/Waterway	Scenario 4	--	--	--
2460	638798.5	4170111.2	Roadway/Waterway	Scenario 4	--	--	--
2461	642611.0	4166673.7	Roadway/Waterway	Scenario 4	--	--	--
2462	642661.0	4166673.7	Roadway/Waterway	Scenario 4	--	--	--
2463	642461.0	4166723.7	Roadway/Waterway	Scenario 4	--	--	--
2464	642511.0	4166723.7	Roadway/Waterway	Scenario 4	--	--	--
2465	642561.0	4166723.7	Roadway/Waterway	Scenario 4	--	--	--
2466	642611.0	4166723.7	Roadway/Waterway	Scenario 4	--	--	--
2467	641311.0	4166773.7	Roadway/Waterway	Scenario 4	--	--	--
2468	641361.0	4166773.7	Roadway/Waterway	Scenario 4	--	--	--
2469	641411.0	4166773.7	Roadway/Waterway	Scenario 4	--	--	--
2470	642411.0	4166773.7	Roadway/Waterway	Scenario 4	--	--	--
2471	642461.0	4166773.7	Roadway/Waterway	Scenario 4	--	--	--
2472	642511.0	4166773.7	Roadway/Waterway	Scenario 4	--	--	--
2473	642561.0	4166773.7	Roadway/Waterway	Scenario 4	--	--	--
2474	641261.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2475	641311.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2476	641361.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2477	641411.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2478	641461.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2479	642361.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2480	642411.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2481	642461.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2482	642511.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2483	642561.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2484	644361.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2485	644561.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2486	644611.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2487	644661.0	4166823.7	Roadway/Waterway	Scenario 4	--	--	--
2488	641211.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2489	641261.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2490	641311.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2491	641361.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2492	641411.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2493	641461.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2494	642311.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2495	644411.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2496	644461.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2497	644511.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2498	644561.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2499	644611.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2500	644661.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2501	644711.0	4166873.7	Roadway/Waterway	Scenario 4	--	--	--
2502	641161.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2503	641211.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2504	641261.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2505	641311.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2506	644511.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2507	644561.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2508	644611.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2509	644661.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2510	644711.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2511	644761.0	4166923.7	Roadway/Waterway	Scenario 4	--	--	--
2512	641161.0	4166973.7	Roadway/Waterway	Scenario 4	--	--	--
2513	641211.0	4166973.7	Roadway/Waterway	Scenario 4	--	--	--
2514	641261.0	4166973.7	Roadway/Waterway	Scenario 4	--	--	--
2515	644661.0	4166973.7	Roadway/Waterway	Scenario 4	--	--	--
2516	644711.0	4167273.7	Roadway/Waterway	Scenario 4	--	--	--
2517	644761.0	4167273.7	Roadway/Waterway	Scenario 4	--	--	--
2518	644811.0	4167273.7	Roadway/Waterway	Scenario 4	--	--	--
2519	644711.0	4167323.7	Roadway/Waterway	Scenario 4	--	--	--
2520	644761.0	4167323.7	Roadway/Waterway	Scenario 4	--	--	--
2521	644811.0	4167323.7	Roadway/Waterway	Scenario 4	--	--	--
2522	641161.0	4167473.7	Roadway/Waterway	Scenario 4	--	--	--
2523	641211.0	4167473.7	Roadway/Waterway	Scenario 4	--	--	--
2524	641261.0	4167473.7	Roadway/Waterway	Scenario 4	--	--	--
2525	641011.0	4167523.7	Roadway/Waterway	Scenario 4	--	--	--
2526	641061.0	4167523.7	Roadway/Waterway	Scenario 4	--	--	--
2527	641111.0	4167523.7	Roadway/Waterway	Scenario 4	--	--	--
2528	640861.0	4167573.7	Roadway/Waterway	Scenario 4	--	--	--
2529	640911.0	4167573.7	Roadway/Waterway	Scenario 4	--	--	--
2530	640711.0	4167623.7	Roadway/Waterway	Scenario 4	--	--	--
2531	640561.0	4167673.7	Roadway/Waterway	Scenario 4	--	--	--
2532	640111.0	4167873.7	Roadway/Waterway	Scenario 4	--	--	--
2533	639961.0	4167973.7	Roadway/Waterway	Scenario 4	--	--	--
2534	639861.0	4168023.7	Roadway/Waterway	Scenario 4	--	--	--
2535	639811.0	4168073.7	Roadway/Waterway	Scenario 4	--	--	--
2536	639711.0	4168123.7	Roadway/Waterway	Scenario 4	--	--	--
2537	639611.0	4168173.7	Roadway/Waterway	Scenario 4	--	--	--
2538	639661.0	4168173.7	Roadway/Waterway	Scenario 4	--	--	--
2539	639561.0	4168223.7	Roadway/Waterway	Scenario 4	--	--	--
2540	639611.0	4168223.7	Roadway/Waterway	Scenario 4	--	--	--
2541	639461.0	4168273.7	Roadway/Waterway	Scenario 4	--	--	--
2542	639511.0	4168273.7	Roadway/Waterway	Scenario 4	--	--	--
2543	639561.0	4168273.7	Roadway/Waterway	Scenario 4	--	--	--
2544	639611.0	4168273.7	Roadway/Waterway	Scenario 4	--	--	--
2545	639161.0	4168323.7	Roadway/Waterway	Scenario 4	--	--	--
2546	639411.0	4168323.7	Roadway/Waterway	Scenario 4	--	--	--
2547	639461.0	4168323.7	Roadway/Waterway	Scenario 4	--	--	--
2548	639511.0	4168323.7	Roadway/Waterway	Scenario 4	--	--	--
2549	639561.0	4168323.7	Roadway/Waterway	Scenario 4	--	--	--
2550	639611.0	4168323.7	Roadway/Waterway	Scenario 4	--	--	--
2551	639061.0	4168373.7	Roadway/Waterway	Scenario 4	--	--	--
2552	639311.0	4168373.7	Roadway/Waterway	Scenario 4	--	--	--
2553	639011.0	4168423.7	Roadway/Waterway	Scenario 4	--	--	--
2554	639211.0	4168423.7	Roadway/Waterway	Scenario 4	--	--	--
2555	638911.0	4168473.7	Roadway/Waterway	Scenario 4	--	--	--
2556	638961.0	4168473.7	Roadway/Waterway	Scenario 4	--	--	--
2557	639161.0	4168473.7	Roadway/Waterway	Scenario 4	--	--	--
2558	638811.0	4168523.7	Roadway/Waterway	Scenario 4	--	--	--
2559	638861.0	4168523.7	Roadway/Waterway	Scenario 4	--	--	--
2560	639061.0	4168523.7	Roadway/Waterway	Scenario 4	--	--	--
2561	638711.0	4168573.7	Roadway/Waterway	Scenario 4	--	--	--
2562	638761.0	4168573.7	Roadway/Waterway	Scenario 4	--	--	--
2563	638811.0	4168573.7	Roadway/Waterway	Scenario 4	--	--	--
2564	638661.0	4168623.7	Roadway/Waterway	Scenario 4	--	--	--
2565	638711.0	4168623.7	Roadway/Waterway	Scenario 4	--	--	--
2566	638761.0	4168623.7	Roadway/Waterway	Scenario 4	--	--	--
2567	638911.0	4168623.7	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2568	638561.0	4168673.7	Roadway/Waterway	Scenario 4	--	--	--
2569	638611.0	4168673.7	Roadway/Waterway	Scenario 4	--	--	--
2570	638661.0	4168673.7	Roadway/Waterway	Scenario 4	--	--	--
2571	638511.0	4168723.7	Roadway/Waterway	Scenario 4	--	--	--
2572	638561.0	4168723.7	Roadway/Waterway	Scenario 4	--	--	--
2573	638611.0	4168723.7	Roadway/Waterway	Scenario 4	--	--	--
2574	638461.0	4168773.7	Roadway/Waterway	Scenario 4	--	--	--
2575	638511.0	4168773.7	Roadway/Waterway	Scenario 4	--	--	--
2576	638411.0	4168823.7	Roadway/Waterway	Scenario 4	--	--	--
2577	638461.0	4168823.7	Roadway/Waterway	Scenario 4	--	--	--
2578	640211.0	4168823.7	Roadway/Waterway	Scenario 4	--	--	--
2579	638311.0	4168873.7	Roadway/Waterway	Scenario 4	--	--	--
2580	638361.0	4168873.7	Roadway/Waterway	Scenario 4	--	--	--
2581	638411.0	4168873.7	Roadway/Waterway	Scenario 4	--	--	--
2582	640111.0	4168873.7	Roadway/Waterway	Scenario 4	--	--	--
2583	640161.0	4168873.7	Roadway/Waterway	Scenario 4	--	--	--
2584	640261.0	4168873.7	Roadway/Waterway	Scenario 4	--	--	--
2585	640311.0	4168873.7	Roadway/Waterway	Scenario 4	--	--	--
2586	640361.0	4168873.7	Roadway/Waterway	Scenario 4	--	--	--
2587	638261.0	4168923.7	Roadway/Waterway	Scenario 4	--	--	--
2588	638311.0	4168923.7	Roadway/Waterway	Scenario 4	--	--	--
2589	640061.0	4168923.7	Roadway/Waterway	Scenario 4	--	--	--
2590	640411.0	4168923.7	Roadway/Waterway	Scenario 4	--	--	--
2591	638211.0	4168973.7	Roadway/Waterway	Scenario 4	--	--	--
2592	638261.0	4168973.7	Roadway/Waterway	Scenario 4	--	--	--
2593	638211.0	4169023.7	Roadway/Waterway	Scenario 4	--	--	--
2594	638311.0	4169073.7	Roadway/Waterway	Scenario 4	--	--	--
2595	638111.0	4169123.7	Roadway/Waterway	Scenario 4	--	--	--
2596	638261.0	4169123.7	Roadway/Waterway	Scenario 4	--	--	--
2597	638111.0	4169173.7	Roadway/Waterway	Scenario 4	--	--	--
2598	638211.0	4169173.7	Roadway/Waterway	Scenario 4	--	--	--
2599	638111.0	4169223.7	Roadway/Waterway	Scenario 4	--	--	--
2600	638161.0	4169223.7	Roadway/Waterway	Scenario 4	--	--	--
2601	639711.0	4169223.7	Roadway/Waterway	Scenario 4	--	--	--
2602	638111.0	4169273.7	Roadway/Waterway	Scenario 4	--	--	--
2603	639711.0	4169273.7	Roadway/Waterway	Scenario 4	--	--	--
2604	638061.0	4169323.7	Roadway/Waterway	Scenario 4	--	--	--
2605	639711.0	4169323.7	Roadway/Waterway	Scenario 4	--	--	--
2606	638011.0	4169373.7	Roadway/Waterway	Scenario 4	--	--	--
2607	637961.0	4169423.7	Roadway/Waterway	Scenario 4	--	--	--
2608	637911.0	4169473.7	Roadway/Waterway	Scenario 4	--	--	--
2609	637961.0	4169473.7	Roadway/Waterway	Scenario 4	--	--	--
2610	637861.0	4169523.7	Roadway/Waterway	Scenario 4	--	--	--
2611	637911.0	4169523.7	Roadway/Waterway	Scenario 4	--	--	--
2612	637961.0	4169523.7	Roadway/Waterway	Scenario 4	--	--	--
2613	641311.0	4169523.7	Roadway/Waterway	Scenario 4	--	--	--
2614	637861.0	4169573.7	Roadway/Waterway	Scenario 4	--	--	--
2615	637911.0	4169573.7	Roadway/Waterway	Scenario 4	--	--	--
2616	637961.0	4169573.7	Roadway/Waterway	Scenario 4	--	--	--
2617	641311.0	4169573.7	Roadway/Waterway	Scenario 4	--	--	--
2618	637861.0	4169623.7	Roadway/Waterway	Scenario 4	--	--	--
2619	637911.0	4169623.7	Roadway/Waterway	Scenario 4	--	--	--
2620	641311.0	4169623.7	Roadway/Waterway	Scenario 4	--	--	--
2621	637861.0	4169673.7	Roadway/Waterway	Scenario 4	--	--	--
2622	638861.0	4170073.7	Roadway/Waterway	Scenario 4	--	--	--
2623	638811.0	4170123.7	Roadway/Waterway	Scenario 4	--	--	--
2624	638861.0	4170123.7	Roadway/Waterway	Scenario 4	--	--	--
2625	638661.0	4170173.7	Roadway/Waterway	Scenario 4	--	--	--
2626	638711.0	4170173.7	Roadway/Waterway	Scenario 4	--	--	--
2627	638761.0	4170173.7	Roadway/Waterway	Scenario 4	--	--	--
2628	638811.0	4170173.7	Roadway/Waterway	Scenario 4	--	--	--
2629	638611.0	4170223.7	Roadway/Waterway	Scenario 4	--	--	--
2630	638661.0	4170223.7	Roadway/Waterway	Scenario 4	--	--	--
2631	638711.0	4170223.7	Roadway/Waterway	Scenario 4	--	--	--
2632	638761.0	4170223.7	Roadway/Waterway	Scenario 4	--	--	--
2633	638711.0	4170273.7	Roadway/Waterway	Scenario 4	--	--	--
2634	644236.2	4164448.9	Roadway/Waterway	Scenario 4	--	--	--
2635	644136.2	4164548.9	Roadway/Waterway	Scenario 4	--	--	--
2636	643936.2	4164648.9	Roadway/Waterway	Scenario 4	--	--	--
2637	644036.2	4164648.9	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2638	644636.2	4164648.9	Roadway/Waterway	Scenario 4	--	--	--
2639	643836.2	4164748.9	Roadway/Waterway	Scenario 4	--	--	--
2640	643936.2	4164748.9	Roadway/Waterway	Scenario 4	--	--	--
2641	644636.2	4164748.9	Roadway/Waterway	Scenario 4	--	--	--
2642	643736.2	4164848.9	Roadway/Waterway	Scenario 4	--	--	--
2643	643836.2	4164848.9	Roadway/Waterway	Scenario 4	--	--	--
2644	644636.2	4164848.9	Roadway/Waterway	Scenario 4	--	--	--
2645	643636.2	4164948.9	Roadway/Waterway	Scenario 4	--	--	--
2646	644636.2	4164948.9	Roadway/Waterway	Scenario 4	--	--	--
2647	643536.2	4165048.9	Roadway/Waterway	Scenario 4	--	--	--
2648	644636.2	4165048.9	Roadway/Waterway	Scenario 4	--	--	--
2649	645836.2	4165048.9	Roadway/Waterway	Scenario 4	--	--	--
2650	645936.2	4165048.9	Roadway/Waterway	Scenario 4	--	--	--
2651	643436.2	4165148.9	Roadway/Waterway	Scenario 4	--	--	--
2652	644636.2	4165148.9	Roadway/Waterway	Scenario 4	--	--	--
2653	645836.2	4165148.9	Roadway/Waterway	Scenario 4	--	--	--
2654	643236.2	4165248.9	Roadway/Waterway	Scenario 4	--	--	--
2655	643336.2	4165248.9	Roadway/Waterway	Scenario 4	--	--	--
2656	644636.2	4165248.9	Roadway/Waterway	Scenario 4	--	--	--
2657	645736.2	4165248.9	Roadway/Waterway	Scenario 4	--	--	--
2658	645836.2	4165248.9	Roadway/Waterway	Scenario 4	--	--	--
2659	646236.2	4165248.9	Roadway/Waterway	Scenario 4	--	--	--
2660	643136.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2661	644636.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2662	645736.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2663	645836.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2664	645936.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2665	646036.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2666	646136.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2667	646236.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2668	646336.2	4165348.9	Roadway/Waterway	Scenario 4	--	--	--
2669	643036.2	4165448.9	Roadway/Waterway	Scenario 4	--	--	--
2670	645736.2	4165448.9	Roadway/Waterway	Scenario 4	--	--	--
2671	645836.2	4165448.9	Roadway/Waterway	Scenario 4	--	--	--
2672	646236.2	4165448.9	Roadway/Waterway	Scenario 4	--	--	--
2673	642836.2	4165548.9	Roadway/Waterway	Scenario 4	--	--	--
2674	642936.2	4165548.9	Roadway/Waterway	Scenario 4	--	--	--
2675	645736.2	4165548.9	Roadway/Waterway	Scenario 4	--	--	--
2676	645836.2	4165548.9	Roadway/Waterway	Scenario 4	--	--	--
2677	646236.2	4165548.9	Roadway/Waterway	Scenario 4	--	--	--
2678	642736.2	4165648.9	Roadway/Waterway	Scenario 4	--	--	--
2679	645636.2	4165648.9	Roadway/Waterway	Scenario 4	--	--	--
2680	645736.2	4165648.9	Roadway/Waterway	Scenario 4	--	--	--
2681	646236.2	4165648.9	Roadway/Waterway	Scenario 4	--	--	--
2682	642636.2	4165748.9	Roadway/Waterway	Scenario 4	--	--	--
2683	645436.2	4165748.9	Roadway/Waterway	Scenario 4	--	--	--
2684	645536.2	4165748.9	Roadway/Waterway	Scenario 4	--	--	--
2685	645636.2	4165748.9	Roadway/Waterway	Scenario 4	--	--	--
2686	646236.2	4165748.9	Roadway/Waterway	Scenario 4	--	--	--
2687	642436.2	4165848.9	Roadway/Waterway	Scenario 4	--	--	--
2688	642536.2	4165848.9	Roadway/Waterway	Scenario 4	--	--	--
2689	645136.2	4165848.9	Roadway/Waterway	Scenario 4	--	--	--
2690	645236.2	4165848.9	Roadway/Waterway	Scenario 4	--	--	--
2691	645336.2	4165848.9	Roadway/Waterway	Scenario 4	--	--	--
2692	646236.2	4165848.9	Roadway/Waterway	Scenario 4	--	--	--
2693	641936.2	4165948.9	Roadway/Waterway	Scenario 4	--	--	--
2694	642336.2	4165948.9	Roadway/Waterway	Scenario 4	--	--	--
2695	644836.2	4165948.9	Roadway/Waterway	Scenario 4	--	--	--
2696	644936.2	4165948.9	Roadway/Waterway	Scenario 4	--	--	--
2697	645036.2	4165948.9	Roadway/Waterway	Scenario 4	--	--	--
2698	645136.2	4165948.9	Roadway/Waterway	Scenario 4	--	--	--
2699	646236.2	4165948.9	Roadway/Waterway	Scenario 4	--	--	--
2700	641536.2	4166048.9	Roadway/Waterway	Scenario 4	--	--	--
2701	642236.2	4166048.9	Roadway/Waterway	Scenario 4	--	--	--
2702	644436.2	4166048.9	Roadway/Waterway	Scenario 4	--	--	--
2703	644536.2	4166048.9	Roadway/Waterway	Scenario 4	--	--	--
2704	644636.2	4166048.9	Roadway/Waterway	Scenario 4	--	--	--
2705	644736.2	4166048.9	Roadway/Waterway	Scenario 4	--	--	--
2706	644836.2	4166048.9	Roadway/Waterway	Scenario 4	--	--	--
2707	646236.2	4166048.9	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2708	642036.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2709	642136.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2710	643136.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2711	643236.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2712	643336.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2713	643436.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2714	643536.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2715	643636.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2716	643736.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2717	643836.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2718	643936.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2719	644036.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2720	644136.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2721	644236.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2722	644336.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2723	644436.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2724	646236.2	4166148.9	Roadway/Waterway	Scenario 4	--	--	--
2725	643036.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2726	643136.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2727	643236.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2728	643336.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2729	643436.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2730	643536.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2731	643636.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2732	643736.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2733	643836.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2734	643936.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2735	644036.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2736	644136.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2737	646236.2	4166248.9	Roadway/Waterway	Scenario 4	--	--	--
2738	641736.2	4166348.9	Roadway/Waterway	Scenario 4	--	--	--
2739	641836.2	4166348.9	Roadway/Waterway	Scenario 4	--	--	--
2740	642936.2	4166348.9	Roadway/Waterway	Scenario 4	--	--	--
2741	646236.2	4166348.9	Roadway/Waterway	Scenario 4	--	--	--
2742	646936.2	4166348.9	Roadway/Waterway	Scenario 4	--	--	--
2743	640736.2	4166448.9	Roadway/Waterway	Scenario 4	--	--	--
2744	641336.2	4166448.9	Roadway/Waterway	Scenario 4	--	--	--
2745	641636.2	4166448.9	Roadway/Waterway	Scenario 4	--	--	--
2746	642736.2	4166448.9	Roadway/Waterway	Scenario 4	--	--	--
2747	642836.2	4166448.9	Roadway/Waterway	Scenario 4	--	--	--
2748	646236.2	4166448.9	Roadway/Waterway	Scenario 4	--	--	--
2749	646936.2	4166448.9	Roadway/Waterway	Scenario 4	--	--	--
2750	640936.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2751	641336.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2752	641436.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2753	641536.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2754	642636.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2755	642736.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2756	646236.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2757	646736.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2758	646836.2	4166548.9	Roadway/Waterway	Scenario 4	--	--	--
2759	641336.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2760	641436.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2761	642536.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2762	642636.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2763	645936.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2764	646036.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2765	646136.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2766	646236.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2767	646336.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2768	646436.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2769	646536.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2770	646636.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2771	646736.2	4166648.9	Roadway/Waterway	Scenario 4	--	--	--
2772	641236.2	4166748.9	Roadway/Waterway	Scenario 4	--	--	--
2773	641336.2	4166748.9	Roadway/Waterway	Scenario 4	--	--	--
2774	644736.2	4166748.9	Roadway/Waterway	Scenario 4	--	--	--
2775	645836.2	4166748.9	Roadway/Waterway	Scenario 4	--	--	--
2776	646136.2	4166748.9	Roadway/Waterway	Scenario 4	--	--	--
2777	646236.2	4166748.9	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2778	646336.2	4166748.9	Roadway/Waterway	Scenario 4	--	--	--
2779	639836.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2780	639936.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2781	640036.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2782	640136.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2783	640236.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2784	640336.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2785	640436.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2786	640536.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2787	641036.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2788	641136.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2789	644736.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2790	645736.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2791	646036.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2792	646136.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2793	646236.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2794	646336.2	4166848.9	Roadway/Waterway	Scenario 4	--	--	--
2795	640836.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2796	640936.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2797	641036.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2798	641136.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2799	644836.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2800	644936.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2801	645036.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2802	645136.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2803	645236.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2804	645336.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2805	645436.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2806	645536.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2807	645736.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2808	645836.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2809	645936.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2810	646036.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2811	646136.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2812	646236.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2813	646336.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2814	646436.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2815	646536.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2816	646636.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2817	646736.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2818	646836.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2819	646936.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2820	647036.2	4166948.9	Roadway/Waterway	Scenario 4	--	--	--
2821	640636.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2822	640736.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2823	640836.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2824	640936.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2825	645236.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2826	645336.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2827	645736.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2828	646036.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2829	646136.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2830	646236.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2831	646336.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2832	646836.2	4167048.9	Roadway/Waterway	Scenario 4	--	--	--
2833	640536.2	4167148.9	Roadway/Waterway	Scenario 4	--	--	--
2834	640636.2	4167148.9	Roadway/Waterway	Scenario 4	--	--	--
2835	640736.2	4167148.9	Roadway/Waterway	Scenario 4	--	--	--
2836	645236.2	4167148.9	Roadway/Waterway	Scenario 4	--	--	--
2837	645336.2	4167148.9	Roadway/Waterway	Scenario 4	--	--	--
2838	645736.2	4167148.9	Roadway/Waterway	Scenario 4	--	--	--
2839	646136.2	4167148.9	Roadway/Waterway	Scenario 4	--	--	--
2840	646236.2	4167148.9	Roadway/Waterway	Scenario 4	--	--	--
2841	640436.2	4167248.9	Roadway/Waterway	Scenario 4	--	--	--
2842	640536.2	4167248.9	Roadway/Waterway	Scenario 4	--	--	--
2843	644936.2	4167248.9	Roadway/Waterway	Scenario 4	--	--	--
2844	645236.2	4167248.9	Roadway/Waterway	Scenario 4	--	--	--
2845	646236.2	4167248.9	Roadway/Waterway	Scenario 4	--	--	--
2846	640336.2	4167348.9	Roadway/Waterway	Scenario 4	--	--	--
2847	640436.2	4167348.9	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2848	646136.2	4167348.9	Roadway/Waterway	Scenario 4	--	--	--
2849	646236.2	4167348.9	Roadway/Waterway	Scenario 4	--	--	--
2850	640236.2	4167448.9	Roadway/Waterway	Scenario 4	--	--	--
2851	640336.2	4167448.9	Roadway/Waterway	Scenario 4	--	--	--
2852	646036.2	4167448.9	Roadway/Waterway	Scenario 4	--	--	--
2853	646136.2	4167448.9	Roadway/Waterway	Scenario 4	--	--	--
2854	646236.2	4167448.9	Roadway/Waterway	Scenario 4	--	--	--
2855	640136.2	4167548.9	Roadway/Waterway	Scenario 4	--	--	--
2856	646136.2	4167548.9	Roadway/Waterway	Scenario 4	--	--	--
2857	640036.2	4167648.9	Roadway/Waterway	Scenario 4	--	--	--
2858	646136.2	4167648.9	Roadway/Waterway	Scenario 4	--	--	--
2859	639836.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2860	639936.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2861	644136.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2862	644236.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2863	645036.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2864	645136.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2865	645236.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2866	645336.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2867	645436.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2868	645536.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2869	645636.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2870	645736.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2871	645836.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2872	645936.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2873	646136.2	4167748.9	Roadway/Waterway	Scenario 4	--	--	--
2874	639736.2	4167848.9	Roadway/Waterway	Scenario 4	--	--	--
2875	646136.2	4167848.9	Roadway/Waterway	Scenario 4	--	--	--
2876	639636.2	4167948.9	Roadway/Waterway	Scenario 4	--	--	--
2877	646136.2	4167948.9	Roadway/Waterway	Scenario 4	--	--	--
2878	639436.2	4168048.9	Roadway/Waterway	Scenario 4	--	--	--
2879	639536.2	4168048.9	Roadway/Waterway	Scenario 4	--	--	--
2880	646136.2	4168048.9	Roadway/Waterway	Scenario 4	--	--	--
2881	639336.2	4168148.9	Roadway/Waterway	Scenario 4	--	--	--
2882	639436.2	4168148.9	Roadway/Waterway	Scenario 4	--	--	--
2883	646136.2	4168148.9	Roadway/Waterway	Scenario 4	--	--	--
2884	639236.2	4168248.9	Roadway/Waterway	Scenario 4	--	--	--
2885	646136.2	4168248.9	Roadway/Waterway	Scenario 4	--	--	--
2886	639036.2	4168348.9	Roadway/Waterway	Scenario 4	--	--	--
2887	646136.2	4168348.9	Roadway/Waterway	Scenario 4	--	--	--
2888	646136.2	4168448.9	Roadway/Waterway	Scenario 4	--	--	--
2889	644836.2	4168548.9	Roadway/Waterway	Scenario 4	--	--	--
2890	644936.2	4168548.9	Roadway/Waterway	Scenario 4	--	--	--
2891	645036.2	4168548.9	Roadway/Waterway	Scenario 4	--	--	--
2892	645136.2	4168548.9	Roadway/Waterway	Scenario 4	--	--	--
2893	645236.2	4168548.9	Roadway/Waterway	Scenario 4	--	--	--
2894	645336.2	4168548.9	Roadway/Waterway	Scenario 4	--	--	--
2895	646136.2	4168548.9	Roadway/Waterway	Scenario 4	--	--	--
2896	646136.2	4168648.9	Roadway/Waterway	Scenario 4	--	--	--
2897	646636.2	4168648.9	Roadway/Waterway	Scenario 4	--	--	--
2898	646136.2	4168748.9	Roadway/Waterway	Scenario 4	--	--	--
2899	646136.2	4168848.9	Roadway/Waterway	Scenario 4	--	--	--
2900	644736.2	4168948.9	Roadway/Waterway	Scenario 4	--	--	--
2901	645936.2	4168948.9	Roadway/Waterway	Scenario 4	--	--	--
2902	646136.2	4168948.9	Roadway/Waterway	Scenario 4	--	--	--
2903	638136.2	4169048.9	Roadway/Waterway	Scenario 4	--	--	--
2904	644136.2	4169048.9	Roadway/Waterway	Scenario 4	--	--	--
2905	646136.2	4169048.9	Roadway/Waterway	Scenario 4	--	--	--
2906	637936.2	4169148.9	Roadway/Waterway	Scenario 4	--	--	--
2907	638036.2	4169148.9	Roadway/Waterway	Scenario 4	--	--	--
2908	644236.2	4169148.9	Roadway/Waterway	Scenario 4	--	--	--
2909	646136.2	4169148.9	Roadway/Waterway	Scenario 4	--	--	--
2910	637836.2	4169248.9	Roadway/Waterway	Scenario 4	--	--	--
2911	644536.2	4169248.9	Roadway/Waterway	Scenario 4	--	--	--
2912	637736.2	4169348.9	Roadway/Waterway	Scenario 4	--	--	--
2913	644536.2	4169348.9	Roadway/Waterway	Scenario 4	--	--	--
2914	637536.2	4169448.9	Roadway/Waterway	Scenario 4	--	--	--
2915	637636.2	4169448.9	Roadway/Waterway	Scenario 4	--	--	--
2916	644436.2	4169448.9	Roadway/Waterway	Scenario 4	--	--	--
2917	644536.2	4169448.9	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2918	637436.2	4169548.9	Roadway/Waterway	Scenario 4	--	--	--
2919	637836.2	4169548.9	Roadway/Waterway	Scenario 4	--	--	--
2920	644536.2	4169548.9	Roadway/Waterway	Scenario 4	--	--	--
2921	637236.2	4169648.9	Roadway/Waterway	Scenario 4	--	--	--
2922	637336.2	4169648.9	Roadway/Waterway	Scenario 4	--	--	--
2923	637836.2	4169648.9	Roadway/Waterway	Scenario 4	--	--	--
2924	644536.2	4169648.9	Roadway/Waterway	Scenario 4	--	--	--
2925	637136.2	4169748.9	Roadway/Waterway	Scenario 4	--	--	--
2926	637736.2	4169748.9	Roadway/Waterway	Scenario 4	--	--	--
2927	644536.2	4169748.9	Roadway/Waterway	Scenario 4	--	--	--
2928	637036.2	4169848.9	Roadway/Waterway	Scenario 4	--	--	--
2929	637636.2	4169848.9	Roadway/Waterway	Scenario 4	--	--	--
2930	637736.2	4169848.9	Roadway/Waterway	Scenario 4	--	--	--
2931	644536.2	4169848.9	Roadway/Waterway	Scenario 4	--	--	--
2932	636836.2	4169948.9	Roadway/Waterway	Scenario 4	--	--	--
2933	636936.2	4169948.9	Roadway/Waterway	Scenario 4	--	--	--
2934	637636.2	4169948.9	Roadway/Waterway	Scenario 4	--	--	--
2935	639636.2	4169948.9	Roadway/Waterway	Scenario 4	--	--	--
2936	636736.2	4170048.9	Roadway/Waterway	Scenario 4	--	--	--
2937	636836.2	4170048.9	Roadway/Waterway	Scenario 4	--	--	--
2938	637536.2	4170048.9	Roadway/Waterway	Scenario 4	--	--	--
2939	635636.2	4170148.9	Roadway/Waterway	Scenario 4	--	--	--
2940	636636.2	4170148.9	Roadway/Waterway	Scenario 4	--	--	--
2941	637436.2	4170148.9	Roadway/Waterway	Scenario 4	--	--	--
2942	637536.2	4170148.9	Roadway/Waterway	Scenario 4	--	--	--
2943	635636.2	4170248.9	Roadway/Waterway	Scenario 4	--	--	--
2944	635736.2	4170248.9	Roadway/Waterway	Scenario 4	--	--	--
2945	636436.2	4170248.9	Roadway/Waterway	Scenario 4	--	--	--
2946	636536.2	4170248.9	Roadway/Waterway	Scenario 4	--	--	--
2947	637336.2	4170248.9	Roadway/Waterway	Scenario 4	--	--	--
2948	637436.2	4170248.9	Roadway/Waterway	Scenario 4	--	--	--
2949	635736.2	4170348.9	Roadway/Waterway	Scenario 4	--	--	--
2950	635836.2	4170348.9	Roadway/Waterway	Scenario 4	--	--	--
2951	636336.2	4170348.9	Roadway/Waterway	Scenario 4	--	--	--
2952	636436.2	4170348.9	Roadway/Waterway	Scenario 4	--	--	--
2953	637336.2	4170348.9	Roadway/Waterway	Scenario 4	--	--	--
2954	638536.2	4170348.9	Roadway/Waterway	Scenario 4	--	--	--
2955	638636.2	4170348.9	Roadway/Waterway	Scenario 4	--	--	--
2956	635736.2	4170448.9	Roadway/Waterway	Scenario 4	--	--	--
2957	635936.2	4170448.9	Roadway/Waterway	Scenario 4	--	--	--
2958	636136.2	4170448.9	Roadway/Waterway	Scenario 4	--	--	--
2959	636236.2	4170448.9	Roadway/Waterway	Scenario 4	--	--	--
2960	637236.2	4170448.9	Roadway/Waterway	Scenario 4	--	--	--
2961	637336.2	4170448.9	Roadway/Waterway	Scenario 4	--	--	--
2962	638436.2	4170448.9	Roadway/Waterway	Scenario 4	--	--	--
2963	638536.2	4170448.9	Roadway/Waterway	Scenario 4	--	--	--
2964	635736.2	4170548.9	Roadway/Waterway	Scenario 4	--	--	--
2965	636036.2	4170548.9	Roadway/Waterway	Scenario 4	--	--	--
2966	636136.2	4170548.9	Roadway/Waterway	Scenario 4	--	--	--
2967	637236.2	4170548.9	Roadway/Waterway	Scenario 4	--	--	--
2968	638436.2	4170548.9	Roadway/Waterway	Scenario 4	--	--	--
2969	635936.2	4170648.9	Roadway/Waterway	Scenario 4	--	--	--
2970	636036.2	4170648.9	Roadway/Waterway	Scenario 4	--	--	--
2971	636136.2	4170648.9	Roadway/Waterway	Scenario 4	--	--	--
2972	637136.2	4170648.9	Roadway/Waterway	Scenario 4	--	--	--
2973	637236.2	4170648.9	Roadway/Waterway	Scenario 4	--	--	--
2974	638436.2	4170648.9	Roadway/Waterway	Scenario 4	--	--	--
2975	635836.2	4170748.9	Roadway/Waterway	Scenario 4	--	--	--
2976	636236.2	4170748.9	Roadway/Waterway	Scenario 4	--	--	--
2977	637036.2	4170748.9	Roadway/Waterway	Scenario 4	--	--	--
2978	637136.2	4170748.9	Roadway/Waterway	Scenario 4	--	--	--
2979	638436.2	4170748.9	Roadway/Waterway	Scenario 4	--	--	--
2980	638536.2	4170748.9	Roadway/Waterway	Scenario 4	--	--	--
2981	635736.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--
2982	635836.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--
2983	636336.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--
2984	636636.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--
2985	636736.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--
2986	637036.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--
2987	637136.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
2988	637236.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--
2989	638436.2	4170848.9	Roadway/Waterway	Scenario 4	--	--	--
2990	635836.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2991	635936.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2992	636436.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2993	636536.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2994	636936.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2995	637036.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2996	637136.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2997	637236.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2998	638336.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
2999	638436.2	4170948.9	Roadway/Waterway	Scenario 4	--	--	--
3000	635836.2	4171048.9	Roadway/Waterway	Scenario 4	--	--	--
3001	636436.2	4171048.9	Roadway/Waterway	Scenario 4	--	--	--
3002	636936.2	4171048.9	Roadway/Waterway	Scenario 4	--	--	--
3003	638336.2	4171048.9	Roadway/Waterway	Scenario 4	--	--	--
3004	636436.2	4171148.9	Roadway/Waterway	Scenario 4	--	--	--
3005	636736.2	4171148.9	Roadway/Waterway	Scenario 4	--	--	--
3006	636836.2	4171148.9	Roadway/Waterway	Scenario 4	--	--	--
3007	638236.2	4171148.9	Roadway/Waterway	Scenario 4	--	--	--
3008	638336.2	4171148.9	Roadway/Waterway	Scenario 4	--	--	--
3009	635936.2	4171248.9	Roadway/Waterway	Scenario 4	--	--	--
3010	636036.2	4171248.9	Roadway/Waterway	Scenario 4	--	--	--
3011	636436.2	4171248.9	Roadway/Waterway	Scenario 4	--	--	--
3012	636636.2	4171248.9	Roadway/Waterway	Scenario 4	--	--	--
3013	636736.2	4171248.9	Roadway/Waterway	Scenario 4	--	--	--
3014	638036.2	4171248.9	Roadway/Waterway	Scenario 4	--	--	--
3015	638136.2	4171248.9	Roadway/Waterway	Scenario 4	--	--	--
3016	638236.2	4171248.9	Roadway/Waterway	Scenario 4	--	--	--
3017	636436.2	4171348.9	Roadway/Waterway	Scenario 4	--	--	--
3018	636536.2	4171348.9	Roadway/Waterway	Scenario 4	--	--	--
3019	636636.2	4171348.9	Roadway/Waterway	Scenario 4	--	--	--
3020	637936.2	4171348.9	Roadway/Waterway	Scenario 4	--	--	--
3021	638036.2	4171348.9	Roadway/Waterway	Scenario 4	--	--	--
3022	636336.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3023	636436.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3024	636536.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3025	637436.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3026	637536.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3027	637636.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3028	637736.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3029	637836.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3030	637936.2	4171448.9	Roadway/Waterway	Scenario 4	--	--	--
3031	636136.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3032	636236.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3033	636336.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3034	636436.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3035	637336.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3036	637436.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3037	637536.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3038	637636.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3039	637736.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3040	637836.2	4171548.9	Roadway/Waterway	Scenario 4	--	--	--
3041	636236.2	4171648.9	Roadway/Waterway	Scenario 4	--	--	--
3042	636436.2	4171648.9	Roadway/Waterway	Scenario 4	--	--	--
3043	637336.2	4171648.9	Roadway/Waterway	Scenario 4	--	--	--
3044	637436.2	4171648.9	Roadway/Waterway	Scenario 4	--	--	--
3045	636436.2	4171748.9	Roadway/Waterway	Scenario 4	--	--	--
3046	637236.2	4171748.9	Roadway/Waterway	Scenario 4	--	--	--
3047	636436.2	4171848.9	Roadway/Waterway	Scenario 4	--	--	--
3048	637136.2	4171848.9	Roadway/Waterway	Scenario 4	--	--	--
3049	637036.2	4171948.9	Roadway/Waterway	Scenario 4	--	--	--
3050	637136.2	4171948.9	Roadway/Waterway	Scenario 4	--	--	--
3051	638036.2	4171948.9	Roadway/Waterway	Scenario 4	--	--	--
3052	636936.2	4172048.9	Roadway/Waterway	Scenario 4	--	--	--
3053	637036.2	4172048.9	Roadway/Waterway	Scenario 4	--	--	--
3054	637136.2	4172048.9	Roadway/Waterway	Scenario 4	--	--	--
3055	638036.2	4172048.9	Roadway/Waterway	Scenario 4	--	--	--
3056	636836.2	4172148.9	Roadway/Waterway	Scenario 4	--	--	--
3057	636936.2	4172148.9	Roadway/Waterway	Scenario 4	--	--	--

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3058	637036.2	4172148.9	Roadway/Waterway	Scenario 4	--	--	--
3059	638036.2	4172148.9	Roadway/Waterway	Scenario 4	--	--	--
3060	638036.2	4172248.9	Roadway/Waterway	Scenario 4	--	--	--
3061	639636.2	4172248.9	Roadway/Waterway	Scenario 4	--	--	--
3062	638036.2	4172348.9	Roadway/Waterway	Scenario 4	--	--	--
3063	639636.2	4172348.9	Roadway/Waterway	Scenario 4	--	--	--
3064	638036.2	4172448.9	Roadway/Waterway	Scenario 4	--	--	--
3065	642798.5	4166811.2	Worker	Scenario 4	2.49E-01	6.92E-03	6.10E-03
3066	642823.5	4166811.2	Worker	Scenario 4	2.51E-01	7.10E-03	5.97E-03
3067	642848.5	4166811.2	Worker	Scenario 4	2.53E-01	7.27E-03	6.08E-03
3068	642873.5	4166811.2	Worker	Scenario 4	2.55E-01	7.43E-03	6.15E-03
3069	642898.5	4166811.2	Worker	Scenario 4	2.57E-01	7.57E-03	6.18E-03
3070	642923.5	4166811.2	Worker	Scenario 4	2.59E-01	7.70E-03	6.16E-03
3071	642948.5	4166811.2	Worker	Scenario 4	2.61E-01	7.81E-03	6.12E-03
3072	642973.5	4166811.2	Worker	Scenario 4	2.65E-01	8.01E-03	5.97E-03
3073	642998.5	4166811.2	Worker	Scenario 4	2.66E-01	8.11E-03	5.89E-03
3074	643023.5	4166811.2	Worker	Scenario 4	2.69E-01	8.27E-03	5.75E-03
3075	643048.5	4166811.2	Worker	Scenario 4	2.71E-01	8.43E-03	5.61E-03
3076	643073.5	4166811.2	Worker	Scenario 4	2.74E-01	8.57E-03	5.53E-03
3077	643098.5	4166811.2	Worker	Scenario 4	2.76E-01	8.64E-03	5.43E-03
3078	643123.5	4166811.2	Worker	Scenario 4	2.76E-01	8.65E-03	5.35E-03
3079	643148.5	4166811.2	Worker	Scenario 4	2.77E-01	8.60E-03	5.26E-03
3080	643173.5	4166811.2	Worker	Scenario 4	2.76E-01	8.53E-03	5.23E-03
3081	643198.5	4166811.2	Worker	Scenario 4	2.76E-01	8.45E-03	5.32E-03
3082	643223.5	4166811.2	Worker	Scenario 4	2.75E-01	8.36E-03	5.44E-03
3083	643248.5	4166811.2	Worker	Scenario 4	2.75E-01	8.27E-03	5.55E-03
3084	643273.5	4166811.2	Worker	Scenario 4	2.74E-01	8.19E-03	5.64E-03
3085	643298.5	4166811.2	Worker	Scenario 4	2.74E-01	8.10E-03	5.72E-03
3086	643323.5	4166811.2	Worker	Scenario 4	2.74E-01	8.03E-03	5.79E-03
3087	643348.5	4166811.2	Worker	Scenario 4	2.73E-01	7.95E-03	5.85E-03
3088	643373.5	4166811.2	Worker	Scenario 4	2.73E-01	7.88E-03	5.89E-03
3089	643398.5	4166811.2	Worker	Scenario 4	2.73E-01	7.81E-03	5.92E-03
3090	643423.5	4166811.2	Worker	Scenario 4	2.72E-01	7.75E-03	5.94E-03
3091	643448.5	4166811.2	Worker	Scenario 4	2.72E-01	7.68E-03	5.94E-03
3092	643473.5	4166811.2	Worker	Scenario 4	2.71E-01	7.62E-03	5.93E-03
3093	643498.5	4166811.2	Worker	Scenario 4	2.70E-01	7.55E-03	5.92E-03
3094	643523.5	4166811.2	Worker	Scenario 4	2.69E-01	7.49E-03	5.89E-03
3095	641973.5	4166836.2	Worker	Scenario 4	5.06E-01	1.41E-02	1.76E-02
3096	641998.5	4166836.2	Worker	Scenario 4	4.93E-01	1.38E-02	1.74E-02
3097	642023.5	4166836.2	Worker	Scenario 4	4.78E-01	1.34E-02	1.75E-02
3098	642048.5	4166836.2	Worker	Scenario 4	4.63E-01	1.30E-02	1.64E-02
3099	642073.5	4166836.2	Worker	Scenario 4	4.47E-01	1.26E-02	1.46E-02
3100	642098.5	4166836.2	Worker	Scenario 4	4.33E-01	1.22E-02	1.52E-02
3101	642123.5	4166836.2	Worker	Scenario 4	4.18E-01	1.18E-02	1.57E-02
3102	642148.5	4166836.2	Worker	Scenario 4	4.04E-01	1.14E-02	1.57E-02
3103	642173.5	4166836.2	Worker	Scenario 4	3.90E-01	1.09E-02	1.51E-02
3104	642198.5	4166836.2	Worker	Scenario 4	3.76E-01	1.04E-02	1.41E-02
3105	642223.5	4166836.2	Worker	Scenario 4	3.63E-01	9.90E-03	1.33E-02
3106	642248.5	4166836.2	Worker	Scenario 4	3.49E-01	9.37E-03	1.28E-02
3107	642598.5	4166836.2	Worker	Scenario 4	2.55E-01	6.32E-03	8.55E-03
3108	642623.5	4166836.2	Worker	Scenario 4	2.54E-01	6.35E-03	8.25E-03
3109	642648.5	4166836.2	Worker	Scenario 4	2.53E-01	6.42E-03	7.88E-03
3110	642673.5	4166836.2	Worker	Scenario 4	2.54E-01	6.53E-03	7.45E-03
3111	642698.5	4166836.2	Worker	Scenario 4	2.55E-01	6.71E-03	7.02E-03
3112	642723.5	4166836.2	Worker	Scenario 4	2.58E-01	6.94E-03	6.69E-03
3113	642748.5	4166836.2	Worker	Scenario 4	2.62E-01	7.21E-03	6.42E-03
3114	642773.5	4166836.2	Worker	Scenario 4	2.66E-01	7.48E-03	6.50E-03
3115	642798.5	4166836.2	Worker	Scenario 4	2.69E-01	7.74E-03	6.59E-03
3116	642823.5	4166836.2	Worker	Scenario 4	2.73E-01	7.97E-03	6.63E-03
3117	642848.5	4166836.2	Worker	Scenario 4	2.76E-01	8.19E-03	6.62E-03
3118	642873.5	4166836.2	Worker	Scenario 4	2.79E-01	8.38E-03	6.57E-03
3119	642898.5	4166836.2	Worker	Scenario 4	2.82E-01	8.57E-03	6.47E-03
3120	642923.5	4166836.2	Worker	Scenario 4	2.85E-01	8.75E-03	6.34E-03
3121	642948.5	4166836.2	Worker	Scenario 4	2.89E-01	8.95E-03	6.18E-03
3122	642973.5	4166836.2	Worker	Scenario 4	2.92E-01	9.16E-03	6.01E-03
3123	642998.5	4166836.2	Worker	Scenario 4	2.98E-01	9.46E-03	5.86E-03
3124	643023.5	4166836.2	Worker	Scenario 4	3.01E-01	9.65E-03	5.79E-03
3125	643048.5	4166836.2	Worker	Scenario 4	3.06E-01	9.91E-03	5.68E-03
3126	643073.5	4166836.2	Worker	Scenario 4	3.10E-01	1.01E-02	5.57E-03
3127	643098.5	4166836.2	Worker	Scenario 4	3.11E-01	1.01E-02	5.51E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3128	643123.5	4166836.2	Worker	Scenario 4	3.11E-01	1.01E-02	5.59E-03
3129	643148.5	4166836.2	Worker	Scenario 4	3.11E-01	9.97E-03	5.71E-03
3130	643173.5	4166836.2	Worker	Scenario 4	3.10E-01	9.84E-03	5.82E-03
3131	643198.5	4166836.2	Worker	Scenario 4	3.09E-01	9.71E-03	5.91E-03
3132	643223.5	4166836.2	Worker	Scenario 4	3.08E-01	9.59E-03	5.99E-03
3133	643248.5	4166836.2	Worker	Scenario 4	3.07E-01	9.47E-03	6.05E-03
3134	643273.5	4166836.2	Worker	Scenario 4	3.06E-01	9.37E-03	6.09E-03
3135	643298.5	4166836.2	Worker	Scenario 4	3.06E-01	9.27E-03	6.12E-03
3136	643323.5	4166836.2	Worker	Scenario 4	3.05E-01	9.18E-03	6.14E-03
3137	643348.5	4166836.2	Worker	Scenario 4	3.05E-01	9.08E-03	6.16E-03
3138	643373.5	4166836.2	Worker	Scenario 4	3.04E-01	8.99E-03	6.16E-03
3139	643398.5	4166836.2	Worker	Scenario 4	3.03E-01	8.91E-03	6.14E-03
3140	643423.5	4166836.2	Worker	Scenario 4	3.03E-01	8.83E-03	6.11E-03
3141	643448.5	4166836.2	Worker	Scenario 4	3.02E-01	8.75E-03	6.08E-03
3142	643473.5	4166836.2	Worker	Scenario 4	3.01E-01	8.67E-03	6.03E-03
3143	643498.5	4166836.2	Worker	Scenario 4	3.00E-01	8.60E-03	5.97E-03
3144	643523.5	4166836.2	Worker	Scenario 4	2.98E-01	8.52E-03	5.90E-03
3145	643548.5	4166836.2	Worker	Scenario 4	2.96E-01	8.44E-03	5.83E-03
3146	643573.5	4166836.2	Worker	Scenario 4	2.94E-01	8.37E-03	5.75E-03
3147	643598.5	4166836.2	Worker	Scenario 4	2.92E-01	8.29E-03	5.66E-03
3148	643623.5	4166836.2	Worker	Scenario 4	2.90E-01	8.21E-03	5.57E-03
3149	643648.5	4166836.2	Worker	Scenario 4	2.88E-01	8.14E-03	5.47E-03
3150	643673.5	4166836.2	Worker	Scenario 4	2.85E-01	8.06E-03	5.37E-03
3151	643698.5	4166836.2	Worker	Scenario 4	2.82E-01	7.98E-03	5.26E-03
3152	643723.5	4166836.2	Worker	Scenario 4	2.79E-01	7.91E-03	5.15E-03
3153	643748.5	4166836.2	Worker	Scenario 4	2.77E-01	7.83E-03	5.04E-03
3154	643773.5	4166836.2	Worker	Scenario 4	2.74E-01	7.76E-03	4.93E-03
3155	643798.5	4166836.2	Worker	Scenario 4	2.71E-01	7.69E-03	4.82E-03
3156	643823.5	4166836.2	Worker	Scenario 4	2.69E-01	7.62E-03	4.70E-03
3157	643848.5	4166836.2	Worker	Scenario 4	2.66E-01	7.54E-03	4.59E-03
3158	643873.5	4166836.2	Worker	Scenario 4	2.63E-01	7.46E-03	4.47E-03
3159	643898.5	4166836.2	Worker	Scenario 4	2.61E-01	7.39E-03	4.35E-03
3160	643923.5	4166836.2	Worker	Scenario 4	2.58E-01	7.32E-03	4.24E-03
3161	643948.5	4166836.2	Worker	Scenario 4	2.56E-01	7.26E-03	4.12E-03
3162	643973.5	4166836.2	Worker	Scenario 4	2.54E-01	7.19E-03	4.01E-03
3163	643998.5	4166836.2	Worker	Scenario 4	2.52E-01	7.13E-03	3.89E-03
3164	644023.5	4166836.2	Worker	Scenario 4	2.50E-01	7.07E-03	3.78E-03
3165	644048.5	4166836.2	Worker	Scenario 4	2.48E-01	7.01E-03	3.67E-03
3166	644073.5	4166836.2	Worker	Scenario 4	2.46E-01	6.94E-03	3.56E-03
3167	644098.5	4166836.2	Worker	Scenario 4	2.44E-01	6.87E-03	3.45E-03
3168	644123.5	4166836.2	Worker	Scenario 4	2.42E-01	6.80E-03	3.35E-03
3169	644148.5	4166836.2	Worker	Scenario 4	2.39E-01	6.72E-03	3.24E-03
3170	644173.5	4166836.2	Worker	Scenario 4	2.37E-01	6.63E-03	3.14E-03
3171	644198.5	4166836.2	Worker	Scenario 4	2.34E-01	6.53E-03	3.08E-03
3172	644223.5	4166836.2	Worker	Scenario 4	2.31E-01	6.40E-03	3.01E-03
3173	644248.5	4166836.2	Worker	Scenario 4	2.27E-01	6.25E-03	2.95E-03
3174	644273.5	4166836.2	Worker	Scenario 4	2.23E-01	6.07E-03	2.89E-03
3175	644298.5	4166836.2	Worker	Scenario 4	2.18E-01	5.86E-03	2.82E-03
3176	641598.5	4166861.2	Worker	Scenario 4	4.37E-01	1.29E-02	3.89E-02
3177	641623.5	4166861.2	Worker	Scenario 4	4.66E-01	1.37E-02	4.24E-02
3178	641648.5	4166861.2	Worker	Scenario 4	4.93E-01	1.44E-02	3.69E-02
3179	641673.5	4166861.2	Worker	Scenario 4	5.19E-01	1.50E-02	3.46E-02
3180	641698.5	4166861.2	Worker	Scenario 4	5.42E-01	1.55E-02	3.16E-02
3181	641723.5	4166861.2	Worker	Scenario 4	5.60E-01	1.60E-02	2.74E-02
3182	641748.5	4166861.2	Worker	Scenario 4	5.77E-01	1.63E-02	2.63E-02
3183	641773.5	4166861.2	Worker	Scenario 4	5.91E-01	1.67E-02	2.46E-02
3184	641798.5	4166861.2	Worker	Scenario 4	6.03E-01	1.69E-02	2.43E-02
3185	641823.5	4166861.2	Worker	Scenario 4	6.12E-01	1.71E-02	2.40E-02
3186	641848.5	4166861.2	Worker	Scenario 4	6.18E-01	1.72E-02	2.29E-02
3187	641873.5	4166861.2	Worker	Scenario 4	6.20E-01	1.73E-02	2.23E-02
3188	641898.5	4166861.2	Worker	Scenario 4	6.18E-01	1.72E-02	2.07E-02
3189	641923.5	4166861.2	Worker	Scenario 4	6.11E-01	1.71E-02	2.01E-02
3190	641948.5	4166861.2	Worker	Scenario 4	5.99E-01	1.68E-02	1.89E-02
3191	641973.5	4166861.2	Worker	Scenario 4	5.82E-01	1.64E-02	1.87E-02
3192	641998.5	4166861.2	Worker	Scenario 4	5.62E-01	1.59E-02	1.87E-02
3193	642023.5	4166861.2	Worker	Scenario 4	5.42E-01	1.54E-02	1.74E-02
3194	642123.5	4166861.2	Worker	Scenario 4	4.64E-01	1.33E-02	1.67E-02
3195	642148.5	4166861.2	Worker	Scenario 4	4.46E-01	1.28E-02	1.58E-02
3196	642173.5	4166861.2	Worker	Scenario 4	4.28E-01	1.22E-02	1.45E-02
3197	641298.5	4167011.2	Worker	Scenario 4	2.77E-01	8.14E-03	7.10E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3198	641323.5	4167011.2	Worker	Scenario 4	3.25E-01	9.83E-03	6.31E-02
3199	641298.5	4167036.2	Worker	Scenario 4	2.96E-01	8.67E-03	7.20E-02
3200	641323.5	4167036.2	Worker	Scenario 4	3.49E-01	1.05E-02	7.47E-02
3201	641298.5	4167061.2	Worker	Scenario 4	3.15E-01	9.22E-03	6.81E-02
3202	641323.5	4167061.2	Worker	Scenario 4	3.75E-01	1.13E-02	8.37E-02
3203	641348.5	4167061.2	Worker	Scenario 4	4.70E-01	1.49E-02	7.42E-02
3204	644673.5	4167061.2	Worker	Scenario 4	2.15E-01	4.68E-03	2.26E-03
3205	641298.5	4167086.2	Worker	Scenario 4	3.35E-01	9.79E-03	7.12E-02
3206	641323.5	4167086.2	Worker	Scenario 4	4.00E-01	1.20E-02	8.40E-02
3207	641348.5	4167086.2	Worker	Scenario 4	5.05E-01	1.59E-02	9.05E-02
3208	644648.5	4167086.2	Worker	Scenario 4	2.36E-01	5.38E-03	2.26E-03
3209	644673.5	4167086.2	Worker	Scenario 4	2.21E-01	4.81E-03	2.23E-03
3210	641298.5	4167111.2	Worker	Scenario 4	3.56E-01	1.04E-02	6.91E-02
3211	641323.5	4167111.2	Worker	Scenario 4	4.27E-01	1.29E-02	6.86E-02
3212	641348.5	4167111.2	Worker	Scenario 4	5.40E-01	1.70E-02	8.91E-02
3213	644648.5	4167111.2	Worker	Scenario 4	2.45E-01	5.62E-03	2.18E-03
3214	644673.5	4167111.2	Worker	Scenario 4	2.28E-01	4.93E-03	2.15E-03
3215	641298.5	4167136.2	Worker	Scenario 4	3.78E-01	1.11E-02	6.59E-02
3216	641323.5	4167136.2	Worker	Scenario 4	4.52E-01	1.36E-02	7.18E-02
3217	641348.5	4167136.2	Worker	Scenario 4	5.72E-01	1.80E-02	9.17E-02
3218	644648.5	4167136.2	Worker	Scenario 4	2.56E-01	5.88E-03	2.25E-03
3219	644673.5	4167136.2	Worker	Scenario 4	2.34E-01	4.99E-03	2.22E-03
3220	641298.5	4167161.2	Worker	Scenario 4	3.98E-01	1.17E-02	6.87E-02
3221	641323.5	4167161.2	Worker	Scenario 4	4.76E-01	1.44E-02	8.02E-02
3222	641348.5	4167161.2	Worker	Scenario 4	6.03E-01	1.91E-02	9.13E-02
3223	644648.5	4167161.2	Worker	Scenario 4	2.67E-01	6.00E-03	2.28E-03
3224	644673.5	4167161.2	Worker	Scenario 4	2.38E-01	4.91E-03	2.26E-03
3225	641298.5	4167186.2	Worker	Scenario 4	4.17E-01	1.23E-02	8.12E-02
3226	641323.5	4167186.2	Worker	Scenario 4	4.97E-01	1.51E-02	8.61E-02
3227	641348.5	4167186.2	Worker	Scenario 4	6.30E-01	2.01E-02	1.02E-01
3228	644648.5	4167186.2	Worker	Scenario 4	2.67E-01	5.58E-03	2.27E-03
3229	644673.5	4167186.2	Worker	Scenario 4	2.36E-01	4.62E-03	2.24E-03
3230	641298.5	4167211.2	Worker	Scenario 4	4.36E-01	1.29E-02	8.33E-02
3231	641323.5	4167211.2	Worker	Scenario 4	5.20E-01	1.59E-02	1.02E-01
3232	641348.5	4167211.2	Worker	Scenario 4	6.60E-01	2.12E-02	1.13E-01
3233	644648.5	4167211.2	Worker	Scenario 4	2.42E-01	4.75E-03	2.22E-03
3234	644673.5	4167211.2	Worker	Scenario 4	2.24E-01	4.18E-03	2.19E-03
3235	641298.5	4167236.2	Worker	Scenario 4	4.53E-01	1.36E-02	1.03E-01
3236	641323.5	4167236.2	Worker	Scenario 4	5.41E-01	1.68E-02	1.14E-01
3237	641348.5	4167236.2	Worker	Scenario 4	6.88E-01	2.25E-02	1.34E-01
3238	644623.5	4167236.2	Worker	Scenario 4	2.33E-01	4.64E-03	2.23E-03
3239	644648.5	4167236.2	Worker	Scenario 4	2.21E-01	4.15E-03	2.21E-03
3240	644673.5	4167236.2	Worker	Scenario 4	2.11E-01	3.81E-03	2.19E-03
3241	641298.5	4167261.2	Worker	Scenario 4	4.69E-01	1.42E-02	1.21E-01
3242	641323.5	4167261.2	Worker	Scenario 4	5.61E-01	1.77E-02	1.46E-01
3243	641348.5	4167261.2	Worker	Scenario 4	7.20E-01	2.42E-02	1.58E-01
3244	641298.5	4167286.2	Worker	Scenario 4	4.84E-01	1.47E-02	1.20E-01
3245	641323.5	4167286.2	Worker	Scenario 4	5.80E-01	1.85E-02	1.59E-01
3246	641348.5	4167286.2	Worker	Scenario 4	7.51E-01	2.59E-02	2.02E-01
3247	641298.5	4167311.2	Worker	Scenario 4	4.97E-01	1.51E-02	1.36E-01
3248	641323.5	4167311.2	Worker	Scenario 4	5.93E-01	1.91E-02	1.73E-01
3249	641348.5	4167311.2	Worker	Scenario 4	7.60E-01	2.65E-02	2.20E-01
3250	641723.5	4167311.2	Roadway/Waterway	Scenario 4	--	--	--
3251	641298.5	4167336.2	Worker	Scenario 4	5.06E-01	1.54E-02	1.39E-01
3252	641323.5	4167336.2	Worker	Scenario 4	6.00E-01	1.93E-02	1.73E-01
3253	641348.5	4167336.2	Worker	Scenario 4	7.55E-01	2.63E-02	2.24E-01
3254	641623.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
3255	641648.5	4167336.2	Roadway/Waterway	Scenario 4	--	--	--
3256	641298.5	4167361.2	Worker	Scenario 4	5.14E-01	1.56E-02	1.25E-01
3257	641323.5	4167361.2	Worker	Scenario 4	6.02E-01	1.93E-02	1.52E-01
3258	641348.5	4167361.2	Worker	Scenario 4	7.49E-01	2.60E-02	1.87E-01
3259	641548.5	4167361.2	Roadway/Waterway	Scenario 4	--	--	--
3260	644523.5	4167361.2	Worker	Scenario 4	2.20E-01	3.69E-03	2.38E-03
3261	641298.5	4167386.2	Worker	Scenario 4	5.21E-01	1.57E-02	1.14E-01
3262	641323.5	4167386.2	Worker	Scenario 4	6.04E-01	1.93E-02	1.47E-01
3263	641348.5	4167386.2	Worker	Scenario 4	7.43E-01	2.57E-02	1.84E-01
3264	641448.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
3265	641473.5	4167386.2	Roadway/Waterway	Scenario 4	--	--	--
3266	644448.5	4167386.2	Worker	Scenario 4	2.31E-01	3.81E-03	2.38E-03
3267	641298.5	4167411.2	Worker	Scenario 4	5.28E-01	1.58E-02	1.10E-01

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3268	641323.5	4167411.2	Worker	Scenario 4	6.06E-01	1.92E-02	1.34E-01
3269	641348.5	4167411.2	Worker	Scenario 4	7.36E-01	2.52E-02	1.72E-01
3270	644348.5	4167411.2	Worker	Scenario 4	2.48E-01	4.01E-03	2.40E-03
3271	644373.5	4167411.2	Worker	Scenario 4	2.43E-01	3.93E-03	2.37E-03
3272	643348.5	4167436.2	Worker	Scenario 4	1.35E+00	1.59E-02	4.35E-03
3273	643373.5	4167436.2	Worker	Scenario 4	1.22E+00	1.45E-02	4.25E-03
3274	643398.5	4167436.2	Worker	Scenario 4	1.11E+00	1.34E-02	4.17E-03
3275	643423.5	4167436.2	Worker	Scenario 4	1.02E+00	1.24E-02	4.09E-03
3276	643448.5	4167436.2	Worker	Scenario 4	9.44E-01	1.16E-02	4.02E-03
3277	643473.5	4167436.2	Worker	Scenario 4	8.76E-01	1.09E-02	3.94E-03
3278	643498.5	4167436.2	Worker	Scenario 4	8.16E-01	1.03E-02	3.87E-03
3279	643523.5	4167436.2	Worker	Scenario 4	7.63E-01	9.70E-03	3.80E-03
3280	643548.5	4167436.2	Worker	Scenario 4	7.17E-01	9.21E-03	3.74E-03
3281	643573.5	4167436.2	Worker	Scenario 4	6.76E-01	8.77E-03	3.68E-03
3282	643598.5	4167436.2	Worker	Scenario 4	6.39E-01	8.37E-03	3.62E-03
3283	643623.5	4167436.2	Worker	Scenario 4	6.06E-01	8.02E-03	3.56E-03
3284	643648.5	4167436.2	Worker	Scenario 4	5.76E-01	7.70E-03	3.50E-03
3285	643673.5	4167436.2	Worker	Scenario 4	5.49E-01	7.40E-03	3.44E-03
3286	643698.5	4167436.2	Worker	Scenario 4	5.25E-01	7.14E-03	3.39E-03
3287	643723.5	4167436.2	Worker	Scenario 4	5.02E-01	6.89E-03	3.33E-03
3288	643748.5	4167436.2	Worker	Scenario 4	4.82E-01	6.67E-03	3.28E-03
3289	644273.5	4167436.2	Worker	Scenario 4	2.63E-01	4.13E-03	2.41E-03
3290	644298.5	4167436.2	Worker	Scenario 4	2.57E-01	4.05E-03	2.38E-03
3291	643323.5	4167461.2	Worker	Scenario 4	1.66E+00	1.87E-02	4.74E-03
3292	643348.5	4167461.2	Worker	Scenario 4	1.46E+00	1.67E-02	4.60E-03
3293	643873.5	4167461.2	Worker	Scenario 4	4.02E-01	5.72E-03	3.09E-03
3294	643898.5	4167461.2	Worker	Scenario 4	3.89E-01	5.57E-03	3.04E-03
3295	644198.5	4167461.2	Worker	Scenario 4	2.79E-01	4.28E-03	2.57E-03
3296	644223.5	4167461.2	Worker	Scenario 4	2.73E-01	4.20E-03	2.53E-03
3297	643298.5	4167486.2	Worker	Scenario 4	2.06E+00	2.24E-02	5.08E-03
3298	643323.5	4167486.2	Worker	Scenario 4	1.73E+00	1.92E-02	4.91E-03
3299	643348.5	4167486.2	Worker	Scenario 4	1.51E+00	1.71E-02	4.80E-03
3300	644098.5	4167486.2	Worker	Scenario 4	3.06E-01	4.56E-03	2.74E-03
3301	644123.5	4167486.2	Worker	Scenario 4	2.98E-01	4.46E-03	2.70E-03
3302	644148.5	4167486.2	Worker	Scenario 4	2.91E-01	4.37E-03	2.66E-03
3303	643273.5	4167511.2	Worker	Scenario 4	2.39E+00	2.55E-02	5.13E-03
3304	643298.5	4167511.2	Worker	Scenario 4	1.95E+00	2.13E-02	4.97E-03
3305	643323.5	4167511.2	Worker	Scenario 4	1.68E+00	1.87E-02	4.89E-03
3306	643273.5	4167536.2	Worker	Scenario 4	1.98E+00	2.16E-02	5.00E-03
3307	643298.5	4167536.2	Worker	Scenario 4	1.72E+00	1.91E-02	4.91E-03
3308	643248.5	4167561.2	Worker	Scenario 4	1.68E+00	1.90E-02	5.10E-03
3309	643273.5	4167561.2	Worker	Scenario 4	1.52E+00	1.74E-02	4.95E-03
3310	643223.5	4167586.2	Worker	Scenario 4	1.13E+00	1.42E-02	5.31E-03
3311	643248.5	4167586.2	Worker	Scenario 4	1.12E+00	1.38E-02	5.17E-03
3312	643198.5	4167611.2	Worker	Scenario 4	6.80E-01	1.03E-02	5.42E-03
3313	643223.5	4167611.2	Worker	Scenario 4	7.16E-01	1.03E-02	5.25E-03
3314	643248.5	4167611.2	Worker	Scenario 4	7.58E-01	1.04E-02	5.14E-03
3315	643173.5	4167636.2	Worker	Scenario 4	5.11E-01	8.93E-03	5.54E-03
3316	643198.5	4167636.2	Worker	Scenario 4	5.02E-01	8.47E-03	5.34E-03
3317	643223.5	4167636.2	Worker	Scenario 4	5.24E-01	8.39E-03	5.22E-03
3318	643173.5	4167661.2	Worker	Scenario 4	4.46E-01	8.04E-03	5.42E-03
3319	643198.5	4167661.2	Worker	Scenario 4	4.31E-01	7.61E-03	5.29E-03
3320	643148.5	4167686.2	Worker	Scenario 4	4.45E-01	8.09E-03	5.53E-03
3321	643173.5	4167686.2	Worker	Scenario 4	4.11E-01	7.48E-03	5.37E-03
3322	643123.5	4167711.2	Worker	Scenario 4	4.56E-01	8.23E-03	5.52E-03
3323	643148.5	4167711.2	Worker	Scenario 4	4.12E-01	7.51E-03	5.40E-03
3324	643098.5	4167736.2	Worker	Scenario 4	4.65E-01	8.32E-03	5.74E-03
3325	643123.5	4167736.2	Worker	Scenario 4	4.18E-01	7.57E-03	5.52E-03
3326	643098.5	4167761.2	Worker	Scenario 4	4.26E-01	7.64E-03	5.63E-03
3327	643123.5	4167761.2	Worker	Scenario 4	3.95E-01	7.11E-03	5.48E-03
3328	643073.5	4167786.2	Worker	Scenario 4	4.25E-01	7.62E-03	5.72E-03
3329	643098.5	4167786.2	Worker	Scenario 4	3.98E-01	7.13E-03	5.55E-03
3330	643048.5	4167811.2	Worker	Scenario 4	4.23E-01	7.60E-03	5.84E-03
3331	643073.5	4167811.2	Worker	Scenario 4	3.96E-01	7.11E-03	5.62E-03
3332	643023.5	4167836.2	Worker	Scenario 4	4.18E-01	7.53E-03	5.86E-03
3333	643048.5	4167836.2	Worker	Scenario 4	3.92E-01	7.06E-03	5.67E-03
3334	642998.5	4167861.2	Worker	Scenario 4	4.10E-01	7.42E-03	6.05E-03
3335	643023.5	4167861.2	Worker	Scenario 4	3.87E-01	6.99E-03	5.80E-03
3336	642973.5	4167886.2	Worker	Scenario 4	4.02E-01	7.31E-03	5.94E-03
3337	642998.5	4167886.2	Worker	Scenario 4	3.81E-01	6.91E-03	5.75E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3338	642948.5	4167911.2	Worker	Scenario 4	3.91E-01	7.18E-03	6.11E-03
3339	642973.5	4167911.2	Worker	Scenario 4	3.75E-01	6.84E-03	5.95E-03
3340	642898.5	4167936.2	Worker	Scenario 4	3.97E-01	7.44E-03	6.37E-03
3341	642923.5	4167936.2	Worker	Scenario 4	3.81E-01	7.05E-03	6.10E-03
3342	642873.5	4167961.2	Worker	Scenario 4	3.86E-01	7.31E-03	6.38E-03
3343	642898.5	4167961.2	Worker	Scenario 4	3.74E-01	6.98E-03	6.18E-03
3344	642823.5	4167986.2	Worker	Scenario 4	3.90E-01	7.58E-03	6.52E-03
3345	642848.5	4167986.2	Worker	Scenario 4	3.78E-01	7.20E-03	6.38E-03
3346	642798.5	4168011.2	Worker	Scenario 4	3.82E-01	7.48E-03	6.83E-03
3347	642823.5	4168011.2	Worker	Scenario 4	3.72E-01	7.13E-03	6.54E-03
3348	642748.5	4168036.2	Worker	Scenario 4	3.88E-01	7.82E-03	7.08E-03
3349	642773.5	4168036.2	Worker	Scenario 4	3.76E-01	7.39E-03	7.01E-03
3350	642698.5	4168061.2	Worker	Scenario 4	3.95E-01	8.21E-03	7.74E-03
3351	642723.5	4168061.2	Worker	Scenario 4	3.82E-01	7.71E-03	7.28E-03
3352	642748.5	4168061.2	Worker	Scenario 4	3.72E-01	7.32E-03	6.82E-03
3353	642673.5	4168086.2	Worker	Scenario 4	3.91E-01	8.09E-03	7.78E-03
3354	642698.5	4168086.2	Worker	Scenario 4	3.78E-01	7.61E-03	7.47E-03
3355	642623.5	4168111.2	Worker	Scenario 4	4.00E-01	8.46E-03	8.06E-03
3356	642648.5	4168111.2	Worker	Scenario 4	3.86E-01	7.95E-03	7.73E-03
3357	642673.5	4168111.2	Worker	Scenario 4	3.75E-01	7.53E-03	7.56E-03
3358	642598.5	4168136.2	Worker	Scenario 4	3.98E-01	8.34E-03	8.09E-03
3359	642623.5	4168136.2	Worker	Scenario 4	3.83E-01	7.83E-03	7.76E-03
3360	642548.5	4168161.2	Worker	Scenario 4	4.10E-01	8.75E-03	8.25E-03
3361	642573.5	4168161.2	Worker	Scenario 4	3.95E-01	8.20E-03	8.03E-03
3362	642523.5	4168186.2	Worker	Scenario 4	4.09E-01	8.63E-03	8.00E-03
3363	642548.5	4168186.2	Worker	Scenario 4	3.94E-01	8.09E-03	7.97E-03
3364	642498.5	4168211.2	Worker	Scenario 4	4.10E-01	8.51E-03	8.16E-03
3365	642473.5	4168236.2	Worker	Scenario 4	4.11E-01	8.42E-03	8.27E-03
3366	642448.5	4168261.2	Worker	Scenario 4	4.15E-01	8.34E-03	8.47E-03
3367	642423.5	4168286.2	Worker	Scenario 4	4.17E-01	8.25E-03	8.20E-03
3368	642398.5	4168311.2	Worker	Scenario 4	4.21E-01	8.16E-03	8.14E-03
3369	642423.5	4168311.2	Worker	Scenario 4	4.06E-01	7.73E-03	8.01E-03
3370	642348.5	4168336.2	Worker	Scenario 4	4.46E-01	8.59E-03	8.36E-03
3371	642373.5	4168336.2	Worker	Scenario 4	4.24E-01	8.06E-03	8.18E-03
3372	639573.5	4168361.2	Worker	Scenario 4	1.81E-01	6.43E-03	3.45E-03
3373	639598.5	4168361.2	Worker	Scenario 4	1.96E-01	6.92E-03	3.38E-03
3374	639623.5	4168361.2	Worker	Scenario 4	2.15E-01	7.55E-03	3.49E-03
3375	642323.5	4168361.2	Worker	Scenario 4	4.47E-01	8.42E-03	8.60E-03
3376	642348.5	4168361.2	Worker	Scenario 4	4.27E-01	7.94E-03	7.92E-03
3377	639523.5	4168386.2	Worker	Scenario 4	1.76E-01	6.44E-03	3.35E-03
3378	639548.5	4168386.2	Worker	Scenario 4	1.88E-01	6.90E-03	3.28E-03
3379	639573.5	4168386.2	Worker	Scenario 4	2.03E-01	7.38E-03	3.33E-03
3380	639598.5	4168386.2	Worker	Scenario 4	2.19E-01	7.91E-03	3.53E-03
3381	639623.5	4168386.2	Worker	Scenario 4	2.39E-01	8.58E-03	3.72E-03
3382	642273.5	4168386.2	Worker	Scenario 4	4.69E-01	8.71E-03	8.56E-03
3383	642298.5	4168386.2	Worker	Scenario 4	4.46E-01	8.22E-03	8.46E-03
3384	639498.5	4168411.2	Worker	Scenario 4	1.87E-01	7.08E-03	3.18E-03
3385	639523.5	4168411.2	Worker	Scenario 4	2.02E-01	7.65E-03	3.17E-03
3386	639548.5	4168411.2	Worker	Scenario 4	2.17E-01	8.20E-03	3.37E-03
3387	639573.5	4168411.2	Worker	Scenario 4	2.32E-01	8.73E-03	3.55E-03
3388	639598.5	4168411.2	Worker	Scenario 4	2.50E-01	9.27E-03	3.71E-03
3389	639623.5	4168411.2	Worker	Scenario 4	2.72E-01	9.94E-03	3.86E-03
3390	642223.5	4168411.2	Worker	Scenario 4	4.89E-01	8.91E-03	8.61E-03
3391	642248.5	4168411.2	Worker	Scenario 4	4.66E-01	8.43E-03	8.37E-03
3392	639448.5	4168436.2	Worker	Scenario 4	1.86E-01	7.18E-03	3.09E-03
3393	639473.5	4168436.2	Worker	Scenario 4	2.02E-01	7.89E-03	3.04E-03
3394	639498.5	4168436.2	Worker	Scenario 4	2.21E-01	8.68E-03	3.22E-03
3395	639523.5	4168436.2	Worker	Scenario 4	2.41E-01	9.50E-03	3.40E-03
3396	639548.5	4168436.2	Worker	Scenario 4	2.60E-01	1.02E-02	3.56E-03
3397	639573.5	4168436.2	Worker	Scenario 4	2.77E-01	1.08E-02	3.70E-03
3398	639598.5	4168436.2	Worker	Scenario 4	2.95E-01	1.13E-02	3.81E-03
3399	639623.5	4168436.2	Worker	Scenario 4	3.18E-01	1.19E-02	3.90E-03
3400	642148.5	4168436.2	Worker	Scenario 4	5.37E-01	9.49E-03	8.83E-03
3401	642173.5	4168436.2	Worker	Scenario 4	5.09E-01	9.03E-03	8.50E-03
3402	642198.5	4168436.2	Worker	Scenario 4	4.84E-01	8.58E-03	8.31E-03
3403	642098.5	4168461.2	Worker	Scenario 4	5.65E-01	9.61E-03	8.67E-03
3404	642123.5	4168461.2	Worker	Scenario 4	5.33E-01	9.15E-03	8.62E-03
3405	642148.5	4168461.2	Worker	Scenario 4	5.06E-01	8.73E-03	8.44E-03
3406	642048.5	4168486.2	Worker	Scenario 4	5.93E-01	9.71E-03	8.79E-03
3407	642073.5	4168486.2	Worker	Scenario 4	5.56E-01	9.25E-03	8.60E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3408	642098.5	4168486.2	Worker	Scenario 4	5.28E-01	8.86E-03	8.39E-03
3409	641973.5	4168511.2	Worker	Scenario 4	6.56E-01	1.03E-02	8.99E-03
3410	641998.5	4168511.2	Worker	Scenario 4	6.13E-01	9.77E-03	8.60E-03
3411	642023.5	4168511.2	Worker	Scenario 4	5.77E-01	9.34E-03	8.60E-03
3412	641923.5	4168536.2	Worker	Scenario 4	6.64E-01	1.03E-02	8.30E-03
3413	641948.5	4168536.2	Worker	Scenario 4	6.23E-01	9.80E-03	8.27E-03
3414	641973.5	4168536.2	Worker	Scenario 4	5.88E-01	9.38E-03	8.55E-03
3415	641873.5	4168561.2	Worker	Scenario 4	6.55E-01	1.02E-02	1.09E-02
3416	641898.5	4168561.2	Worker	Scenario 4	6.17E-01	9.73E-03	9.33E-03
3417	641823.5	4168586.2	Worker	Scenario 4	6.46E-01	1.02E-02	1.23E-02
3418	641848.5	4168586.2	Worker	Scenario 4	6.08E-01	9.69E-03	1.19E-02
3419	641748.5	4168611.2	Worker	Scenario 4	6.74E-01	1.06E-02	9.04E-03
3420	641773.5	4168611.2	Worker	Scenario 4	6.34E-01	1.02E-02	1.02E-02
3421	641798.5	4168611.2	Worker	Scenario 4	6.01E-01	9.72E-03	1.13E-02
3422	641673.5	4168636.2	Worker	Scenario 4	6.75E-01	1.10E-02	8.30E-03
3423	641698.5	4168636.2	Worker	Scenario 4	6.45E-01	1.06E-02	8.54E-03
3424	641723.5	4168636.2	Worker	Scenario 4	6.14E-01	1.01E-02	8.14E-03
3425	641598.5	4168661.2	Worker	Scenario 4	6.56E-01	1.14E-02	8.45E-03
3426	641623.5	4168661.2	Worker	Scenario 4	6.30E-01	1.10E-02	8.35E-03
3427	641648.5	4168661.2	Worker	Scenario 4	6.08E-01	1.05E-02	8.20E-03
3428	641523.5	4168686.2	Worker	Scenario 4	6.44E-01	1.23E-02	8.32E-03
3429	641548.5	4168686.2	Worker	Scenario 4	6.17E-01	1.17E-02	8.22E-03
3430	641573.5	4168686.2	Worker	Scenario 4	5.95E-01	1.11E-02	8.13E-03
3431	641448.5	4168711.2	Worker	Scenario 4	6.65E-01	1.45E-02	7.96E-03
3432	641473.5	4168711.2	Worker	Scenario 4	6.29E-01	1.33E-02	8.08E-03
3433	641498.5	4168711.2	Worker	Scenario 4	6.01E-01	1.24E-02	8.00E-03
3434	641373.5	4168736.2	Worker	Scenario 4	8.07E-01	2.21E-02	7.69E-03
3435	641398.5	4168736.2	Worker	Scenario 4	7.03E-01	1.79E-02	7.41E-03
3436	641423.5	4168736.2	Worker	Scenario 4	6.46E-01	1.56E-02	7.59E-03
3437	641298.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
3438	641323.5	4168761.2	Roadway/Waterway	Scenario 4	--	--	--
3439	641348.5	4168761.2	Worker	Scenario 4	8.99E-01	2.91E-02	7.46E-03
3440	641373.5	4168761.2	Worker	Scenario 4	7.58E-01	2.18E-02	7.39E-03
3441	641398.5	4168761.2	Worker	Scenario 4	6.66E-01	1.78E-02	7.20E-03
3442	641423.5	4168761.2	Worker	Scenario 4	6.12E-01	1.54E-02	7.40E-03
3443	641248.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
3444	641273.5	4168786.2	Roadway/Waterway	Scenario 4	--	--	--
3445	641348.5	4168786.2	Worker	Scenario 4	8.71E-01	2.93E-02	7.26E-03
3446	641373.5	4168786.2	Worker	Scenario 4	7.35E-01	2.21E-02	7.21E-03
3447	641398.5	4168786.2	Worker	Scenario 4	6.40E-01	1.78E-02	7.05E-03
3448	641423.5	4168786.2	Worker	Scenario 4	5.85E-01	1.53E-02	7.23E-03
3449	641173.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
3450	641198.5	4168811.2	Roadway/Waterway	Scenario 4	--	--	--
3451	641348.5	4168811.2	Worker	Scenario 4	9.06E-01	3.17E-02	7.07E-03
3452	641373.5	4168811.2	Worker	Scenario 4	7.16E-01	2.23E-02	7.03E-03
3453	641398.5	4168811.2	Worker	Scenario 4	6.18E-01	1.79E-02	6.91E-03
3454	641423.5	4168811.2	Worker	Scenario 4	5.61E-01	1.52E-02	7.05E-03
3455	641098.5	4168836.2	Roadway/Waterway	Scenario 4	--	--	--
3456	641348.5	4168836.2	Worker	Scenario 4	8.91E-01	3.23E-02	6.88E-03
3457	641373.5	4168836.2	Worker	Scenario 4	7.01E-01	2.27E-02	6.86E-03
3458	641398.5	4168836.2	Worker	Scenario 4	5.99E-01	1.79E-02	6.76E-03
3459	641423.5	4168836.2	Worker	Scenario 4	5.40E-01	1.51E-02	6.89E-03
3460	641023.5	4168861.2	Roadway/Waterway	Scenario 4	--	--	--
3461	641348.5	4168861.2	Worker	Scenario 4	9.38E-01	3.55E-02	6.70E-03
3462	641373.5	4168861.2	Worker	Scenario 4	6.85E-01	2.29E-02	6.69E-03
3463	641398.5	4168861.2	Worker	Scenario 4	5.79E-01	1.77E-02	6.62E-03
3464	641423.5	4168861.2	Worker	Scenario 4	5.20E-01	1.49E-02	6.73E-03
3465	640948.5	4168886.2	Roadway/Waterway	Scenario 4	--	--	--
3466	641348.5	4168886.2	Worker	Scenario 4	9.06E-01	3.56E-02	6.53E-03
3467	641373.5	4168886.2	Worker	Scenario 4	6.59E-01	2.22E-02	6.53E-03
3468	641398.5	4168886.2	Worker	Scenario 4	5.57E-01	1.72E-02	6.48E-03
3469	641423.5	4168886.2	Worker	Scenario 4	5.00E-01	1.45E-02	6.57E-03
3470	640873.5	4168911.2	Roadway/Waterway	Scenario 4	--	--	--
3471	641348.5	4168911.2	Worker	Scenario 4	8.57E-01	3.16E-02	6.39E-03
3472	641373.5	4168911.2	Worker	Scenario 4	6.33E-01	2.09E-02	6.38E-03
3473	641398.5	4168911.2	Worker	Scenario 4	5.37E-01	1.65E-02	6.35E-03
3474	641423.5	4168911.2	Worker	Scenario 4	4.82E-01	1.41E-02	6.42E-03
3475	640773.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
3476	640798.5	4168936.2	Roadway/Waterway	Scenario 4	--	--	--
3477	641348.5	4168936.2	Worker	Scenario 4	8.24E-01	2.99E-02	6.26E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3478	641373.5	4168936.2	Worker	Scenario 4	6.12E-01	2.02E-02	6.22E-03
3479	641398.5	4168936.2	Worker	Scenario 4	5.20E-01	1.61E-02	6.22E-03
3480	641423.5	4168936.2	Worker	Scenario 4	4.67E-01	1.38E-02	6.28E-03
3481	640548.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
3482	640573.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
3483	640698.5	4168961.2	Roadway/Waterway	Scenario 4	--	--	--
3484	641348.5	4168961.2	Worker	Scenario 4	8.00E-01	2.90E-02	6.13E-03
3485	641373.5	4168961.2	Worker	Scenario 4	5.96E-01	1.97E-02	6.08E-03
3486	641398.5	4168961.2	Worker	Scenario 4	5.06E-01	1.58E-02	6.10E-03
3487	641423.5	4168961.2	Worker	Scenario 4	4.53E-01	1.35E-02	6.14E-03
3488	640598.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
3489	640623.5	4168986.2	Roadway/Waterway	Scenario 4	--	--	--
3490	641348.5	4168986.2	Worker	Scenario 4	7.84E-01	2.85E-02	6.01E-03
3491	641373.5	4168986.2	Worker	Scenario 4	5.84E-01	1.95E-02	5.93E-03
3492	641398.5	4168986.2	Worker	Scenario 4	4.94E-01	1.56E-02	5.98E-03
3493	641423.5	4168986.2	Worker	Scenario 4	4.42E-01	1.34E-02	6.00E-03
3494	640448.5	4169011.2	Worker	Scenario 4	2.36E-01	7.36E-03	4.17E-03
3495	640523.5	4169011.2	Worker	Scenario 4	2.83E-01	1.07E-02	5.00E-03
3496	641348.5	4169011.2	Worker	Scenario 4	7.74E-01	2.84E-02	5.89E-03
3497	641373.5	4169011.2	Worker	Scenario 4	5.74E-01	1.94E-02	5.80E-03
3498	641398.5	4169011.2	Worker	Scenario 4	4.85E-01	1.56E-02	5.86E-03
3499	641423.5	4169011.2	Worker	Scenario 4	4.33E-01	1.33E-02	5.87E-03
3500	640448.5	4169036.2	Worker	Scenario 4	2.35E-01	7.53E-03	4.12E-03
3501	640473.5	4169036.2	Worker	Scenario 4	2.44E-01	8.13E-03	4.53E-03
3502	640523.5	4169036.2	Worker	Scenario 4	2.85E-01	1.12E-02	4.96E-03
3503	641348.5	4169036.2	Worker	Scenario 4	7.68E-01	2.86E-02	5.78E-03
3504	641373.5	4169036.2	Worker	Scenario 4	5.68E-01	1.96E-02	5.66E-03
3505	641398.5	4169036.2	Worker	Scenario 4	4.78E-01	1.57E-02	5.75E-03
3506	641423.5	4169036.2	Worker	Scenario 4	4.24E-01	1.33E-02	5.75E-03
3507	640448.5	4169061.2	Worker	Scenario 4	2.34E-01	7.73E-03	4.28E-03
3508	640473.5	4169061.2	Worker	Scenario 4	2.44E-01	8.39E-03	4.62E-03
3509	640523.5	4169061.2	Worker	Scenario 4	2.87E-01	1.17E-02	4.88E-03
3510	641348.5	4169061.2	Worker	Scenario 4	7.68E-01	2.91E-02	5.67E-03
3511	641373.5	4169061.2	Worker	Scenario 4	5.66E-01	2.00E-02	5.54E-03
3512	641398.5	4169061.2	Worker	Scenario 4	4.71E-01	1.58E-02	5.63E-03
3513	641423.5	4169061.2	Worker	Scenario 4	4.16E-01	1.33E-02	5.61E-03
3514	640448.5	4169086.2	Worker	Scenario 4	2.34E-01	7.96E-03	4.40E-03
3515	640473.5	4169086.2	Worker	Scenario 4	2.44E-01	8.66E-03	4.66E-03
3516	640523.5	4169086.2	Worker	Scenario 4	2.89E-01	1.21E-02	4.76E-03
3517	641348.5	4169086.2	Worker	Scenario 4	7.76E-01	3.03E-02	5.56E-03
3518	641373.5	4169086.2	Worker	Scenario 4	5.63E-01	2.04E-02	5.40E-03
3519	641398.5	4169086.2	Worker	Scenario 4	4.64E-01	1.59E-02	5.50E-03
3520	641423.5	4169086.2	Worker	Scenario 4	4.08E-01	1.33E-02	5.48E-03
3521	640448.5	4169111.2	Worker	Scenario 4	2.35E-01	8.24E-03	4.48E-03
3522	640473.5	4169111.2	Worker	Scenario 4	2.45E-01	8.97E-03	4.65E-03
3523	640523.5	4169111.2	Worker	Scenario 4	2.91E-01	1.25E-02	4.72E-03
3524	641348.5	4169111.2	Worker	Scenario 4	7.79E-01	3.12E-02	5.44E-03
3525	641373.5	4169111.2	Worker	Scenario 4	5.58E-01	2.06E-02	5.27E-03
3526	641398.5	4169111.2	Worker	Scenario 4	4.59E-01	1.59E-02	5.40E-03
3527	641423.5	4169111.2	Worker	Scenario 4	4.02E-01	1.32E-02	5.38E-03
3528	640448.5	4169136.2	Worker	Scenario 4	2.36E-01	8.60E-03	4.51E-03
3529	640473.5	4169136.2	Worker	Scenario 4	2.46E-01	9.35E-03	4.60E-03
3530	640523.5	4169136.2	Worker	Scenario 4	2.93E-01	1.29E-02	4.64E-03
3531	641348.5	4169136.2	Worker	Scenario 4	7.64E-01	3.08E-02	5.32E-03
3532	641373.5	4169136.2	Worker	Scenario 4	5.52E-01	2.05E-02	5.15E-03
3533	641398.5	4169136.2	Worker	Scenario 4	4.52E-01	1.58E-02	5.30E-03
3534	641423.5	4169136.2	Worker	Scenario 4	3.94E-01	1.30E-02	5.27E-03
3535	640448.5	4169161.2	Worker	Scenario 4	2.40E-01	9.09E-03	4.49E-03
3536	640473.5	4169161.2	Worker	Scenario 4	2.50E-01	9.83E-03	4.51E-03
3537	640523.5	4169161.2	Worker	Scenario 4	2.96E-01	1.34E-02	4.52E-03
3538	641348.5	4169161.2	Worker	Scenario 4	7.51E-01	3.03E-02	5.21E-03
3539	641373.5	4169161.2	Worker	Scenario 4	5.43E-01	2.03E-02	5.04E-03
3540	641398.5	4169161.2	Worker	Scenario 4	4.43E-01	1.55E-02	5.21E-03
3541	641423.5	4169161.2	Worker	Scenario 4	3.85E-01	1.28E-02	5.17E-03
3542	640448.5	4169186.2	Worker	Scenario 4	2.46E-01	9.80E-03	4.43E-03
3543	640473.5	4169186.2	Worker	Scenario 4	2.55E-01	1.05E-02	4.43E-03
3544	640523.5	4169186.2	Worker	Scenario 4	3.00E-01	1.40E-02	4.36E-03
3545	641348.5	4169186.2	Worker	Scenario 4	7.38E-01	2.97E-02	5.11E-03
3546	641373.5	4169186.2	Worker	Scenario 4	5.32E-01	1.98E-02	4.93E-03
3547	641398.5	4169186.2	Worker	Scenario 4	4.34E-01	1.52E-02	5.11E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3548	641423.5	4169186.2	Worker	Scenario 4	3.77E-01	1.25E-02	5.08E-03
3549	640448.5	4169211.2	Worker	Scenario 4	2.57E-01	1.09E-02	4.34E-03
3550	640473.5	4169211.2	Worker	Scenario 4	2.66E-01	1.16E-02	4.38E-03
3551	640498.5	4169211.2	Worker	Scenario 4	2.82E-01	1.28E-02	4.34E-03
3552	640523.5	4169211.2	Worker	Scenario 4	3.09E-01	1.49E-02	4.33E-03
3553	641348.5	4169211.2	Worker	Scenario 4	7.24E-01	2.91E-02	5.01E-03
3554	641373.5	4169211.2	Worker	Scenario 4	5.20E-01	1.93E-02	4.85E-03
3555	641398.5	4169211.2	Worker	Scenario 4	4.23E-01	1.47E-02	5.02E-03
3556	641423.5	4169211.2	Worker	Scenario 4	3.67E-01	1.21E-02	4.99E-03
3557	640448.5	4169236.2	Worker	Scenario 4	2.81E-01	1.31E-02	4.28E-03
3558	640473.5	4169236.2	Worker	Scenario 4	2.89E-01	1.37E-02	4.30E-03
3559	640498.5	4169236.2	Worker	Scenario 4	3.03E-01	1.48E-02	4.19E-03
3560	640523.5	4169236.2	Worker	Scenario 4	3.27E-01	1.66E-02	4.34E-03
3561	641348.5	4169236.2	Worker	Scenario 4	7.08E-01	2.82E-02	4.91E-03
3562	641373.5	4169236.2	Worker	Scenario 4	5.08E-01	1.87E-02	4.77E-03
3563	641398.5	4169236.2	Worker	Scenario 4	4.12E-01	1.42E-02	4.93E-03
3564	641423.5	4169236.2	Worker	Scenario 4	3.57E-01	1.17E-02	4.90E-03
3565	640448.5	4169261.2	Worker	Scenario 4	3.49E-01	1.87E-02	4.23E-03
3566	640473.5	4169261.2	Worker	Scenario 4	3.54E-01	1.91E-02	4.18E-03
3567	640498.5	4169261.2	Worker	Scenario 4	3.65E-01	1.99E-02	4.18E-03
3568	640523.5	4169261.2	Worker	Scenario 4	3.78E-01	2.09E-02	4.31E-03
3569	641348.5	4169261.2	Worker	Scenario 4	6.91E-01	2.73E-02	4.81E-03
3570	641373.5	4169261.2	Worker	Scenario 4	4.94E-01	1.80E-02	4.69E-03
3571	641398.5	4169261.2	Worker	Scenario 4	4.01E-01	1.37E-02	4.84E-03
3572	641423.5	4169261.2	Worker	Scenario 4	3.47E-01	1.12E-02	4.81E-03
3573	640448.5	4169286.2	Worker	Scenario 4	3.31E-01	1.75E-02	4.14E-03
3574	640473.5	4169286.2	Worker	Scenario 4	3.41E-01	1.83E-02	4.04E-03
3575	640498.5	4169286.2	Worker	Scenario 4	3.41E-01	1.82E-02	4.18E-03
3576	640523.5	4169286.2	Worker	Scenario 4	3.45E-01	1.85E-02	4.25E-03
3577	640923.5	4169286.2	Worker	Scenario 4	2.84E-01	1.25E-02	4.60E-03
3578	640948.5	4169286.2	Worker	Scenario 4	2.74E-01	1.16E-02	4.71E-03
3579	640973.5	4169286.2	Worker	Scenario 4	2.69E-01	1.11E-02	4.87E-03
3580	640998.5	4169286.2	Worker	Scenario 4	2.66E-01	1.08E-02	4.87E-03
3581	641023.5	4169286.2	Worker	Scenario 4	2.65E-01	1.06E-02	4.72E-03
3582	641048.5	4169286.2	Worker	Scenario 4	2.66E-01	1.06E-02	4.67E-03
3583	641073.5	4169286.2	Worker	Scenario 4	2.67E-01	1.05E-02	4.64E-03
3584	641098.5	4169286.2	Worker	Scenario 4	2.71E-01	1.07E-02	4.69E-03
3585	641123.5	4169286.2	Worker	Scenario 4	2.77E-01	1.10E-02	4.55E-03
3586	641148.5	4169286.2	Worker	Scenario 4	2.88E-01	1.17E-02	4.69E-03
3587	641173.5	4169286.2	Worker	Scenario 4	3.07E-01	1.29E-02	4.70E-03
3588	641348.5	4169286.2	Worker	Scenario 4	6.73E-01	2.62E-02	4.72E-03
3589	641373.5	4169286.2	Worker	Scenario 4	4.81E-01	1.72E-02	4.62E-03
3590	641398.5	4169286.2	Worker	Scenario 4	3.89E-01	1.30E-02	4.75E-03
3591	641423.5	4169286.2	Worker	Scenario 4	3.37E-01	1.07E-02	4.72E-03
3592	640423.5	4169311.2	Worker	Scenario 4	2.54E-01	1.15E-02	4.08E-03
3593	640448.5	4169311.2	Worker	Scenario 4	2.61E-01	1.20E-02	4.03E-03
3594	640473.5	4169311.2	Worker	Scenario 4	2.69E-01	1.26E-02	4.03E-03
3595	640498.5	4169311.2	Worker	Scenario 4	2.82E-01	1.36E-02	4.16E-03
3596	640873.5	4169311.2	Worker	Scenario 4	2.70E-01	1.18E-02	4.49E-03
3597	640898.5	4169311.2	Worker	Scenario 4	2.57E-01	1.07E-02	4.50E-03
3598	640923.5	4169311.2	Worker	Scenario 4	2.49E-01	9.99E-03	4.51E-03
3599	640948.5	4169311.2	Worker	Scenario 4	2.45E-01	9.57E-03	4.67E-03
3600	640973.5	4169311.2	Worker	Scenario 4	2.43E-01	9.30E-03	4.79E-03
3601	640998.5	4169311.2	Worker	Scenario 4	2.42E-01	9.13E-03	4.76E-03
3602	641023.5	4169311.2	Worker	Scenario 4	2.42E-01	9.02E-03	4.60E-03
3603	641048.5	4169311.2	Worker	Scenario 4	2.43E-01	8.99E-03	4.59E-03
3604	641073.5	4169311.2	Worker	Scenario 4	2.45E-01	9.02E-03	4.58E-03
3605	641098.5	4169311.2	Worker	Scenario 4	2.49E-01	9.18E-03	4.59E-03
3606	641123.5	4169311.2	Worker	Scenario 4	2.56E-01	9.55E-03	4.44E-03
3607	641148.5	4169311.2	Worker	Scenario 4	2.69E-01	1.04E-02	4.61E-03
3608	641173.5	4169311.2	Worker	Scenario 4	2.89E-01	1.18E-02	4.60E-03
3609	641348.5	4169311.2	Worker	Scenario 4	6.52E-01	2.49E-02	4.63E-03
3610	641373.5	4169311.2	Worker	Scenario 4	4.65E-01	1.63E-02	4.55E-03
3611	641398.5	4169311.2	Worker	Scenario 4	3.77E-01	1.23E-02	4.67E-03
3612	641423.5	4169311.2	Worker	Scenario 4	3.27E-01	1.02E-02	4.64E-03
3613	640423.5	4169336.2	Worker	Scenario 4	2.20E-01	8.91E-03	3.99E-03
3614	640448.5	4169336.2	Worker	Scenario 4	2.25E-01	9.32E-03	3.89E-03
3615	640473.5	4169336.2	Worker	Scenario 4	2.33E-01	9.93E-03	4.04E-03
3616	640498.5	4169336.2	Worker	Scenario 4	2.48E-01	1.11E-02	4.10E-03
3617	640823.5	4169336.2	Worker	Scenario 4	2.66E-01	1.18E-02	4.23E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3618	640848.5	4169336.2	Worker	Scenario 4	2.49E-01	1.04E-02	4.38E-03
3619	640873.5	4169336.2	Worker	Scenario 4	2.39E-01	9.49E-03	4.38E-03
3620	640898.5	4169336.2	Worker	Scenario 4	2.32E-01	8.93E-03	4.43E-03
3621	640923.5	4169336.2	Worker	Scenario 4	2.29E-01	8.56E-03	4.46E-03
3622	640948.5	4169336.2	Worker	Scenario 4	2.27E-01	8.31E-03	4.64E-03
3623	640973.5	4169336.2	Worker	Scenario 4	2.26E-01	8.14E-03	4.72E-03
3624	640998.5	4169336.2	Worker	Scenario 4	2.26E-01	8.03E-03	4.65E-03
3625	641023.5	4169336.2	Worker	Scenario 4	2.26E-01	7.97E-03	4.49E-03
3626	641048.5	4169336.2	Worker	Scenario 4	2.27E-01	7.97E-03	4.51E-03
3627	641073.5	4169336.2	Worker	Scenario 4	2.30E-01	8.04E-03	4.52E-03
3628	641098.5	4169336.2	Worker	Scenario 4	2.34E-01	8.22E-03	4.49E-03
3629	641123.5	4169336.2	Worker	Scenario 4	2.41E-01	8.62E-03	4.41E-03
3630	641148.5	4169336.2	Worker	Scenario 4	2.54E-01	9.47E-03	4.55E-03
3631	641348.5	4169336.2	Worker	Scenario 4	6.25E-01	2.33E-02	4.54E-03
3632	641373.5	4169336.2	Worker	Scenario 4	4.48E-01	1.52E-02	4.48E-03
3633	641398.5	4169336.2	Worker	Scenario 4	3.64E-01	1.16E-02	4.59E-03
3634	641423.5	4169336.2	Worker	Scenario 4	3.17E-01	9.63E-03	4.56E-03
3635	640423.5	4169361.2	Worker	Scenario 4	2.02E-01	7.65E-03	3.88E-03
3636	640448.5	4169361.2	Worker	Scenario 4	2.07E-01	8.03E-03	3.89E-03
3637	640473.5	4169361.2	Worker	Scenario 4	2.16E-01	8.66E-03	4.01E-03
3638	640498.5	4169361.2	Worker	Scenario 4	2.31E-01	9.89E-03	4.02E-03
3639	640798.5	4169361.2	Worker	Scenario 4	2.47E-01	1.06E-02	4.22E-03
3640	640823.5	4169361.2	Worker	Scenario 4	2.33E-01	9.34E-03	4.22E-03
3641	640848.5	4169361.2	Worker	Scenario 4	2.24E-01	8.61E-03	4.32E-03
3642	640873.5	4169361.2	Worker	Scenario 4	2.19E-01	8.14E-03	4.31E-03
3643	640898.5	4169361.2	Worker	Scenario 4	2.16E-01	7.81E-03	4.35E-03
3644	640923.5	4169361.2	Worker	Scenario 4	2.14E-01	7.58E-03	4.43E-03
3645	640948.5	4169361.2	Worker	Scenario 4	2.13E-01	7.42E-03	4.59E-03
3646	640973.5	4169361.2	Worker	Scenario 4	2.13E-01	7.31E-03	4.63E-03
3647	640998.5	4169361.2	Worker	Scenario 4	2.13E-01	7.24E-03	4.53E-03
3648	641023.5	4169361.2	Worker	Scenario 4	2.14E-01	7.21E-03	4.41E-03
3649	641048.5	4169361.2	Worker	Scenario 4	2.16E-01	7.24E-03	4.43E-03
3650	641073.5	4169361.2	Worker	Scenario 4	2.18E-01	7.33E-03	4.45E-03
3651	641098.5	4169361.2	Worker	Scenario 4	2.22E-01	7.52E-03	4.39E-03
3652	641123.5	4169361.2	Worker	Scenario 4	2.29E-01	7.88E-03	4.37E-03
3653	641148.5	4169361.2	Worker	Scenario 4	2.40E-01	8.57E-03	4.47E-03
3654	641348.5	4169361.2	Worker	Scenario 4	5.95E-01	2.13E-02	4.45E-03
3655	641373.5	4169361.2	Worker	Scenario 4	4.30E-01	1.41E-02	4.41E-03
3656	641398.5	4169361.2	Worker	Scenario 4	3.52E-01	1.09E-02	4.51E-03
3657	641423.5	4169361.2	Worker	Scenario 4	3.07E-01	9.15E-03	4.49E-03
3658	640423.5	4169386.2	Worker	Scenario 4	1.91E-01	6.89E-03	3.75E-03
3659	640448.5	4169386.2	Worker	Scenario 4	1.95E-01	7.25E-03	3.90E-03
3660	640473.5	4169386.2	Worker	Scenario 4	2.03E-01	7.86E-03	3.96E-03
3661	640498.5	4169386.2	Worker	Scenario 4	2.19E-01	9.05E-03	3.96E-03
3662	640773.5	4169386.2	Worker	Scenario 4	2.30E-01	9.40E-03	4.21E-03
3663	640798.5	4169386.2	Worker	Scenario 4	2.18E-01	8.44E-03	4.10E-03
3664	640823.5	4169386.2	Worker	Scenario 4	2.12E-01	7.87E-03	4.20E-03
3665	640848.5	4169386.2	Worker	Scenario 4	2.08E-01	7.47E-03	4.26E-03
3666	640873.5	4169386.2	Worker	Scenario 4	2.05E-01	7.19E-03	4.26E-03
3667	640898.5	4169386.2	Worker	Scenario 4	2.03E-01	6.99E-03	4.27E-03
3668	640923.5	4169386.2	Worker	Scenario 4	2.02E-01	6.85E-03	4.39E-03
3669	641098.5	4169386.2	Worker	Scenario 4	2.12E-01	6.95E-03	4.29E-03
3670	641123.5	4169386.2	Worker	Scenario 4	2.18E-01	7.25E-03	4.33E-03
3671	641148.5	4169386.2	Worker	Scenario 4	2.26E-01	7.71E-03	4.40E-03
3672	641173.5	4169386.2	Worker	Scenario 4	2.35E-01	8.17E-03	4.30E-03
3673	641198.5	4169386.2	Worker	Scenario 4	2.44E-01	8.54E-03	4.04E-03
3674	641223.5	4169386.2	Worker	Scenario 4	2.55E-01	8.96E-03	4.27E-03
3675	641248.5	4169386.2	Worker	Scenario 4	2.72E-01	9.54E-03	4.41E-03
3676	641273.5	4169386.2	Worker	Scenario 4	2.99E-01	1.06E-02	4.38E-03
3677	641298.5	4169386.2	Worker	Scenario 4	3.59E-01	1.28E-02	4.42E-03
3678	641348.5	4169386.2	Worker	Scenario 4	5.70E-01	1.98E-02	4.37E-03
3679	641373.5	4169386.2	Worker	Scenario 4	4.16E-01	1.33E-02	4.34E-03
3680	641398.5	4169386.2	Worker	Scenario 4	3.42E-01	1.04E-02	4.43E-03
3681	641423.5	4169386.2	Worker	Scenario 4	2.99E-01	8.75E-03	4.41E-03
3682	640423.5	4169411.2	Worker	Scenario 4	1.82E-01	6.35E-03	3.76E-03
3683	640448.5	4169411.2	Worker	Scenario 4	1.86E-01	6.68E-03	3.88E-03
3684	640473.5	4169411.2	Worker	Scenario 4	1.93E-01	7.22E-03	3.89E-03
3685	640498.5	4169411.2	Worker	Scenario 4	2.06E-01	8.23E-03	3.93E-03
3686	640698.5	4169411.2	Worker	Scenario 4	2.25E-01	9.41E-03	3.76E-03
3687	640723.5	4169411.2	Worker	Scenario 4	2.18E-01	8.73E-03	4.01E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3688	640748.5	4169411.2	Worker	Scenario 4	2.10E-01	8.09E-03	4.13E-03
3689	640773.5	4169411.2	Worker	Scenario 4	2.04E-01	7.55E-03	4.11E-03
3690	640798.5	4169411.2	Worker	Scenario 4	2.00E-01	7.17E-03	4.01E-03
3691	640823.5	4169411.2	Worker	Scenario 4	1.97E-01	6.88E-03	4.16E-03
3692	640848.5	4169411.2	Worker	Scenario 4	1.95E-01	6.66E-03	4.18E-03
3693	640873.5	4169411.2	Worker	Scenario 4	1.94E-01	6.50E-03	4.21E-03
3694	641098.5	4169411.2	Worker	Scenario 4	2.04E-01	6.48E-03	4.19E-03
3695	641123.5	4169411.2	Worker	Scenario 4	2.09E-01	6.70E-03	4.28E-03
3696	641148.5	4169411.2	Worker	Scenario 4	2.15E-01	6.98E-03	4.32E-03
3697	641173.5	4169411.2	Worker	Scenario 4	2.21E-01	7.26E-03	4.20E-03
3698	641198.5	4169411.2	Worker	Scenario 4	2.29E-01	7.54E-03	3.96E-03
3699	641223.5	4169411.2	Worker	Scenario 4	2.40E-01	7.91E-03	4.23E-03
3700	641248.5	4169411.2	Worker	Scenario 4	2.56E-01	8.47E-03	4.34E-03
3701	641273.5	4169411.2	Worker	Scenario 4	2.84E-01	9.53E-03	4.32E-03
3702	641298.5	4169411.2	Worker	Scenario 4	3.47E-01	1.20E-02	4.34E-03
3703	641348.5	4169411.2	Worker	Scenario 4	5.55E-01	1.90E-02	4.28E-03
3704	641373.5	4169411.2	Worker	Scenario 4	4.05E-01	1.28E-02	4.28E-03
3705	641398.5	4169411.2	Worker	Scenario 4	3.33E-01	9.99E-03	4.36E-03
3706	641423.5	4169411.2	Worker	Scenario 4	2.92E-01	8.43E-03	4.34E-03
3707	640423.5	4169436.2	Worker	Scenario 4	1.75E-01	5.94E-03	3.76E-03
3708	640448.5	4169436.2	Worker	Scenario 4	1.79E-01	6.22E-03	3.83E-03
3709	640473.5	4169436.2	Worker	Scenario 4	1.84E-01	6.64E-03	3.83E-03
3710	640498.5	4169436.2	Worker	Scenario 4	1.93E-01	7.32E-03	3.87E-03
3711	640523.5	4169436.2	Worker	Scenario 4	2.00E-01	7.82E-03	3.80E-03
3712	640548.5	4169436.2	Worker	Scenario 4	2.03E-01	8.07E-03	3.83E-03
3713	640573.5	4169436.2	Worker	Scenario 4	2.05E-01	8.20E-03	3.94E-03
3714	640598.5	4169436.2	Worker	Scenario 4	2.06E-01	8.20E-03	3.92E-03
3715	640623.5	4169436.2	Worker	Scenario 4	2.05E-01	8.10E-03	3.96E-03
3716	640648.5	4169436.2	Worker	Scenario 4	2.04E-01	7.94E-03	3.91E-03
3717	640673.5	4169436.2	Worker	Scenario 4	2.01E-01	7.71E-03	3.75E-03
3718	640698.5	4169436.2	Worker	Scenario 4	1.98E-01	7.42E-03	3.79E-03
3719	640723.5	4169436.2	Worker	Scenario 4	1.95E-01	7.07E-03	3.99E-03
3720	640748.5	4169436.2	Worker	Scenario 4	1.92E-01	6.77E-03	4.07E-03
3721	640773.5	4169436.2	Worker	Scenario 4	1.89E-01	6.54E-03	4.01E-03
3722	640798.5	4169436.2	Worker	Scenario 4	1.88E-01	6.35E-03	4.00E-03
3723	640823.5	4169436.2	Worker	Scenario 4	1.86E-01	6.19E-03	4.12E-03
3724	641098.5	4169436.2	Worker	Scenario 4	1.96E-01	6.06E-03	4.08E-03
3725	641123.5	4169436.2	Worker	Scenario 4	2.00E-01	6.23E-03	4.23E-03
3726	641148.5	4169436.2	Worker	Scenario 4	2.05E-01	6.42E-03	4.24E-03
3727	641173.5	4169436.2	Worker	Scenario 4	2.11E-01	6.63E-03	4.10E-03
3728	641198.5	4169436.2	Worker	Scenario 4	2.18E-01	6.88E-03	3.93E-03
3729	641223.5	4169436.2	Worker	Scenario 4	2.29E-01	7.23E-03	4.18E-03
3730	641248.5	4169436.2	Worker	Scenario 4	2.45E-01	7.82E-03	4.27E-03
3731	641273.5	4169436.2	Worker	Scenario 4	2.75E-01	8.95E-03	4.26E-03
3732	641298.5	4169436.2	Worker	Scenario 4	3.40E-01	1.16E-02	4.27E-03
3733	641348.5	4169436.2	Worker	Scenario 4	5.43E-01	1.85E-02	4.20E-03
3734	641373.5	4169436.2	Worker	Scenario 4	3.96E-01	1.24E-02	4.21E-03
3735	641398.5	4169436.2	Worker	Scenario 4	3.26E-01	9.69E-03	4.29E-03
3736	640423.5	4169461.2	Worker	Scenario 4	1.69E-01	5.60E-03	3.75E-03
3737	640448.5	4169461.2	Worker	Scenario 4	1.72E-01	5.82E-03	3.76E-03
3738	640473.5	4169461.2	Worker	Scenario 4	1.76E-01	6.12E-03	3.80E-03
3739	640498.5	4169461.2	Worker	Scenario 4	1.81E-01	6.48E-03	3.79E-03
3740	640523.5	4169461.2	Worker	Scenario 4	1.84E-01	6.69E-03	3.67E-03
3741	640548.5	4169461.2	Worker	Scenario 4	1.85E-01	6.77E-03	3.82E-03
3742	640573.5	4169461.2	Worker	Scenario 4	1.86E-01	6.79E-03	3.87E-03
3743	640598.5	4169461.2	Worker	Scenario 4	1.86E-01	6.78E-03	3.86E-03
3744	640623.5	4169461.2	Worker	Scenario 4	1.86E-01	6.73E-03	3.88E-03
3745	640648.5	4169461.2	Worker	Scenario 4	1.85E-01	6.64E-03	3.79E-03
3746	640673.5	4169461.2	Worker	Scenario 4	1.84E-01	6.51E-03	3.59E-03
3747	640698.5	4169461.2	Worker	Scenario 4	1.83E-01	6.34E-03	3.81E-03
3748	640723.5	4169461.2	Worker	Scenario 4	1.81E-01	6.17E-03	3.96E-03
3749	640748.5	4169461.2	Worker	Scenario 4	1.80E-01	6.01E-03	4.00E-03
3750	640773.5	4169461.2	Worker	Scenario 4	1.79E-01	5.89E-03	3.90E-03
3751	640798.5	4169461.2	Worker	Scenario 4	1.78E-01	5.77E-03	3.99E-03
3752	641148.5	4169461.2	Worker	Scenario 4	1.97E-01	5.98E-03	4.16E-03
3753	641173.5	4169461.2	Worker	Scenario 4	2.03E-01	6.17E-03	4.00E-03
3754	641198.5	4169461.2	Worker	Scenario 4	2.10E-01	6.41E-03	3.90E-03
3755	641223.5	4169461.2	Worker	Scenario 4	2.21E-01	6.78E-03	4.13E-03
3756	641248.5	4169461.2	Worker	Scenario 4	2.38E-01	7.40E-03	4.20E-03
3757	641273.5	4169461.2	Worker	Scenario 4	2.68E-01	8.58E-03	4.19E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3758	641298.5	4169461.2	Worker	Scenario 4	3.35E-01	1.13E-02	4.19E-03
3759	641348.5	4169461.2	Worker	Scenario 4	5.32E-01	1.80E-02	4.12E-03
3760	641373.5	4169461.2	Worker	Scenario 4	3.89E-01	1.21E-02	4.15E-03
3761	638073.5	4169486.2	Worker	Scenario 4	7.11E-02	2.27E-03	1.47E-03
3762	639398.5	4169486.2	Worker	Scenario 4	2.06E-01	6.30E-03	2.40E-03
3763	640448.5	4169486.2	Worker	Scenario 4	1.65E-01	5.46E-03	3.68E-03
3764	640473.5	4169486.2	Worker	Scenario 4	1.68E-01	5.64E-03	3.73E-03
3765	640498.5	4169486.2	Worker	Scenario 4	1.70E-01	5.81E-03	3.68E-03
3766	640523.5	4169486.2	Worker	Scenario 4	1.72E-01	5.93E-03	3.68E-03
3767	640548.5	4169486.2	Worker	Scenario 4	1.73E-01	5.98E-03	3.79E-03
3768	640573.5	4169486.2	Worker	Scenario 4	1.74E-01	5.99E-03	3.79E-03
3769	640598.5	4169486.2	Worker	Scenario 4	1.74E-01	5.98E-03	3.82E-03
3770	640623.5	4169486.2	Worker	Scenario 4	1.74E-01	5.94E-03	3.80E-03
3771	640648.5	4169486.2	Worker	Scenario 4	1.74E-01	5.88E-03	3.66E-03
3772	640673.5	4169486.2	Worker	Scenario 4	1.73E-01	5.79E-03	3.59E-03
3773	640698.5	4169486.2	Worker	Scenario 4	1.72E-01	5.68E-03	3.81E-03
3774	640723.5	4169486.2	Worker	Scenario 4	1.72E-01	5.58E-03	3.92E-03
3775	640748.5	4169486.2	Worker	Scenario 4	1.71E-01	5.49E-03	3.91E-03
3776	640773.5	4169486.2	Worker	Scenario 4	1.71E-01	5.41E-03	3.81E-03
3777	638048.5	4169511.2	Worker	Scenario 4	6.73E-02	2.08E-03	1.43E-03
3778	638073.5	4169511.2	Worker	Scenario 4	7.47E-02	2.35E-03	1.46E-03
3779	640473.5	4169511.2	Worker	Scenario 4	1.61E-01	5.25E-03	3.66E-03
3780	640498.5	4169511.2	Worker	Scenario 4	1.63E-01	5.35E-03	3.56E-03
3781	640523.5	4169511.2	Worker	Scenario 4	1.64E-01	5.41E-03	3.68E-03
3782	640548.5	4169511.2	Worker	Scenario 4	1.65E-01	5.44E-03	3.74E-03
3783	640573.5	4169511.2	Worker	Scenario 4	1.65E-01	5.44E-03	3.72E-03
3784	640598.5	4169511.2	Worker	Scenario 4	1.65E-01	5.43E-03	3.76E-03
3785	640623.5	4169511.2	Worker	Scenario 4	1.65E-01	5.40E-03	3.70E-03
3786	640648.5	4169511.2	Worker	Scenario 4	1.65E-01	5.35E-03	3.53E-03
3787	640673.5	4169511.2	Worker	Scenario 4	1.65E-01	5.29E-03	3.62E-03
3788	638023.5	4169536.2	Worker	Scenario 4	6.45E-02	1.94E-03	1.41E-03
3789	638048.5	4169536.2	Worker	Scenario 4	7.09E-02	2.16E-03	1.46E-03
3790	638073.5	4169536.2	Worker	Scenario 4	7.82E-02	2.42E-03	1.51E-03
3791	637998.5	4169561.2	Worker	Scenario 4	6.17E-02	1.83E-03	1.42E-03
3792	638023.5	4169561.2	Worker	Scenario 4	6.75E-02	2.01E-03	1.47E-03
3793	638048.5	4169561.2	Worker	Scenario 4	7.39E-02	2.22E-03	1.51E-03
3794	638073.5	4169561.2	Worker	Scenario 4	8.20E-02	2.49E-03	1.55E-03
3795	637998.5	4169586.2	Worker	Scenario 4	6.44E-02	1.88E-03	1.47E-03
3796	638023.5	4169586.2	Worker	Scenario 4	7.01E-02	2.06E-03	1.51E-03
3797	638048.5	4169586.2	Worker	Scenario 4	7.72E-02	2.27E-03	1.54E-03
3798	638073.5	4169586.2	Worker	Scenario 4	8.65E-02	2.55E-03	1.57E-03
3799	637998.5	4169611.2	Worker	Scenario 4	6.65E-02	1.92E-03	1.50E-03
3800	638023.5	4169611.2	Worker	Scenario 4	7.27E-02	2.10E-03	1.53E-03
3801	638048.5	4169611.2	Worker	Scenario 4	8.07E-02	2.33E-03	1.56E-03
3802	638073.5	4169611.2	Worker	Scenario 4	9.13E-02	2.62E-03	1.58E-03
3803	639248.5	4169611.2	Worker	Scenario 4	1.98E-01	6.13E-03	2.19E-03
3804	637998.5	4169636.2	Worker	Scenario 4	6.85E-02	1.96E-03	1.52E-03
3805	638023.5	4169636.2	Worker	Scenario 4	7.54E-02	2.14E-03	1.55E-03
3806	638048.5	4169636.2	Worker	Scenario 4	8.42E-02	2.37E-03	1.56E-03
3807	638073.5	4169636.2	Worker	Scenario 4	9.64E-02	2.68E-03	1.58E-03
3808	637998.5	4169661.2	Worker	Scenario 4	7.06E-02	1.99E-03	1.53E-03
3809	638023.5	4169661.2	Worker	Scenario 4	7.80E-02	2.18E-03	1.55E-03
3810	638048.5	4169661.2	Worker	Scenario 4	8.76E-02	2.42E-03	1.55E-03
3811	638073.5	4169661.2	Worker	Scenario 4	1.01E-01	2.73E-03	1.55E-03
3812	637998.5	4169686.2	Worker	Scenario 4	7.27E-02	2.03E-03	1.53E-03
3813	638023.5	4169686.2	Worker	Scenario 4	8.05E-02	2.22E-03	1.53E-03
3814	638048.5	4169686.2	Worker	Scenario 4	9.06E-02	2.46E-03	1.53E-03
3815	638073.5	4169686.2	Worker	Scenario 4	1.06E-01	2.80E-03	1.52E-03
3816	637998.5	4169711.2	Worker	Scenario 4	7.47E-02	2.06E-03	1.51E-03
3817	638023.5	4169711.2	Worker	Scenario 4	8.28E-02	2.25E-03	1.50E-03
3818	638048.5	4169711.2	Worker	Scenario 4	9.10E-02	2.45E-03	1.49E-03
3819	638073.5	4169711.2	Worker	Scenario 4	1.09E-01	2.84E-03	1.47E-03
3820	637998.5	4169736.2	Worker	Scenario 4	7.64E-02	2.09E-03	1.48E-03
3821	638023.5	4169736.2	Worker	Scenario 4	8.47E-02	2.28E-03	1.46E-03
3822	638048.5	4169736.2	Worker	Scenario 4	9.17E-02	2.45E-03	1.44E-03
3823	638073.5	4169736.2	Worker	Scenario 4	1.12E-01	2.88E-03	1.42E-03
3824	639098.5	4169736.2	Worker	Scenario 4	1.91E-01	6.27E-03	2.02E-03
3825	637998.5	4169761.2	Worker	Scenario 4	7.78E-02	2.11E-03	1.43E-03
3826	638023.5	4169761.2	Worker	Scenario 4	8.62E-02	2.31E-03	1.41E-03
3827	638048.5	4169761.2	Worker	Scenario 4	9.65E-02	2.54E-03	1.38E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3828	638073.5	4169761.2	Worker	Scenario 4	1.14E-01	2.92E-03	1.36E-03
3829	639073.5	4169761.2	Worker	Scenario 4	1.87E-01	6.25E-03	1.98E-03
3830	637998.5	4169786.2	Worker	Scenario 4	7.90E-02	2.14E-03	1.38E-03
3831	638023.5	4169786.2	Worker	Scenario 4	8.78E-02	2.34E-03	1.35E-03
3832	638048.5	4169786.2	Worker	Scenario 4	9.95E-02	2.61E-03	1.33E-03
3833	638073.5	4169786.2	Worker	Scenario 4	1.16E-01	2.97E-03	1.32E-03
3834	639048.5	4169786.2	Worker	Scenario 4	1.84E-01	6.28E-03	1.96E-03
3835	637998.5	4169811.2	Worker	Scenario 4	7.99E-02	2.16E-03	1.32E-03
3836	638023.5	4169811.2	Worker	Scenario 4	8.88E-02	2.37E-03	1.31E-03
3837	638048.5	4169811.2	Worker	Scenario 4	1.00E-01	2.64E-03	1.30E-03
3838	638073.5	4169811.2	Worker	Scenario 4	1.16E-01	3.01E-03	1.29E-03
3839	637998.5	4169836.2	Worker	Scenario 4	8.05E-02	2.19E-03	1.28E-03
3840	638023.5	4169836.2	Worker	Scenario 4	8.93E-02	2.40E-03	1.27E-03
3841	638048.5	4169836.2	Worker	Scenario 4	1.01E-01	2.68E-03	1.27E-03
3842	638073.5	4169836.2	Worker	Scenario 4	1.16E-01	3.05E-03	1.30E-03
3843	637998.5	4169861.2	Worker	Scenario 4	8.08E-02	2.21E-03	1.25E-03
3844	638023.5	4169861.2	Worker	Scenario 4	8.94E-02	2.43E-03	1.25E-03
3845	638048.5	4169861.2	Worker	Scenario 4	1.00E-01	2.72E-03	1.30E-03
3846	638073.5	4169861.2	Worker	Scenario 4	1.15E-01	3.10E-03	1.35E-03
3847	637998.5	4169886.2	Worker	Scenario 4	8.09E-02	2.23E-03	1.25E-03
3848	638023.5	4169886.2	Worker	Scenario 4	8.93E-02	2.47E-03	1.30E-03
3849	638048.5	4169886.2	Worker	Scenario 4	9.99E-02	2.77E-03	1.35E-03
3850	638073.5	4169886.2	Worker	Scenario 4	1.14E-01	3.18E-03	1.40E-03
3851	637998.5	4169911.2	Worker	Scenario 4	8.09E-02	2.27E-03	1.30E-03
3852	638023.5	4169911.2	Worker	Scenario 4	8.91E-02	2.52E-03	1.35E-03
3853	638048.5	4169911.2	Worker	Scenario 4	9.93E-02	2.84E-03	1.39E-03
3854	638073.5	4169911.2	Worker	Scenario 4	1.13E-01	3.29E-03	1.43E-03
3855	637998.5	4169936.2	Worker	Scenario 4	8.07E-02	2.30E-03	1.34E-03
3856	638023.5	4169936.2	Worker	Scenario 4	8.87E-02	2.58E-03	1.38E-03
3857	638048.5	4169936.2	Worker	Scenario 4	9.89E-02	2.96E-03	1.42E-03
3858	638073.5	4169936.2	Worker	Scenario 4	1.12E-01	3.50E-03	1.45E-03
3859	637998.5	4169961.2	Worker	Scenario 4	8.03E-02	2.34E-03	1.38E-03
3860	638023.5	4169961.2	Worker	Scenario 4	8.84E-02	2.67E-03	1.41E-03
3861	638048.5	4169961.2	Worker	Scenario 4	9.89E-02	3.14E-03	1.44E-03
3862	638073.5	4169961.2	Worker	Scenario 4	1.13E-01	3.89E-03	1.46E-03
3863	637998.5	4169986.2	Worker	Scenario 4	7.96E-02	2.37E-03	1.40E-03
3864	638023.5	4169986.2	Worker	Scenario 4	8.78E-02	2.75E-03	1.43E-03
3865	638048.5	4169986.2	Worker	Scenario 4	9.98E-02	3.41E-03	1.45E-03
3866	638073.5	4169986.2	Worker	Scenario 4	1.20E-01	4.74E-03	1.46E-03
3867	637998.5	4170011.2	Worker	Scenario 4	7.85E-02	2.38E-03	1.42E-03
3868	638023.5	4170011.2	Worker	Scenario 4	8.67E-02	2.80E-03	1.43E-03
3869	638048.5	4170011.2	Worker	Scenario 4	1.00E-01	3.62E-03	1.45E-03
3870	638073.5	4170011.2	Worker	Scenario 4	1.38E-01	6.46E-03	1.45E-03
3871	637998.5	4170036.2	Worker	Scenario 4	7.68E-02	2.35E-03	1.42E-03
3872	638023.5	4170036.2	Worker	Scenario 4	8.45E-02	2.76E-03	1.43E-03
3873	638048.5	4170036.2	Worker	Scenario 4	9.70E-02	3.55E-03	1.43E-03
3874	638073.5	4170036.2	Worker	Scenario 4	1.19E-01	5.15E-03	1.43E-03
3875	638098.5	4170036.2	Worker	Scenario 4	1.44E-01	6.94E-03	1.42E-03
3876	638123.5	4170036.2	Worker	Scenario 4	1.60E-01	8.03E-03	1.40E-03
3877	638148.5	4170036.2	Worker	Scenario 4	1.70E-01	8.68E-03	1.38E-03
3878	638173.5	4170036.2	Worker	Scenario 4	1.78E-01	9.14E-03	1.42E-03
3879	638198.5	4170036.2	Worker	Scenario 4	1.85E-01	9.52E-03	1.45E-03
3880	638223.5	4170036.2	Worker	Scenario 4	1.91E-01	9.84E-03	1.47E-03
3881	638248.5	4170036.2	Worker	Scenario 4	1.98E-01	1.02E-02	1.49E-03
3882	638273.5	4170036.2	Worker	Scenario 4	2.05E-01	1.05E-02	1.49E-03
3883	638298.5	4170036.2	Worker	Scenario 4	2.13E-01	1.09E-02	1.49E-03
3884	638323.5	4170036.2	Worker	Scenario 4	2.22E-01	1.13E-02	1.51E-03
3885	638348.5	4170036.2	Worker	Scenario 4	2.34E-01	1.19E-02	1.53E-03
3886	638373.5	4170036.2	Worker	Scenario 4	2.50E-01	1.26E-02	1.54E-03
3887	638398.5	4170036.2	Worker	Scenario 4	2.70E-01	1.35E-02	1.54E-03
3888	638423.5	4170036.2	Worker	Scenario 4	2.70E-01	1.35E-02	1.56E-03
3889	638448.5	4170036.2	Worker	Scenario 4	2.59E-01	1.30E-02	1.58E-03
3890	638473.5	4170036.2	Worker	Scenario 4	2.52E-01	1.28E-02	1.60E-03
3891	638498.5	4170036.2	Worker	Scenario 4	2.49E-01	1.27E-02	1.60E-03
3892	638523.5	4170036.2	Worker	Scenario 4	2.47E-01	1.29E-02	1.59E-03
3893	638548.5	4170036.2	Worker	Scenario 4	2.48E-01	1.31E-02	1.58E-03
3894	638573.5	4170036.2	Worker	Scenario 4	2.50E-01	1.34E-02	1.55E-03
3895	638598.5	4170036.2	Worker	Scenario 4	2.54E-01	1.38E-02	1.59E-03
3896	638623.5	4170036.2	Worker	Scenario 4	2.60E-01	1.44E-02	1.63E-03
3897	638648.5	4170036.2	Worker	Scenario 4	2.68E-01	1.52E-02	1.66E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3898	638673.5	4170036.2	Worker	Scenario 4	2.82E-01	1.64E-02	1.67E-03
3899	638698.5	4170036.2	Worker	Scenario 4	2.88E-01	1.70E-02	1.68E-03
3900	638723.5	4170036.2	Worker	Scenario 4	2.78E-01	1.62E-02	1.67E-03
3901	638748.5	4170036.2	Worker	Scenario 4	2.70E-01	1.56E-02	1.70E-03
3902	638023.5	4170061.2	Worker	Scenario 4	8.20E-02	2.72E-03	1.40E-03
3903	638048.5	4170061.2	Worker	Scenario 4	9.15E-02	3.27E-03	1.41E-03
3904	638073.5	4170061.2	Worker	Scenario 4	1.02E-01	3.95E-03	1.40E-03
3905	638098.5	4170061.2	Worker	Scenario 4	1.13E-01	4.63E-03	1.38E-03
3906	638123.5	4170061.2	Worker	Scenario 4	1.16E-01	4.79E-03	1.38E-03
3907	638148.5	4170061.2	Worker	Scenario 4	1.12E-01	4.43E-03	1.42E-03
3908	638173.5	4170061.2	Worker	Scenario 4	1.12E-01	4.43E-03	1.44E-03
3909	638198.5	4170061.2	Worker	Scenario 4	1.15E-01	4.52E-03	1.47E-03
3910	638223.5	4170061.2	Worker	Scenario 4	1.18E-01	4.66E-03	1.48E-03
3911	638248.5	4170061.2	Worker	Scenario 4	1.23E-01	4.84E-03	1.48E-03
3912	638273.5	4170061.2	Worker	Scenario 4	1.27E-01	5.05E-03	1.48E-03
3913	638298.5	4170061.2	Worker	Scenario 4	1.33E-01	5.29E-03	1.51E-03
3914	638323.5	4170061.2	Worker	Scenario 4	1.39E-01	5.56E-03	1.52E-03
3915	638348.5	4170061.2	Worker	Scenario 4	1.45E-01	5.83E-03	1.53E-03
3916	638373.5	4170061.2	Worker	Scenario 4	1.51E-01	6.04E-03	1.53E-03
3917	638398.5	4170061.2	Worker	Scenario 4	1.54E-01	6.16E-03	1.56E-03
3918	638423.5	4170061.2	Worker	Scenario 4	1.57E-01	6.29E-03	1.58E-03
3919	638448.5	4170061.2	Worker	Scenario 4	1.60E-01	6.49E-03	1.59E-03
3920	638473.5	4170061.2	Worker	Scenario 4	1.69E-01	7.02E-03	1.59E-03
3921	638498.5	4170061.2	Worker	Scenario 4	1.81E-01	8.04E-03	1.58E-03
3922	638523.5	4170061.2	Worker	Scenario 4	1.80E-01	8.14E-03	1.56E-03
3923	638548.5	4170061.2	Worker	Scenario 4	1.80E-01	8.19E-03	1.53E-03
3924	638573.5	4170061.2	Worker	Scenario 4	1.81E-01	8.32E-03	1.58E-03
3925	638598.5	4170061.2	Worker	Scenario 4	1.83E-01	8.53E-03	1.62E-03
3926	638623.5	4170061.2	Worker	Scenario 4	1.85E-01	8.79E-03	1.64E-03
3927	638648.5	4170061.2	Worker	Scenario 4	1.89E-01	9.12E-03	1.66E-03
3928	638673.5	4170061.2	Worker	Scenario 4	1.91E-01	9.39E-03	1.66E-03
3929	638698.5	4170061.2	Worker	Scenario 4	1.91E-01	9.40E-03	1.66E-03
3930	638723.5	4170061.2	Worker	Scenario 4	1.88E-01	9.24E-03	1.68E-03
3931	638748.5	4170061.2	Worker	Scenario 4	1.84E-01	9.01E-03	1.69E-03
3932	638048.5	4170086.2	Worker	Scenario 4	8.56E-02	2.94E-03	1.37E-03
3933	638073.5	4170086.2	Worker	Scenario 4	9.22E-02	3.31E-03	1.35E-03
3934	638098.5	4170086.2	Worker	Scenario 4	9.85E-02	3.66E-03	1.36E-03
3935	638123.5	4170086.2	Worker	Scenario 4	1.02E-01	3.79E-03	1.40E-03
3936	638148.5	4170086.2	Worker	Scenario 4	1.09E-01	4.17E-03	1.42E-03
3937	638173.5	4170086.2	Worker	Scenario 4	1.14E-01	4.44E-03	1.44E-03
3938	638198.5	4170086.2	Worker	Scenario 4	1.18E-01	4.63E-03	1.45E-03
3939	638223.5	4170086.2	Worker	Scenario 4	1.22E-01	4.81E-03	1.45E-03
3940	638248.5	4170086.2	Worker	Scenario 4	1.26E-01	4.99E-03	1.45E-03
3941	638273.5	4170086.2	Worker	Scenario 4	1.31E-01	5.18E-03	1.48E-03
3942	638298.5	4170086.2	Worker	Scenario 4	1.35E-01	5.38E-03	1.49E-03
3943	638323.5	4170086.2	Worker	Scenario 4	1.40E-01	5.57E-03	1.50E-03
3944	638348.5	4170086.2	Worker	Scenario 4	1.44E-01	5.75E-03	1.50E-03
3945	638373.5	4170086.2	Worker	Scenario 4	1.48E-01	5.91E-03	1.53E-03
3946	638398.5	4170086.2	Worker	Scenario 4	1.50E-01	5.99E-03	1.55E-03
3947	638423.5	4170086.2	Worker	Scenario 4	1.51E-01	6.05E-03	1.56E-03
3948	638448.5	4170086.2	Worker	Scenario 4	1.51E-01	6.05E-03	1.56E-03
3949	638473.5	4170086.2	Worker	Scenario 4	1.49E-01	5.94E-03	1.56E-03
3950	638498.5	4170086.2	Worker	Scenario 4	1.50E-01	6.07E-03	1.54E-03
3951	638523.5	4170086.2	Worker	Scenario 4	1.50E-01	6.17E-03	1.51E-03
3952	638548.5	4170086.2	Worker	Scenario 4	1.50E-01	6.25E-03	1.56E-03
3953	638573.5	4170086.2	Worker	Scenario 4	1.51E-01	6.36E-03	1.59E-03
3954	638598.5	4170086.2	Worker	Scenario 4	1.52E-01	6.49E-03	1.62E-03
3955	638623.5	4170086.2	Worker	Scenario 4	1.53E-01	6.62E-03	1.63E-03
3956	638648.5	4170086.2	Worker	Scenario 4	1.54E-01	6.74E-03	1.64E-03
3957	638673.5	4170086.2	Worker	Scenario 4	1.54E-01	6.79E-03	1.63E-03
3958	638698.5	4170086.2	Worker	Scenario 4	1.53E-01	6.74E-03	1.66E-03
3959	638723.5	4170086.2	Worker	Scenario 4	1.52E-01	6.64E-03	1.67E-03
3960	638323.5	4170111.2	Worker	Scenario 4	1.23E-01	4.62E-03	1.48E-03
3961	638348.5	4170111.2	Worker	Scenario 4	1.26E-01	4.74E-03	1.51E-03
3962	638373.5	4170111.2	Worker	Scenario 4	1.29E-01	4.83E-03	1.53E-03
3963	638398.5	4170111.2	Worker	Scenario 4	1.30E-01	4.89E-03	1.54E-03
3964	638423.5	4170111.2	Worker	Scenario 4	1.31E-01	4.94E-03	1.54E-03
3965	638448.5	4170111.2	Worker	Scenario 4	1.31E-01	4.97E-03	1.53E-03
3966	638473.5	4170111.2	Worker	Scenario 4	1.31E-01	4.99E-03	1.51E-03
3967	638498.5	4170111.2	Worker	Scenario 4	1.31E-01	5.04E-03	1.50E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
3968	638523.5	4170111.2	Worker	Scenario 4	1.31E-01	5.09E-03	1.54E-03
3969	638548.5	4170111.2	Worker	Scenario 4	1.32E-01	5.15E-03	1.57E-03
3970	638573.5	4170111.2	Worker	Scenario 4	1.32E-01	5.22E-03	1.60E-03
3971	638598.5	4170111.2	Worker	Scenario 4	1.33E-01	5.29E-03	1.61E-03
3972	638623.5	4170111.2	Worker	Scenario 4	1.33E-01	5.35E-03	1.62E-03
3973	638648.5	4170111.2	Worker	Scenario 4	1.34E-01	5.39E-03	1.61E-03
3974	638673.5	4170111.2	Worker	Scenario 4	1.33E-01	5.39E-03	1.64E-03
3975	638698.5	4170111.2	Worker	Scenario 4	1.33E-01	5.36E-03	1.65E-03
3976	642711.0	4166673.7	Worker	Scenario 4	1.82E-01	4.65E-03	7.29E-03
3977	642761.0	4166673.7	Worker	Scenario 4	1.82E-01	4.68E-03	6.82E-03
3978	642811.0	4166673.7	Worker	Scenario 4	1.81E-01	4.71E-03	6.68E-03
3979	642861.0	4166673.7	Worker	Scenario 4	1.82E-01	4.83E-03	6.28E-03
3980	642911.0	4166673.7	Worker	Scenario 4	1.82E-01	4.90E-03	5.89E-03
3981	642961.0	4166673.7	Worker	Scenario 4	1.81E-01	4.93E-03	5.77E-03
3982	643011.0	4166673.7	Worker	Scenario 4	1.83E-01	5.04E-03	5.39E-03
3983	643061.0	4166673.7	Worker	Scenario 4	1.84E-01	5.10E-03	4.95E-03
3984	643111.0	4166673.7	Worker	Scenario 4	1.85E-01	5.15E-03	4.57E-03
3985	643161.0	4166673.7	Worker	Scenario 4	1.85E-01	5.19E-03	4.25E-03
3986	643211.0	4166673.7	Worker	Scenario 4	1.86E-01	5.20E-03	4.32E-03
3987	643261.0	4166673.7	Worker	Scenario 4	1.86E-01	5.17E-03	4.42E-03
3988	643311.0	4166673.7	Worker	Scenario 4	1.87E-01	5.13E-03	4.44E-03
3989	643361.0	4166673.7	Worker	Scenario 4	1.87E-01	5.07E-03	4.38E-03
3990	643411.0	4166673.7	Worker	Scenario 4	1.86E-01	5.01E-03	4.25E-03
3991	643461.0	4166673.7	Worker	Scenario 4	1.86E-01	4.94E-03	4.11E-03
3992	643511.0	4166673.7	Worker	Scenario 4	1.86E-01	4.87E-03	4.08E-03
3993	643561.0	4166673.7	Worker	Scenario 4	1.85E-01	4.80E-03	4.04E-03
3994	643611.0	4166673.7	Worker	Scenario 4	1.84E-01	4.73E-03	4.15E-03
3995	643661.0	4166673.7	Worker	Scenario 4	1.82E-01	4.65E-03	4.36E-03
3996	643711.0	4166673.7	Worker	Scenario 4	1.80E-01	4.58E-03	4.54E-03
3997	643761.0	4166673.7	Worker	Scenario 4	1.78E-01	4.50E-03	4.68E-03
3998	643811.0	4166673.7	Worker	Scenario 4	1.75E-01	4.41E-03	4.80E-03
3999	643861.0	4166673.7	Worker	Scenario 4	1.72E-01	4.33E-03	4.89E-03
4000	643911.0	4166673.7	Worker	Scenario 4	1.69E-01	4.25E-03	4.94E-03
4001	643961.0	4166673.7	Worker	Scenario 4	1.66E-01	4.17E-03	4.97E-03
4002	644011.0	4166673.7	Worker	Scenario 4	1.63E-01	4.09E-03	4.96E-03
4003	644061.0	4166673.7	Worker	Scenario 4	1.60E-01	4.01E-03	4.94E-03
4004	644111.0	4166673.7	Worker	Scenario 4	1.57E-01	3.93E-03	4.89E-03
4005	641461.0	4166723.7	Worker	Scenario 4	2.13E-01	6.45E-03	2.73E-02
4006	641511.0	4166723.7	Worker	Scenario 4	2.02E-01	5.96E-03	3.28E-02
4007	641561.0	4166723.7	Worker	Scenario 4	2.08E-01	6.05E-03	3.67E-02
4008	641611.0	4166723.7	Worker	Scenario 4	2.20E-01	6.36E-03	3.03E-02
4009	641661.0	4166723.7	Worker	Scenario 4	2.38E-01	6.80E-03	3.17E-02
4010	641711.0	4166723.7	Worker	Scenario 4	2.56E-01	7.25E-03	2.58E-02
4011	641761.0	4166723.7	Worker	Scenario 4	2.73E-01	7.66E-03	2.23E-02
4012	641811.0	4166723.7	Worker	Scenario 4	2.86E-01	7.98E-03	1.78E-02
4013	641861.0	4166723.7	Worker	Scenario 4	2.96E-01	8.20E-03	1.72E-02
4014	641911.0	4166723.7	Worker	Scenario 4	3.02E-01	8.36E-03	1.66E-02
4015	641961.0	4166723.7	Worker	Scenario 4	3.05E-01	8.41E-03	1.60E-02
4016	642011.0	4166723.7	Worker	Scenario 4	3.03E-01	8.36E-03	1.47E-02
4017	642061.0	4166723.7	Worker	Scenario 4	2.95E-01	8.18E-03	1.40E-02
4018	642111.0	4166723.7	Worker	Scenario 4	2.86E-01	7.92E-03	1.29E-02
4019	642161.0	4166723.7	Worker	Scenario 4	2.75E-01	7.62E-03	1.29E-02
4020	642211.0	4166723.7	Worker	Scenario 4	2.65E-01	7.27E-03	1.08E-02
4021	642261.0	4166723.7	Worker	Scenario 4	2.54E-01	6.89E-03	1.16E-02
4022	642311.0	4166723.7	Worker	Scenario 4	2.44E-01	6.50E-03	1.17E-02
4023	642361.0	4166723.7	Worker	Scenario 4	2.34E-01	6.13E-03	1.05E-02
4024	642411.0	4166723.7	Worker	Scenario 4	2.26E-01	5.81E-03	9.78E-03
4025	642661.0	4166723.7	Worker	Scenario 4	2.02E-01	5.09E-03	7.66E-03
4026	642711.0	4166723.7	Worker	Scenario 4	2.00E-01	5.11E-03	7.42E-03
4027	642761.0	4166723.7	Worker	Scenario 4	2.00E-01	5.19E-03	7.02E-03
4028	642811.0	4166723.7	Worker	Scenario 4	2.01E-01	5.31E-03	6.60E-03
4029	642861.0	4166723.7	Worker	Scenario 4	2.01E-01	5.42E-03	6.38E-03
4030	642911.0	4166723.7	Worker	Scenario 4	2.03E-01	5.60E-03	5.87E-03
4031	642961.0	4166723.7	Worker	Scenario 4	2.03E-01	5.67E-03	5.36E-03
4032	643011.0	4166723.7	Worker	Scenario 4	2.05E-01	5.79E-03	4.91E-03
4033	643061.0	4166723.7	Worker	Scenario 4	2.06E-01	5.88E-03	4.76E-03
4034	643111.0	4166723.7	Worker	Scenario 4	2.08E-01	5.97E-03	4.91E-03
4035	643161.0	4166723.7	Worker	Scenario 4	2.09E-01	6.01E-03	4.95E-03
4036	643211.0	4166723.7	Worker	Scenario 4	2.09E-01	5.99E-03	4.89E-03
4037	643261.0	4166723.7	Worker	Scenario 4	2.10E-01	5.93E-03	4.74E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4038	643311.0	4166723.7	Worker	Scenario 4	2.09E-01	5.86E-03	4.55E-03
4039	643361.0	4166723.7	Worker	Scenario 4	2.09E-01	5.78E-03	4.50E-03
4040	643411.0	4166723.7	Worker	Scenario 4	2.09E-01	5.70E-03	4.41E-03
4041	643461.0	4166723.7	Worker	Scenario 4	2.09E-01	5.61E-03	4.52E-03
4042	643511.0	4166723.7	Worker	Scenario 4	2.08E-01	5.53E-03	4.74E-03
4043	643561.0	4166723.7	Worker	Scenario 4	2.07E-01	5.44E-03	4.92E-03
4044	643611.0	4166723.7	Worker	Scenario 4	2.06E-01	5.36E-03	5.06E-03
4045	643661.0	4166723.7	Worker	Scenario 4	2.03E-01	5.27E-03	5.17E-03
4046	643711.0	4166723.7	Worker	Scenario 4	2.01E-01	5.17E-03	5.24E-03
4047	643761.0	4166723.7	Worker	Scenario 4	1.97E-01	5.08E-03	5.27E-03
4048	643811.0	4166723.7	Worker	Scenario 4	1.94E-01	4.98E-03	5.28E-03
4049	643861.0	4166723.7	Worker	Scenario 4	1.90E-01	4.88E-03	5.25E-03
4050	643911.0	4166723.7	Worker	Scenario 4	1.87E-01	4.79E-03	5.19E-03
4051	643961.0	4166723.7	Worker	Scenario 4	1.83E-01	4.70E-03	5.11E-03
4052	644011.0	4166723.7	Worker	Scenario 4	1.80E-01	4.61E-03	5.01E-03
4053	644061.0	4166723.7	Worker	Scenario 4	1.77E-01	4.52E-03	4.89E-03
4054	644111.0	4166723.7	Worker	Scenario 4	1.74E-01	4.43E-03	4.75E-03
4055	644161.0	4166723.7	Worker	Scenario 4	1.71E-01	4.34E-03	4.60E-03
4056	644211.0	4166723.7	Worker	Scenario 4	1.68E-01	4.24E-03	4.44E-03
4057	644261.0	4166723.7	Worker	Scenario 4	1.64E-01	4.13E-03	4.28E-03
4058	644311.0	4166723.7	Worker	Scenario 4	1.61E-01	4.00E-03	4.11E-03
4059	644361.0	4166723.7	Worker	Scenario 4	1.57E-01	3.85E-03	3.93E-03
4060	644411.0	4166723.7	Worker	Scenario 4	1.53E-01	3.70E-03	3.76E-03
4061	641461.0	4166773.7	Worker	Scenario 4	2.38E-01	7.18E-03	3.10E-02
4062	641511.0	4166773.7	Worker	Scenario 4	2.36E-01	6.94E-03	3.61E-02
4063	641561.0	4166773.7	Worker	Scenario 4	2.49E-01	7.27E-03	3.94E-02
4064	641611.0	4166773.7	Worker	Scenario 4	2.71E-01	7.85E-03	3.31E-02
4065	641661.0	4166773.7	Worker	Scenario 4	2.97E-01	8.50E-03	3.45E-02
4066	641711.0	4166773.7	Worker	Scenario 4	3.22E-01	9.12E-03	2.82E-02
4067	641761.0	4166773.7	Worker	Scenario 4	3.46E-01	9.68E-03	2.23E-02
4068	641811.0	4166773.7	Worker	Scenario 4	3.62E-01	1.01E-02	2.07E-02
4069	641861.0	4166773.7	Worker	Scenario 4	3.72E-01	1.03E-02	1.92E-02
4070	641911.0	4166773.7	Worker	Scenario 4	3.76E-01	1.04E-02	1.83E-02
4071	641961.0	4166773.7	Worker	Scenario 4	3.75E-01	1.03E-02	1.70E-02
4072	642011.0	4166773.7	Worker	Scenario 4	3.67E-01	1.02E-02	1.58E-02
4073	642061.0	4166773.7	Worker	Scenario 4	3.53E-01	9.79E-03	1.46E-02
4074	642111.0	4166773.7	Worker	Scenario 4	3.37E-01	9.36E-03	1.43E-02
4075	642161.0	4166773.7	Worker	Scenario 4	3.20E-01	8.87E-03	1.24E-02
4076	642211.0	4166773.7	Worker	Scenario 4	3.04E-01	8.33E-03	1.33E-02
4077	642261.0	4166773.7	Worker	Scenario 4	2.89E-01	7.76E-03	1.28E-02
4078	642311.0	4166773.7	Worker	Scenario 4	2.74E-01	7.20E-03	1.13E-02
4079	642361.0	4166773.7	Worker	Scenario 4	2.61E-01	6.69E-03	1.06E-02
4080	642611.0	4166773.7	Worker	Scenario 4	2.25E-01	5.60E-03	8.37E-03
4081	642661.0	4166773.7	Worker	Scenario 4	2.22E-01	5.59E-03	7.85E-03
4082	642711.0	4166773.7	Worker	Scenario 4	2.21E-01	5.69E-03	7.41E-03
4083	642761.0	4166773.7	Worker	Scenario 4	2.23E-01	5.89E-03	7.04E-03
4084	642811.0	4166773.7	Worker	Scenario 4	2.25E-01	6.12E-03	6.45E-03
4085	642861.0	4166773.7	Worker	Scenario 4	2.28E-01	6.35E-03	5.83E-03
4086	642911.0	4166773.7	Worker	Scenario 4	2.29E-01	6.52E-03	5.39E-03
4087	642961.0	4166773.7	Worker	Scenario 4	2.33E-01	6.74E-03	5.50E-03
4088	643011.0	4166773.7	Worker	Scenario 4	2.35E-01	6.89E-03	5.57E-03
4089	643061.0	4166773.7	Worker	Scenario 4	2.37E-01	7.07E-03	5.51E-03
4090	643111.0	4166773.7	Worker	Scenario 4	2.40E-01	7.19E-03	5.34E-03
4091	643161.0	4166773.7	Worker	Scenario 4	2.41E-01	7.21E-03	5.11E-03
4092	643211.0	4166773.7	Worker	Scenario 4	2.41E-01	7.13E-03	4.99E-03
4093	643261.0	4166773.7	Worker	Scenario 4	2.41E-01	7.02E-03	4.86E-03
4094	643311.0	4166773.7	Worker	Scenario 4	2.41E-01	6.90E-03	4.95E-03
4095	643361.0	4166773.7	Worker	Scenario 4	2.40E-01	6.78E-03	5.18E-03
4096	643411.0	4166773.7	Worker	Scenario 4	2.40E-01	6.68E-03	5.35E-03
4097	643461.0	4166773.7	Worker	Scenario 4	2.39E-01	6.57E-03	5.49E-03
4098	643511.0	4166773.7	Worker	Scenario 4	2.38E-01	6.46E-03	5.58E-03
4099	643561.0	4166773.7	Worker	Scenario 4	2.36E-01	6.36E-03	5.63E-03
4100	643611.0	4166773.7	Worker	Scenario 4	2.34E-01	6.25E-03	5.63E-03
4101	643661.0	4166773.7	Worker	Scenario 4	2.31E-01	6.14E-03	5.60E-03
4102	643711.0	4166773.7	Worker	Scenario 4	2.27E-01	6.03E-03	5.54E-03
4103	643761.0	4166773.7	Worker	Scenario 4	2.23E-01	5.91E-03	5.44E-03
4104	643811.0	4166773.7	Worker	Scenario 4	2.19E-01	5.80E-03	5.32E-03
4105	643861.0	4166773.7	Worker	Scenario 4	2.15E-01	5.69E-03	5.18E-03
4106	643911.0	4166773.7	Worker	Scenario 4	2.10E-01	5.58E-03	5.02E-03
4107	643961.0	4166773.7	Worker	Scenario 4	2.07E-01	5.47E-03	4.85E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4108	644011.0	4166773.7	Worker	Scenario 4	2.03E-01	5.37E-03	4.67E-03
4109	644061.0	4166773.7	Worker	Scenario 4	2.00E-01	5.27E-03	4.48E-03
4110	644111.0	4166773.7	Worker	Scenario 4	1.96E-01	5.17E-03	4.28E-03
4111	644161.0	4166773.7	Worker	Scenario 4	1.93E-01	5.06E-03	4.09E-03
4112	644211.0	4166773.7	Worker	Scenario 4	1.89E-01	4.93E-03	3.89E-03
4113	644261.0	4166773.7	Worker	Scenario 4	1.85E-01	4.77E-03	3.69E-03
4114	644311.0	4166773.7	Worker	Scenario 4	1.80E-01	4.58E-03	3.50E-03
4115	644361.0	4166773.7	Worker	Scenario 4	1.74E-01	4.36E-03	3.31E-03
4116	644411.0	4166773.7	Worker	Scenario 4	1.69E-01	4.13E-03	3.13E-03
4117	644461.0	4166773.7	Worker	Scenario 4	1.63E-01	3.91E-03	2.96E-03
4118	644511.0	4166773.7	Worker	Scenario 4	1.56E-01	3.68E-03	2.85E-03
4119	641511.0	4166823.7	Worker	Scenario 4	2.86E-01	8.46E-03	3.97E-02
4120	641561.0	4166823.7	Worker	Scenario 4	3.14E-01	9.26E-03	4.14E-02
4121	641611.0	4166823.7	Worker	Scenario 4	3.53E-01	1.03E-02	3.58E-02
4122	641661.0	4166823.7	Worker	Scenario 4	3.91E-01	1.13E-02	3.43E-02
4123	641711.0	4166823.7	Worker	Scenario 4	4.26E-01	1.21E-02	2.85E-02
4124	641761.0	4166823.7	Worker	Scenario 4	4.54E-01	1.27E-02	2.32E-02
4125	641811.0	4166823.7	Worker	Scenario 4	4.75E-01	1.32E-02	2.16E-02
4126	641861.0	4166823.7	Worker	Scenario 4	4.86E-01	1.34E-02	2.13E-02
4127	641911.0	4166823.7	Worker	Scenario 4	4.87E-01	1.35E-02	1.98E-02
4128	641961.0	4166823.7	Worker	Scenario 4	4.78E-01	1.32E-02	1.80E-02
4129	642011.0	4166823.7	Worker	Scenario 4	4.57E-01	1.28E-02	1.68E-02
4130	642061.0	4166823.7	Worker	Scenario 4	4.31E-01	1.21E-02	1.60E-02
4131	642111.0	4166823.7	Worker	Scenario 4	4.05E-01	1.14E-02	1.46E-02
4132	642161.0	4166823.7	Worker	Scenario 4	3.79E-01	1.06E-02	1.52E-02
4133	642211.0	4166823.7	Worker	Scenario 4	3.55E-01	9.73E-03	1.38E-02
4134	642261.0	4166823.7	Worker	Scenario 4	3.31E-01	8.82E-03	1.25E-02
4135	642311.0	4166823.7	Worker	Scenario 4	3.10E-01	7.95E-03	1.12E-02
4136	644111.0	4166823.7	Worker	Scenario 4	2.31E-01	6.39E-03	3.59E-03
4137	644161.0	4166823.7	Worker	Scenario 4	2.26E-01	6.24E-03	3.38E-03
4138	644211.0	4166823.7	Worker	Scenario 4	2.21E-01	6.06E-03	3.18E-03
4139	644261.0	4166823.7	Worker	Scenario 4	2.15E-01	5.80E-03	3.01E-03
4140	644311.0	4166823.7	Worker	Scenario 4	2.07E-01	5.46E-03	2.88E-03
4141	644411.0	4166823.7	Worker	Scenario 4	1.88E-01	4.71E-03	2.67E-03
4142	644461.0	4166823.7	Worker	Scenario 4	1.81E-01	4.39E-03	2.58E-03
4143	644511.0	4166823.7	Worker	Scenario 4	1.73E-01	4.10E-03	2.50E-03
4144	644711.0	4166973.7	Worker	Scenario 4	1.82E-01	3.82E-03	2.21E-03
4145	644761.0	4166973.7	Worker	Scenario 4	1.71E-01	3.45E-03	2.16E-03
4146	641161.0	4167023.7	Worker	Scenario 4	1.68E-01	4.66E-03	3.59E-02
4147	641211.0	4167023.7	Worker	Scenario 4	1.96E-01	5.48E-03	4.50E-02
4148	641261.0	4167023.7	Worker	Scenario 4	2.37E-01	6.77E-03	5.92E-02
4149	644711.0	4167023.7	Worker	Scenario 4	1.93E-01	4.02E-03	2.19E-03
4150	644761.0	4167023.7	Worker	Scenario 4	1.80E-01	3.55E-03	2.15E-03
4151	644811.0	4167023.7	Worker	Scenario 4	1.69E-01	3.20E-03	2.12E-03
4152	641161.0	4167073.7	Worker	Scenario 4	1.84E-01	5.08E-03	4.72E-02
4153	641211.0	4167073.7	Worker	Scenario 4	2.16E-01	6.02E-03	4.51E-02
4154	641261.0	4167073.7	Worker	Scenario 4	2.65E-01	7.54E-03	5.70E-02
4155	644711.0	4167073.7	Worker	Scenario 4	2.02E-01	4.15E-03	2.21E-03
4156	644761.0	4167073.7	Worker	Scenario 4	1.86E-01	3.59E-03	2.15E-03
4157	644811.0	4167073.7	Worker	Scenario 4	1.74E-01	3.22E-03	2.10E-03
4158	641161.0	4167123.7	Worker	Scenario 4	2.02E-01	5.54E-03	4.89E-02
4159	641211.0	4167123.7	Worker	Scenario 4	2.38E-01	6.62E-03	5.60E-02
4160	641261.0	4167123.7	Worker	Scenario 4	2.96E-01	8.39E-03	5.89E-02
4161	644711.0	4167123.7	Worker	Scenario 4	2.10E-01	4.18E-03	2.16E-03
4162	644761.0	4167123.7	Worker	Scenario 4	1.91E-01	3.55E-03	2.12E-03
4163	644811.0	4167123.7	Worker	Scenario 4	1.77E-01	3.17E-03	2.09E-03
4164	641161.0	4167173.7	Worker	Scenario 4	2.21E-01	6.12E-03	5.07E-02
4165	641211.0	4167173.7	Worker	Scenario 4	2.63E-01	7.38E-03	5.38E-02
4166	641261.0	4167173.7	Worker	Scenario 4	3.29E-01	9.42E-03	5.91E-02
4167	644711.0	4167173.7	Worker	Scenario 4	2.12E-01	3.97E-03	2.22E-03
4168	644761.0	4167173.7	Worker	Scenario 4	1.92E-01	3.41E-03	2.17E-03
4169	644811.0	4167173.7	Worker	Scenario 4	1.79E-01	3.08E-03	2.12E-03
4170	641161.0	4167223.7	Worker	Scenario 4	2.41E-01	6.64E-03	6.67E-02
4171	641211.0	4167223.7	Worker	Scenario 4	2.88E-01	8.07E-03	6.81E-02
4172	641261.0	4167223.7	Worker	Scenario 4	3.59E-01	1.04E-02	8.65E-02
4173	644711.0	4167223.7	Worker	Scenario 4	2.02E-01	3.56E-03	2.12E-03
4174	644761.0	4167223.7	Worker	Scenario 4	1.88E-01	3.20E-03	2.08E-03
4175	644811.0	4167223.7	Worker	Scenario 4	1.77E-01	2.96E-03	2.04E-03
4176	641161.0	4167273.7	Worker	Scenario 4	2.62E-01	7.14E-03	5.97E-02
4177	641211.0	4167273.7	Worker	Scenario 4	3.12E-01	8.69E-03	6.87E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4178	641261.0	4167273.7	Worker	Scenario 4	3.87E-01	1.12E-02	9.07E-02
4179	641161.0	4167323.7	Worker	Scenario 4	2.82E-01	7.63E-03	6.06E-02
4180	641211.0	4167323.7	Worker	Scenario 4	3.34E-01	9.23E-03	7.66E-02
4181	641261.0	4167323.7	Worker	Scenario 4	4.11E-01	1.19E-02	1.05E-01
4182	641161.0	4167373.7	Worker	Scenario 4	3.06E-01	8.15E-03	5.47E-02
4183	641211.0	4167373.7	Worker	Scenario 4	3.58E-01	9.76E-03	7.04E-02
4184	641261.0	4167373.7	Worker	Scenario 4	4.33E-01	1.23E-02	9.01E-02
4185	644511.0	4167373.7	Worker	Scenario 4	2.21E-01	3.66E-03	2.36E-03
4186	644561.0	4167373.7	Worker	Scenario 4	2.11E-01	3.47E-03	2.30E-03
4187	644611.0	4167373.7	Worker	Scenario 4	2.02E-01	3.28E-03	2.25E-03
4188	644661.0	4167373.7	Worker	Scenario 4	1.93E-01	3.11E-03	2.20E-03
4189	644711.0	4167373.7	Worker	Scenario 4	1.85E-01	2.95E-03	2.16E-03
4190	644761.0	4167373.7	Worker	Scenario 4	1.78E-01	2.81E-03	2.11E-03
4191	644811.0	4167373.7	Worker	Scenario 4	1.71E-01	2.68E-03	2.07E-03
4192	640961.0	4167423.7	Worker	Scenario 4	2.14E-01	5.58E-03	2.60E-02
4193	641011.0	4167423.7	Worker	Scenario 4	2.35E-01	6.12E-03	2.95E-02
4194	641061.0	4167423.7	Worker	Scenario 4	2.61E-01	6.79E-03	3.40E-02
4195	641111.0	4167423.7	Worker	Scenario 4	2.94E-01	7.66E-03	3.82E-02
4196	641161.0	4167423.7	Worker	Scenario 4	3.35E-01	8.80E-03	4.74E-02
4197	641211.0	4167423.7	Worker	Scenario 4	3.86E-01	1.04E-02	6.62E-02
4198	641261.0	4167423.7	Worker	Scenario 4	4.56E-01	1.29E-02	8.56E-02
4199	644361.0	4167423.7	Worker	Scenario 4	2.45E-01	3.91E-03	2.35E-03
4200	644411.0	4167423.7	Worker	Scenario 4	2.35E-01	3.76E-03	2.30E-03
4201	644461.0	4167423.7	Worker	Scenario 4	2.25E-01	3.60E-03	2.25E-03
4202	644511.0	4167423.7	Worker	Scenario 4	2.16E-01	3.44E-03	2.20E-03
4203	644561.0	4167423.7	Worker	Scenario 4	2.07E-01	3.28E-03	2.15E-03
4204	644611.0	4167423.7	Worker	Scenario 4	1.99E-01	3.13E-03	2.10E-03
4205	644661.0	4167423.7	Worker	Scenario 4	1.91E-01	2.99E-03	2.06E-03
4206	644711.0	4167423.7	Worker	Scenario 4	1.84E-01	2.87E-03	2.01E-03
4207	644761.0	4167423.7	Worker	Scenario 4	1.77E-01	2.74E-03	1.97E-03
4208	640761.0	4167473.7	Worker	Scenario 4	1.72E-01	4.60E-03	1.61E-02
4209	640811.0	4167473.7	Worker	Scenario 4	1.86E-01	4.93E-03	1.76E-02
4210	640861.0	4167473.7	Worker	Scenario 4	2.02E-01	5.30E-03	1.89E-02
4211	640911.0	4167473.7	Worker	Scenario 4	2.20E-01	5.74E-03	2.00E-02
4212	640961.0	4167473.7	Worker	Scenario 4	2.40E-01	6.24E-03	2.12E-02
4213	641011.0	4167473.7	Worker	Scenario 4	2.64E-01	6.84E-03	2.81E-02
4214	641061.0	4167473.7	Worker	Scenario 4	2.93E-01	7.59E-03	3.50E-02
4215	641111.0	4167473.7	Worker	Scenario 4	3.30E-01	8.52E-03	4.06E-02
4216	643361.0	4167473.7	Worker	Scenario 4	1.41E+00	1.61E-02	4.67E-03
4217	643411.0	4167473.7	Worker	Scenario 4	1.14E+00	1.34E-02	4.48E-03
4218	643461.0	4167473.7	Worker	Scenario 4	9.53E-01	1.15E-02	4.30E-03
4219	643511.0	4167473.7	Worker	Scenario 4	8.16E-01	1.01E-02	4.13E-03
4220	643561.0	4167473.7	Worker	Scenario 4	7.13E-01	9.01E-03	3.96E-03
4221	643611.0	4167473.7	Worker	Scenario 4	6.33E-01	8.17E-03	3.80E-03
4222	643661.0	4167473.7	Worker	Scenario 4	5.69E-01	7.49E-03	3.65E-03
4223	643711.0	4167473.7	Worker	Scenario 4	5.17E-01	6.94E-03	3.51E-03
4224	643761.0	4167473.7	Worker	Scenario 4	4.74E-01	6.47E-03	3.37E-03
4225	643811.0	4167473.7	Worker	Scenario 4	4.39E-01	6.09E-03	3.24E-03
4226	643861.0	4167473.7	Worker	Scenario 4	4.08E-01	5.75E-03	3.14E-03
4227	643911.0	4167473.7	Worker	Scenario 4	3.82E-01	5.46E-03	3.04E-03
4228	643961.0	4167473.7	Worker	Scenario 4	3.59E-01	5.20E-03	2.95E-03
4229	644211.0	4167473.7	Worker	Scenario 4	2.75E-01	4.19E-03	2.56E-03
4230	644261.0	4167473.7	Worker	Scenario 4	2.62E-01	4.03E-03	2.49E-03
4231	644311.0	4167473.7	Worker	Scenario 4	2.51E-01	3.87E-03	2.43E-03
4232	644361.0	4167473.7	Worker	Scenario 4	2.41E-01	3.73E-03	2.37E-03
4233	644411.0	4167473.7	Worker	Scenario 4	2.31E-01	3.58E-03	2.31E-03
4234	644461.0	4167473.7	Worker	Scenario 4	2.21E-01	3.43E-03	2.26E-03
4235	644511.0	4167473.7	Worker	Scenario 4	2.13E-01	3.29E-03	2.20E-03
4236	644561.0	4167473.7	Worker	Scenario 4	2.04E-01	3.15E-03	2.15E-03
4237	644611.0	4167473.7	Worker	Scenario 4	1.96E-01	3.02E-03	2.09E-03
4238	644661.0	4167473.7	Worker	Scenario 4	1.88E-01	2.90E-03	2.04E-03
4239	640561.0	4167523.7	Worker	Scenario 4	1.47E-01	4.03E-03	1.12E-02
4240	640611.0	4167523.7	Worker	Scenario 4	1.55E-01	4.26E-03	1.18E-02
4241	640661.0	4167523.7	Worker	Scenario 4	1.67E-01	4.54E-03	1.24E-02
4242	640711.0	4167523.7	Worker	Scenario 4	1.79E-01	4.85E-03	1.27E-02
4243	640761.0	4167523.7	Worker	Scenario 4	1.94E-01	5.20E-03	1.28E-02
4244	640811.0	4167523.7	Worker	Scenario 4	2.11E-01	5.60E-03	1.55E-02
4245	640861.0	4167523.7	Worker	Scenario 4	2.30E-01	6.05E-03	1.92E-02
4246	640911.0	4167523.7	Worker	Scenario 4	2.52E-01	6.58E-03	2.26E-02
4247	640961.0	4167523.7	Worker	Scenario 4	2.77E-01	7.19E-03	2.48E-02

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4248	643361.0	4167523.7	Worker	Scenario 4	1.34E+00	1.53E-02	4.69E-03
4249	643411.0	4167523.7	Worker	Scenario 4	1.09E+00	1.28E-02	4.56E-03
4250	643461.0	4167523.7	Worker	Scenario 4	9.18E-01	1.10E-02	4.44E-03
4251	643511.0	4167523.7	Worker	Scenario 4	7.89E-01	9.69E-03	4.31E-03
4252	643561.0	4167523.7	Worker	Scenario 4	6.91E-01	8.68E-03	4.18E-03
4253	643611.0	4167523.7	Worker	Scenario 4	6.15E-01	7.88E-03	4.06E-03
4254	643661.0	4167523.7	Worker	Scenario 4	5.54E-01	7.23E-03	3.93E-03
4255	643711.0	4167523.7	Worker	Scenario 4	5.04E-01	6.70E-03	3.81E-03
4256	643761.0	4167523.7	Worker	Scenario 4	4.63E-01	6.25E-03	3.70E-03
4257	643811.0	4167523.7	Worker	Scenario 4	4.29E-01	5.88E-03	3.59E-03
4258	643861.0	4167523.7	Worker	Scenario 4	4.00E-01	5.55E-03	3.47E-03
4259	643911.0	4167523.7	Worker	Scenario 4	3.74E-01	5.26E-03	3.37E-03
4260	643961.0	4167523.7	Worker	Scenario 4	3.51E-01	5.01E-03	3.26E-03
4261	644011.0	4167523.7	Worker	Scenario 4	3.32E-01	4.78E-03	3.16E-03
4262	644061.0	4167523.7	Worker	Scenario 4	3.13E-01	4.57E-03	3.06E-03
4263	644111.0	4167523.7	Worker	Scenario 4	2.97E-01	4.37E-03	2.96E-03
4264	644161.0	4167523.7	Worker	Scenario 4	2.82E-01	4.19E-03	2.86E-03
4265	644211.0	4167523.7	Worker	Scenario 4	2.69E-01	4.02E-03	2.77E-03
4266	644261.0	4167523.7	Worker	Scenario 4	2.57E-01	3.87E-03	2.68E-03
4267	644311.0	4167523.7	Worker	Scenario 4	2.46E-01	3.72E-03	2.60E-03
4268	644361.0	4167523.7	Worker	Scenario 4	2.36E-01	3.57E-03	2.51E-03
4269	644411.0	4167523.7	Worker	Scenario 4	2.26E-01	3.43E-03	2.43E-03
4270	644461.0	4167523.7	Worker	Scenario 4	2.17E-01	3.30E-03	2.36E-03
4271	644511.0	4167523.7	Worker	Scenario 4	2.09E-01	3.17E-03	2.28E-03
4272	640361.0	4167573.7	Worker	Scenario 4	1.22E-01	3.44E-03	8.32E-03
4273	640411.0	4167573.7	Worker	Scenario 4	1.31E-01	3.67E-03	8.63E-03
4274	640461.0	4167573.7	Worker	Scenario 4	1.41E-01	3.95E-03	8.84E-03
4275	640511.0	4167573.7	Worker	Scenario 4	1.53E-01	4.28E-03	8.93E-03
4276	640561.0	4167573.7	Worker	Scenario 4	1.64E-01	4.57E-03	8.92E-03
4277	640611.0	4167573.7	Worker	Scenario 4	1.76E-01	4.89E-03	9.83E-03
4278	640661.0	4167573.7	Worker	Scenario 4	1.89E-01	5.23E-03	1.20E-02
4279	640711.0	4167573.7	Worker	Scenario 4	2.05E-01	5.62E-03	1.42E-02
4280	640761.0	4167573.7	Worker	Scenario 4	2.24E-01	6.07E-03	1.62E-02
4281	640811.0	4167573.7	Worker	Scenario 4	2.45E-01	6.58E-03	1.76E-02
4282	643311.0	4167573.7	Worker	Scenario 4	1.18E+00	1.39E-02	4.86E-03
4283	643361.0	4167573.7	Worker	Scenario 4	1.02E+00	1.22E-02	4.63E-03
4284	643411.0	4167573.7	Worker	Scenario 4	8.88E-01	1.08E-02	4.42E-03
4285	643461.0	4167573.7	Worker	Scenario 4	7.81E-01	9.64E-03	4.26E-03
4286	643511.0	4167573.7	Worker	Scenario 4	6.93E-01	8.69E-03	4.16E-03
4287	643561.0	4167573.7	Worker	Scenario 4	6.21E-01	7.92E-03	4.06E-03
4288	643611.0	4167573.7	Worker	Scenario 4	5.62E-01	7.29E-03	3.95E-03
4289	643661.0	4167573.7	Worker	Scenario 4	5.14E-01	6.76E-03	3.84E-03
4290	643711.0	4167573.7	Worker	Scenario 4	4.72E-01	6.30E-03	3.74E-03
4291	643761.0	4167573.7	Worker	Scenario 4	4.37E-01	5.91E-03	3.63E-03
4292	643811.0	4167573.7	Worker	Scenario 4	4.07E-01	5.58E-03	3.53E-03
4293	643861.0	4167573.7	Worker	Scenario 4	3.81E-01	5.29E-03	3.43E-03
4294	643911.0	4167573.7	Worker	Scenario 4	3.58E-01	5.02E-03	3.35E-03
4295	643961.0	4167573.7	Worker	Scenario 4	3.38E-01	4.79E-03	3.28E-03
4296	644011.0	4167573.7	Worker	Scenario 4	3.20E-01	4.58E-03	3.21E-03
4297	644061.0	4167573.7	Worker	Scenario 4	3.03E-01	4.38E-03	3.13E-03
4298	644111.0	4167573.7	Worker	Scenario 4	2.88E-01	4.19E-03	3.06E-03
4299	644161.0	4167573.7	Worker	Scenario 4	2.74E-01	4.02E-03	2.98E-03
4300	644211.0	4167573.7	Worker	Scenario 4	2.62E-01	3.86E-03	2.91E-03
4301	644261.0	4167573.7	Worker	Scenario 4	2.50E-01	3.71E-03	2.84E-03
4302	644311.0	4167573.7	Worker	Scenario 4	2.40E-01	3.57E-03	2.77E-03
4303	644361.0	4167573.7	Worker	Scenario 4	2.30E-01	3.44E-03	2.70E-03
4304	640261.0	4167623.7	Worker	Scenario 4	1.15E-01	3.30E-03	6.71E-03
4305	640311.0	4167623.7	Worker	Scenario 4	1.25E-01	3.58E-03	6.73E-03
4306	640361.0	4167623.7	Worker	Scenario 4	1.37E-01	3.90E-03	6.66E-03
4307	640411.0	4167623.7	Worker	Scenario 4	1.48E-01	4.21E-03	6.79E-03
4308	640461.0	4167623.7	Worker	Scenario 4	1.60E-01	4.57E-03	8.15E-03
4309	640511.0	4167623.7	Worker	Scenario 4	1.74E-01	4.97E-03	9.61E-03
4310	640561.0	4167623.7	Worker	Scenario 4	1.89E-01	5.38E-03	1.11E-02
4311	640611.0	4167623.7	Worker	Scenario 4	2.04E-01	5.80E-03	1.24E-02
4312	640661.0	4167623.7	Worker	Scenario 4	2.22E-01	6.27E-03	1.33E-02
4313	643261.0	4167623.7	Worker	Scenario 4	6.55E-01	9.32E-03	5.08E-03
4314	643311.0	4167623.7	Worker	Scenario 4	6.86E-01	9.26E-03	4.89E-03
4315	643361.0	4167623.7	Worker	Scenario 4	6.76E-01	8.91E-03	4.70E-03
4316	643411.0	4167623.7	Worker	Scenario 4	6.45E-01	8.44E-03	4.53E-03
4317	644011.0	4167623.7	Worker	Scenario 4	3.04E-01	4.35E-03	3.13E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4318	644061.0	4167623.7	Worker	Scenario 4	2.89E-01	4.17E-03	3.06E-03
4319	644111.0	4167623.7	Worker	Scenario 4	2.75E-01	4.00E-03	2.99E-03
4320	644161.0	4167623.7	Worker	Scenario 4	2.63E-01	3.84E-03	2.92E-03
4321	644211.0	4167623.7	Worker	Scenario 4	2.52E-01	3.69E-03	2.85E-03
4322	640211.0	4167673.7	Worker	Scenario 4	1.18E-01	3.42E-03	5.10E-03
4323	640261.0	4167673.7	Worker	Scenario 4	1.29E-01	3.74E-03	5.90E-03
4324	640311.0	4167673.7	Worker	Scenario 4	1.39E-01	4.07E-03	6.92E-03
4325	640361.0	4167673.7	Worker	Scenario 4	1.55E-01	4.52E-03	7.95E-03
4326	640411.0	4167673.7	Worker	Scenario 4	1.70E-01	4.98E-03	8.97E-03
4327	640461.0	4167673.7	Worker	Scenario 4	1.87E-01	5.49E-03	9.88E-03
4328	640511.0	4167673.7	Worker	Scenario 4	2.06E-01	6.07E-03	1.05E-02
4329	643211.0	4167673.7	Worker	Scenario 4	4.06E-01	7.17E-03	5.25E-03
4330	643261.0	4167673.7	Worker	Scenario 4	4.14E-01	6.87E-03	5.03E-03
4331	643311.0	4167673.7	Worker	Scenario 4	4.37E-01	6.81E-03	4.84E-03
4332	643361.0	4167673.7	Worker	Scenario 4	4.55E-01	6.75E-03	4.69E-03
4333	640111.0	4167723.7	Worker	Scenario 4	1.11E-01	3.25E-03	5.18E-03
4334	640161.0	4167723.7	Worker	Scenario 4	1.21E-01	3.57E-03	5.95E-03
4335	640211.0	4167723.7	Worker	Scenario 4	1.34E-01	3.94E-03	6.74E-03
4336	640261.0	4167723.7	Worker	Scenario 4	1.48E-01	4.38E-03	7.48E-03
4337	640311.0	4167723.7	Worker	Scenario 4	1.64E-01	4.89E-03	8.14E-03
4338	640361.0	4167723.7	Worker	Scenario 4	1.81E-01	5.46E-03	8.65E-03
4339	643161.0	4167723.7	Worker	Scenario 4	3.88E-01	7.04E-03	5.24E-03
4340	643211.0	4167723.7	Worker	Scenario 4	3.52E-01	6.35E-03	5.14E-03
4341	643261.0	4167723.7	Worker	Scenario 4	3.36E-01	5.92E-03	5.00E-03
4342	643311.0	4167723.7	Worker	Scenario 4	3.36E-01	5.70E-03	4.82E-03
4343	640011.0	4167773.7	Worker	Scenario 4	1.02E-01	3.03E-03	5.20E-03
4344	640061.0	4167773.7	Worker	Scenario 4	1.13E-01	3.34E-03	5.80E-03
4345	640111.0	4167773.7	Worker	Scenario 4	1.25E-01	3.71E-03	6.38E-03
4346	640161.0	4167773.7	Worker	Scenario 4	1.38E-01	4.14E-03	6.88E-03
4347	640211.0	4167773.7	Worker	Scenario 4	1.55E-01	4.68E-03	7.26E-03
4348	640261.0	4167773.7	Worker	Scenario 4	1.76E-01	5.35E-03	7.47E-03
4349	643161.0	4167773.7	Worker	Scenario 4	3.52E-01	6.36E-03	5.30E-03
4350	643211.0	4167773.7	Worker	Scenario 4	3.22E-01	5.80E-03	5.14E-03
4351	643261.0	4167773.7	Worker	Scenario 4	3.03E-01	5.41E-03	4.94E-03
4352	639961.0	4167823.7	Worker	Scenario 4	1.04E-01	3.11E-03	5.52E-03
4353	640011.0	4167823.7	Worker	Scenario 4	1.14E-01	3.44E-03	5.92E-03
4354	640061.0	4167823.7	Worker	Scenario 4	1.28E-01	3.85E-03	6.23E-03
4355	640111.0	4167823.7	Worker	Scenario 4	1.44E-01	4.37E-03	6.41E-03
4356	640161.0	4167823.7	Worker	Scenario 4	1.63E-01	5.03E-03	6.57E-03
4357	643111.0	4167823.7	Worker	Scenario 4	3.59E-01	6.42E-03	5.45E-03
4358	643161.0	4167823.7	Worker	Scenario 4	3.26E-01	5.84E-03	5.27E-03
4359	643211.0	4167823.7	Worker	Scenario 4	3.01E-01	5.39E-03	5.06E-03
4360	643261.0	4167823.7	Worker	Scenario 4	2.83E-01	5.05E-03	4.89E-03
4361	639861.0	4167873.7	Worker	Scenario 4	9.61E-02	2.89E-03	5.16E-03
4362	639911.0	4167873.7	Worker	Scenario 4	1.05E-01	3.19E-03	5.41E-03
4363	639961.0	4167873.7	Worker	Scenario 4	1.18E-01	3.57E-03	5.57E-03
4364	640011.0	4167873.7	Worker	Scenario 4	1.31E-01	4.01E-03	5.64E-03
4365	640061.0	4167873.7	Worker	Scenario 4	1.49E-01	4.60E-03	5.97E-03
4366	643061.0	4167873.7	Worker	Scenario 4	3.58E-01	6.39E-03	5.61E-03
4367	643111.0	4167873.7	Worker	Scenario 4	3.32E-01	5.89E-03	5.31E-03
4368	643161.0	4167873.7	Worker	Scenario 4	3.06E-01	5.44E-03	5.12E-03
4369	643211.0	4167873.7	Worker	Scenario 4	2.84E-01	5.07E-03	5.01E-03
4370	639811.0	4167923.7	Worker	Scenario 4	9.72E-02	2.95E-03	4.90E-03
4371	639861.0	4167923.7	Worker	Scenario 4	1.07E-01	3.26E-03	4.95E-03
4372	639911.0	4167923.7	Worker	Scenario 4	1.20E-01	3.68E-03	5.17E-03
4373	639961.0	4167923.7	Worker	Scenario 4	1.36E-01	4.18E-03	5.46E-03
4374	640011.0	4167923.7	Worker	Scenario 4	1.55E-01	4.85E-03	5.77E-03
4375	643011.0	4167923.7	Worker	Scenario 4	3.51E-01	6.31E-03	5.75E-03
4376	643061.0	4167923.7	Worker	Scenario 4	3.31E-01	5.88E-03	5.44E-03
4377	643111.0	4167923.7	Worker	Scenario 4	3.10E-01	5.48E-03	5.23E-03
4378	643161.0	4167923.7	Worker	Scenario 4	2.90E-01	5.11E-03	5.13E-03
4379	639711.0	4167973.7	Worker	Scenario 4	9.05E-02	2.75E-03	4.41E-03
4380	639761.0	4167973.7	Worker	Scenario 4	1.01E-01	3.06E-03	4.53E-03
4381	639811.0	4167973.7	Worker	Scenario 4	1.08E-01	3.32E-03	4.75E-03
4382	639861.0	4167973.7	Worker	Scenario 4	1.22E-01	3.77E-03	5.03E-03
4383	639911.0	4167973.7	Worker	Scenario 4	1.39E-01	4.34E-03	5.24E-03
4384	642911.0	4167973.7	Worker	Scenario 4	3.63E-01	6.68E-03	6.11E-03
4385	642961.0	4167973.7	Worker	Scenario 4	3.44E-01	6.22E-03	5.87E-03
4386	643011.0	4167973.7	Worker	Scenario 4	3.27E-01	5.82E-03	5.61E-03
4387	643061.0	4167973.7	Worker	Scenario 4	3.10E-01	5.47E-03	5.44E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4388	643111.0	4167973.7	Worker	Scenario 4	2.93E-01	5.14E-03	5.23E-03
4389	639661.0	4168023.7	Worker	Scenario 4	9.09E-02	2.79E-03	4.21E-03
4390	639711.0	4168023.7	Worker	Scenario 4	1.01E-01	3.10E-03	4.41E-03
4391	639761.0	4168023.7	Worker	Scenario 4	1.11E-01	3.43E-03	4.63E-03
4392	639811.0	4168023.7	Worker	Scenario 4	1.25E-01	3.90E-03	4.75E-03
4393	642861.0	4168023.7	Worker	Scenario 4	3.54E-01	6.58E-03	6.30E-03
4394	642911.0	4168023.7	Worker	Scenario 4	3.39E-01	6.14E-03	5.93E-03
4395	642961.0	4168023.7	Worker	Scenario 4	3.23E-01	5.76E-03	5.75E-03
4396	643011.0	4168023.7	Worker	Scenario 4	3.08E-01	5.43E-03	5.55E-03
4397	643061.0	4168023.7	Worker	Scenario 4	2.93E-01	5.13E-03	5.32E-03
4398	639561.0	4168073.7	Worker	Scenario 4	8.38E-02	2.61E-03	3.90E-03
4399	639611.0	4168073.7	Worker	Scenario 4	9.14E-02	2.85E-03	4.11E-03
4400	639661.0	4168073.7	Worker	Scenario 4	1.01E-01	3.14E-03	4.26E-03
4401	639711.0	4168073.7	Worker	Scenario 4	1.12E-01	3.48E-03	4.33E-03
4402	639761.0	4168073.7	Worker	Scenario 4	1.27E-01	3.97E-03	4.30E-03
4403	642761.0	4168073.7	Worker	Scenario 4	3.63E-01	6.98E-03	6.82E-03
4404	642811.0	4168073.7	Worker	Scenario 4	3.48E-01	6.48E-03	6.70E-03
4405	642861.0	4168073.7	Worker	Scenario 4	3.34E-01	6.06E-03	6.67E-03
4406	642911.0	4168073.7	Worker	Scenario 4	3.19E-01	5.70E-03	6.39E-03
4407	642961.0	4168073.7	Worker	Scenario 4	3.05E-01	5.38E-03	5.93E-03
4408	639561.0	4168123.7	Worker	Scenario 4	9.15E-02	2.89E-03	3.92E-03
4409	639611.0	4168123.7	Worker	Scenario 4	1.01E-01	3.18E-03	3.95E-03
4410	639661.0	4168123.7	Worker	Scenario 4	1.13E-01	3.56E-03	3.90E-03
4411	642661.0	4168123.7	Worker	Scenario 4	3.74E-01	7.49E-03	7.53E-03
4412	642711.0	4168123.7	Worker	Scenario 4	3.58E-01	6.88E-03	7.25E-03
4413	642761.0	4168123.7	Worker	Scenario 4	3.43E-01	6.39E-03	6.98E-03
4414	642811.0	4168123.7	Worker	Scenario 4	3.30E-01	5.99E-03	6.68E-03
4415	642861.0	4168123.7	Worker	Scenario 4	3.17E-01	5.65E-03	6.19E-03
4416	642911.0	4168123.7	Worker	Scenario 4	3.04E-01	5.34E-03	6.36E-03
4417	639511.0	4168173.7	Worker	Scenario 4	9.20E-02	2.96E-03	3.60E-03
4418	639561.0	4168173.7	Worker	Scenario 4	1.01E-01	3.25E-03	3.57E-03
4419	642611.0	4168173.7	Worker	Scenario 4	3.73E-01	7.35E-03	7.78E-03
4420	642661.0	4168173.7	Worker	Scenario 4	3.56E-01	6.78E-03	7.41E-03
4421	642711.0	4168173.7	Worker	Scenario 4	3.41E-01	6.32E-03	7.11E-03
4422	642761.0	4168173.7	Worker	Scenario 4	3.27E-01	5.93E-03	6.84E-03
4423	642811.0	4168173.7	Worker	Scenario 4	3.15E-01	5.60E-03	6.59E-03
4424	639311.0	4168223.7	Worker	Scenario 4	7.31E-02	2.37E-03	3.30E-03
4425	639361.0	4168223.7	Worker	Scenario 4	7.88E-02	2.57E-03	3.33E-03
4426	639411.0	4168223.7	Worker	Scenario 4	8.56E-02	2.79E-03	3.30E-03
4427	639461.0	4168223.7	Worker	Scenario 4	9.31E-02	3.05E-03	3.29E-03
4428	639511.0	4168223.7	Worker	Scenario 4	1.02E-01	3.34E-03	3.39E-03
4429	642511.0	4168223.7	Worker	Scenario 4	3.96E-01	7.97E-03	7.95E-03
4430	642561.0	4168223.7	Worker	Scenario 4	3.74E-01	7.24E-03	7.54E-03
4431	642611.0	4168223.7	Worker	Scenario 4	3.56E-01	6.69E-03	7.44E-03
4432	642661.0	4168223.7	Worker	Scenario 4	3.41E-01	6.25E-03	7.19E-03
4433	642711.0	4168223.7	Worker	Scenario 4	3.27E-01	5.88E-03	6.98E-03
4434	642761.0	4168223.7	Worker	Scenario 4	3.14E-01	5.56E-03	6.61E-03
4435	639261.0	4168273.7	Worker	Scenario 4	7.45E-02	2.45E-03	3.07E-03
4436	639311.0	4168273.7	Worker	Scenario 4	8.03E-02	2.65E-03	3.04E-03
4437	639361.0	4168273.7	Worker	Scenario 4	8.69E-02	2.89E-03	3.03E-03
4438	639411.0	4168273.7	Worker	Scenario 4	9.49E-02	3.16E-03	3.19E-03
4439	642461.0	4168273.7	Worker	Scenario 4	4.01E-01	7.84E-03	8.28E-03
4440	642511.0	4168273.7	Worker	Scenario 4	3.77E-01	7.15E-03	7.83E-03
4441	642561.0	4168273.7	Worker	Scenario 4	3.58E-01	6.62E-03	7.35E-03
4442	642611.0	4168273.7	Worker	Scenario 4	3.42E-01	6.19E-03	7.13E-03
4443	642661.0	4168273.7	Worker	Scenario 4	3.27E-01	5.83E-03	6.94E-03
4444	639211.0	4168323.7	Worker	Scenario 4	7.63E-02	2.54E-03	2.82E-03
4445	639261.0	4168323.7	Worker	Scenario 4	8.22E-02	2.76E-03	2.82E-03
4446	639311.0	4168323.7	Worker	Scenario 4	8.94E-02	3.02E-03	3.01E-03
4447	639361.0	4168323.7	Worker	Scenario 4	9.75E-02	3.32E-03	3.23E-03
4448	642461.0	4168323.7	Worker	Scenario 4	3.82E-01	7.05E-03	7.76E-03
4449	642511.0	4168323.7	Worker	Scenario 4	3.61E-01	6.55E-03	7.69E-03
4450	642561.0	4168323.7	Worker	Scenario 4	3.44E-01	6.14E-03	7.35E-03
4451	642611.0	4168323.7	Worker	Scenario 4	3.28E-01	5.79E-03	6.79E-03
4452	639111.0	4168373.7	Worker	Scenario 4	7.26E-02	2.43E-03	2.62E-03
4453	639161.0	4168373.7	Worker	Scenario 4	7.85E-02	2.65E-03	2.63E-03
4454	639211.0	4168373.7	Worker	Scenario 4	8.48E-02	2.89E-03	2.84E-03
4455	639261.0	4168373.7	Worker	Scenario 4	9.23E-02	3.17E-03	3.03E-03
4456	642361.0	4168373.7	Worker	Scenario 4	4.12E-01	7.52E-03	7.72E-03
4457	642411.0	4168373.7	Worker	Scenario 4	3.86E-01	6.94E-03	7.73E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4458	642461.0	4168373.7	Worker	Scenario 4	3.64E-01	6.47E-03	7.45E-03
4459	642511.0	4168373.7	Worker	Scenario 4	3.46E-01	6.08E-03	7.23E-03
4460	642561.0	4168373.7	Worker	Scenario 4	3.29E-01	5.74E-03	7.17E-03
4461	639061.0	4168423.7	Worker	Scenario 4	7.43E-02	2.51E-03	2.48E-03
4462	639111.0	4168423.7	Worker	Scenario 4	8.05E-02	2.75E-03	2.68E-03
4463	639161.0	4168423.7	Worker	Scenario 4	8.78E-02	3.03E-03	2.86E-03
4464	642261.0	4168423.7	Worker	Scenario 4	4.47E-01	7.95E-03	8.18E-03
4465	642311.0	4168423.7	Worker	Scenario 4	4.15E-01	7.33E-03	7.95E-03
4466	642361.0	4168423.7	Worker	Scenario 4	3.89E-01	6.81E-03	7.95E-03
4467	642411.0	4168423.7	Worker	Scenario 4	3.66E-01	6.38E-03	7.14E-03
4468	642461.0	4168423.7	Worker	Scenario 4	3.47E-01	6.01E-03	7.19E-03
4469	642511.0	4168423.7	Worker	Scenario 4	3.29E-01	5.68E-03	6.97E-03
4470	639011.0	4168473.7	Worker	Scenario 4	7.64E-02	2.61E-03	2.54E-03
4471	639061.0	4168473.7	Worker	Scenario 4	8.31E-02	2.87E-03	2.70E-03
4472	639111.0	4168473.7	Worker	Scenario 4	9.09E-02	3.18E-03	2.81E-03
4473	642161.0	4168473.7	Worker	Scenario 4	4.84E-01	8.28E-03	8.27E-03
4474	642211.0	4168473.7	Worker	Scenario 4	4.46E-01	7.67E-03	7.83E-03
4475	642261.0	4168473.7	Worker	Scenario 4	4.15E-01	7.14E-03	7.83E-03
4476	642311.0	4168473.7	Worker	Scenario 4	3.89E-01	6.68E-03	7.57E-03
4477	642361.0	4168473.7	Worker	Scenario 4	3.66E-01	6.28E-03	7.47E-03
4478	642411.0	4168473.7	Worker	Scenario 4	3.46E-01	5.93E-03	7.36E-03
4479	642461.0	4168473.7	Worker	Scenario 4	3.28E-01	5.62E-03	6.73E-03
4480	638911.0	4168523.7	Worker	Scenario 4	7.19E-02	2.45E-03	2.41E-03
4481	638961.0	4168523.7	Worker	Scenario 4	7.88E-02	2.72E-03	2.55E-03
4482	639011.0	4168523.7	Worker	Scenario 4	8.67E-02	3.03E-03	2.65E-03
4483	642061.0	4168523.7	Worker	Scenario 4	5.18E-01	8.52E-03	8.30E-03
4484	642111.0	4168523.7	Worker	Scenario 4	4.75E-01	7.94E-03	8.13E-03
4485	642161.0	4168523.7	Worker	Scenario 4	4.40E-01	7.41E-03	7.92E-03
4486	642211.0	4168523.7	Worker	Scenario 4	4.09E-01	6.95E-03	7.71E-03
4487	642261.0	4168523.7	Worker	Scenario 4	3.84E-01	6.53E-03	7.48E-03
4488	642311.0	4168523.7	Worker	Scenario 4	3.62E-01	6.17E-03	7.29E-03
4489	642361.0	4168523.7	Worker	Scenario 4	3.42E-01	5.84E-03	7.11E-03
4490	638861.0	4168573.7	Worker	Scenario 4	7.34E-02	2.53E-03	2.42E-03
4491	638911.0	4168573.7	Worker	Scenario 4	8.11E-02	2.83E-03	2.51E-03
4492	638961.0	4168573.7	Worker	Scenario 4	9.06E-02	3.21E-03	2.56E-03
4493	641911.0	4168573.7	Worker	Scenario 4	5.71E-01	9.18E-03	8.84E-03
4494	641961.0	4168573.7	Worker	Scenario 4	5.26E-01	8.59E-03	7.79E-03
4495	642011.0	4168573.7	Worker	Scenario 4	4.87E-01	8.05E-03	8.04E-03
4496	642061.0	4168573.7	Worker	Scenario 4	4.53E-01	7.57E-03	7.91E-03
4497	642111.0	4168573.7	Worker	Scenario 4	4.23E-01	7.13E-03	7.71E-03
4498	642161.0	4168573.7	Worker	Scenario 4	3.96E-01	6.72E-03	7.39E-03
4499	642211.0	4168573.7	Worker	Scenario 4	3.73E-01	6.35E-03	7.39E-03
4500	642261.0	4168573.7	Worker	Scenario 4	3.53E-01	6.02E-03	7.12E-03
4501	638811.0	4168623.7	Worker	Scenario 4	7.64E-02	2.65E-03	2.38E-03
4502	638861.0	4168623.7	Worker	Scenario 4	8.38E-02	2.97E-03	2.42E-03
4503	641811.0	4168623.7	Worker	Scenario 4	5.60E-01	9.24E-03	1.15E-02
4504	641861.0	4168623.7	Worker	Scenario 4	5.18E-01	8.63E-03	1.16E-02
4505	641911.0	4168623.7	Worker	Scenario 4	4.82E-01	8.10E-03	9.39E-03
4506	641961.0	4168623.7	Worker	Scenario 4	4.50E-01	7.63E-03	7.20E-03
4507	642011.0	4168623.7	Worker	Scenario 4	4.22E-01	7.20E-03	7.74E-03
4508	642061.0	4168623.7	Worker	Scenario 4	3.98E-01	6.82E-03	7.58E-03
4509	642111.0	4168623.7	Worker	Scenario 4	3.76E-01	6.47E-03	7.40E-03
4510	638711.0	4168673.7	Worker	Scenario 4	7.27E-02	2.48E-03	2.25E-03
4511	638761.0	4168673.7	Worker	Scenario 4	7.98E-02	2.78E-03	2.29E-03
4512	638811.0	4168673.7	Worker	Scenario 4	8.85E-02	3.17E-03	2.34E-03
4513	641661.0	4168673.7	Worker	Scenario 4	5.68E-01	1.00E-02	7.85E-03
4514	641711.0	4168673.7	Worker	Scenario 4	5.36E-01	9.39E-03	8.09E-03
4515	641761.0	4168673.7	Worker	Scenario 4	5.04E-01	8.80E-03	8.36E-03
4516	641811.0	4168673.7	Worker	Scenario 4	4.73E-01	8.26E-03	1.07E-02
4517	641861.0	4168673.7	Worker	Scenario 4	4.44E-01	7.77E-03	1.14E-02
4518	641911.0	4168673.7	Worker	Scenario 4	4.17E-01	7.32E-03	9.92E-03
4519	641961.0	4168673.7	Worker	Scenario 4	3.94E-01	6.92E-03	7.50E-03
4520	642011.0	4168673.7	Worker	Scenario 4	3.73E-01	6.56E-03	7.15E-03
4521	638661.0	4168723.7	Worker	Scenario 4	7.48E-02	2.56E-03	2.18E-03
4522	638711.0	4168723.7	Worker	Scenario 4	8.32E-02	2.92E-03	2.22E-03
4523	641511.0	4168723.7	Worker	Scenario 4	5.69E-01	1.19E-02	7.87E-03
4524	641561.0	4168723.7	Worker	Scenario 4	5.36E-01	1.07E-02	7.84E-03
4525	641611.0	4168723.7	Worker	Scenario 4	5.08E-01	9.85E-03	7.81E-03
4526	641661.0	4168723.7	Worker	Scenario 4	4.82E-01	9.15E-03	7.60E-03
4527	641711.0	4168723.7	Worker	Scenario 4	4.57E-01	8.54E-03	7.71E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4528	641761.0	4168723.7	Worker	Scenario 4	4.33E-01	8.02E-03	7.85E-03
4529	641811.0	4168723.7	Worker	Scenario 4	4.10E-01	7.54E-03	9.82E-03
4530	641861.0	4168723.7	Worker	Scenario 4	3.89E-01	7.12E-03	1.11E-02
4531	641911.0	4168723.7	Worker	Scenario 4	3.69E-01	6.73E-03	1.03E-02
4532	638561.0	4168773.7	Worker	Scenario 4	6.92E-02	2.31E-03	2.07E-03
4533	638611.0	4168773.7	Worker	Scenario 4	7.66E-02	2.62E-03	2.11E-03
4534	638661.0	4168773.7	Worker	Scenario 4	8.62E-02	3.05E-03	2.16E-03
4535	641461.0	4168773.7	Worker	Scenario 4	5.47E-01	1.31E-02	7.51E-03
4536	641511.0	4168773.7	Worker	Scenario 4	5.03E-01	1.13E-02	7.48E-03
4537	641561.0	4168773.7	Worker	Scenario 4	4.71E-01	1.01E-02	7.44E-03
4538	641611.0	4168773.7	Worker	Scenario 4	4.46E-01	9.22E-03	7.40E-03
4539	641661.0	4168773.7	Worker	Scenario 4	4.24E-01	8.52E-03	7.33E-03
4540	641711.0	4168773.7	Worker	Scenario 4	4.03E-01	7.94E-03	7.29E-03
4541	641761.0	4168773.7	Worker	Scenario 4	3.83E-01	7.44E-03	7.34E-03
4542	638511.0	4168823.7	Worker	Scenario 4	6.99E-02	2.32E-03	2.01E-03
4543	638561.0	4168823.7	Worker	Scenario 4	7.81E-02	2.68E-03	2.06E-03
4544	641461.0	4168823.7	Worker	Scenario 4	4.98E-01	1.28E-02	7.16E-03
4545	641511.0	4168823.7	Worker	Scenario 4	4.54E-01	1.08E-02	7.12E-03
4546	641561.0	4168823.7	Worker	Scenario 4	4.24E-01	9.61E-03	7.08E-03
4547	641611.0	4168823.7	Worker	Scenario 4	4.00E-01	8.72E-03	7.06E-03
4548	638461.0	4168873.7	Worker	Scenario 4	6.73E-02	2.25E-03	1.96E-03
4549	638511.0	4168873.7	Worker	Scenario 4	7.77E-02	2.67E-03	1.98E-03
4550	640211.0	4168873.7	Worker	Scenario 4	2.47E-01	7.10E-03	4.19E-03
4551	641461.0	4168873.7	Worker	Scenario 4	4.58E-01	1.23E-02	6.83E-03
4552	641511.0	4168873.7	Worker	Scenario 4	4.15E-01	1.04E-02	6.78E-03
4553	641561.0	4168873.7	Worker	Scenario 4	3.86E-01	9.17E-03	6.78E-03
4554	638361.0	4168923.7	Worker	Scenario 4	5.72E-02	1.87E-03	1.88E-03
4555	638411.0	4168923.7	Worker	Scenario 4	6.50E-02	2.17E-03	1.89E-03
4556	638461.0	4168923.7	Worker	Scenario 4	7.55E-02	2.60E-03	1.88E-03
4557	640111.0	4168923.7	Worker	Scenario 4	2.47E-01	7.41E-03	3.88E-03
4558	640161.0	4168923.7	Worker	Scenario 4	2.39E-01	7.00E-03	3.97E-03
4559	640211.0	4168923.7	Worker	Scenario 4	2.34E-01	6.74E-03	4.04E-03
4560	640261.0	4168923.7	Worker	Scenario 4	2.32E-01	6.60E-03	4.16E-03
4561	640311.0	4168923.7	Worker	Scenario 4	2.32E-01	6.55E-03	4.26E-03
4562	640361.0	4168923.7	Worker	Scenario 4	2.34E-01	6.59E-03	4.34E-03
4563	641461.0	4168923.7	Worker	Scenario 4	4.25E-01	1.17E-02	6.53E-03
4564	641511.0	4168923.7	Worker	Scenario 4	3.84E-01	9.96E-03	6.48E-03
4565	641561.0	4168923.7	Worker	Scenario 4	3.57E-01	8.77E-03	6.50E-03
4566	638311.0	4168973.7	Worker	Scenario 4	5.64E-02	1.82E-03	1.81E-03
4567	638361.0	4168973.7	Worker	Scenario 4	6.38E-02	2.12E-03	1.81E-03
4568	638411.0	4168973.7	Worker	Scenario 4	7.39E-02	2.53E-03	1.77E-03
4569	640061.0	4168973.7	Worker	Scenario 4	2.43E-01	7.48E-03	3.68E-03
4570	640111.0	4168973.7	Worker	Scenario 4	2.34E-01	7.03E-03	3.81E-03
4571	640161.0	4168973.7	Worker	Scenario 4	2.28E-01	6.73E-03	3.88E-03
4572	640211.0	4168973.7	Worker	Scenario 4	2.25E-01	6.55E-03	3.93E-03
4573	640261.0	4168973.7	Worker	Scenario 4	2.24E-01	6.46E-03	4.03E-03
4574	640311.0	4168973.7	Worker	Scenario 4	2.24E-01	6.45E-03	4.12E-03
4575	640361.0	4168973.7	Worker	Scenario 4	2.27E-01	6.55E-03	4.09E-03
4576	640411.0	4168973.7	Worker	Scenario 4	2.32E-01	6.81E-03	4.28E-03
4577	641461.0	4168973.7	Worker	Scenario 4	3.99E-01	1.14E-02	6.26E-03
4578	641511.0	4168973.7	Worker	Scenario 4	3.60E-01	9.61E-03	6.21E-03
4579	641561.0	4168973.7	Worker	Scenario 4	3.32E-01	8.41E-03	6.22E-03
4580	638261.0	4169023.7	Worker	Scenario 4	5.57E-02	1.79E-03	1.73E-03
4581	638311.0	4169023.7	Worker	Scenario 4	6.27E-02	2.06E-03	1.70E-03
4582	638361.0	4169023.7	Worker	Scenario 4	7.24E-02	2.46E-03	1.65E-03
4583	640011.0	4169023.7	Worker	Scenario 4	2.41E-01	7.68E-03	3.49E-03
4584	640061.0	4169023.7	Worker	Scenario 4	2.31E-01	7.18E-03	3.65E-03
4585	640111.0	4169023.7	Worker	Scenario 4	2.25E-01	6.85E-03	3.72E-03
4586	640161.0	4169023.7	Worker	Scenario 4	2.21E-01	6.63E-03	3.76E-03
4587	640311.0	4169023.7	Worker	Scenario 4	2.19E-01	6.49E-03	3.98E-03
4588	640361.0	4169023.7	Worker	Scenario 4	2.22E-01	6.64E-03	4.07E-03
4589	640411.0	4169023.7	Worker	Scenario 4	2.28E-01	6.96E-03	4.11E-03
4590	641461.0	4169023.7	Worker	Scenario 4	3.79E-01	1.11E-02	5.98E-03
4591	641511.0	4169023.7	Worker	Scenario 4	3.38E-01	9.30E-03	5.93E-03
4592	641561.0	4169023.7	Worker	Scenario 4	3.11E-01	8.09E-03	5.95E-03
4593	638161.0	4169073.7	Worker	Scenario 4	4.94E-02	1.54E-03	1.66E-03
4594	638211.0	4169073.7	Worker	Scenario 4	5.49E-02	1.74E-03	1.64E-03
4595	638261.0	4169073.7	Worker	Scenario 4	6.16E-02	2.00E-03	1.59E-03
4596	639961.0	4169073.7	Worker	Scenario 4	2.41E-01	8.05E-03	3.30E-03
4597	640011.0	4169073.7	Worker	Scenario 4	2.31E-01	7.52E-03	3.50E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4598	640061.0	4169073.7	Worker	Scenario 4	2.24E-01	7.15E-03	3.56E-03
4599	640111.0	4169073.7	Worker	Scenario 4	2.19E-01	6.90E-03	3.60E-03
4600	640311.0	4169073.7	Worker	Scenario 4	2.16E-01	6.68E-03	3.82E-03
4601	640361.0	4169073.7	Worker	Scenario 4	2.19E-01	6.86E-03	3.94E-03
4602	640411.0	4169073.7	Worker	Scenario 4	2.26E-01	7.25E-03	3.96E-03
4603	641461.0	4169073.7	Worker	Scenario 4	3.61E-01	1.09E-02	5.73E-03
4604	641511.0	4169073.7	Worker	Scenario 4	3.21E-01	9.02E-03	5.71E-03
4605	641561.0	4169073.7	Worker	Scenario 4	2.94E-01	7.78E-03	5.73E-03
4606	638161.0	4169123.7	Worker	Scenario 4	5.24E-02	1.65E-03	1.53E-03
4607	638211.0	4169123.7	Worker	Scenario 4	5.93E-02	1.91E-03	1.48E-03
4608	639911.0	4169123.7	Worker	Scenario 4	2.47E-01	8.79E-03	3.13E-03
4609	639961.0	4169123.7	Worker	Scenario 4	2.35E-01	8.19E-03	3.34E-03
4610	640011.0	4169123.7	Worker	Scenario 4	2.27E-01	7.77E-03	3.40E-03
4611	640061.0	4169123.7	Worker	Scenario 4	2.22E-01	7.47E-03	3.44E-03
4612	640311.0	4169123.7	Worker	Scenario 4	2.16E-01	7.11E-03	3.78E-03
4613	640361.0	4169123.7	Worker	Scenario 4	2.19E-01	7.32E-03	3.80E-03
4614	640411.0	4169123.7	Worker	Scenario 4	2.26E-01	7.77E-03	4.06E-03
4615	641461.0	4169123.7	Worker	Scenario 4	3.46E-01	1.07E-02	5.52E-03
4616	641511.0	4169123.7	Worker	Scenario 4	3.05E-01	8.68E-03	5.50E-03
4617	641561.0	4169123.7	Worker	Scenario 4	2.78E-01	7.44E-03	5.50E-03
4618	638061.0	4169173.7	Worker	Scenario 4	4.51E-02	1.39E-03	1.48E-03
4619	638161.0	4169173.7	Worker	Scenario 4	5.62E-02	1.80E-03	1.45E-03
4620	639861.0	4169173.7	Worker	Scenario 4	2.64E-01	1.04E-02	2.97E-03
4621	639911.0	4169173.7	Worker	Scenario 4	2.50E-01	9.63E-03	3.20E-03
4622	639961.0	4169173.7	Worker	Scenario 4	2.40E-01	9.09E-03	3.25E-03
4623	640011.0	4169173.7	Worker	Scenario 4	2.33E-01	8.70E-03	3.28E-03
4624	640311.0	4169173.7	Worker	Scenario 4	2.23E-01	8.10E-03	3.63E-03
4625	640361.0	4169173.7	Worker	Scenario 4	2.26E-01	8.31E-03	3.66E-03
4626	640411.0	4169173.7	Worker	Scenario 4	2.33E-01	8.76E-03	4.25E-03
4627	641461.0	4169173.7	Worker	Scenario 4	3.29E-01	1.02E-02	5.31E-03
4628	641511.0	4169173.7	Worker	Scenario 4	2.89E-01	8.25E-03	5.30E-03
4629	641561.0	4169173.7	Worker	Scenario 4	2.63E-01	7.06E-03	5.29E-03
4630	638011.0	4169223.7	Worker	Scenario 4	4.33E-02	1.31E-03	1.38E-03
4631	638061.0	4169223.7	Worker	Scenario 4	4.75E-02	1.47E-03	1.36E-03
4632	639661.0	4169223.7	Worker	Scenario 4	2.89E-01	1.16E-02	2.87E-03
4633	639761.0	4169223.7	Worker	Scenario 4	3.66E-01	1.81E-02	2.70E-03
4634	639811.0	4169223.7	Worker	Scenario 4	3.19E-01	1.50E-02	2.82E-03
4635	639861.0	4169223.7	Worker	Scenario 4	2.96E-01	1.35E-02	3.06E-03
4636	639911.0	4169223.7	Worker	Scenario 4	2.81E-01	1.27E-02	3.11E-03
4637	639961.0	4169223.7	Worker	Scenario 4	2.71E-01	1.21E-02	3.17E-03
4638	640311.0	4169223.7	Worker	Scenario 4	2.50E-01	1.07E-02	3.51E-03
4639	640361.0	4169223.7	Worker	Scenario 4	2.53E-01	1.08E-02	3.86E-03
4640	640411.0	4169223.7	Worker	Scenario 4	2.59E-01	1.12E-02	4.27E-03
4641	641461.0	4169223.7	Worker	Scenario 4	3.12E-01	9.54E-03	5.12E-03
4642	641511.0	4169223.7	Worker	Scenario 4	2.74E-01	7.74E-03	5.10E-03
4643	641561.0	4169223.7	Worker	Scenario 4	2.49E-01	6.64E-03	5.09E-03
4644	637961.0	4169273.7	Worker	Scenario 4	4.17E-02	1.25E-03	1.31E-03
4645	638011.0	4169273.7	Worker	Scenario 4	4.56E-02	1.39E-03	1.41E-03
4646	638061.0	4169273.7	Worker	Scenario 4	5.03E-02	1.56E-03	1.52E-03
4647	639611.0	4169273.7	Worker	Scenario 4	2.50E-01	8.97E-03	2.77E-03
4648	639661.0	4169273.7	Worker	Scenario 4	2.87E-01	1.22E-02	2.71E-03
4649	639761.0	4169273.7	Worker	Scenario 4	4.51E-01	2.59E-02	2.68E-03
4650	639811.0	4169273.7	Worker	Scenario 4	3.68E-01	1.96E-02	2.92E-03
4651	639861.0	4169273.7	Worker	Scenario 4	3.37E-01	1.74E-02	3.00E-03
4652	639911.0	4169273.7	Worker	Scenario 4	3.43E-01	1.82E-02	3.06E-03
4653	640311.0	4169273.7	Worker	Scenario 4	3.18E-01	1.65E-02	3.45E-03
4654	640361.0	4169273.7	Worker	Scenario 4	3.25E-01	1.71E-02	3.99E-03
4655	640411.0	4169273.7	Worker	Scenario 4	3.47E-01	1.88E-02	4.15E-03
4656	641461.0	4169273.7	Worker	Scenario 4	2.95E-01	8.81E-03	4.93E-03
4657	641511.0	4169273.7	Worker	Scenario 4	2.59E-01	7.20E-03	4.92E-03
4658	641561.0	4169273.7	Worker	Scenario 4	2.36E-01	6.22E-03	4.89E-03
4659	637911.0	4169323.7	Worker	Scenario 4	4.01E-02	1.19E-03	1.33E-03
4660	637961.0	4169323.7	Worker	Scenario 4	4.37E-02	1.31E-03	1.43E-03
4661	638011.0	4169323.7	Worker	Scenario 4	4.79E-02	1.46E-03	1.53E-03
4662	639611.0	4169323.7	Worker	Scenario 4	2.35E-01	8.44E-03	2.62E-03
4663	639661.0	4169323.7	Worker	Scenario 4	2.76E-01	1.20E-02	2.50E-03
4664	639761.0	4169323.7	Worker	Scenario 4	3.08E-01	1.51E-02	2.80E-03
4665	639811.0	4169323.7	Worker	Scenario 4	2.58E-01	1.13E-02	2.90E-03
4666	640311.0	4169323.7	Worker	Scenario 4	2.20E-01	8.95E-03	3.67E-03
4667	640361.0	4169323.7	Worker	Scenario 4	2.24E-01	9.26E-03	3.99E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4668	640411.0	4169323.7	Worker	Scenario 4	2.31E-01	9.76E-03	4.03E-03
4669	641461.0	4169323.7	Worker	Scenario 4	2.79E-01	8.07E-03	4.76E-03
4670	641511.0	4169323.7	Worker	Scenario 4	2.45E-01	6.68E-03	4.75E-03
4671	641561.0	4169323.7	Worker	Scenario 4	2.24E-01	5.82E-03	4.71E-03
4672	637861.0	4169373.7	Worker	Scenario 4	3.85E-02	1.12E-03	1.36E-03
4673	637911.0	4169373.7	Worker	Scenario 4	4.18E-02	1.23E-03	1.45E-03
4674	637961.0	4169373.7	Worker	Scenario 4	4.58E-02	1.37E-03	1.54E-03
4675	639561.0	4169373.7	Worker	Scenario 4	2.16E-01	7.09E-03	2.54E-03
4676	639611.0	4169373.7	Worker	Scenario 4	2.21E-01	7.89E-03	2.41E-03
4677	639661.0	4169373.7	Worker	Scenario 4	2.50E-01	1.05E-02	2.46E-03
4678	640311.0	4169373.7	Worker	Scenario 4	1.85E-01	6.49E-03	3.76E-03
4679	640361.0	4169373.7	Worker	Scenario 4	1.88E-01	6.71E-03	3.85E-03
4680	640411.0	4169373.7	Worker	Scenario 4	1.94E-01	7.09E-03	3.87E-03
4681	641461.0	4169373.7	Worker	Scenario 4	2.64E-01	7.41E-03	4.60E-03
4682	641511.0	4169373.7	Worker	Scenario 4	2.33E-01	6.21E-03	4.59E-03
4683	641561.0	4169373.7	Worker	Scenario 4	2.14E-01	5.46E-03	4.54E-03
4684	637861.0	4169423.7	Worker	Scenario 4	4.00E-02	1.16E-03	1.46E-03
4685	637911.0	4169423.7	Worker	Scenario 4	4.36E-02	1.29E-03	1.53E-03
4686	639511.0	4169423.7	Worker	Scenario 4	2.05E-01	6.43E-03	2.46E-03
4687	639561.0	4169423.7	Worker	Scenario 4	2.02E-01	6.59E-03	2.33E-03
4688	639611.0	4169423.7	Worker	Scenario 4	2.07E-01	7.32E-03	2.37E-03
4689	639661.0	4169423.7	Worker	Scenario 4	2.32E-01	9.57E-03	2.56E-03
4690	640311.0	4169423.7	Worker	Scenario 4	1.69E-01	5.54E-03	3.73E-03
4691	640361.0	4169423.7	Worker	Scenario 4	1.72E-01	5.72E-03	3.76E-03
4692	640411.0	4169423.7	Worker	Scenario 4	1.77E-01	6.02E-03	3.68E-03
4693	640861.0	4169423.7	Worker	Scenario 4	1.89E-01	6.27E-03	4.16E-03
4694	640911.0	4169423.7	Worker	Scenario 4	1.88E-01	6.07E-03	4.26E-03
4695	640961.0	4169423.7	Worker	Scenario 4	1.89E-01	5.97E-03	4.43E-03
4696	641011.0	4169423.7	Worker	Scenario 4	1.91E-01	5.96E-03	4.23E-03
4697	641061.0	4169423.7	Worker	Scenario 4	1.95E-01	6.07E-03	4.27E-03
4698	641461.0	4169423.7	Worker	Scenario 4	2.52E-01	6.92E-03	4.44E-03
4699	641511.0	4169423.7	Worker	Scenario 4	2.22E-01	5.84E-03	4.44E-03
4700	641561.0	4169423.7	Worker	Scenario 4	2.04E-01	5.15E-03	4.39E-03
4701	637861.0	4169473.7	Worker	Scenario 4	4.17E-02	1.21E-03	1.51E-03
4702	639461.0	4169473.7	Worker	Scenario 4	1.97E-01	6.02E-03	2.39E-03
4703	639511.0	4169473.7	Worker	Scenario 4	1.92E-01	5.95E-03	2.26E-03
4704	639561.0	4169473.7	Worker	Scenario 4	1.90E-01	6.17E-03	2.29E-03
4705	639611.0	4169473.7	Worker	Scenario 4	1.95E-01	6.86E-03	2.45E-03
4706	640311.0	4169473.7	Worker	Scenario 4	1.59E-01	4.99E-03	3.58E-03
4707	640361.0	4169473.7	Worker	Scenario 4	1.61E-01	5.13E-03	3.61E-03
4708	640411.0	4169473.7	Worker	Scenario 4	1.65E-01	5.37E-03	3.70E-03
4709	640811.0	4169473.7	Worker	Scenario 4	1.74E-01	5.51E-03	4.02E-03
4710	640861.0	4169473.7	Worker	Scenario 4	1.74E-01	5.38E-03	4.04E-03
4711	640911.0	4169473.7	Worker	Scenario 4	1.74E-01	5.30E-03	4.22E-03
4712	640961.0	4169473.7	Worker	Scenario 4	1.76E-01	5.27E-03	4.25E-03
4713	641011.0	4169473.7	Worker	Scenario 4	1.78E-01	5.30E-03	4.11E-03
4714	641061.0	4169473.7	Worker	Scenario 4	1.82E-01	5.41E-03	4.13E-03
4715	641111.0	4169473.7	Worker	Scenario 4	1.88E-01	5.60E-03	4.09E-03
4716	641161.0	4169473.7	Worker	Scenario 4	1.96E-01	5.88E-03	4.05E-03
4717	641211.0	4169473.7	Worker	Scenario 4	2.11E-01	6.39E-03	4.01E-03
4718	641361.0	4169473.7	Worker	Scenario 4	4.41E-01	1.42E-02	4.03E-03
4719	641411.0	4169473.7	Worker	Scenario 4	2.95E-01	8.50E-03	4.15E-03
4720	641461.0	4169473.7	Worker	Scenario 4	2.41E-01	6.56E-03	4.30E-03
4721	641511.0	4169473.7	Worker	Scenario 4	2.13E-01	5.54E-03	4.29E-03
4722	639361.0	4169523.7	Worker	Scenario 4	2.00E-01	6.12E-03	2.34E-03
4723	639411.0	4169523.7	Worker	Scenario 4	1.90E-01	5.73E-03	2.31E-03
4724	639461.0	4169523.7	Worker	Scenario 4	1.83E-01	5.56E-03	2.19E-03
4725	639511.0	4169523.7	Worker	Scenario 4	1.80E-01	5.58E-03	2.20E-03
4726	639561.0	4169523.7	Worker	Scenario 4	1.80E-01	5.83E-03	2.35E-03
4727	640311.0	4169523.7	Worker	Scenario 4	1.50E-01	4.60E-03	3.52E-03
4728	640361.0	4169523.7	Worker	Scenario 4	1.52E-01	4.70E-03	3.44E-03
4729	640411.0	4169523.7	Worker	Scenario 4	1.54E-01	4.86E-03	3.60E-03
4730	640461.0	4169523.7	Worker	Scenario 4	1.57E-01	5.04E-03	3.64E-03
4731	640611.0	4169523.7	Worker	Scenario 4	1.62E-01	5.20E-03	3.70E-03
4732	640661.0	4169523.7	Worker	Scenario 4	1.62E-01	5.11E-03	3.52E-03
4733	640711.0	4169523.7	Worker	Scenario 4	1.61E-01	5.00E-03	3.83E-03
4734	640761.0	4169523.7	Worker	Scenario 4	1.61E-01	4.91E-03	3.71E-03
4735	640811.0	4169523.7	Worker	Scenario 4	1.62E-01	4.83E-03	3.89E-03
4736	640861.0	4169523.7	Worker	Scenario 4	1.62E-01	4.78E-03	3.91E-03
4737	640911.0	4169523.7	Worker	Scenario 4	1.63E-01	4.76E-03	4.14E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4738	640961.0	4169523.7	Worker	Scenario 4	1.65E-01	4.76E-03	4.06E-03
4739	641011.0	4169523.7	Worker	Scenario 4	1.67E-01	4.81E-03	3.98E-03
4740	641061.0	4169523.7	Worker	Scenario 4	1.71E-01	4.90E-03	3.98E-03
4741	641111.0	4169523.7	Worker	Scenario 4	1.76E-01	5.05E-03	4.00E-03
4742	641161.0	4169523.7	Worker	Scenario 4	1.85E-01	5.33E-03	3.90E-03
4743	641211.0	4169523.7	Worker	Scenario 4	2.00E-01	5.86E-03	3.95E-03
4744	641261.0	4169523.7	Worker	Scenario 4	2.38E-01	7.29E-03	4.02E-03
4745	641361.0	4169523.7	Worker	Scenario 4	4.26E-01	1.36E-02	3.92E-03
4746	641411.0	4169523.7	Worker	Scenario 4	2.84E-01	8.14E-03	4.01E-03
4747	641461.0	4169523.7	Worker	Scenario 4	2.32E-01	6.26E-03	4.16E-03
4748	641511.0	4169523.7	Worker	Scenario 4	2.05E-01	5.28E-03	4.16E-03
4749	639311.0	4169573.7	Worker	Scenario 4	1.95E-01	5.93E-03	2.26E-03
4750	639361.0	4169573.7	Worker	Scenario 4	1.84E-01	5.53E-03	2.24E-03
4751	639411.0	4169573.7	Worker	Scenario 4	1.77E-01	5.31E-03	2.13E-03
4752	639461.0	4169573.7	Worker	Scenario 4	1.72E-01	5.23E-03	2.13E-03
4753	639511.0	4169573.7	Worker	Scenario 4	1.70E-01	5.30E-03	2.25E-03
4754	640361.0	4169573.7	Worker	Scenario 4	1.44E-01	4.35E-03	3.45E-03
4755	640411.0	4169573.7	Worker	Scenario 4	1.46E-01	4.44E-03	3.50E-03
4756	640461.0	4169573.7	Worker	Scenario 4	1.47E-01	4.52E-03	3.47E-03
4757	640511.0	4169573.7	Worker	Scenario 4	1.49E-01	4.57E-03	3.58E-03
4758	640561.0	4169573.7	Worker	Scenario 4	1.50E-01	4.58E-03	3.61E-03
4759	640611.0	4169573.7	Worker	Scenario 4	1.50E-01	4.55E-03	3.49E-03
4760	640661.0	4169573.7	Worker	Scenario 4	1.50E-01	4.50E-03	3.56E-03
4761	640711.0	4169573.7	Worker	Scenario 4	1.51E-01	4.44E-03	3.71E-03
4762	640761.0	4169573.7	Worker	Scenario 4	1.51E-01	4.40E-03	3.70E-03
4763	640811.0	4169573.7	Worker	Scenario 4	1.52E-01	4.36E-03	3.76E-03
4764	640861.0	4169573.7	Worker	Scenario 4	1.53E-01	4.34E-03	3.84E-03
4765	640911.0	4169573.7	Worker	Scenario 4	1.54E-01	4.34E-03	4.03E-03
4766	641061.0	4169573.7	Worker	Scenario 4	1.62E-01	4.50E-03	3.82E-03
4767	641111.0	4169573.7	Worker	Scenario 4	1.67E-01	4.65E-03	3.89E-03
4768	641161.0	4169573.7	Worker	Scenario 4	1.76E-01	4.93E-03	3.71E-03
4769	641211.0	4169573.7	Worker	Scenario 4	1.92E-01	5.49E-03	3.87E-03
4770	641261.0	4169573.7	Worker	Scenario 4	2.31E-01	7.02E-03	3.91E-03
4771	641361.0	4169573.7	Worker	Scenario 4	4.13E-01	1.31E-02	3.81E-03
4772	641411.0	4169573.7	Worker	Scenario 4	2.75E-01	7.85E-03	3.89E-03
4773	641461.0	4169573.7	Worker	Scenario 4	2.24E-01	6.00E-03	4.02E-03
4774	637961.0	4169623.7	Worker	Scenario 4	6.00E-02	1.73E-03	1.46E-03
4775	639261.0	4169623.7	Worker	Scenario 4	1.89E-01	5.80E-03	2.19E-03
4776	639311.0	4169623.7	Worker	Scenario 4	1.79E-01	5.39E-03	2.18E-03
4777	639361.0	4169623.7	Worker	Scenario 4	1.71E-01	5.14E-03	2.08E-03
4778	639411.0	4169623.7	Worker	Scenario 4	1.66E-01	5.01E-03	2.06E-03
4779	639461.0	4169623.7	Worker	Scenario 4	1.62E-01	4.98E-03	2.15E-03
4780	640361.0	4169623.7	Worker	Scenario 4	1.37E-01	4.05E-03	3.39E-03
4781	640411.0	4169623.7	Worker	Scenario 4	1.38E-01	4.09E-03	3.42E-03
4782	640461.0	4169623.7	Worker	Scenario 4	1.39E-01	4.12E-03	3.36E-03
4783	640511.0	4169623.7	Worker	Scenario 4	1.40E-01	4.14E-03	3.49E-03
4784	640561.0	4169623.7	Worker	Scenario 4	1.41E-01	4.13E-03	3.50E-03
4785	640611.0	4169623.7	Worker	Scenario 4	1.41E-01	4.11E-03	3.24E-03
4786	640661.0	4169623.7	Worker	Scenario 4	1.41E-01	4.07E-03	3.55E-03
4787	640711.0	4169623.7	Worker	Scenario 4	1.42E-01	4.04E-03	3.55E-03
4788	640761.0	4169623.7	Worker	Scenario 4	1.43E-01	4.01E-03	3.64E-03
4789	640811.0	4169623.7	Worker	Scenario 4	1.43E-01	4.00E-03	3.68E-03
4790	641261.0	4169623.7	Worker	Scenario 4	2.25E-01	6.82E-03	3.79E-03
4791	637911.0	4169673.7	Worker	Scenario 4	5.50E-02	1.56E-03	1.45E-03
4792	637961.0	4169673.7	Worker	Scenario 4	6.31E-02	1.79E-03	1.51E-03
4793	639211.0	4169673.7	Worker	Scenario 4	1.84E-01	5.70E-03	2.13E-03
4794	639261.0	4169673.7	Worker	Scenario 4	1.74E-01	5.30E-03	2.12E-03
4795	639311.0	4169673.7	Worker	Scenario 4	1.67E-01	5.04E-03	2.03E-03
4796	639361.0	4169673.7	Worker	Scenario 4	1.61E-01	4.88E-03	2.00E-03
4797	640461.0	4169673.7	Worker	Scenario 4	1.32E-01	3.81E-03	3.35E-03
4798	640511.0	4169673.7	Worker	Scenario 4	1.33E-01	3.80E-03	3.38E-03
4799	640561.0	4169673.7	Worker	Scenario 4	1.33E-01	3.79E-03	3.34E-03
4800	640611.0	4169673.7	Worker	Scenario 4	1.34E-01	3.77E-03	3.24E-03
4801	637861.0	4169723.7	Worker	Scenario 4	5.07E-02	1.42E-03	1.44E-03
4802	637911.0	4169723.7	Worker	Scenario 4	5.71E-02	1.60E-03	1.48E-03
4803	637961.0	4169723.7	Worker	Scenario 4	6.61E-02	1.84E-03	1.50E-03
4804	639161.0	4169723.7	Worker	Scenario 4	1.78E-01	5.65E-03	2.06E-03
4805	639211.0	4169723.7	Worker	Scenario 4	1.69E-01	5.26E-03	2.06E-03
4806	639261.0	4169723.7	Worker	Scenario 4	1.62E-01	5.00E-03	1.97E-03
4807	639311.0	4169723.7	Worker	Scenario 4	1.57E-01	4.83E-03	1.94E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4808	637861.0	4169773.7	Worker	Scenario 4	5.19E-02	1.45E-03	1.45E-03
4809	637911.0	4169773.7	Worker	Scenario 4	5.90E-02	1.64E-03	1.45E-03
4810	637961.0	4169773.7	Worker	Scenario 4	6.80E-02	1.87E-03	1.44E-03
4811	639111.0	4169773.7	Worker	Scenario 4	1.73E-01	5.68E-03	2.01E-03
4812	639161.0	4169773.7	Worker	Scenario 4	1.65E-01	5.30E-03	2.00E-03
4813	639211.0	4169773.7	Worker	Scenario 4	1.58E-01	5.04E-03	1.93E-03
4814	639261.0	4169773.7	Worker	Scenario 4	1.53E-01	4.87E-03	1.88E-03
4815	637861.0	4169823.7	Worker	Scenario 4	5.35E-02	1.48E-03	1.41E-03
4816	637911.0	4169823.7	Worker	Scenario 4	6.05E-02	1.67E-03	1.38E-03
4817	637961.0	4169823.7	Worker	Scenario 4	7.02E-02	1.92E-03	1.33E-03
4818	639061.0	4169823.7	Worker	Scenario 4	1.70E-01	5.83E-03	1.95E-03
4819	639111.0	4169823.7	Worker	Scenario 4	1.62E-01	5.47E-03	1.95E-03
4820	639161.0	4169823.7	Worker	Scenario 4	1.55E-01	5.21E-03	1.88E-03
4821	639211.0	4169823.7	Worker	Scenario 4	1.51E-01	5.04E-03	1.82E-03
4822	637861.0	4169873.7	Worker	Scenario 4	5.44E-02	1.50E-03	1.32E-03
4823	637911.0	4169873.7	Worker	Scenario 4	6.15E-02	1.69E-03	1.27E-03
4824	637961.0	4169873.7	Worker	Scenario 4	7.11E-02	1.95E-03	1.25E-03
4825	639011.0	4169873.7	Worker	Scenario 4	1.69E-01	6.20E-03	1.90E-03
4826	639061.0	4169873.7	Worker	Scenario 4	1.62E-01	5.86E-03	1.90E-03
4827	639111.0	4169873.7	Worker	Scenario 4	1.56E-01	5.61E-03	1.83E-03
4828	639161.0	4169873.7	Worker	Scenario 4	1.51E-01	5.44E-03	1.77E-03
4829	637861.0	4169923.7	Worker	Scenario 4	5.50E-02	1.51E-03	1.23E-03
4830	637911.0	4169923.7	Worker	Scenario 4	6.20E-02	1.71E-03	1.20E-03
4831	637961.0	4169923.7	Worker	Scenario 4	7.14E-02	1.99E-03	1.25E-03
4832	638961.0	4169923.7	Worker	Scenario 4	1.74E-01	7.09E-03	1.85E-03
4833	639011.0	4169923.7	Worker	Scenario 4	1.67E-01	6.76E-03	1.85E-03
4834	639061.0	4169923.7	Worker	Scenario 4	1.62E-01	6.52E-03	1.79E-03
4835	639111.0	4169923.7	Worker	Scenario 4	1.58E-01	6.35E-03	1.72E-03
4836	637861.0	4169973.7	Worker	Scenario 4	5.52E-02	1.51E-03	1.17E-03
4837	637911.0	4169973.7	Worker	Scenario 4	6.19E-02	1.72E-03	1.25E-03
4838	637961.0	4169973.7	Worker	Scenario 4	7.08E-02	2.01E-03	1.34E-03
4839	638911.0	4169973.7	Worker	Scenario 4	1.99E-01	9.65E-03	1.80E-03
4840	638961.0	4169973.7	Worker	Scenario 4	1.93E-01	9.31E-03	1.80E-03
4841	639011.0	4169973.7	Worker	Scenario 4	1.88E-01	9.06E-03	1.75E-03
4842	639061.0	4169973.7	Worker	Scenario 4	1.85E-01	8.86E-03	1.67E-03
4843	637861.0	4170023.7	Worker	Scenario 4	5.50E-02	1.51E-03	1.24E-03
4844	637911.0	4170023.7	Worker	Scenario 4	6.13E-02	1.71E-03	1.32E-03
4845	637961.0	4170023.7	Worker	Scenario 4	6.94E-02	2.01E-03	1.39E-03
4846	638911.0	4170023.7	Worker	Scenario 4	2.75E-01	1.63E-02	1.76E-03
4847	638961.0	4170023.7	Worker	Scenario 4	2.55E-01	1.48E-02	1.71E-03
4848	639011.0	4170023.7	Worker	Scenario 4	2.57E-01	1.51E-02	1.63E-03
4849	637861.0	4170073.7	Worker	Scenario 4	5.49E-02	1.53E-03	1.30E-03
4850	637911.0	4170073.7	Worker	Scenario 4	6.03E-02	1.72E-03	1.35E-03
4851	637961.0	4170073.7	Worker	Scenario 4	6.72E-02	2.00E-03	1.38E-03
4852	638011.0	4170073.7	Worker	Scenario 4	7.68E-02	2.47E-03	1.39E-03
4853	638911.0	4170073.7	Worker	Scenario 4	1.54E-01	7.07E-03	1.67E-03
4854	638961.0	4170073.7	Worker	Scenario 4	1.53E-01	7.05E-03	1.59E-03
4855	637911.0	4170123.7	Worker	Scenario 4	5.90E-02	1.69E-03	1.35E-03
4856	637961.0	4170123.7	Worker	Scenario 4	6.48E-02	1.93E-03	1.35E-03
4857	638011.0	4170123.7	Worker	Scenario 4	7.18E-02	2.26E-03	1.33E-03
4858	638061.0	4170123.7	Worker	Scenario 4	8.07E-02	2.66E-03	1.35E-03
4859	638111.0	4170123.7	Worker	Scenario 4	8.86E-02	3.03E-03	1.40E-03
4860	638161.0	4170123.7	Worker	Scenario 4	9.60E-02	3.39E-03	1.42E-03
4861	638211.0	4170123.7	Worker	Scenario 4	1.03E-01	3.68E-03	1.43E-03
4862	638261.0	4170123.7	Worker	Scenario 4	1.09E-01	3.95E-03	1.47E-03
4863	638311.0	4170123.7	Worker	Scenario 4	1.15E-01	4.21E-03	1.48E-03
4864	638361.0	4170123.7	Worker	Scenario 4	1.20E-01	4.40E-03	1.52E-03
4865	638411.0	4170123.7	Worker	Scenario 4	1.23E-01	4.52E-03	1.53E-03
4866	638461.0	4170123.7	Worker	Scenario 4	1.24E-01	4.59E-03	1.50E-03
4867	638511.0	4170123.7	Worker	Scenario 4	1.24E-01	4.67E-03	1.53E-03
4868	638561.0	4170123.7	Worker	Scenario 4	1.25E-01	4.78E-03	1.59E-03
4869	638611.0	4170123.7	Worker	Scenario 4	1.26E-01	4.89E-03	1.61E-03
4870	638661.0	4170123.7	Worker	Scenario 4	1.26E-01	4.93E-03	1.63E-03
4871	638911.0	4170123.7	Worker	Scenario 4	1.19E-01	4.58E-03	1.55E-03
4872	638961.0	4170123.7	Worker	Scenario 4	1.18E-01	4.55E-03	1.56E-03
4873	637911.0	4170173.7	Worker	Scenario 4	5.74E-02	1.64E-03	1.32E-03
4874	637961.0	4170173.7	Worker	Scenario 4	6.22E-02	1.84E-03	1.29E-03
4875	638011.0	4170173.7	Worker	Scenario 4	6.75E-02	2.06E-03	1.32E-03
4876	638061.0	4170173.7	Worker	Scenario 4	7.33E-02	2.29E-03	1.37E-03
4877	638111.0	4170173.7	Worker	Scenario 4	7.88E-02	2.52E-03	1.39E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4878	638161.0	4170173.7	Worker	Scenario 4	8.42E-02	2.75E-03	1.40E-03
4879	638211.0	4170173.7	Worker	Scenario 4	8.91E-02	2.95E-03	1.43E-03
4880	638261.0	4170173.7	Worker	Scenario 4	9.37E-02	3.14E-03	1.45E-03
4881	638311.0	4170173.7	Worker	Scenario 4	9.76E-02	3.29E-03	1.49E-03
4882	638361.0	4170173.7	Worker	Scenario 4	1.01E-01	3.42E-03	1.49E-03
4883	638411.0	4170173.7	Worker	Scenario 4	1.03E-01	3.51E-03	1.46E-03
4884	638461.0	4170173.7	Worker	Scenario 4	1.04E-01	3.60E-03	1.50E-03
4885	638511.0	4170173.7	Worker	Scenario 4	1.05E-01	3.66E-03	1.55E-03
4886	638561.0	4170173.7	Worker	Scenario 4	1.06E-01	3.72E-03	1.57E-03
4887	638611.0	4170173.7	Worker	Scenario 4	1.06E-01	3.76E-03	1.59E-03
4888	638861.0	4170173.7	Worker	Scenario 4	1.03E-01	3.63E-03	1.53E-03
4889	638911.0	4170173.7	Worker	Scenario 4	1.02E-01	3.60E-03	1.52E-03
4890	638961.0	4170173.7	Worker	Scenario 4	1.02E-01	3.58E-03	1.54E-03
4891	638011.0	4170223.7	Worker	Scenario 4	6.37E-02	1.89E-03	1.34E-03
4892	638061.0	4170223.7	Worker	Scenario 4	6.79E-02	2.06E-03	1.36E-03
4893	638111.0	4170223.7	Worker	Scenario 4	7.22E-02	2.22E-03	1.38E-03
4894	638161.0	4170223.7	Worker	Scenario 4	7.63E-02	2.39E-03	1.40E-03
4895	638211.0	4170223.7	Worker	Scenario 4	8.00E-02	2.53E-03	1.42E-03
4896	638261.0	4170223.7	Worker	Scenario 4	8.33E-02	2.66E-03	1.45E-03
4897	638311.0	4170223.7	Worker	Scenario 4	8.60E-02	2.77E-03	1.45E-03
4898	638361.0	4170223.7	Worker	Scenario 4	8.83E-02	2.86E-03	1.42E-03
4899	638411.0	4170223.7	Worker	Scenario 4	9.02E-02	2.94E-03	1.46E-03
4900	638461.0	4170223.7	Worker	Scenario 4	9.18E-02	3.01E-03	1.51E-03
4901	638511.0	4170223.7	Worker	Scenario 4	9.26E-02	3.06E-03	1.53E-03
4902	638561.0	4170223.7	Worker	Scenario 4	9.33E-02	3.09E-03	1.55E-03
4903	638811.0	4170223.7	Worker	Scenario 4	9.29E-02	3.09E-03	1.50E-03
4904	638861.0	4170223.7	Worker	Scenario 4	9.25E-02	3.07E-03	1.48E-03
4905	638911.0	4170223.7	Worker	Scenario 4	9.22E-02	3.06E-03	1.50E-03
4906	638761.0	4170273.7	Worker	Scenario 4	8.52E-02	2.71E-03	1.48E-03
4907	641536.2	4164448.9	Worker	Scenario 4	9.27E-03	3.34E-04	1.55E-03
4908	641636.2	4164448.9	Worker	Scenario 4	1.01E-02	3.59E-04	1.88E-03
4909	641736.2	4164448.9	Worker	Scenario 4	1.01E-02	3.59E-04	1.10E-03
4910	641836.2	4164448.9	Worker	Scenario 4	1.01E-02	3.62E-04	1.01E-03
4911	641936.2	4164448.9	Worker	Scenario 4	1.04E-02	3.70E-04	9.29E-04
4912	642036.2	4164448.9	Worker	Scenario 4	1.07E-02	3.81E-04	1.16E-03
4913	642136.2	4164448.9	Worker	Scenario 4	1.11E-02	3.92E-04	1.25E-03
4914	642236.2	4164448.9	Worker	Scenario 4	1.18E-02	4.13E-04	1.15E-03
4915	642336.2	4164448.9	Worker	Scenario 4	1.25E-02	4.32E-04	1.14E-03
4916	642436.2	4164448.9	Worker	Scenario 4	1.26E-02	4.38E-04	8.74E-04
4917	642536.2	4164448.9	Worker	Scenario 4	1.24E-02	4.33E-04	9.53E-04
4918	642636.2	4164448.9	Worker	Scenario 4	1.28E-02	4.45E-04	1.03E-03
4919	642736.2	4164448.9	Worker	Scenario 4	1.40E-02	4.78E-04	1.60E-03
4920	642836.2	4164448.9	Worker	Scenario 4	1.58E-02	5.23E-04	2.27E-03
4921	642936.2	4164448.9	Worker	Scenario 4	1.61E-02	5.31E-04	1.84E-03
4922	643036.2	4164448.9	Worker	Scenario 4	1.67E-02	5.47E-04	2.05E-03
4923	643136.2	4164448.9	Worker	Scenario 4	1.82E-02	5.82E-04	3.06E-03
4924	643236.2	4164448.9	Worker	Scenario 4	1.93E-02	6.08E-04	3.44E-03
4925	643336.2	4164448.9	Worker	Scenario 4	2.05E-02	6.35E-04	3.36E-03
4926	643436.2	4164448.9	Worker	Scenario 4	2.13E-02	6.53E-04	3.47E-03
4927	643536.2	4164448.9	Worker	Scenario 4	2.19E-02	6.65E-04	3.93E-03
4928	643636.2	4164448.9	Worker	Scenario 4	2.28E-02	6.83E-04	3.68E-03
4929	643736.2	4164448.9	Worker	Scenario 4	2.33E-02	6.92E-04	4.00E-03
4930	643836.2	4164448.9	Worker	Scenario 4	2.36E-02	6.98E-04	3.25E-03
4931	643936.2	4164448.9	Worker	Scenario 4	2.42E-02	7.08E-04	3.11E-03
4932	644036.2	4164448.9	Worker	Scenario 4	2.46E-02	7.15E-04	3.06E-03
4933	644136.2	4164448.9	Worker	Scenario 4	2.49E-02	7.18E-04	3.59E-03
4934	644336.2	4164448.9	Worker	Scenario 4	2.51E-02	7.20E-04	2.98E-03
4935	644436.2	4164448.9	Worker	Scenario 4	2.51E-02	7.19E-04	2.90E-03
4936	644536.2	4164448.9	Worker	Scenario 4	2.50E-02	7.16E-04	2.66E-03
4937	640936.2	4164548.9	Worker	Scenario 4	8.22E-03	3.03E-04	9.93E-04
4938	641036.2	4164548.9	Worker	Scenario 4	8.03E-03	2.98E-04	1.06E-03
4939	641136.2	4164548.9	Worker	Scenario 4	8.24E-03	3.05E-04	9.93E-04
4940	641236.2	4164548.9	Worker	Scenario 4	8.47E-03	3.12E-04	5.42E-04
4941	641336.2	4164548.9	Worker	Scenario 4	8.75E-03	3.21E-04	6.97E-04
4942	641436.2	4164548.9	Worker	Scenario 4	8.87E-03	3.25E-04	8.21E-04
4943	641536.2	4164548.9	Worker	Scenario 4	9.18E-03	3.35E-04	7.96E-04
4944	641636.2	4164548.9	Worker	Scenario 4	9.70E-03	3.51E-04	7.44E-04
4945	641736.2	4164548.9	Worker	Scenario 4	1.06E-02	3.78E-04	1.34E-03
4946	641836.2	4164548.9	Worker	Scenario 4	1.17E-02	4.06E-04	2.27E-03
4947	641936.2	4164548.9	Worker	Scenario 4	1.17E-02	4.10E-04	1.22E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
4948	642036.2	4164548.9	Worker	Scenario 4	1.13E-02	4.00E-04	1.22E-03
4949	642136.2	4164548.9	Worker	Scenario 4	1.18E-02	4.14E-04	1.27E-03
4950	642236.2	4164548.9	Worker	Scenario 4	1.19E-02	4.19E-04	1.13E-03
4951	642336.2	4164548.9	Worker	Scenario 4	1.26E-02	4.39E-04	8.76E-04
4952	642436.2	4164548.9	Worker	Scenario 4	1.48E-02	4.96E-04	2.06E-03
4953	642536.2	4164548.9	Worker	Scenario 4	1.32E-02	4.60E-04	1.07E-03
4954	642636.2	4164548.9	Worker	Scenario 4	1.35E-02	4.68E-04	1.03E-03
4955	642736.2	4164548.9	Worker	Scenario 4	1.39E-02	4.82E-04	8.37E-04
4956	642836.2	4164548.9	Worker	Scenario 4	1.61E-02	5.38E-04	1.61E-03
4957	642936.2	4164548.9	Worker	Scenario 4	1.79E-02	5.79E-04	2.31E-03
4958	643036.2	4164548.9	Worker	Scenario 4	1.77E-02	5.78E-04	2.36E-03
4959	643136.2	4164548.9	Worker	Scenario 4	1.90E-02	6.09E-04	3.06E-03
4960	643236.2	4164548.9	Worker	Scenario 4	2.04E-02	6.39E-04	3.23E-03
4961	643336.2	4164548.9	Worker	Scenario 4	2.16E-02	6.67E-04	3.62E-03
4962	643436.2	4164548.9	Worker	Scenario 4	2.24E-02	6.84E-04	3.75E-03
4963	643536.2	4164548.9	Worker	Scenario 4	2.33E-02	7.03E-04	4.03E-03
4964	643636.2	4164548.9	Worker	Scenario 4	2.40E-02	7.16E-04	4.17E-03
4965	643736.2	4164548.9	Worker	Scenario 4	2.46E-02	7.28E-04	3.55E-03
4966	643836.2	4164548.9	Worker	Scenario 4	2.50E-02	7.33E-04	3.34E-03
4967	643936.2	4164548.9	Worker	Scenario 4	2.54E-02	7.40E-04	3.11E-03
4968	644036.2	4164548.9	Worker	Scenario 4	2.58E-02	7.46E-04	3.79E-03
4969	644236.2	4164548.9	Worker	Scenario 4	2.57E-02	7.42E-04	3.29E-03
4970	644336.2	4164548.9	Worker	Scenario 4	2.60E-02	7.47E-04	3.11E-03
4971	644436.2	4164548.9	Worker	Scenario 4	2.61E-02	7.46E-04	2.81E-03
4972	644536.2	4164548.9	Worker	Scenario 4	2.61E-02	7.44E-04	2.53E-03
4973	644636.2	4164548.9	Worker	Scenario 4	2.61E-02	7.39E-04	2.35E-03
4974	644736.2	4164548.9	Worker	Scenario 4	2.61E-02	7.34E-04	1.90E-03
4975	644836.2	4164548.9	Worker	Scenario 4	2.60E-02	7.27E-04	2.08E-03
4976	644936.2	4164548.9	Worker	Scenario 4	2.57E-02	7.16E-04	2.23E-03
4977	645036.2	4164548.9	Worker	Scenario 4	2.60E-02	7.15E-04	2.00E-03
4978	640536.2	4164648.9	Worker	Scenario 4	7.48E-03	2.79E-04	6.53E-04
4979	640636.2	4164648.9	Worker	Scenario 4	7.90E-03	2.93E-04	1.16E-03
4980	640736.2	4164648.9	Worker	Scenario 4	7.81E-03	2.91E-04	6.70E-04
4981	640836.2	4164648.9	Worker	Scenario 4	8.11E-03	3.01E-04	9.93E-04
4982	640936.2	4164648.9	Worker	Scenario 4	8.47E-03	3.12E-04	1.07E-03
4983	641036.2	4164648.9	Worker	Scenario 4	8.31E-03	3.08E-04	9.92E-04
4984	641136.2	4164648.9	Worker	Scenario 4	8.55E-03	3.16E-04	1.14E-03
4985	641236.2	4164648.9	Worker	Scenario 4	8.78E-03	3.23E-04	5.48E-04
4986	641336.2	4164648.9	Worker	Scenario 4	9.33E-03	3.40E-04	7.10E-04
4987	641436.2	4164648.9	Worker	Scenario 4	9.25E-03	3.38E-04	8.43E-04
4988	641536.2	4164648.9	Worker	Scenario 4	9.53E-03	3.47E-04	8.17E-04
4989	641636.2	4164648.9	Worker	Scenario 4	9.90E-03	3.59E-04	6.71E-04
4990	641736.2	4164648.9	Worker	Scenario 4	1.04E-02	3.73E-04	8.29E-04
4991	641836.2	4164648.9	Worker	Scenario 4	1.17E-02	4.11E-04	1.80E-03
4992	641936.2	4164648.9	Worker	Scenario 4	1.32E-02	4.52E-04	1.63E-03
4993	642036.2	4164648.9	Worker	Scenario 4	1.25E-02	4.36E-04	1.27E-03
4994	642136.2	4164648.9	Worker	Scenario 4	1.23E-02	4.32E-04	1.29E-03
4995	642236.2	4164648.9	Worker	Scenario 4	1.25E-02	4.40E-04	1.10E-03
4996	642336.2	4164648.9	Worker	Scenario 4	1.29E-02	4.52E-04	8.07E-04
4997	642436.2	4164648.9	Worker	Scenario 4	1.42E-02	4.88E-04	1.32E-03
4998	642536.2	4164648.9	Worker	Scenario 4	1.60E-02	5.34E-04	2.95E-03
4999	642636.2	4164648.9	Worker	Scenario 4	1.45E-02	5.01E-04	1.25E-03
5000	642736.2	4164648.9	Worker	Scenario 4	1.47E-02	5.07E-04	7.26E-04
5001	642836.2	4164648.9	Worker	Scenario 4	1.64E-02	5.51E-04	1.33E-03
5002	642936.2	4164648.9	Worker	Scenario 4	1.86E-02	6.03E-04	2.58E-03
5003	643036.2	4164648.9	Worker	Scenario 4	1.95E-02	6.27E-04	3.09E-03
5004	643136.2	4164648.9	Worker	Scenario 4	1.99E-02	6.39E-04	3.02E-03
5005	643236.2	4164648.9	Worker	Scenario 4	2.17E-02	6.77E-04	3.58E-03
5006	643336.2	4164648.9	Worker	Scenario 4	2.26E-02	6.97E-04	3.57E-03
5007	643436.2	4164648.9	Worker	Scenario 4	2.38E-02	7.22E-04	4.24E-03
5008	643536.2	4164648.9	Worker	Scenario 4	2.47E-02	7.41E-04	4.22E-03
5009	643636.2	4164648.9	Worker	Scenario 4	2.53E-02	7.52E-04	3.92E-03
5010	643736.2	4164648.9	Worker	Scenario 4	2.60E-02	7.64E-04	3.55E-03
5011	643836.2	4164648.9	Worker	Scenario 4	2.63E-02	7.70E-04	3.18E-03
5012	644136.2	4164648.9	Worker	Scenario 4	2.70E-02	7.78E-04	3.42E-03
5013	644236.2	4164648.9	Worker	Scenario 4	2.71E-02	7.77E-04	3.38E-03
5014	644336.2	4164648.9	Worker	Scenario 4	2.73E-02	7.79E-04	2.94E-03
5015	644436.2	4164648.9	Worker	Scenario 4	2.73E-02	7.76E-04	2.70E-03
5016	644536.2	4164648.9	Worker	Scenario 4	2.73E-02	7.72E-04	2.45E-03
5017	644736.2	4164648.9	Worker	Scenario 4	2.73E-02	7.62E-04	2.13E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5018	644836.2	4164648.9	Worker	Scenario 4	2.73E-02	7.55E-04	2.04E-03
5019	644936.2	4164648.9	Worker	Scenario 4	2.72E-02	7.47E-04	2.23E-03
5020	645036.2	4164648.9	Worker	Scenario 4	2.71E-02	7.38E-04	2.32E-03
5021	645136.2	4164648.9	Worker	Scenario 4	2.69E-02	7.27E-04	2.52E-03
5022	645236.2	4164648.9	Worker	Scenario 4	2.69E-02	7.20E-04	2.04E-03
5023	640336.2	4164748.9	Worker	Scenario 4	9.94E-03	3.46E-04	2.99E-03
5024	640436.2	4164748.9	Worker	Scenario 4	8.05E-03	2.98E-04	1.52E-03
5025	640536.2	4164748.9	Worker	Scenario 4	7.77E-03	2.90E-04	7.43E-04
5026	640636.2	4164748.9	Worker	Scenario 4	8.09E-03	3.00E-04	1.05E-03
5027	640736.2	4164748.9	Worker	Scenario 4	8.14E-03	3.02E-04	9.06E-04
5028	640836.2	4164748.9	Worker	Scenario 4	8.36E-03	3.10E-04	9.32E-04
5029	640936.2	4164748.9	Worker	Scenario 4	8.79E-03	3.23E-04	1.13E-03
5030	641036.2	4164748.9	Worker	Scenario 4	8.63E-03	3.20E-04	9.04E-04
5031	641136.2	4164748.9	Worker	Scenario 4	8.87E-03	3.27E-04	1.25E-03
5032	641236.2	4164748.9	Worker	Scenario 4	9.22E-03	3.38E-04	6.36E-04
5033	641336.2	4164748.9	Worker	Scenario 4	9.68E-03	3.52E-04	7.23E-04
5034	641436.2	4164748.9	Worker	Scenario 4	9.65E-03	3.52E-04	8.67E-04
5035	641536.2	4164748.9	Worker	Scenario 4	9.99E-03	3.63E-04	8.38E-04
5036	641636.2	4164748.9	Worker	Scenario 4	1.04E-02	3.77E-04	7.07E-04
5037	641736.2	4164748.9	Worker	Scenario 4	1.08E-02	3.89E-04	8.67E-04
5038	641836.2	4164748.9	Worker	Scenario 4	1.15E-02	4.10E-04	9.16E-04
5039	641936.2	4164748.9	Worker	Scenario 4	1.32E-02	4.58E-04	1.40E-03
5040	642036.2	4164748.9	Worker	Scenario 4	1.31E-02	4.56E-04	1.33E-03
5041	642136.2	4164748.9	Worker	Scenario 4	1.28E-02	4.49E-04	1.29E-03
5042	642236.2	4164748.9	Worker	Scenario 4	1.37E-02	4.75E-04	1.05E-03
5043	642336.2	4164748.9	Worker	Scenario 4	1.39E-02	4.84E-04	9.20E-04
5044	642436.2	4164748.9	Worker	Scenario 4	1.42E-02	4.93E-04	1.08E-03
5045	642536.2	4164748.9	Worker	Scenario 4	1.66E-02	5.56E-04	2.89E-03
5046	642636.2	4164748.9	Worker	Scenario 4	1.59E-02	5.41E-04	1.41E-03
5047	642736.2	4164748.9	Worker	Scenario 4	1.57E-02	5.37E-04	7.78E-04
5048	642836.2	4164748.9	Worker	Scenario 4	1.64E-02	5.59E-04	1.11E-03
5049	642936.2	4164748.9	Worker	Scenario 4	1.81E-02	6.01E-04	2.24E-03
5050	643036.2	4164748.9	Worker	Scenario 4	2.09E-02	6.67E-04	3.34E-03
5051	643136.2	4164748.9	Worker	Scenario 4	2.14E-02	6.81E-04	3.28E-03
5052	643236.2	4164748.9	Worker	Scenario 4	2.33E-02	7.22E-04	3.83E-03
5053	643336.2	4164748.9	Worker	Scenario 4	2.41E-02	7.39E-04	4.20E-03
5054	643436.2	4164748.9	Worker	Scenario 4	2.50E-02	7.57E-04	3.99E-03
5055	643536.2	4164748.9	Worker	Scenario 4	2.60E-02	7.78E-04	4.24E-03
5056	643636.2	4164748.9	Worker	Scenario 4	2.68E-02	7.92E-04	3.71E-03
5057	643736.2	4164748.9	Worker	Scenario 4	2.73E-02	8.00E-04	3.36E-03
5058	644036.2	4164748.9	Worker	Scenario 4	2.81E-02	8.10E-04	3.67E-03
5059	644136.2	4164748.9	Worker	Scenario 4	2.85E-02	8.15E-04	3.52E-03
5060	644236.2	4164748.9	Worker	Scenario 4	2.85E-02	8.13E-04	3.11E-03
5061	644336.2	4164748.9	Worker	Scenario 4	2.86E-02	8.11E-04	2.88E-03
5062	644436.2	4164748.9	Worker	Scenario 4	2.86E-02	8.08E-04	2.50E-03
5063	644536.2	4164748.9	Worker	Scenario 4	2.86E-02	8.03E-04	2.16E-03
5064	644736.2	4164748.9	Worker	Scenario 4	2.86E-02	7.91E-04	2.22E-03
5065	644836.2	4164748.9	Worker	Scenario 4	2.86E-02	7.83E-04	2.38E-03
5066	644936.2	4164748.9	Worker	Scenario 4	2.85E-02	7.74E-04	2.53E-03
5067	645036.2	4164748.9	Worker	Scenario 4	2.80E-02	7.57E-04	2.95E-03
5068	645136.2	4164748.9	Worker	Scenario 4	2.82E-02	7.53E-04	2.19E-03
5069	645236.2	4164748.9	Worker	Scenario 4	2.81E-02	7.43E-04	1.76E-03
5070	645336.2	4164748.9	Worker	Scenario 4	2.78E-02	7.31E-04	1.56E-03
5071	645436.2	4164748.9	Worker	Scenario 4	2.79E-02	7.24E-04	1.29E-03
5072	640136.2	4164848.9	Worker	Scenario 4	7.54E-03	2.82E-04	9.32E-04
5073	640236.2	4164848.9	Worker	Scenario 4	8.71E-03	3.16E-04	1.29E-03
5074	640336.2	4164848.9	Worker	Scenario 4	1.04E-02	3.62E-04	3.08E-03
5075	640436.2	4164848.9	Worker	Scenario 4	8.41E-03	3.10E-04	1.42E-03
5076	640536.2	4164848.9	Worker	Scenario 4	7.98E-03	2.99E-04	8.07E-04
5077	640636.2	4164848.9	Worker	Scenario 4	8.31E-03	3.09E-04	8.55E-04
5078	640736.2	4164848.9	Worker	Scenario 4	8.77E-03	3.23E-04	1.31E-03
5079	640836.2	4164848.9	Worker	Scenario 4	8.73E-03	3.23E-04	8.46E-04
5080	640936.2	4164848.9	Worker	Scenario 4	9.21E-03	3.38E-04	1.17E-03
5081	641036.2	4164848.9	Worker	Scenario 4	8.98E-03	3.32E-04	9.08E-04
5082	641136.2	4164848.9	Worker	Scenario 4	9.23E-03	3.41E-04	1.36E-03
5083	641236.2	4164848.9	Worker	Scenario 4	9.62E-03	3.53E-04	6.88E-04
5084	641336.2	4164848.9	Worker	Scenario 4	1.01E-02	3.66E-04	7.37E-04
5085	641436.2	4164848.9	Worker	Scenario 4	1.02E-02	3.70E-04	8.93E-04
5086	641536.2	4164848.9	Worker	Scenario 4	1.04E-02	3.80E-04	8.61E-04
5087	641636.2	4164848.9	Worker	Scenario 4	1.08E-02	3.91E-04	7.10E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5088	641736.2	4164848.9	Worker	Scenario 4	1.15E-02	4.12E-04	9.04E-04
5089	641836.2	4164848.9	Worker	Scenario 4	1.20E-02	4.29E-04	9.61E-04
5090	641936.2	4164848.9	Worker	Scenario 4	1.31E-02	4.61E-04	1.25E-03
5091	642036.2	4164848.9	Worker	Scenario 4	1.60E-02	5.32E-04	2.31E-03
5092	642136.2	4164848.9	Worker	Scenario 4	1.36E-02	4.77E-04	1.28E-03
5093	642236.2	4164848.9	Worker	Scenario 4	1.41E-02	4.92E-04	9.92E-04
5094	642336.2	4164848.9	Worker	Scenario 4	1.56E-02	5.34E-04	1.31E-03
5095	642436.2	4164848.9	Worker	Scenario 4	1.51E-02	5.21E-04	1.04E-03
5096	642536.2	4164848.9	Worker	Scenario 4	1.63E-02	5.55E-04	1.79E-03
5097	642636.2	4164848.9	Worker	Scenario 4	1.77E-02	5.93E-04	1.72E-03
5098	642736.2	4164848.9	Worker	Scenario 4	1.67E-02	5.71E-04	9.05E-04
5099	642836.2	4164848.9	Worker	Scenario 4	1.75E-02	5.91E-04	1.24E-03
5100	642936.2	4164848.9	Worker	Scenario 4	1.88E-02	6.27E-04	2.42E-03
5101	643036.2	4164848.9	Worker	Scenario 4	2.02E-02	6.62E-04	2.80E-03
5102	643136.2	4164848.9	Worker	Scenario 4	2.43E-02	7.53E-04	4.05E-03
5103	643236.2	4164848.9	Worker	Scenario 4	2.47E-02	7.62E-04	3.99E-03
5104	643336.2	4164848.9	Worker	Scenario 4	2.60E-02	7.90E-04	4.10E-03
5105	643436.2	4164848.9	Worker	Scenario 4	2.68E-02	8.07E-04	4.52E-03
5106	643536.2	4164848.9	Worker	Scenario 4	2.75E-02	8.18E-04	3.77E-03
5107	643636.2	4164848.9	Worker	Scenario 4	2.83E-02	8.32E-04	3.54E-03
5108	643936.2	4164848.9	Worker	Scenario 4	2.95E-02	8.50E-04	3.87E-03
5109	644036.2	4164848.9	Worker	Scenario 4	2.97E-02	8.52E-04	3.79E-03
5110	644136.2	4164848.9	Worker	Scenario 4	3.00E-02	8.53E-04	3.25E-03
5111	644236.2	4164848.9	Worker	Scenario 4	3.00E-02	8.50E-04	3.03E-03
5112	644336.2	4164848.9	Worker	Scenario 4	3.00E-02	8.46E-04	2.62E-03
5113	644436.2	4164848.9	Worker	Scenario 4	3.00E-02	8.42E-04	2.37E-03
5114	644536.2	4164848.9	Worker	Scenario 4	3.00E-02	8.36E-04	2.41E-03
5115	644736.2	4164848.9	Worker	Scenario 4	3.01E-02	8.22E-04	2.57E-03
5116	644836.2	4164848.9	Worker	Scenario 4	2.98E-02	8.09E-04	2.98E-03
5117	644936.2	4164848.9	Worker	Scenario 4	2.97E-02	7.99E-04	2.85E-03
5118	645036.2	4164848.9	Worker	Scenario 4	2.97E-02	7.91E-04	2.22E-03
5119	645136.2	4164848.9	Worker	Scenario 4	2.95E-02	7.79E-04	1.80E-03
5120	645236.2	4164848.9	Worker	Scenario 4	2.93E-02	7.67E-04	1.70E-03
5121	645336.2	4164848.9	Worker	Scenario 4	2.90E-02	7.54E-04	1.64E-03
5122	645436.2	4164848.9	Worker	Scenario 4	2.87E-02	7.41E-04	1.46E-03
5123	645536.2	4164848.9	Worker	Scenario 4	2.85E-02	7.30E-04	1.13E-03
5124	645636.2	4164848.9	Worker	Scenario 4	2.88E-02	7.20E-04	1.18E-03
5125	645736.2	4164848.9	Worker	Scenario 4	2.84E-02	7.05E-04	1.19E-03
5126	640036.2	4164948.9	Worker	Scenario 4	7.31E-03	2.75E-04	7.41E-04
5127	640136.2	4164948.9	Worker	Scenario 4	7.98E-03	2.96E-04	8.96E-04
5128	640236.2	4164948.9	Worker	Scenario 4	9.17E-03	3.31E-04	1.83E-03
5129	640336.2	4164948.9	Worker	Scenario 4	1.09E-02	3.77E-04	3.28E-03
5130	640436.2	4164948.9	Worker	Scenario 4	9.50E-03	3.43E-04	2.05E-03
5131	640536.2	4164948.9	Worker	Scenario 4	8.30E-03	3.10E-04	8.30E-04
5132	640636.2	4164948.9	Worker	Scenario 4	8.48E-03	3.16E-04	7.31E-04
5133	640736.2	4164948.9	Worker	Scenario 4	8.79E-03	3.27E-04	1.21E-03
5134	640836.2	4164948.9	Worker	Scenario 4	9.42E-03	3.45E-04	8.79E-04
5135	640936.2	4164948.9	Worker	Scenario 4	9.89E-03	3.60E-04	2.35E-03
5136	641036.2	4164948.9	Worker	Scenario 4	9.37E-03	3.46E-04	1.03E-03
5137	641136.2	4164948.9	Worker	Scenario 4	9.61E-03	3.54E-04	1.44E-03
5138	641236.2	4164948.9	Worker	Scenario 4	1.01E-02	3.70E-04	7.83E-04
5139	641336.2	4164948.9	Worker	Scenario 4	1.05E-02	3.82E-04	7.51E-04
5140	641436.2	4164948.9	Worker	Scenario 4	1.08E-02	3.91E-04	1.02E-03
5141	641536.2	4164948.9	Worker	Scenario 4	1.10E-02	3.98E-04	8.86E-04
5142	641636.2	4164948.9	Worker	Scenario 4	1.13E-02	4.09E-04	7.45E-04
5143	641736.2	4164948.9	Worker	Scenario 4	1.19E-02	4.29E-04	9.42E-04
5144	641836.2	4164948.9	Worker	Scenario 4	1.35E-02	4.72E-04	1.57E-03
5145	641936.2	4164948.9	Worker	Scenario 4	1.35E-02	4.74E-04	1.34E-03
5146	642036.2	4164948.9	Worker	Scenario 4	1.69E-02	5.60E-04	2.65E-03
5147	642136.2	4164948.9	Worker	Scenario 4	1.45E-02	5.06E-04	1.25E-03
5148	642236.2	4164948.9	Worker	Scenario 4	1.48E-02	5.14E-04	9.22E-04
5149	642336.2	4164948.9	Worker	Scenario 4	1.61E-02	5.53E-04	1.37E-03
5150	642436.2	4164948.9	Worker	Scenario 4	1.73E-02	5.86E-04	2.52E-03
5151	642536.2	4164948.9	Worker	Scenario 4	1.76E-02	5.96E-04	1.73E-03
5152	642636.2	4164948.9	Worker	Scenario 4	1.96E-02	6.47E-04	2.04E-03
5153	642736.2	4164948.9	Worker	Scenario 4	1.86E-02	6.26E-04	1.39E-03
5154	642836.2	4164948.9	Worker	Scenario 4	1.86E-02	6.29E-04	1.68E-03
5155	642936.2	4164948.9	Worker	Scenario 4	1.99E-02	6.64E-04	2.45E-03
5156	643036.2	4164948.9	Worker	Scenario 4	2.13E-02	6.98E-04	2.90E-03
5157	643136.2	4164948.9	Worker	Scenario 4	2.58E-02	7.98E-04	4.00E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5158	643236.2	4164948.9	Worker	Scenario 4	2.67E-02	8.18E-04	4.46E-03
5159	643336.2	4164948.9	Worker	Scenario 4	2.80E-02	8.44E-04	4.80E-03
5160	643436.2	4164948.9	Worker	Scenario 4	2.88E-02	8.59E-04	3.90E-03
5161	643536.2	4164948.9	Worker	Scenario 4	2.94E-02	8.69E-04	3.75E-03
5162	643736.2	4164948.9	Worker	Scenario 4	3.03E-02	8.82E-04	4.58E-03
5163	643836.2	4164948.9	Worker	Scenario 4	3.10E-02	8.92E-04	4.12E-03
5164	643936.2	4164948.9	Worker	Scenario 4	3.13E-02	8.96E-04	3.99E-03
5165	644036.2	4164948.9	Worker	Scenario 4	3.16E-02	8.97E-04	3.38E-03
5166	644136.2	4164948.9	Worker	Scenario 4	3.15E-02	8.92E-04	3.24E-03
5167	644236.2	4164948.9	Worker	Scenario 4	3.15E-02	8.88E-04	2.71E-03
5168	644336.2	4164948.9	Worker	Scenario 4	3.16E-02	8.85E-04	2.56E-03
5169	644436.2	4164948.9	Worker	Scenario 4	3.16E-02	8.79E-04	2.54E-03
5170	644536.2	4164948.9	Worker	Scenario 4	3.17E-02	8.73E-04	2.64E-03
5171	644736.2	4164948.9	Worker	Scenario 4	3.16E-02	8.56E-04	2.85E-03
5172	644836.2	4164948.9	Worker	Scenario 4	3.16E-02	8.45E-04	2.59E-03
5173	644936.2	4164948.9	Worker	Scenario 4	3.07E-02	8.17E-04	2.72E-03
5174	645036.2	4164948.9	Worker	Scenario 4	3.11E-02	8.19E-04	1.95E-03
5175	645136.2	4164948.9	Worker	Scenario 4	3.10E-02	8.07E-04	1.83E-03
5176	645236.2	4164948.9	Worker	Scenario 4	3.06E-02	7.92E-04	1.76E-03
5177	645336.2	4164948.9	Worker	Scenario 4	3.04E-02	7.80E-04	1.24E-03
5178	645436.2	4164948.9	Worker	Scenario 4	3.01E-02	7.67E-04	1.24E-03
5179	645536.2	4164948.9	Worker	Scenario 4	3.04E-02	7.57E-04	1.27E-03
5180	645636.2	4164948.9	Worker	Scenario 4	2.99E-02	7.41E-04	1.25E-03
5181	645736.2	4164948.9	Worker	Scenario 4	2.95E-02	7.25E-04	1.26E-03
5182	645836.2	4164948.9	Worker	Scenario 4	2.91E-02	7.09E-04	1.22E-03
5183	639836.2	4165048.9	Worker	Scenario 4	7.44E-03	2.79E-04	5.61E-04
5184	639936.2	4165048.9	Worker	Scenario 4	7.33E-03	2.77E-04	5.95E-04
5185	640036.2	4165048.9	Worker	Scenario 4	7.71E-03	2.89E-04	7.41E-04
5186	640136.2	4165048.9	Worker	Scenario 4	7.99E-03	2.99E-04	8.43E-04
5187	640236.2	4165048.9	Worker	Scenario 4	8.78E-03	3.22E-04	1.28E-03
5188	640336.2	4165048.9	Worker	Scenario 4	1.07E-02	3.75E-04	2.57E-03
5189	640436.2	4165048.9	Worker	Scenario 4	1.14E-02	3.95E-04	3.31E-03
5190	640536.2	4165048.9	Worker	Scenario 4	8.77E-03	3.27E-04	8.10E-04
5191	640636.2	4165048.9	Worker	Scenario 4	8.94E-03	3.33E-04	8.57E-04
5192	640736.2	4165048.9	Worker	Scenario 4	9.03E-03	3.36E-04	1.09E-03
5193	640836.2	4165048.9	Worker	Scenario 4	9.41E-03	3.48E-04	1.01E-03
5194	640936.2	4165048.9	Worker	Scenario 4	1.05E-02	3.80E-04	2.30E-03
5195	641036.2	4165048.9	Worker	Scenario 4	9.77E-03	3.61E-04	1.14E-03
5196	641136.2	4165048.9	Worker	Scenario 4	1.00E-02	3.69E-04	1.48E-03
5197	641236.2	4165048.9	Worker	Scenario 4	1.06E-02	3.88E-04	9.34E-04
5198	641336.2	4165048.9	Worker	Scenario 4	1.08E-02	3.93E-04	7.66E-04
5199	641436.2	4165048.9	Worker	Scenario 4	1.21E-02	4.32E-04	1.88E-03
5200	641536.2	4165048.9	Worker	Scenario 4	1.20E-02	4.32E-04	1.82E-03
5201	641636.2	4165048.9	Worker	Scenario 4	1.20E-02	4.32E-04	8.09E-04
5202	641736.2	4165048.9	Worker	Scenario 4	1.25E-02	4.47E-04	9.83E-04
5203	641836.2	4165048.9	Worker	Scenario 4	1.33E-02	4.73E-04	1.14E-03
5204	641936.2	4165048.9	Worker	Scenario 4	1.59E-02	5.42E-04	1.95E-03
5205	642036.2	4165048.9	Worker	Scenario 4	1.64E-02	5.58E-04	2.24E-03
5206	642136.2	4165048.9	Worker	Scenario 4	1.71E-02	5.78E-04	2.25E-03
5207	642236.2	4165048.9	Worker	Scenario 4	1.58E-02	5.47E-04	1.00E-03
5208	642336.2	4165048.9	Worker	Scenario 4	1.65E-02	5.70E-04	1.21E-03
5209	642436.2	4165048.9	Worker	Scenario 4	1.77E-02	6.04E-04	1.78E-03
5210	642536.2	4165048.9	Worker	Scenario 4	2.13E-02	6.90E-04	3.15E-03
5211	642636.2	4165048.9	Worker	Scenario 4	2.29E-02	7.29E-04	3.34E-03
5212	642736.2	4165048.9	Worker	Scenario 4	2.14E-02	7.03E-04	2.50E-03
5213	642836.2	4165048.9	Worker	Scenario 4	2.02E-02	6.78E-04	2.17E-03
5214	642936.2	4165048.9	Worker	Scenario 4	2.16E-02	7.14E-04	2.68E-03
5215	643036.2	4165048.9	Worker	Scenario 4	2.53E-02	8.00E-04	3.76E-03
5216	643136.2	4165048.9	Worker	Scenario 4	2.75E-02	8.48E-04	4.62E-03
5217	643236.2	4165048.9	Worker	Scenario 4	3.01E-02	9.01E-04	5.20E-03
5218	643336.2	4165048.9	Worker	Scenario 4	3.03E-02	9.04E-04	4.32E-03
5219	643436.2	4165048.9	Worker	Scenario 4	3.12E-02	9.21E-04	3.99E-03
5220	643636.2	4165048.9	Worker	Scenario 4	3.19E-02	9.29E-04	4.87E-03
5221	643736.2	4165048.9	Worker	Scenario 4	3.24E-02	9.35E-04	4.40E-03
5222	643836.2	4165048.9	Worker	Scenario 4	3.31E-02	9.46E-04	4.20E-03
5223	643936.2	4165048.9	Worker	Scenario 4	3.34E-02	9.47E-04	3.50E-03
5224	644036.2	4165048.9	Worker	Scenario 4	3.33E-02	9.41E-04	3.36E-03
5225	644136.2	4165048.9	Worker	Scenario 4	3.33E-02	9.36E-04	2.76E-03
5226	644236.2	4165048.9	Worker	Scenario 4	3.33E-02	9.30E-04	2.81E-03
5227	644336.2	4165048.9	Worker	Scenario 4	3.34E-02	9.25E-04	2.70E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5228	644436.2	4165048.9	Worker	Scenario 4	3.34E-02	9.19E-04	2.94E-03
5229	644536.2	4165048.9	Worker	Scenario 4	3.34E-02	9.11E-04	3.09E-03
5230	644736.2	4165048.9	Worker	Scenario 4	3.34E-02	8.92E-04	2.59E-03
5231	644836.2	4165048.9	Worker	Scenario 4	3.33E-02	8.81E-04	2.06E-03
5232	644936.2	4165048.9	Worker	Scenario 4	3.31E-02	8.67E-04	1.97E-03
5233	645036.2	4165048.9	Worker	Scenario 4	3.29E-02	8.53E-04	1.85E-03
5234	645136.2	4165048.9	Worker	Scenario 4	3.25E-02	8.38E-04	1.66E-03
5235	645236.2	4165048.9	Worker	Scenario 4	3.21E-02	8.21E-04	1.78E-03
5236	645336.2	4165048.9	Worker	Scenario 4	3.26E-02	8.16E-04	1.34E-03
5237	645436.2	4165048.9	Worker	Scenario 4	3.22E-02	7.99E-04	1.34E-03
5238	645536.2	4165048.9	Worker	Scenario 4	3.17E-02	7.81E-04	1.34E-03
5239	645636.2	4165048.9	Worker	Scenario 4	3.12E-02	7.64E-04	1.31E-03
5240	645736.2	4165048.9	Worker	Scenario 4	3.07E-02	7.47E-04	1.28E-03
5241	646036.2	4165048.9	Worker	Scenario 4	2.91E-02	6.96E-04	1.16E-03
5242	639736.2	4165148.9	Worker	Scenario 4	7.38E-03	2.78E-04	5.92E-04
5243	639836.2	4165148.9	Worker	Scenario 4	7.74E-03	2.89E-04	5.89E-04
5244	639936.2	4165148.9	Worker	Scenario 4	7.57E-03	2.85E-04	4.90E-04
5245	640036.2	4165148.9	Worker	Scenario 4	7.80E-03	2.93E-04	6.76E-04
5246	640136.2	4165148.9	Worker	Scenario 4	8.25E-03	3.08E-04	8.02E-04
5247	640236.2	4165148.9	Worker	Scenario 4	8.61E-03	3.20E-04	9.45E-04
5248	640336.2	4165148.9	Worker	Scenario 4	1.03E-02	3.68E-04	2.25E-03
5249	640436.2	4165148.9	Worker	Scenario 4	1.24E-02	4.23E-04	3.87E-03
5250	640536.2	4165148.9	Worker	Scenario 4	9.48E-03	3.50E-04	1.43E-03
5251	640636.2	4165148.9	Worker	Scenario 4	9.50E-03	3.52E-04	1.78E-03
5252	640736.2	4165148.9	Worker	Scenario 4	9.42E-03	3.51E-04	9.21E-04
5253	640836.2	4165148.9	Worker	Scenario 4	9.77E-03	3.62E-04	1.26E-03
5254	640936.2	4165148.9	Worker	Scenario 4	1.11E-02	4.00E-04	2.17E-03
5255	641036.2	4165148.9	Worker	Scenario 4	1.02E-02	3.77E-04	1.25E-03
5256	641136.2	4165148.9	Worker	Scenario 4	1.05E-02	3.87E-04	1.48E-03
5257	641236.2	4165148.9	Worker	Scenario 4	1.09E-02	3.99E-04	1.04E-03
5258	641336.2	4165148.9	Worker	Scenario 4	1.18E-02	4.24E-04	1.56E-03
5259	641436.2	4165148.9	Worker	Scenario 4	1.21E-02	4.35E-04	1.96E-03
5260	641536.2	4165148.9	Worker	Scenario 4	1.28E-02	4.56E-04	1.87E-03
5261	641636.2	4165148.9	Worker	Scenario 4	1.27E-02	4.58E-04	8.89E-04
5262	641736.2	4165148.9	Worker	Scenario 4	1.33E-02	4.74E-04	1.03E-03
5263	641836.2	4165148.9	Worker	Scenario 4	1.39E-02	4.94E-04	1.25E-03
5264	641936.2	4165148.9	Worker	Scenario 4	1.51E-02	5.29E-04	1.50E-03
5265	642036.2	4165148.9	Worker	Scenario 4	1.80E-02	6.04E-04	2.78E-03
5266	642136.2	4165148.9	Worker	Scenario 4	2.06E-02	6.69E-04	3.23E-03
5267	642236.2	4165148.9	Worker	Scenario 4	1.71E-02	5.91E-04	1.31E-03
5268	642336.2	4165148.9	Worker	Scenario 4	1.78E-02	6.10E-04	1.22E-03
5269	642436.2	4165148.9	Worker	Scenario 4	1.86E-02	6.36E-04	1.24E-03
5270	642536.2	4165148.9	Worker	Scenario 4	1.94E-02	6.58E-04	9.81E-04
5271	642636.2	4165148.9	Worker	Scenario 4	2.26E-02	7.37E-04	2.15E-03
5272	642736.2	4165148.9	Worker	Scenario 4	2.50E-02	7.94E-04	3.75E-03
5273	642836.2	4165148.9	Worker	Scenario 4	2.21E-02	7.33E-04	2.31E-03
5274	642936.2	4165148.9	Worker	Scenario 4	2.37E-02	7.76E-04	2.97E-03
5275	643036.2	4165148.9	Worker	Scenario 4	2.81E-02	8.74E-04	4.29E-03
5276	643136.2	4165148.9	Worker	Scenario 4	3.03E-02	9.22E-04	4.89E-03
5277	643236.2	4165148.9	Worker	Scenario 4	3.16E-02	9.47E-04	4.84E-03
5278	643336.2	4165148.9	Worker	Scenario 4	3.31E-02	9.76E-04	4.39E-03
5279	643536.2	4165148.9	Worker	Scenario 4	3.41E-02	9.90E-04	5.18E-03
5280	643636.2	4165148.9	Worker	Scenario 4	3.48E-02	9.99E-04	4.59E-03
5281	643736.2	4165148.9	Worker	Scenario 4	3.54E-02	1.01E-03	4.29E-03
5282	643836.2	4165148.9	Worker	Scenario 4	3.55E-02	1.00E-03	3.59E-03
5283	643936.2	4165148.9	Worker	Scenario 4	3.54E-02	9.98E-04	3.46E-03
5284	644036.2	4165148.9	Worker	Scenario 4	3.54E-02	9.91E-04	2.77E-03
5285	644136.2	4165148.9	Worker	Scenario 4	3.53E-02	9.84E-04	2.94E-03
5286	644236.2	4165148.9	Worker	Scenario 4	3.53E-02	9.77E-04	2.99E-03
5287	644336.2	4165148.9	Worker	Scenario 4	3.54E-02	9.70E-04	3.20E-03
5288	644436.2	4165148.9	Worker	Scenario 4	3.54E-02	9.62E-04	3.33E-03
5289	644536.2	4165148.9	Worker	Scenario 4	3.54E-02	9.53E-04	3.10E-03
5290	644736.2	4165148.9	Worker	Scenario 4	3.53E-02	9.31E-04	2.15E-03
5291	644836.2	4165148.9	Worker	Scenario 4	3.51E-02	9.18E-04	2.09E-03
5292	644936.2	4165148.9	Worker	Scenario 4	3.49E-02	9.04E-04	1.86E-03
5293	645036.2	4165148.9	Worker	Scenario 4	3.46E-02	8.88E-04	1.73E-03
5294	645136.2	4165148.9	Worker	Scenario 4	3.40E-02	8.68E-04	1.90E-03
5295	645236.2	4165148.9	Worker	Scenario 4	3.37E-02	8.53E-04	1.44E-03
5296	645336.2	4165148.9	Worker	Scenario 4	3.40E-02	8.44E-04	1.43E-03
5297	645436.2	4165148.9	Worker	Scenario 4	3.36E-02	8.25E-04	1.41E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5298	645536.2	4165148.9	Worker	Scenario 4	3.31E-02	8.07E-04	1.36E-03
5299	645636.2	4165148.9	Worker	Scenario 4	3.26E-02	7.88E-04	1.32E-03
5300	645736.2	4165148.9	Worker	Scenario 4	3.16E-02	7.66E-04	1.25E-03
5301	645936.2	4165148.9	Worker	Scenario 4	3.07E-02	7.32E-04	1.24E-03
5302	646036.2	4165148.9	Worker	Scenario 4	3.04E-02	7.17E-04	1.19E-03
5303	646136.2	4165148.9	Worker	Scenario 4	3.00E-02	7.01E-04	1.12E-03
5304	639636.2	4165248.9	Worker	Scenario 4	7.21E-03	2.73E-04	5.52E-04
5305	639736.2	4165248.9	Worker	Scenario 4	7.45E-03	2.81E-04	4.87E-04
5306	639836.2	4165248.9	Worker	Scenario 4	7.76E-03	2.92E-04	5.75E-04
5307	639936.2	4165248.9	Worker	Scenario 4	8.10E-03	3.03E-04	6.23E-04
5308	640036.2	4165248.9	Worker	Scenario 4	8.07E-03	3.04E-04	5.76E-04
5309	640136.2	4165248.9	Worker	Scenario 4	8.51E-03	3.18E-04	7.60E-04
5310	640236.2	4165248.9	Worker	Scenario 4	9.26E-03	3.41E-04	1.10E-03
5311	640336.2	4165248.9	Worker	Scenario 4	1.06E-02	3.80E-04	2.64E-03
5312	640436.2	4165248.9	Worker	Scenario 4	1.29E-02	4.38E-04	3.61E-03
5313	640536.2	4165248.9	Worker	Scenario 4	1.22E-02	4.25E-04	3.38E-03
5314	640636.2	4165248.9	Worker	Scenario 4	9.67E-03	3.60E-04	8.95E-04
5315	640736.2	4165248.9	Worker	Scenario 4	9.82E-03	3.66E-04	8.28E-04
5316	640836.2	4165248.9	Worker	Scenario 4	1.02E-02	3.79E-04	1.46E-03
5317	640936.2	4165248.9	Worker	Scenario 4	1.18E-02	4.24E-04	2.03E-03
5318	641036.2	4165248.9	Worker	Scenario 4	1.10E-02	4.02E-04	1.32E-03
5319	641136.2	4165248.9	Worker	Scenario 4	1.10E-02	4.05E-04	1.41E-03
5320	641236.2	4165248.9	Worker	Scenario 4	1.19E-02	4.31E-04	1.42E-03
5321	641336.2	4165248.9	Worker	Scenario 4	1.28E-02	4.58E-04	1.58E-03
5322	641436.2	4165248.9	Worker	Scenario 4	1.25E-02	4.51E-04	1.15E-03
5323	641536.2	4165248.9	Worker	Scenario 4	1.39E-02	4.92E-04	1.92E-03
5324	641636.2	4165248.9	Worker	Scenario 4	1.35E-02	4.84E-04	9.51E-04
5325	641736.2	4165248.9	Worker	Scenario 4	1.42E-02	5.06E-04	1.08E-03
5326	641836.2	4165248.9	Worker	Scenario 4	1.48E-02	5.25E-04	1.37E-03
5327	641936.2	4165248.9	Worker	Scenario 4	1.57E-02	5.51E-04	1.58E-03
5328	642036.2	4165248.9	Worker	Scenario 4	1.79E-02	6.13E-04	2.03E-03
5329	642136.2	4165248.9	Worker	Scenario 4	2.22E-02	7.17E-04	3.35E-03
5330	642236.2	4165248.9	Worker	Scenario 4	2.06E-02	6.88E-04	2.79E-03
5331	642336.2	4165248.9	Worker	Scenario 4	2.07E-02	6.93E-04	2.83E-03
5332	642436.2	4165248.9	Worker	Scenario 4	2.02E-02	6.84E-04	1.15E-03
5333	642536.2	4165248.9	Worker	Scenario 4	2.18E-02	7.30E-04	1.47E-03
5334	642636.2	4165248.9	Worker	Scenario 4	2.27E-02	7.56E-04	2.30E-03
5335	642736.2	4165248.9	Worker	Scenario 4	3.03E-02	9.24E-04	5.97E-03
5336	642836.2	4165248.9	Worker	Scenario 4	2.45E-02	8.02E-04	2.90E-03
5337	642936.2	4165248.9	Worker	Scenario 4	2.70E-02	8.64E-04	3.39E-03
5338	643036.2	4165248.9	Worker	Scenario 4	3.13E-02	9.59E-04	4.75E-03
5339	643136.2	4165248.9	Worker	Scenario 4	3.31E-02	9.96E-04	5.38E-03
5340	643436.2	4165248.9	Worker	Scenario 4	3.70E-02	1.07E-03	5.39E-03
5341	643536.2	4165248.9	Worker	Scenario 4	3.76E-02	1.08E-03	4.65E-03
5342	643636.2	4165248.9	Worker	Scenario 4	3.79E-02	1.08E-03	4.36E-03
5343	643736.2	4165248.9	Worker	Scenario 4	3.78E-02	1.07E-03	3.71E-03
5344	643836.2	4165248.9	Worker	Scenario 4	3.78E-02	1.06E-03	3.50E-03
5345	643936.2	4165248.9	Worker	Scenario 4	3.77E-02	1.05E-03	2.91E-03
5346	644036.2	4165248.9	Worker	Scenario 4	3.76E-02	1.05E-03	3.02E-03
5347	644136.2	4165248.9	Worker	Scenario 4	3.76E-02	1.04E-03	3.22E-03
5348	644236.2	4165248.9	Worker	Scenario 4	3.76E-02	1.03E-03	3.47E-03
5349	644336.2	4165248.9	Worker	Scenario 4	3.76E-02	1.02E-03	3.50E-03
5350	644436.2	4165248.9	Worker	Scenario 4	3.77E-02	1.01E-03	3.11E-03
5351	644536.2	4165248.9	Worker	Scenario 4	3.76E-02	1.00E-03	2.50E-03
5352	644736.2	4165248.9	Worker	Scenario 4	3.74E-02	9.74E-04	2.17E-03
5353	644836.2	4165248.9	Worker	Scenario 4	3.72E-02	9.59E-04	1.98E-03
5354	644936.2	4165248.9	Worker	Scenario 4	3.69E-02	9.42E-04	1.83E-03
5355	645036.2	4165248.9	Worker	Scenario 4	3.65E-02	9.25E-04	1.55E-03
5356	645136.2	4165248.9	Worker	Scenario 4	3.60E-02	9.05E-04	1.53E-03
5357	645236.2	4165248.9	Worker	Scenario 4	3.55E-02	8.87E-04	1.52E-03
5358	645336.2	4165248.9	Worker	Scenario 4	3.50E-02	8.68E-04	1.47E-03
5359	645436.2	4165248.9	Worker	Scenario 4	3.45E-02	8.48E-04	1.43E-03
5360	645536.2	4165248.9	Worker	Scenario 4	3.39E-02	8.27E-04	1.34E-03
5361	645636.2	4165248.9	Worker	Scenario 4	3.34E-02	8.08E-04	1.33E-03
5362	645936.2	4165248.9	Worker	Scenario 4	3.22E-02	7.56E-04	1.18E-03
5363	646036.2	4165248.9	Worker	Scenario 4	3.18E-02	7.39E-04	1.17E-03
5364	646136.2	4165248.9	Worker	Scenario 4	3.14E-02	7.23E-04	1.16E-03
5365	639536.2	4165348.9	Worker	Scenario 4	7.23E-03	2.74E-04	6.64E-04
5366	639636.2	4165348.9	Worker	Scenario 4	7.59E-03	2.86E-04	6.48E-04
5367	639736.2	4165348.9	Worker	Scenario 4	7.60E-03	2.87E-04	5.62E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5368	639836.2	4165348.9	Worker	Scenario 4	7.97E-03	3.00E-04	6.19E-04
5369	639936.2	4165348.9	Worker	Scenario 4	8.61E-03	3.19E-04	7.02E-04
5370	640036.2	4165348.9	Worker	Scenario 4	8.31E-03	3.13E-04	5.07E-04
5371	640136.2	4165348.9	Worker	Scenario 4	8.69E-03	3.26E-04	6.69E-04
5372	640236.2	4165348.9	Worker	Scenario 4	9.18E-03	3.42E-04	8.55E-04
5373	640336.2	4165348.9	Worker	Scenario 4	9.91E-03	3.64E-04	1.15E-03
5374	640436.2	4165348.9	Worker	Scenario 4	1.26E-02	4.37E-04	3.35E-03
5375	640536.2	4165348.9	Worker	Scenario 4	1.44E-02	4.81E-04	4.57E-03
5376	640636.2	4165348.9	Worker	Scenario 4	1.09E-02	3.98E-04	1.65E-03
5377	640736.2	4165348.9	Worker	Scenario 4	1.04E-02	3.85E-04	9.48E-04
5378	640836.2	4165348.9	Worker	Scenario 4	1.10E-02	4.05E-04	1.62E-03
5379	640936.2	4165348.9	Worker	Scenario 4	1.26E-02	4.50E-04	2.14E-03
5380	641036.2	4165348.9	Worker	Scenario 4	1.12E-02	4.14E-04	1.37E-03
5381	641136.2	4165348.9	Worker	Scenario 4	1.15E-02	4.24E-04	1.27E-03
5382	641236.2	4165348.9	Worker	Scenario 4	1.21E-02	4.43E-04	1.54E-03
5383	641336.2	4165348.9	Worker	Scenario 4	1.33E-02	4.77E-04	1.61E-03
5384	641436.2	4165348.9	Worker	Scenario 4	1.47E-02	5.15E-04	2.07E-03
5385	641536.2	4165348.9	Worker	Scenario 4	1.52E-02	5.32E-04	2.36E-03
5386	641636.2	4165348.9	Worker	Scenario 4	1.45E-02	5.19E-04	1.40E-03
5387	641736.2	4165348.9	Worker	Scenario 4	1.53E-02	5.41E-04	1.12E-03
5388	641836.2	4165348.9	Worker	Scenario 4	1.61E-02	5.66E-04	1.48E-03
5389	641936.2	4165348.9	Worker	Scenario 4	1.69E-02	5.91E-04	1.64E-03
5390	642036.2	4165348.9	Worker	Scenario 4	1.82E-02	6.29E-04	1.41E-03
5391	642136.2	4165348.9	Worker	Scenario 4	2.04E-02	6.91E-04	1.71E-03
5392	642236.2	4165348.9	Worker	Scenario 4	2.69E-02	8.39E-04	5.73E-03
5393	642336.2	4165348.9	Worker	Scenario 4	2.30E-02	7.62E-04	3.07E-03
5394	642436.2	4165348.9	Worker	Scenario 4	2.24E-02	7.52E-04	1.22E-03
5395	642536.2	4165348.9	Worker	Scenario 4	2.51E-02	8.21E-04	2.33E-03
5396	642636.2	4165348.9	Worker	Scenario 4	2.51E-02	8.27E-04	3.16E-03
5397	642736.2	4165348.9	Worker	Scenario 4	2.89E-02	9.14E-04	4.28E-03
5398	642836.2	4165348.9	Worker	Scenario 4	3.20E-02	9.86E-04	4.98E-03
5399	642936.2	4165348.9	Worker	Scenario 4	3.04E-02	9.56E-04	3.86E-03
5400	643036.2	4165348.9	Worker	Scenario 4	3.48E-02	1.05E-03	5.82E-03
5401	643236.2	4165348.9	Worker	Scenario 4	3.97E-02	1.15E-03	4.97E-03
5402	643336.2	4165348.9	Worker	Scenario 4	4.02E-02	1.16E-03	5.42E-03
5403	643436.2	4165348.9	Worker	Scenario 4	4.04E-02	1.16E-03	4.71E-03
5404	643536.2	4165348.9	Worker	Scenario 4	4.05E-02	1.15E-03	4.46E-03
5405	643636.2	4165348.9	Worker	Scenario 4	4.05E-02	1.14E-03	3.84E-03
5406	643736.2	4165348.9	Worker	Scenario 4	4.04E-02	1.13E-03	3.56E-03
5407	643836.2	4165348.9	Worker	Scenario 4	4.03E-02	1.12E-03	3.07E-03
5408	643936.2	4165348.9	Worker	Scenario 4	4.02E-02	1.11E-03	3.11E-03
5409	644036.2	4165348.9	Worker	Scenario 4	4.02E-02	1.11E-03	3.42E-03
5410	644136.2	4165348.9	Worker	Scenario 4	4.01E-02	1.10E-03	3.72E-03
5411	644236.2	4165348.9	Worker	Scenario 4	4.01E-02	1.09E-03	3.60E-03
5412	644336.2	4165348.9	Worker	Scenario 4	4.02E-02	1.08E-03	3.04E-03
5413	644436.2	4165348.9	Worker	Scenario 4	4.02E-02	1.06E-03	2.50E-03
5414	644536.2	4165348.9	Worker	Scenario 4	4.01E-02	1.05E-03	2.45E-03
5415	644736.2	4165348.9	Worker	Scenario 4	3.97E-02	1.02E-03	2.13E-03
5416	644836.2	4165348.9	Worker	Scenario 4	3.94E-02	1.00E-03	1.92E-03
5417	644936.2	4165348.9	Worker	Scenario 4	3.90E-02	9.86E-04	1.64E-03
5418	645036.2	4165348.9	Worker	Scenario 4	3.85E-02	9.66E-04	1.64E-03
5419	645136.2	4165348.9	Worker	Scenario 4	3.79E-02	9.44E-04	1.58E-03
5420	645236.2	4165348.9	Worker	Scenario 4	3.74E-02	9.22E-04	1.55E-03
5421	645336.2	4165348.9	Worker	Scenario 4	3.68E-02	9.01E-04	1.45E-03
5422	645436.2	4165348.9	Worker	Scenario 4	3.62E-02	8.80E-04	1.43E-03
5423	645536.2	4165348.9	Worker	Scenario 4	3.57E-02	8.59E-04	1.42E-03
5424	645636.2	4165348.9	Worker	Scenario 4	3.52E-02	8.38E-04	1.36E-03
5425	639436.2	4165448.9	Worker	Scenario 4	7.26E-03	2.75E-04	5.16E-04
5426	639536.2	4165448.9	Worker	Scenario 4	7.64E-03	2.88E-04	6.28E-04
5427	639636.2	4165448.9	Worker	Scenario 4	7.94E-03	2.98E-04	6.88E-04
5428	639736.2	4165448.9	Worker	Scenario 4	7.88E-03	2.98E-04	6.70E-04
5429	639836.2	4165448.9	Worker	Scenario 4	8.12E-03	3.06E-04	5.80E-04
5430	639936.2	4165448.9	Worker	Scenario 4	8.87E-03	3.29E-04	9.03E-04
5431	640036.2	4165448.9	Worker	Scenario 4	8.76E-03	3.28E-04	6.33E-04
5432	640136.2	4165448.9	Worker	Scenario 4	8.91E-03	3.34E-04	5.57E-04
5433	640236.2	4165448.9	Worker	Scenario 4	9.50E-03	3.53E-04	7.70E-04
5434	640336.2	4165448.9	Worker	Scenario 4	1.00E-02	3.70E-04	1.04E-03
5435	640436.2	4165448.9	Worker	Scenario 4	1.21E-02	4.30E-04	3.20E-03
5436	640536.2	4165448.9	Worker	Scenario 4	1.52E-02	5.06E-04	4.44E-03
5437	640636.2	4165448.9	Worker	Scenario 4	1.29E-02	4.54E-04	3.09E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5438	640736.2	4165448.9	Worker	Scenario 4	1.08E-02	4.02E-04	9.88E-04
5439	640836.2	4165448.9	Worker	Scenario 4	1.17E-02	4.28E-04	1.58E-03
5440	640936.2	4165448.9	Worker	Scenario 4	1.26E-02	4.55E-04	1.86E-03
5441	641036.2	4165448.9	Worker	Scenario 4	1.19E-02	4.37E-04	1.36E-03
5442	641136.2	4165448.9	Worker	Scenario 4	1.22E-02	4.48E-04	1.20E-03
5443	641236.2	4165448.9	Worker	Scenario 4	1.26E-02	4.62E-04	1.70E-03
5444	641336.2	4165448.9	Worker	Scenario 4	1.32E-02	4.78E-04	8.24E-04
5445	641436.2	4165448.9	Worker	Scenario 4	1.43E-02	5.13E-04	2.17E-03
5446	641536.2	4165448.9	Worker	Scenario 4	1.76E-02	6.01E-04	3.92E-03
5447	641636.2	4165448.9	Worker	Scenario 4	1.71E-02	5.95E-04	2.34E-03
5448	641736.2	4165448.9	Worker	Scenario 4	1.62E-02	5.75E-04	1.20E-03
5449	641836.2	4165448.9	Worker	Scenario 4	1.78E-02	6.22E-04	1.60E-03
5450	641936.2	4165448.9	Worker	Scenario 4	1.86E-02	6.46E-04	1.67E-03
5451	642036.2	4165448.9	Worker	Scenario 4	2.02E-02	6.93E-04	1.53E-03
5452	642136.2	4165448.9	Worker	Scenario 4	2.08E-02	7.11E-04	1.64E-03
5453	642236.2	4165448.9	Worker	Scenario 4	2.59E-02	8.39E-04	4.82E-03
5454	642336.2	4165448.9	Worker	Scenario 4	2.94E-02	9.21E-04	5.15E-03
5455	642436.2	4165448.9	Worker	Scenario 4	2.63E-02	8.61E-04	2.23E-03
5456	642536.2	4165448.9	Worker	Scenario 4	2.75E-02	8.93E-04	3.39E-03
5457	642636.2	4165448.9	Worker	Scenario 4	3.16E-02	9.89E-04	4.62E-03
5458	642736.2	4165448.9	Worker	Scenario 4	2.99E-02	9.56E-04	3.90E-03
5459	642836.2	4165448.9	Worker	Scenario 4	3.82E-02	1.14E-03	6.88E-03
5460	642936.2	4165448.9	Worker	Scenario 4	3.90E-02	1.16E-03	6.71E-03
5461	643136.2	4165448.9	Worker	Scenario 4	4.26E-02	1.24E-03	5.00E-03
5462	643236.2	4165448.9	Worker	Scenario 4	4.33E-02	1.25E-03	5.33E-03
5463	643336.2	4165448.9	Worker	Scenario 4	4.36E-02	1.24E-03	4.74E-03
5464	643436.2	4165448.9	Worker	Scenario 4	4.35E-02	1.23E-03	4.50E-03
5465	643536.2	4165448.9	Worker	Scenario 4	4.36E-02	1.23E-03	3.95E-03
5466	643636.2	4165448.9	Worker	Scenario 4	4.34E-02	1.21E-03	3.58E-03
5467	643736.2	4165448.9	Worker	Scenario 4	4.33E-02	1.20E-03	3.16E-03
5468	643836.2	4165448.9	Worker	Scenario 4	4.32E-02	1.19E-03	3.30E-03
5469	643936.2	4165448.9	Worker	Scenario 4	4.31E-02	1.18E-03	3.57E-03
5470	644036.2	4165448.9	Worker	Scenario 4	4.31E-02	1.17E-03	3.81E-03
5471	644136.2	4165448.9	Worker	Scenario 4	4.31E-02	1.16E-03	3.54E-03
5472	644236.2	4165448.9	Worker	Scenario 4	4.30E-02	1.15E-03	2.98E-03
5473	644336.2	4165448.9	Worker	Scenario 4	4.31E-02	1.14E-03	2.62E-03
5474	644436.2	4165448.9	Worker	Scenario 4	4.51E-02	1.16E-03	1.93E-03
5475	644536.2	4165448.9	Worker	Scenario 4	4.49E-02	1.14E-03	1.72E-03
5476	644636.2	4165448.9	Worker	Scenario 4	4.27E-02	1.09E-03	2.17E-03
5477	644736.2	4165448.9	Worker	Scenario 4	4.31E-02	1.09E-03	1.77E-03
5478	644836.2	4165448.9	Worker	Scenario 4	4.13E-02	1.04E-03	2.47E-03
5479	644936.2	4165448.9	Worker	Scenario 4	4.06E-02	1.02E-03	2.65E-03
5480	645036.2	4165448.9	Worker	Scenario 4	4.07E-02	1.01E-03	1.67E-03
5481	645136.2	4165448.9	Worker	Scenario 4	4.06E-02	9.91E-04	1.56E-03
5482	645236.2	4165448.9	Worker	Scenario 4	4.04E-02	9.70E-04	1.53E-03
5483	645336.2	4165448.9	Worker	Scenario 4	4.02E-02	9.52E-04	1.50E-03
5484	645436.2	4165448.9	Worker	Scenario 4	3.93E-02	9.24E-04	1.40E-03
5485	645536.2	4165448.9	Worker	Scenario 4	3.80E-02	8.91E-04	1.27E-03
5486	645636.2	4165448.9	Worker	Scenario 4	3.73E-02	8.67E-04	1.28E-03
5487	645936.2	4165448.9	Worker	Scenario 4	3.56E-02	8.09E-04	1.17E-03
5488	646036.2	4165448.9	Worker	Scenario 4	3.52E-02	7.91E-04	1.08E-03
5489	646136.2	4165448.9	Worker	Scenario 4	3.47E-02	7.73E-04	1.01E-03
5490	646336.2	4165448.9	Worker	Scenario 4	3.39E-02	7.40E-04	8.62E-04
5491	646436.2	4165448.9	Worker	Scenario 4	3.35E-02	7.25E-04	9.03E-04
5492	639436.2	4165548.9	Worker	Scenario 4	7.67E-03	2.89E-04	4.12E-04
5493	639536.2	4165548.9	Worker	Scenario 4	7.81E-03	2.94E-04	5.31E-04
5494	639636.2	4165548.9	Worker	Scenario 4	8.38E-03	3.12E-04	6.52E-04
5495	639736.2	4165548.9	Worker	Scenario 4	8.34E-03	3.13E-04	7.17E-04
5496	639836.2	4165548.9	Worker	Scenario 4	8.65E-03	3.23E-04	7.46E-04
5497	639936.2	4165548.9	Worker	Scenario 4	9.29E-03	3.43E-04	7.80E-04
5498	640036.2	4165548.9	Worker	Scenario 4	9.16E-03	3.42E-04	8.05E-04
5499	640136.2	4165548.9	Worker	Scenario 4	9.21E-03	3.45E-04	5.09E-04
5500	640236.2	4165548.9	Worker	Scenario 4	9.64E-03	3.60E-04	6.58E-04
5501	640336.2	4165548.9	Worker	Scenario 4	1.05E-02	3.87E-04	9.99E-04
5502	640436.2	4165548.9	Worker	Scenario 4	1.11E-02	4.05E-04	1.19E-03
5503	640536.2	4165548.9	Worker	Scenario 4	1.55E-02	5.20E-04	4.34E-03
5504	640636.2	4165548.9	Worker	Scenario 4	1.42E-02	4.94E-04	3.58E-03
5505	640736.2	4165548.9	Worker	Scenario 4	1.19E-02	4.38E-04	1.91E-03
5506	640836.2	4165548.9	Worker	Scenario 4	1.25E-02	4.58E-04	1.98E-03
5507	640936.2	4165548.9	Worker	Scenario 4	1.32E-02	4.78E-04	2.21E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5508	641036.2	4165548.9	Worker	Scenario 4	1.26E-02	4.63E-04	1.29E-03
5509	641136.2	4165548.9	Worker	Scenario 4	1.31E-02	4.79E-04	1.35E-03
5510	641236.2	4165548.9	Worker	Scenario 4	1.36E-02	4.96E-04	2.07E-03
5511	641336.2	4165548.9	Worker	Scenario 4	1.40E-02	5.10E-04	8.55E-04
5512	641436.2	4165548.9	Worker	Scenario 4	1.47E-02	5.30E-04	1.21E-03
5513	641536.2	4165548.9	Worker	Scenario 4	1.65E-02	5.84E-04	2.12E-03
5514	641636.2	4165548.9	Worker	Scenario 4	1.94E-02	6.61E-04	3.47E-03
5515	641736.2	4165548.9	Worker	Scenario 4	1.77E-02	6.23E-04	1.42E-03
5516	641836.2	4165548.9	Worker	Scenario 4	1.89E-02	6.60E-04	1.72E-03
5517	641936.2	4165548.9	Worker	Scenario 4	2.10E-02	7.20E-04	1.94E-03
5518	642036.2	4165548.9	Worker	Scenario 4	2.22E-02	7.56E-04	1.63E-03
5519	642136.2	4165548.9	Worker	Scenario 4	2.34E-02	7.92E-04	2.14E-03
5520	642236.2	4165548.9	Worker	Scenario 4	2.55E-02	8.48E-04	3.07E-03
5521	642336.2	4165548.9	Worker	Scenario 4	3.68E-02	1.10E-03	6.38E-03
5522	642436.2	4165548.9	Worker	Scenario 4	2.99E-02	9.62E-04	3.11E-03
5523	642536.2	4165548.9	Worker	Scenario 4	3.46E-02	1.07E-03	5.53E-03
5524	642636.2	4165548.9	Worker	Scenario 4	3.39E-02	1.06E-03	4.90E-03
5525	642736.2	4165548.9	Worker	Scenario 4	3.99E-02	1.19E-03	6.82E-03
5526	643036.2	4165548.9	Worker	Scenario 4	4.59E-02	1.33E-03	5.05E-03
5527	643136.2	4165548.9	Worker	Scenario 4	4.67E-02	1.34E-03	5.29E-03
5528	643236.2	4165548.9	Worker	Scenario 4	4.70E-02	1.34E-03	4.62E-03
5529	643336.2	4165548.9	Worker	Scenario 4	4.71E-02	1.33E-03	4.44E-03
5530	643436.2	4165548.9	Worker	Scenario 4	4.69E-02	1.32E-03	4.04E-03
5531	643536.2	4165548.9	Worker	Scenario 4	4.69E-02	1.31E-03	3.55E-03
5532	643636.2	4165548.9	Worker	Scenario 4	4.67E-02	1.29E-03	3.19E-03
5533	643736.2	4165548.9	Worker	Scenario 4	4.66E-02	1.28E-03	3.43E-03
5534	643836.2	4165548.9	Worker	Scenario 4	4.65E-02	1.27E-03	3.83E-03
5535	643936.2	4165548.9	Worker	Scenario 4	4.64E-02	1.26E-03	3.87E-03
5536	644036.2	4165548.9	Worker	Scenario 4	4.64E-02	1.25E-03	3.35E-03
5537	644136.2	4165548.9	Worker	Scenario 4	4.99E-02	1.29E-03	2.13E-03
5538	644236.2	4165548.9	Worker	Scenario 4	4.98E-02	1.27E-03	2.09E-03
5539	644336.2	4165548.9	Worker	Scenario 4	4.96E-02	1.25E-03	1.92E-03
5540	644436.2	4165548.9	Worker	Scenario 4	4.92E-02	1.23E-03	1.84E-03
5541	644536.2	4165548.9	Worker	Scenario 4	4.82E-02	1.21E-03	1.90E-03
5542	644636.2	4165548.9	Worker	Scenario 4	4.57E-02	1.15E-03	1.92E-03
5543	644736.2	4165548.9	Worker	Scenario 4	4.56E-02	1.13E-03	1.68E-03
5544	644836.2	4165548.9	Worker	Scenario 4	4.53E-02	1.11E-03	1.67E-03
5545	644936.2	4165548.9	Worker	Scenario 4	4.51E-02	1.10E-03	1.69E-03
5546	645036.2	4165548.9	Worker	Scenario 4	4.29E-02	1.05E-03	1.66E-03
5547	645136.2	4165548.9	Worker	Scenario 4	4.24E-02	1.03E-03	1.65E-03
5548	645236.2	4165548.9	Worker	Scenario 4	4.19E-02	9.95E-04	1.43E-03
5549	645336.2	4165548.9	Worker	Scenario 4	4.11E-02	9.69E-04	1.34E-03
5550	645436.2	4165548.9	Worker	Scenario 4	4.07E-02	9.50E-04	1.37E-03
5551	645536.2	4165548.9	Worker	Scenario 4	4.00E-02	9.24E-04	1.33E-03
5552	645636.2	4165548.9	Worker	Scenario 4	3.93E-02	8.99E-04	1.25E-03
5553	645936.2	4165548.9	Worker	Scenario 4	3.76E-02	8.40E-04	1.06E-03
5554	646036.2	4165548.9	Worker	Scenario 4	3.71E-02	8.20E-04	9.70E-04
5555	646136.2	4165548.9	Worker	Scenario 4	3.66E-02	8.01E-04	9.62E-04
5556	646336.2	4165548.9	Worker	Scenario 4	3.57E-02	7.67E-04	1.06E-03
5557	646436.2	4165548.9	Worker	Scenario 4	3.53E-02	7.51E-04	1.08E-03
5558	646536.2	4165548.9	Worker	Scenario 4	3.49E-02	7.37E-04	1.10E-03
5559	639236.2	4165648.9	Worker	Scenario 4	7.89E-03	2.94E-04	7.28E-04
5560	639336.2	4165648.9	Worker	Scenario 4	8.87E-03	3.21E-04	1.86E-03
5561	639436.2	4165648.9	Worker	Scenario 4	8.28E-03	3.07E-04	6.39E-04
5562	639536.2	4165648.9	Worker	Scenario 4	8.00E-03	3.01E-04	4.18E-04
5563	639636.2	4165648.9	Worker	Scenario 4	8.48E-03	3.17E-04	5.46E-04
5564	639736.2	4165648.9	Worker	Scenario 4	8.97E-03	3.32E-04	6.78E-04
5565	639836.2	4165648.9	Worker	Scenario 4	9.53E-03	3.50E-04	1.18E-03
5566	639936.2	4165648.9	Worker	Scenario 4	9.73E-03	3.58E-04	9.49E-04
5567	640036.2	4165648.9	Worker	Scenario 4	9.39E-03	3.51E-04	6.35E-04
5568	640136.2	4165648.9	Worker	Scenario 4	9.72E-03	3.63E-04	7.58E-04
5569	640236.2	4165648.9	Worker	Scenario 4	1.03E-02	3.81E-04	8.20E-04
5570	640336.2	4165648.9	Worker	Scenario 4	1.14E-02	4.14E-04	8.82E-04
5571	640436.2	4165648.9	Worker	Scenario 4	1.33E-02	4.68E-04	3.33E-03
5572	640536.2	4165648.9	Worker	Scenario 4	1.48E-02	5.11E-04	4.39E-03
5573	640636.2	4165648.9	Worker	Scenario 4	1.67E-02	5.61E-04	4.74E-03
5574	640736.2	4165648.9	Worker	Scenario 4	1.22E-02	4.51E-04	1.65E-03
5575	640836.2	4165648.9	Worker	Scenario 4	1.25E-02	4.63E-04	2.14E-03
5576	640936.2	4165648.9	Worker	Scenario 4	1.60E-02	5.57E-04	3.08E-03
5577	641036.2	4165648.9	Worker	Scenario 4	1.43E-02	5.16E-04	2.33E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5578	641136.2	4165648.9	Worker	Scenario 4	1.47E-02	5.32E-04	3.01E-03
5579	641236.2	4165648.9	Worker	Scenario 4	1.44E-02	5.24E-04	2.20E-03
5580	641336.2	4165648.9	Worker	Scenario 4	1.58E-02	5.65E-04	1.70E-03
5581	641436.2	4165648.9	Worker	Scenario 4	1.64E-02	5.86E-04	2.35E-03
5582	641536.2	4165648.9	Worker	Scenario 4	1.73E-02	6.12E-04	2.21E-03
5583	641636.2	4165648.9	Worker	Scenario 4	2.33E-02	7.68E-04	5.10E-03
5584	641736.2	4165648.9	Worker	Scenario 4	1.97E-02	6.85E-04	1.74E-03
5585	641836.2	4165648.9	Worker	Scenario 4	2.19E-02	7.51E-04	1.93E-03
5586	641936.2	4165648.9	Worker	Scenario 4	2.49E-02	8.29E-04	3.54E-03
5587	642036.2	4165648.9	Worker	Scenario 4	2.76E-02	9.02E-04	3.76E-03
5588	642136.2	4165648.9	Worker	Scenario 4	2.96E-02	9.56E-04	5.23E-03
5589	642236.2	4165648.9	Worker	Scenario 4	2.82E-02	9.30E-04	2.49E-03
5590	642336.2	4165648.9	Worker	Scenario 4	3.50E-02	1.09E-03	4.90E-03
5591	642436.2	4165648.9	Worker	Scenario 4	4.16E-02	1.23E-03	7.90E-03
5592	642536.2	4165648.9	Worker	Scenario 4	3.97E-02	1.21E-03	6.07E-03
5593	642636.2	4165648.9	Worker	Scenario 4	4.59E-02	1.34E-03	7.13E-03
5594	642836.2	4165648.9	Worker	Scenario 4	4.93E-02	1.42E-03	6.40E-03
5595	642936.2	4165648.9	Worker	Scenario 4	4.95E-02	1.43E-03	5.41E-03
5596	643036.2	4165648.9	Worker	Scenario 4	5.01E-02	1.44E-03	5.78E-03
5597	643136.2	4165648.9	Worker	Scenario 4	5.07E-02	1.45E-03	4.64E-03
5598	643236.2	4165648.9	Worker	Scenario 4	5.11E-02	1.44E-03	4.06E-03
5599	643336.2	4165648.9	Worker	Scenario 4	5.09E-02	1.43E-03	4.00E-03
5600	643436.2	4165648.9	Worker	Scenario 4	5.08E-02	1.41E-03	3.45E-03
5601	643536.2	4165648.9	Worker	Scenario 4	5.07E-02	1.40E-03	3.10E-03
5602	643636.2	4165648.9	Worker	Scenario 4	5.06E-02	1.39E-03	3.50E-03
5603	643736.2	4165648.9	Worker	Scenario 4	5.05E-02	1.37E-03	3.82E-03
5604	643836.2	4165648.9	Worker	Scenario 4	5.28E-02	1.41E-03	2.68E-03
5605	643936.2	4165648.9	Worker	Scenario 4	5.37E-02	1.40E-03	2.23E-03
5606	644036.2	4165648.9	Worker	Scenario 4	5.32E-02	1.38E-03	2.22E-03
5607	644136.2	4165648.9	Worker	Scenario 4	5.32E-02	1.37E-03	2.12E-03
5608	644236.2	4165648.9	Worker	Scenario 4	5.32E-02	1.35E-03	1.92E-03
5609	644336.2	4165648.9	Worker	Scenario 4	5.28E-02	1.33E-03	2.00E-03
5610	644436.2	4165648.9	Worker	Scenario 4	5.23E-02	1.30E-03	1.99E-03
5611	644536.2	4165648.9	Worker	Scenario 4	5.12E-02	1.27E-03	2.03E-03
5612	644636.2	4165648.9	Worker	Scenario 4	4.89E-02	1.22E-03	1.98E-03
5613	644736.2	4165648.9	Worker	Scenario 4	4.86E-02	1.19E-03	1.68E-03
5614	644836.2	4165648.9	Worker	Scenario 4	4.75E-02	1.15E-03	1.62E-03
5615	644936.2	4165648.9	Worker	Scenario 4	4.69E-02	1.13E-03	1.63E-03
5616	645036.2	4165648.9	Worker	Scenario 4	4.77E-02	1.13E-03	1.65E-03
5617	645136.2	4165648.9	Worker	Scenario 4	4.50E-02	1.08E-03	1.59E-03
5618	645236.2	4165648.9	Worker	Scenario 4	4.41E-02	1.05E-03	1.59E-03
5619	645336.2	4165648.9	Worker	Scenario 4	4.47E-02	1.03E-03	1.47E-03
5620	645436.2	4165648.9	Worker	Scenario 4	4.30E-02	9.89E-04	1.32E-03
5621	645536.2	4165648.9	Worker	Scenario 4	4.32E-02	9.79E-04	1.27E-03
5622	645836.2	4165648.9	Worker	Scenario 4	4.03E-02	8.95E-04	1.03E-03
5623	645936.2	4165648.9	Worker	Scenario 4	3.98E-02	8.73E-04	1.10E-03
5624	646036.2	4165648.9	Worker	Scenario 4	3.92E-02	8.52E-04	1.15E-03
5625	646136.2	4165648.9	Worker	Scenario 4	3.87E-02	8.32E-04	1.18E-03
5626	646336.2	4165648.9	Worker	Scenario 4	3.77E-02	7.96E-04	1.21E-03
5627	646436.2	4165648.9	Worker	Scenario 4	3.72E-02	7.79E-04	1.21E-03
5628	646536.2	4165648.9	Worker	Scenario 4	3.68E-02	7.64E-04	1.21E-03
5629	646636.2	4165648.9	Worker	Scenario 4	3.64E-02	7.50E-04	1.25E-03
5630	639036.2	4165748.9	Worker	Scenario 4	7.24E-03	2.76E-04	4.63E-04
5631	639136.2	4165748.9	Worker	Scenario 4	7.46E-03	2.83E-04	5.32E-04
5632	639236.2	4165748.9	Worker	Scenario 4	8.07E-03	3.01E-04	6.38E-04
5633	639336.2	4165748.9	Worker	Scenario 4	9.59E-03	3.42E-04	2.08E-03
5634	639436.2	4165748.9	Worker	Scenario 4	8.48E-03	3.15E-04	6.59E-04
5635	639536.2	4165748.9	Worker	Scenario 4	8.28E-03	3.11E-04	3.19E-04
5636	639636.2	4165748.9	Worker	Scenario 4	8.57E-03	3.22E-04	4.40E-04
5637	639736.2	4165748.9	Worker	Scenario 4	9.75E-03	3.56E-04	1.22E-03
5638	639836.2	4165748.9	Worker	Scenario 4	1.07E-02	3.83E-04	1.85E-03
5639	639936.2	4165748.9	Worker	Scenario 4	1.02E-02	3.74E-04	1.20E-03
5640	640036.2	4165748.9	Worker	Scenario 4	1.04E-02	3.81E-04	1.00E-03
5641	640136.2	4165748.9	Worker	Scenario 4	1.08E-02	3.96E-04	1.04E-03
5642	640236.2	4165748.9	Worker	Scenario 4	1.06E-02	3.94E-04	8.07E-04
5643	640336.2	4165748.9	Worker	Scenario 4	1.13E-02	4.16E-04	9.47E-04
5644	640436.2	4165748.9	Worker	Scenario 4	1.19E-02	4.36E-04	1.02E-03
5645	640536.2	4165748.9	Worker	Scenario 4	1.50E-02	5.22E-04	4.10E-03
5646	640636.2	4165748.9	Worker	Scenario 4	1.98E-02	6.37E-04	6.11E-03
5647	640736.2	4165748.9	Worker	Scenario 4	1.45E-02	5.20E-04	2.04E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5648	640836.2	4165748.9	Worker	Scenario 4	1.35E-02	4.97E-04	2.19E-03
5649	640936.2	4165748.9	Worker	Scenario 4	1.42E-02	5.20E-04	1.84E-03
5650	641036.2	4165748.9	Worker	Scenario 4	1.77E-02	6.13E-04	3.81E-03
5651	641136.2	4165748.9	Worker	Scenario 4	1.65E-02	5.88E-04	3.24E-03
5652	641236.2	4165748.9	Worker	Scenario 4	1.59E-02	5.73E-04	2.58E-03
5653	641336.2	4165748.9	Worker	Scenario 4	1.72E-02	6.11E-04	1.75E-03
5654	641436.2	4165748.9	Worker	Scenario 4	1.86E-02	6.52E-04	2.43E-03
5655	641536.2	4165748.9	Worker	Scenario 4	1.90E-02	6.69E-04	2.28E-03
5656	641636.2	4165748.9	Worker	Scenario 4	2.69E-02	8.69E-04	5.97E-03
5657	641736.2	4165748.9	Worker	Scenario 4	2.21E-02	7.65E-04	2.13E-03
5658	641836.2	4165748.9	Worker	Scenario 4	2.50E-02	8.45E-04	2.86E-03
5659	641936.2	4165748.9	Worker	Scenario 4	3.11E-02	9.93E-04	5.36E-03
5660	642036.2	4165748.9	Worker	Scenario 4	3.35E-02	1.06E-03	5.85E-03
5661	642136.2	4165748.9	Worker	Scenario 4	3.15E-02	1.03E-03	4.87E-03
5662	642236.2	4165748.9	Worker	Scenario 4	3.60E-02	1.14E-03	5.01E-03
5663	642336.2	4165748.9	Worker	Scenario 4	4.30E-02	1.29E-03	8.22E-03
5664	642436.2	4165748.9	Worker	Scenario 4	4.89E-02	1.42E-03	9.03E-03
5665	642536.2	4165748.9	Worker	Scenario 4	5.26E-02	1.51E-03	6.53E-03
5666	642736.2	4165748.9	Worker	Scenario 4	5.48E-02	1.57E-03	6.38E-03
5667	642836.2	4165748.9	Worker	Scenario 4	5.48E-02	1.57E-03	5.59E-03
5668	642936.2	4165748.9	Worker	Scenario 4	5.47E-02	1.57E-03	5.95E-03
5669	643036.2	4165748.9	Worker	Scenario 4	5.48E-02	1.56E-03	5.04E-03
5670	643136.2	4165748.9	Worker	Scenario 4	5.53E-02	1.56E-03	4.08E-03
5671	643236.2	4165748.9	Worker	Scenario 4	5.57E-02	1.56E-03	3.45E-03
5672	643336.2	4165748.9	Worker	Scenario 4	5.54E-02	1.54E-03	2.97E-03
5673	643436.2	4165748.9	Worker	Scenario 4	5.53E-02	1.52E-03	2.72E-03
5674	643536.2	4165748.9	Worker	Scenario 4	5.57E-02	1.52E-03	3.01E-03
5675	643636.2	4165748.9	Worker	Scenario 4	5.86E-02	1.56E-03	2.84E-03
5676	643736.2	4165748.9	Worker	Scenario 4	5.84E-02	1.54E-03	2.64E-03
5677	643836.2	4165748.9	Worker	Scenario 4	5.82E-02	1.52E-03	2.41E-03
5678	643936.2	4165748.9	Worker	Scenario 4	5.79E-02	1.50E-03	2.39E-03
5679	644036.2	4165748.9	Worker	Scenario 4	5.76E-02	1.48E-03	2.13E-03
5680	644136.2	4165748.9	Worker	Scenario 4	5.71E-02	1.45E-03	2.11E-03
5681	644236.2	4165748.9	Worker	Scenario 4	5.66E-02	1.43E-03	2.09E-03
5682	644336.2	4165748.9	Worker	Scenario 4	5.61E-02	1.40E-03	2.08E-03
5683	644436.2	4165748.9	Worker	Scenario 4	5.58E-02	1.38E-03	2.04E-03
5684	644536.2	4165748.9	Worker	Scenario 4	5.42E-02	1.34E-03	2.04E-03
5685	644636.2	4165748.9	Worker	Scenario 4	5.24E-02	1.29E-03	1.98E-03
5686	644736.2	4165748.9	Worker	Scenario 4	5.19E-02	1.26E-03	1.76E-03
5687	644836.2	4165748.9	Worker	Scenario 4	5.05E-02	1.21E-03	1.62E-03
5688	644936.2	4165748.9	Worker	Scenario 4	4.94E-02	1.18E-03	1.55E-03
5689	645036.2	4165748.9	Worker	Scenario 4	5.08E-02	1.19E-03	1.68E-03
5690	645136.2	4165748.9	Worker	Scenario 4	4.86E-02	1.14E-03	1.62E-03
5691	645236.2	4165748.9	Worker	Scenario 4	4.70E-02	1.10E-03	1.49E-03
5692	645336.2	4165748.9	Worker	Scenario 4	4.60E-02	1.07E-03	1.37E-03
5693	645736.2	4165748.9	Worker	Scenario 4	4.34E-02	9.57E-04	1.25E-03
5694	645836.2	4165748.9	Worker	Scenario 4	4.28E-02	9.32E-04	1.28E-03
5695	645936.2	4165748.9	Worker	Scenario 4	4.22E-02	9.08E-04	1.30E-03
5696	646036.2	4165748.9	Worker	Scenario 4	4.16E-02	8.86E-04	1.33E-03
5697	646136.2	4165748.9	Worker	Scenario 4	4.10E-02	8.65E-04	1.33E-03
5698	646336.2	4165748.9	Worker	Scenario 4	3.99E-02	8.27E-04	1.38E-03
5699	646436.2	4165748.9	Worker	Scenario 4	3.93E-02	8.09E-04	1.46E-03
5700	646536.2	4165748.9	Worker	Scenario 4	3.88E-02	7.93E-04	1.59E-03
5701	646636.2	4165748.9	Worker	Scenario 4	3.84E-02	7.78E-04	1.71E-03
5702	638936.2	4165848.9	Worker	Scenario 4	7.30E-03	2.79E-04	4.42E-04
5703	639036.2	4165848.9	Worker	Scenario 4	7.49E-03	2.85E-04	3.96E-04
5704	639136.2	4165848.9	Worker	Scenario 4	7.83E-03	2.96E-04	5.06E-04
5705	639236.2	4165848.9	Worker	Scenario 4	8.18E-03	3.07E-04	6.47E-04
5706	639336.2	4165848.9	Worker	Scenario 4	9.41E-03	3.41E-04	1.47E-03
5707	639436.2	4165848.9	Worker	Scenario 4	9.67E-03	3.49E-04	1.50E-03
5708	639536.2	4165848.9	Worker	Scenario 4	8.91E-03	3.31E-04	5.83E-04
5709	639636.2	4165848.9	Worker	Scenario 4	8.95E-03	3.35E-04	3.33E-04
5710	639736.2	4165848.9	Worker	Scenario 4	9.30E-03	3.46E-04	4.88E-04
5711	639836.2	4165848.9	Worker	Scenario 4	1.01E-02	3.72E-04	8.72E-04
5712	639936.2	4165848.9	Worker	Scenario 4	1.12E-02	4.04E-04	1.64E-03
5713	640036.2	4165848.9	Worker	Scenario 4	1.22E-02	4.33E-04	2.89E-03
5714	640136.2	4165848.9	Worker	Scenario 4	1.08E-02	4.02E-04	9.94E-04
5715	640236.2	4165848.9	Worker	Scenario 4	1.10E-02	4.10E-04	9.22E-04
5716	640336.2	4165848.9	Worker	Scenario 4	1.16E-02	4.30E-04	8.40E-04
5717	640436.2	4165848.9	Worker	Scenario 4	1.21E-02	4.46E-04	8.51E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5718	640536.2	4165848.9	Worker	Scenario 4	1.37E-02	4.93E-04	1.64E-03
5719	640636.2	4165848.9	Worker	Scenario 4	1.77E-02	6.00E-04	5.27E-03
5720	640736.2	4165848.9	Worker	Scenario 4	2.25E-02	7.15E-04	6.65E-03
5721	640836.2	4165848.9	Worker	Scenario 4	1.85E-02	6.32E-04	5.15E-03
5722	640936.2	4165848.9	Worker	Scenario 4	1.68E-02	5.97E-04	3.51E-03
5723	641036.2	4165848.9	Worker	Scenario 4	1.66E-02	5.97E-04	2.70E-03
5724	641136.2	4165848.9	Worker	Scenario 4	2.29E-02	7.50E-04	5.78E-03
5725	641236.2	4165848.9	Worker	Scenario 4	1.95E-02	6.78E-04	3.54E-03
5726	641336.2	4165848.9	Worker	Scenario 4	1.93E-02	6.78E-04	2.28E-03
5727	641436.2	4165848.9	Worker	Scenario 4	2.22E-02	7.56E-04	3.17E-03
5728	641536.2	4165848.9	Worker	Scenario 4	2.19E-02	7.60E-04	3.17E-03
5729	641636.2	4165848.9	Worker	Scenario 4	3.05E-02	9.75E-04	6.66E-03
5730	641736.2	4165848.9	Worker	Scenario 4	2.63E-02	8.87E-04	3.19E-03
5731	641836.2	4165848.9	Worker	Scenario 4	2.95E-02	9.75E-04	4.40E-03
5732	641936.2	4165848.9	Worker	Scenario 4	3.43E-02	1.10E-03	4.86E-03
5733	642036.2	4165848.9	Worker	Scenario 4	4.05E-02	1.24E-03	8.14E-03
5734	642136.2	4165848.9	Worker	Scenario 4	4.56E-02	1.36E-03	8.97E-03
5735	642236.2	4165848.9	Worker	Scenario 4	5.17E-02	1.50E-03	9.09E-03
5736	642336.2	4165848.9	Worker	Scenario 4	5.54E-02	1.59E-03	9.17E-03
5737	642636.2	4165848.9	Worker	Scenario 4	6.11E-02	1.73E-03	6.22E-03
5738	642736.2	4165848.9	Worker	Scenario 4	6.13E-02	1.74E-03	5.46E-03
5739	642836.2	4165848.9	Worker	Scenario 4	6.09E-02	1.73E-03	5.61E-03
5740	642936.2	4165848.9	Worker	Scenario 4	6.07E-02	1.72E-03	4.72E-03
5741	643036.2	4165848.9	Worker	Scenario 4	6.04E-02	1.71E-03	3.62E-03
5742	643136.2	4165848.9	Worker	Scenario 4	6.03E-02	1.69E-03	3.76E-03
5743	643236.2	4165848.9	Worker	Scenario 4	6.06E-02	1.68E-03	3.12E-03
5744	643336.2	4165848.9	Worker	Scenario 4	6.07E-02	1.67E-03	3.12E-03
5745	643436.2	4165848.9	Worker	Scenario 4	6.29E-02	1.69E-03	3.29E-03
5746	643536.2	4165848.9	Worker	Scenario 4	6.47E-02	1.71E-03	3.14E-03
5747	643636.2	4165848.9	Worker	Scenario 4	6.15E-02	1.65E-03	2.90E-03
5748	643736.2	4165848.9	Worker	Scenario 4	6.03E-02	1.61E-03	2.85E-03
5749	643836.2	4165848.9	Worker	Scenario 4	6.02E-02	1.59E-03	2.66E-03
5750	643936.2	4165848.9	Worker	Scenario 4	6.01E-02	1.57E-03	2.47E-03
5751	644036.2	4165848.9	Worker	Scenario 4	6.00E-02	1.55E-03	2.50E-03
5752	644136.2	4165848.9	Worker	Scenario 4	5.98E-02	1.53E-03	2.49E-03
5753	644236.2	4165848.9	Worker	Scenario 4	5.96E-02	1.50E-03	2.38E-03
5754	644336.2	4165848.9	Worker	Scenario 4	5.92E-02	1.48E-03	2.26E-03
5755	644436.2	4165848.9	Worker	Scenario 4	5.85E-02	1.45E-03	2.17E-03
5756	644536.2	4165848.9	Worker	Scenario 4	5.75E-02	1.41E-03	2.13E-03
5757	644636.2	4165848.9	Worker	Scenario 4	5.64E-02	1.37E-03	1.98E-03
5758	644736.2	4165848.9	Worker	Scenario 4	5.53E-02	1.32E-03	1.71E-03
5759	644836.2	4165848.9	Worker	Scenario 4	5.41E-02	1.29E-03	1.67E-03
5760	644936.2	4165848.9	Worker	Scenario 4	5.51E-02	1.28E-03	1.69E-03
5761	645036.2	4165848.9	Worker	Scenario 4	5.30E-02	1.24E-03	1.57E-03
5762	645436.2	4165848.9	Worker	Scenario 4	4.84E-02	1.09E-03	1.36E-03
5763	645536.2	4165848.9	Worker	Scenario 4	4.77E-02	1.06E-03	1.41E-03
5764	645636.2	4165848.9	Worker	Scenario 4	4.69E-02	1.03E-03	1.43E-03
5765	645736.2	4165848.9	Worker	Scenario 4	4.61E-02	9.98E-04	1.46E-03
5766	645836.2	4165848.9	Worker	Scenario 4	4.54E-02	9.72E-04	1.46E-03
5767	645936.2	4165848.9	Worker	Scenario 4	4.48E-02	9.46E-04	1.44E-03
5768	646036.2	4165848.9	Worker	Scenario 4	4.41E-02	9.23E-04	1.51E-03
5769	646136.2	4165848.9	Worker	Scenario 4	4.34E-02	9.00E-04	1.61E-03
5770	646336.2	4165848.9	Worker	Scenario 4	4.22E-02	8.60E-04	1.91E-03
5771	646436.2	4165848.9	Worker	Scenario 4	4.16E-02	8.41E-04	2.04E-03
5772	646536.2	4165848.9	Worker	Scenario 4	4.10E-02	8.24E-04	2.15E-03
5773	646636.2	4165848.9	Worker	Scenario 4	4.05E-02	8.07E-04	2.25E-03
5774	646736.2	4165848.9	Worker	Scenario 4	3.99E-02	7.91E-04	2.33E-03
5775	638736.2	4165948.9	Worker	Scenario 4	7.28E-03	2.77E-04	8.55E-04
5776	638836.2	4165948.9	Worker	Scenario 4	8.16E-03	3.03E-04	1.11E-03
5777	638936.2	4165948.9	Worker	Scenario 4	7.82E-03	2.95E-04	7.99E-04
5778	639036.2	4165948.9	Worker	Scenario 4	7.97E-03	3.01E-04	6.49E-04
5779	639136.2	4165948.9	Worker	Scenario 4	8.30E-03	3.12E-04	6.00E-04
5780	639236.2	4165948.9	Worker	Scenario 4	8.54E-03	3.21E-04	8.73E-03
5781	639336.2	4165948.9	Worker	Scenario 4	9.71E-03	3.53E-04	1.86E-03
5782	639436.2	4165948.9	Worker	Scenario 4	9.93E-03	3.60E-04	1.64E-03
5783	639536.2	4165948.9	Worker	Scenario 4	8.96E-03	3.36E-04	6.68E-04
5784	639636.2	4165948.9	Worker	Scenario 4	9.39E-03	3.50E-04	6.80E-04
5785	639736.2	4165948.9	Worker	Scenario 4	9.82E-03	3.64E-04	5.37E-04
5786	639836.2	4165948.9	Worker	Scenario 4	1.02E-02	3.78E-04	6.82E-04
5787	639936.2	4165948.9	Worker	Scenario 4	1.06E-02	3.92E-04	6.65E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5788	640036.2	4165948.9	Worker	Scenario 4	1.32E-02	4.62E-04	2.74E-03
5789	640136.2	4165948.9	Worker	Scenario 4	1.17E-02	4.29E-04	1.05E-03
5790	640236.2	4165948.9	Worker	Scenario 4	1.22E-02	4.46E-04	1.18E-03
5791	640336.2	4165948.9	Worker	Scenario 4	1.29E-02	4.69E-04	1.45E-03
5792	640436.2	4165948.9	Worker	Scenario 4	1.37E-02	4.96E-04	1.33E-03
5793	640536.2	4165948.9	Worker	Scenario 4	1.55E-02	5.46E-04	2.02E-03
5794	640636.2	4165948.9	Worker	Scenario 4	1.77E-02	6.08E-04	4.87E-03
5795	640736.2	4165948.9	Worker	Scenario 4	2.04E-02	6.80E-04	5.80E-03
5796	640836.2	4165948.9	Worker	Scenario 4	2.56E-02	8.03E-04	8.38E-03
5797	640936.2	4165948.9	Worker	Scenario 4	2.67E-02	8.37E-04	8.75E-03
5798	641036.2	4165948.9	Worker	Scenario 4	2.60E-02	8.32E-04	7.23E-03
5799	641136.2	4165948.9	Worker	Scenario 4	2.06E-02	7.14E-04	3.91E-03
5800	641236.2	4165948.9	Worker	Scenario 4	2.26E-02	7.67E-04	5.27E-03
5801	641336.2	4165948.9	Worker	Scenario 4	2.31E-02	7.87E-04	3.62E-03
5802	641436.2	4165948.9	Worker	Scenario 4	2.76E-02	8.98E-04	4.75E-03
5803	641536.2	4165948.9	Worker	Scenario 4	2.89E-02	9.48E-04	6.80E-03
5804	641636.2	4165948.9	Worker	Scenario 4	3.42E-02	1.09E-03	7.32E-03
5805	641736.2	4165948.9	Worker	Scenario 4	3.73E-02	1.17E-03	8.32E-03
5806	641836.2	4165948.9	Worker	Scenario 4	4.31E-02	1.31E-03	1.03E-02
5807	642136.2	4165948.9	Worker	Scenario 4	5.95E-02	1.71E-03	8.74E-03
5808	642236.2	4165948.9	Worker	Scenario 4	6.35E-02	1.81E-03	8.35E-03
5809	642436.2	4165948.9	Worker	Scenario 4	6.58E-02	1.87E-03	7.92E-03
5810	642536.2	4165948.9	Worker	Scenario 4	6.73E-02	1.91E-03	7.19E-03
5811	642636.2	4165948.9	Worker	Scenario 4	6.84E-02	1.93E-03	5.88E-03
5812	642736.2	4165948.9	Worker	Scenario 4	6.86E-02	1.93E-03	4.61E-03
5813	642836.2	4165948.9	Worker	Scenario 4	6.78E-02	1.91E-03	4.35E-03
5814	642936.2	4165948.9	Worker	Scenario 4	6.71E-02	1.88E-03	4.04E-03
5815	643036.2	4165948.9	Worker	Scenario 4	6.66E-02	1.86E-03	4.10E-03
5816	643136.2	4165948.9	Worker	Scenario 4	6.65E-02	1.84E-03	3.27E-03
5817	643236.2	4165948.9	Worker	Scenario 4	6.65E-02	1.83E-03	3.56E-03
5818	643336.2	4165948.9	Worker	Scenario 4	6.88E-02	1.85E-03	3.66E-03
5819	643436.2	4165948.9	Worker	Scenario 4	6.99E-02	1.86E-03	3.42E-03
5820	643536.2	4165948.9	Worker	Scenario 4	6.67E-02	1.79E-03	3.13E-03
5821	643636.2	4165948.9	Worker	Scenario 4	6.67E-02	1.78E-03	3.07E-03
5822	643736.2	4165948.9	Worker	Scenario 4	6.65E-02	1.76E-03	2.68E-03
5823	643836.2	4165948.9	Worker	Scenario 4	6.63E-02	1.74E-03	2.77E-03
5824	643936.2	4165948.9	Worker	Scenario 4	6.62E-02	1.71E-03	2.76E-03
5825	644036.2	4165948.9	Worker	Scenario 4	6.60E-02	1.69E-03	2.64E-03
5826	644136.2	4165948.9	Worker	Scenario 4	6.57E-02	1.66E-03	2.52E-03
5827	644236.2	4165948.9	Worker	Scenario 4	6.51E-02	1.62E-03	2.40E-03
5828	644336.2	4165948.9	Worker	Scenario 4	6.43E-02	1.59E-03	2.34E-03
5829	644436.2	4165948.9	Worker	Scenario 4	6.28E-02	1.54E-03	2.16E-03
5830	644536.2	4165948.9	Worker	Scenario 4	6.17E-02	1.50E-03	2.11E-03
5831	644636.2	4165948.9	Worker	Scenario 4	6.07E-02	1.46E-03	2.03E-03
5832	644736.2	4165948.9	Worker	Scenario 4	5.96E-02	1.42E-03	1.87E-03
5833	645236.2	4165948.9	Worker	Scenario 4	5.38E-02	1.22E-03	1.55E-03
5834	645336.2	4165948.9	Worker	Scenario 4	5.28E-02	1.18E-03	1.58E-03
5835	645436.2	4165948.9	Worker	Scenario 4	5.18E-02	1.14E-03	1.61E-03
5836	645536.2	4165948.9	Worker	Scenario 4	5.09E-02	1.11E-03	1.61E-03
5837	645636.2	4165948.9	Worker	Scenario 4	5.00E-02	1.07E-03	1.60E-03
5838	645736.2	4165948.9	Worker	Scenario 4	4.92E-02	1.04E-03	1.67E-03
5839	645836.2	4165948.9	Worker	Scenario 4	4.84E-02	1.01E-03	1.80E-03
5840	645936.2	4165948.9	Worker	Scenario 4	4.76E-02	9.87E-04	1.96E-03
5841	646036.2	4165948.9	Worker	Scenario 4	4.69E-02	9.61E-04	2.11E-03
5842	646136.2	4165948.9	Worker	Scenario 4	4.61E-02	9.38E-04	2.26E-03
5843	646336.2	4165948.9	Worker	Scenario 4	4.47E-02	8.94E-04	2.48E-03
5844	646436.2	4165948.9	Worker	Scenario 4	4.40E-02	8.74E-04	2.56E-03
5845	646536.2	4165948.9	Worker	Scenario 4	4.34E-02	8.55E-04	2.62E-03
5846	646636.2	4165948.9	Worker	Scenario 4	4.27E-02	8.37E-04	2.65E-03
5847	646736.2	4165948.9	Worker	Scenario 4	4.21E-02	8.19E-04	2.66E-03
5848	638536.2	4166048.9	Worker	Scenario 4	8.44E-03	3.06E-04	2.73E-03
5849	638636.2	4166048.9	Worker	Scenario 4	7.66E-03	2.87E-04	1.94E-03
5850	638736.2	4166048.9	Worker	Scenario 4	7.52E-03	2.86E-04	1.29E-03
5851	638836.2	4166048.9	Worker	Scenario 4	8.32E-03	3.09E-04	1.27E-03
5852	638936.2	4166048.9	Worker	Scenario 4	8.59E-03	3.19E-04	1.18E-03
5853	639036.2	4166048.9	Worker	Scenario 4	8.41E-03	3.16E-04	9.35E-04
5854	639136.2	4166048.9	Worker	Scenario 4	8.47E-03	3.19E-04	8.23E-04
5855	639236.2	4166048.9	Worker	Scenario 4	8.87E-03	3.32E-04	7.33E-04
5856	639336.2	4166048.9	Worker	Scenario 4	1.02E-02	3.69E-04	1.98E-03
5857	639436.2	4166048.9	Worker	Scenario 4	1.02E-02	3.73E-04	1.71E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5858	639536.2	4166048.9	Worker	Scenario 4	9.36E-03	3.51E-04	7.14E-04
5859	639636.2	4166048.9	Worker	Scenario 4	9.87E-03	3.67E-04	7.48E-04
5860	639736.2	4166048.9	Worker	Scenario 4	1.02E-02	3.77E-04	8.22E-04
5861	639836.2	4166048.9	Worker	Scenario 4	1.08E-02	3.98E-04	8.07E-04
5862	639936.2	4166048.9	Worker	Scenario 4	1.12E-02	4.10E-04	7.39E-04
5863	640036.2	4166048.9	Worker	Scenario 4	1.19E-02	4.33E-04	1.04E-03
5864	640136.2	4166048.9	Worker	Scenario 4	1.56E-02	5.29E-04	3.70E-03
5865	640236.2	4166048.9	Worker	Scenario 4	1.40E-02	4.98E-04	2.69E-03
5866	640336.2	4166048.9	Worker	Scenario 4	1.42E-02	5.08E-04	1.62E-03
5867	640436.2	4166048.9	Worker	Scenario 4	1.49E-02	5.32E-04	1.78E-03
5868	640536.2	4166048.9	Worker	Scenario 4	1.54E-02	5.53E-04	1.65E-03
5869	640636.2	4166048.9	Worker	Scenario 4	1.76E-02	6.14E-04	3.29E-03
5870	640736.2	4166048.9	Worker	Scenario 4	2.02E-02	6.84E-04	5.50E-03
5871	640836.2	4166048.9	Worker	Scenario 4	2.39E-02	7.82E-04	6.72E-03
5872	640936.2	4166048.9	Worker	Scenario 4	2.65E-02	8.49E-04	7.91E-03
5873	641036.2	4166048.9	Worker	Scenario 4	3.22E-02	9.86E-04	1.02E-02
5874	641136.2	4166048.9	Worker	Scenario 4	2.75E-02	8.92E-04	7.17E-03
5875	641236.2	4166048.9	Worker	Scenario 4	3.07E-02	9.71E-04	8.56E-03
5876	641336.2	4166048.9	Worker	Scenario 4	3.42E-02	1.05E-03	9.18E-03
5877	641436.2	4166048.9	Worker	Scenario 4	3.68E-02	1.13E-03	8.08E-03
5878	641636.2	4166048.9	Worker	Scenario 4	4.48E-02	1.36E-03	1.41E-02
5879	641736.2	4166048.9	Worker	Scenario 4	4.80E-02	1.45E-03	1.26E-02
5880	641836.2	4166048.9	Worker	Scenario 4	5.47E-02	1.61E-03	1.36E-02
5881	641936.2	4166048.9	Worker	Scenario 4	6.03E-02	1.75E-03	1.29E-02
5882	642036.2	4166048.9	Worker	Scenario 4	6.49E-02	1.87E-03	1.12E-02
5883	642136.2	4166048.9	Worker	Scenario 4	6.91E-02	1.97E-03	9.50E-03
5884	642336.2	4166048.9	Worker	Scenario 4	7.52E-02	2.13E-03	6.94E-03
5885	642436.2	4166048.9	Worker	Scenario 4	7.60E-02	2.15E-03	7.21E-03
5886	642536.2	4166048.9	Worker	Scenario 4	7.69E-02	2.16E-03	5.62E-03
5887	642636.2	4166048.9	Worker	Scenario 4	7.70E-02	2.16E-03	5.09E-03
5888	642736.2	4166048.9	Worker	Scenario 4	7.64E-02	2.13E-03	4.85E-03
5889	642836.2	4166048.9	Worker	Scenario 4	7.54E-02	2.10E-03	4.54E-03
5890	642936.2	4166048.9	Worker	Scenario 4	7.44E-02	2.06E-03	4.47E-03
5891	643036.2	4166048.9	Worker	Scenario 4	7.37E-02	2.03E-03	3.50E-03
5892	643136.2	4166048.9	Worker	Scenario 4	7.34E-02	2.01E-03	4.05E-03
5893	643236.2	4166048.9	Worker	Scenario 4	7.39E-02	2.00E-03	4.09E-03
5894	643336.2	4166048.9	Worker	Scenario 4	7.41E-02	1.99E-03	3.65E-03
5895	643436.2	4166048.9	Worker	Scenario 4	7.40E-02	1.98E-03	3.49E-03
5896	643536.2	4166048.9	Worker	Scenario 4	7.41E-02	1.97E-03	3.18E-03
5897	643636.2	4166048.9	Worker	Scenario 4	7.40E-02	1.95E-03	3.08E-03
5898	643736.2	4166048.9	Worker	Scenario 4	7.40E-02	1.93E-03	3.07E-03
5899	643836.2	4166048.9	Worker	Scenario 4	7.35E-02	1.90E-03	2.95E-03
5900	643936.2	4166048.9	Worker	Scenario 4	7.33E-02	1.87E-03	2.82E-03
5901	644036.2	4166048.9	Worker	Scenario 4	7.30E-02	1.84E-03	2.67E-03
5902	644136.2	4166048.9	Worker	Scenario 4	7.23E-02	1.80E-03	2.60E-03
5903	644236.2	4166048.9	Worker	Scenario 4	7.14E-02	1.75E-03	2.37E-03
5904	644336.2	4166048.9	Worker	Scenario 4	7.02E-02	1.71E-03	2.34E-03
5905	644936.2	4166048.9	Worker	Scenario 4	6.16E-02	1.42E-03	1.71E-03
5906	645036.2	4166048.9	Worker	Scenario 4	6.03E-02	1.38E-03	1.76E-03
5907	645136.2	4166048.9	Worker	Scenario 4	5.91E-02	1.33E-03	1.78E-03
5908	645236.2	4166048.9	Worker	Scenario 4	5.78E-02	1.29E-03	1.79E-03
5909	645336.2	4166048.9	Worker	Scenario 4	5.67E-02	1.24E-03	1.76E-03
5910	645436.2	4166048.9	Worker	Scenario 4	5.55E-02	1.20E-03	1.86E-03
5911	645536.2	4166048.9	Worker	Scenario 4	5.45E-02	1.16E-03	2.02E-03
5912	645636.2	4166048.9	Worker	Scenario 4	5.35E-02	1.13E-03	2.20E-03
5913	645736.2	4166048.9	Worker	Scenario 4	5.26E-02	1.09E-03	2.37E-03
5914	645836.2	4166048.9	Worker	Scenario 4	5.17E-02	1.06E-03	2.51E-03
5915	645936.2	4166048.9	Worker	Scenario 4	5.08E-02	1.03E-03	2.63E-03
5916	646036.2	4166048.9	Worker	Scenario 4	4.99E-02	1.00E-03	2.73E-03
5917	646136.2	4166048.9	Worker	Scenario 4	4.91E-02	9.77E-04	2.81E-03
5918	646336.2	4166048.9	Worker	Scenario 4	4.74E-02	9.30E-04	2.88E-03
5919	646436.2	4166048.9	Worker	Scenario 4	4.66E-02	9.08E-04	2.88E-03
5920	646536.2	4166048.9	Worker	Scenario 4	4.58E-02	8.87E-04	2.86E-03
5921	646636.2	4166048.9	Worker	Scenario 4	4.51E-02	8.67E-04	2.80E-03
5922	646736.2	4166048.9	Worker	Scenario 4	4.43E-02	8.48E-04	2.73E-03
5923	646836.2	4166048.9	Worker	Scenario 4	4.35E-02	8.29E-04	2.65E-03
5924	638436.2	4166148.9	Worker	Scenario 4	7.98E-03	2.94E-04	6.02E-03
5925	638536.2	4166148.9	Worker	Scenario 4	8.35E-03	3.05E-04	5.27E-03
5926	638636.2	4166148.9	Worker	Scenario 4	7.83E-03	2.94E-04	4.32E-03
5927	638736.2	4166148.9	Worker	Scenario 4	7.84E-03	2.96E-04	3.31E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5928	638836.2	4166148.9	Worker	Scenario 4	8.37E-03	3.13E-04	2.36E-03
5929	638936.2	4166148.9	Worker	Scenario 4	9.38E-03	3.41E-04	1.97E-03
5930	639036.2	4166148.9	Worker	Scenario 4	9.22E-03	3.40E-04	1.52E-03
5931	639136.2	4166148.9	Worker	Scenario 4	8.71E-03	3.28E-04	1.00E-03
5932	639236.2	4166148.9	Worker	Scenario 4	9.06E-03	3.40E-04	9.52E-04
5933	639336.2	4166148.9	Worker	Scenario 4	1.01E-02	3.71E-04	1.35E-03
5934	639436.2	4166148.9	Worker	Scenario 4	1.15E-02	4.09E-04	2.67E-03
5935	639536.2	4166148.9	Worker	Scenario 4	1.03E-02	3.81E-04	8.65E-04
5936	639636.2	4166148.9	Worker	Scenario 4	1.11E-02	4.05E-04	1.54E-03
5937	639736.2	4166148.9	Worker	Scenario 4	1.12E-02	4.10E-04	1.06E-03
5938	639836.2	4166148.9	Worker	Scenario 4	1.19E-02	4.32E-04	1.27E-03
5939	639936.2	4166148.9	Worker	Scenario 4	1.31E-02	4.66E-04	2.54E-03
5940	640036.2	4166148.9	Worker	Scenario 4	1.35E-02	4.82E-04	2.25E-03
5941	640136.2	4166148.9	Worker	Scenario 4	1.64E-02	5.55E-04	4.56E-03
5942	640236.2	4166148.9	Worker	Scenario 4	1.62E-02	5.57E-04	3.37E-03
5943	640336.2	4166148.9	Worker	Scenario 4	1.49E-02	5.32E-04	2.13E-03
5944	640436.2	4166148.9	Worker	Scenario 4	1.74E-02	6.01E-04	2.86E-03
5945	640536.2	4166148.9	Worker	Scenario 4	1.74E-02	6.09E-04	2.65E-03
5946	640636.2	4166148.9	Worker	Scenario 4	1.95E-02	6.68E-04	3.75E-03
5947	640736.2	4166148.9	Worker	Scenario 4	2.21E-02	7.41E-04	6.14E-03
5948	640836.2	4166148.9	Worker	Scenario 4	2.63E-02	8.49E-04	7.40E-03
5949	640936.2	4166148.9	Worker	Scenario 4	3.07E-02	9.61E-04	9.20E-03
5950	641036.2	4166148.9	Worker	Scenario 4	3.45E-02	1.06E-03	1.14E-02
5951	641136.2	4166148.9	Worker	Scenario 4	3.85E-02	1.16E-03	1.19E-02
5952	641236.2	4166148.9	Worker	Scenario 4	3.94E-02	1.19E-03	1.19E-02
5953	641336.2	4166148.9	Worker	Scenario 4	4.33E-02	1.28E-03	1.25E-02
5954	641436.2	4166148.9	Worker	Scenario 4	4.71E-02	1.39E-03	1.19E-02
5955	641536.2	4166148.9	Worker	Scenario 4	5.09E-02	1.52E-03	1.56E-02
5956	641636.2	4166148.9	Worker	Scenario 4	5.42E-02	1.63E-03	1.73E-02
5957	641736.2	4166148.9	Worker	Scenario 4	5.78E-02	1.73E-03	1.51E-02
5958	641836.2	4166148.9	Worker	Scenario 4	6.43E-02	1.88E-03	1.58E-02
5959	641936.2	4166148.9	Worker	Scenario 4	7.10E-02	2.04E-03	1.21E-02
5960	642236.2	4166148.9	Worker	Scenario 4	8.61E-02	2.43E-03	6.48E-03
5961	642336.2	4166148.9	Worker	Scenario 4	8.78E-02	2.47E-03	6.61E-03
5962	642436.2	4166148.9	Worker	Scenario 4	8.79E-02	2.47E-03	6.29E-03
5963	642536.2	4166148.9	Worker	Scenario 4	8.78E-02	2.45E-03	5.65E-03
5964	642636.2	4166148.9	Worker	Scenario 4	8.70E-02	2.42E-03	5.45E-03
5965	642736.2	4166148.9	Worker	Scenario 4	8.55E-02	2.37E-03	5.14E-03
5966	642836.2	4166148.9	Worker	Scenario 4	8.39E-02	2.31E-03	4.89E-03
5967	642936.2	4166148.9	Worker	Scenario 4	8.28E-02	2.27E-03	4.16E-03
5968	643036.2	4166148.9	Worker	Scenario 4	8.21E-02	2.24E-03	4.58E-03
5969	644536.2	4166148.9	Worker	Scenario 4	7.31E-02	1.74E-03	1.78E-03
5970	644636.2	4166148.9	Worker	Scenario 4	7.16E-02	1.69E-03	1.90E-03
5971	644736.2	4166148.9	Worker	Scenario 4	6.99E-02	1.63E-03	1.97E-03
5972	644836.2	4166148.9	Worker	Scenario 4	6.82E-02	1.57E-03	1.99E-03
5973	644936.2	4166148.9	Worker	Scenario 4	6.67E-02	1.52E-03	1.99E-03
5974	645036.2	4166148.9	Worker	Scenario 4	6.52E-02	1.46E-03	1.97E-03
5975	645136.2	4166148.9	Worker	Scenario 4	6.38E-02	1.41E-03	2.06E-03
5976	645236.2	4166148.9	Worker	Scenario 4	6.23E-02	1.36E-03	2.25E-03
5977	645336.2	4166148.9	Worker	Scenario 4	6.11E-02	1.31E-03	2.44E-03
5978	645436.2	4166148.9	Worker	Scenario 4	5.97E-02	1.26E-03	2.67E-03
5979	645536.2	4166148.9	Worker	Scenario 4	5.85E-02	1.22E-03	2.82E-03
5980	645636.2	4166148.9	Worker	Scenario 4	5.73E-02	1.18E-03	2.95E-03
5981	645736.2	4166148.9	Worker	Scenario 4	5.62E-02	1.14E-03	3.04E-03
5982	645836.2	4166148.9	Worker	Scenario 4	5.52E-02	1.11E-03	3.09E-03
5983	645936.2	4166148.9	Worker	Scenario 4	5.42E-02	1.08E-03	3.12E-03
5984	646036.2	4166148.9	Worker	Scenario 4	5.32E-02	1.05E-03	3.12E-03
5985	646136.2	4166148.9	Worker	Scenario 4	5.22E-02	1.02E-03	3.09E-03
5986	646336.2	4166148.9	Worker	Scenario 4	5.03E-02	9.66E-04	2.96E-03
5987	646436.2	4166148.9	Worker	Scenario 4	4.94E-02	9.42E-04	2.87E-03
5988	646536.2	4166148.9	Worker	Scenario 4	4.84E-02	9.19E-04	2.76E-03
5989	646636.2	4166148.9	Worker	Scenario 4	4.75E-02	8.97E-04	2.64E-03
5990	646736.2	4166148.9	Worker	Scenario 4	4.66E-02	8.75E-04	2.51E-03
5991	646836.2	4166148.9	Worker	Scenario 4	4.57E-02	8.54E-04	2.37E-03
5992	638236.2	4166248.9	Worker	Scenario 4	7.84E-03	2.87E-04	5.70E-03
5993	638336.2	4166248.9	Worker	Scenario 4	8.76E-03	3.12E-04	6.41E-03
5994	638436.2	4166248.9	Worker	Scenario 4	8.78E-03	3.15E-04	6.90E-03
5995	638536.2	4166248.9	Worker	Scenario 4	8.51E-03	3.11E-04	7.05E-03
5996	638636.2	4166248.9	Worker	Scenario 4	8.08E-03	3.02E-04	6.80E-03
5997	638736.2	4166248.9	Worker	Scenario 4	8.24E-03	3.09E-04	6.15E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
5998	638836.2	4166248.9	Worker	Scenario 4	9.46E-03	3.43E-04	5.18E-03
5999	638936.2	4166248.9	Worker	Scenario 4	9.30E-03	3.42E-04	4.03E-03
6000	639036.2	4166248.9	Worker	Scenario 4	8.87E-03	3.32E-04	2.90E-03
6001	639136.2	4166248.9	Worker	Scenario 4	9.15E-03	3.43E-04	1.92E-03
6002	639236.2	4166248.9	Worker	Scenario 4	1.00E-02	3.69E-04	1.55E-03
6003	639336.2	4166248.9	Worker	Scenario 4	1.03E-02	3.79E-04	1.31E-03
6004	639436.2	4166248.9	Worker	Scenario 4	1.41E-02	4.74E-04	3.93E-03
6005	639536.2	4166248.9	Worker	Scenario 4	1.15E-02	4.15E-04	1.74E-03
6006	639636.2	4166248.9	Worker	Scenario 4	1.27E-02	4.51E-04	2.74E-03
6007	639736.2	4166248.9	Worker	Scenario 4	1.30E-02	4.62E-04	2.57E-03
6008	639836.2	4166248.9	Worker	Scenario 4	1.46E-02	5.05E-04	3.73E-03
6009	639936.2	4166248.9	Worker	Scenario 4	1.56E-02	5.32E-04	3.22E-03
6010	640036.2	4166248.9	Worker	Scenario 4	1.45E-02	5.14E-04	2.82E-03
6011	640136.2	4166248.9	Worker	Scenario 4	1.60E-02	5.55E-04	3.57E-03
6012	640236.2	4166248.9	Worker	Scenario 4	1.78E-02	6.04E-04	4.81E-03
6013	640336.2	4166248.9	Worker	Scenario 4	1.85E-02	6.27E-04	4.14E-03
6014	640436.2	4166248.9	Worker	Scenario 4	2.17E-02	7.07E-04	6.39E-03
6015	640536.2	4166248.9	Worker	Scenario 4	2.38E-02	7.65E-04	6.19E-03
6016	640636.2	4166248.9	Worker	Scenario 4	2.81E-02	8.68E-04	7.76E-03
6017	640736.2	4166248.9	Worker	Scenario 4	3.23E-02	9.73E-04	1.13E-02
6018	640836.2	4166248.9	Worker	Scenario 4	3.58E-02	1.07E-03	1.29E-02
6019	640936.2	4166248.9	Worker	Scenario 4	3.78E-02	1.14E-03	1.31E-02
6020	641036.2	4166248.9	Worker	Scenario 4	4.00E-02	1.20E-03	1.31E-02
6021	641136.2	4166248.9	Worker	Scenario 4	4.37E-02	1.31E-03	1.32E-02
6022	641236.2	4166248.9	Worker	Scenario 4	4.64E-02	1.38E-03	1.55E-02
6023	641336.2	4166248.9	Worker	Scenario 4	5.03E-02	1.48E-03	1.44E-02
6024	641436.2	4166248.9	Worker	Scenario 4	5.49E-02	1.62E-03	1.40E-02
6025	641536.2	4166248.9	Worker	Scenario 4	6.04E-02	1.80E-03	1.72E-02
6026	641636.2	4166248.9	Worker	Scenario 4	6.59E-02	1.97E-03	1.90E-02
6027	641736.2	4166248.9	Worker	Scenario 4	7.03E-02	2.08E-03	1.67E-02
6028	641836.2	4166248.9	Worker	Scenario 4	7.67E-02	2.23E-03	1.74E-02
6029	641936.2	4166248.9	Worker	Scenario 4	8.38E-02	2.41E-03	1.40E-02
6030	642036.2	4166248.9	Worker	Scenario 4	9.21E-02	2.61E-03	1.08E-02
6031	642136.2	4166248.9	Worker	Scenario 4	9.79E-02	2.76E-03	8.19E-03
6032	642236.2	4166248.9	Worker	Scenario 4	1.02E-01	2.85E-03	7.62E-03
6033	642336.2	4166248.9	Worker	Scenario 4	1.02E-01	2.87E-03	7.21E-03
6034	642436.2	4166248.9	Worker	Scenario 4	1.02E-01	2.84E-03	6.35E-03
6035	642536.2	4166248.9	Worker	Scenario 4	9.99E-02	2.78E-03	6.18E-03
6036	642636.2	4166248.9	Worker	Scenario 4	9.81E-02	2.71E-03	5.86E-03
6037	642736.2	4166248.9	Worker	Scenario 4	9.64E-02	2.63E-03	5.34E-03
6038	642836.2	4166248.9	Worker	Scenario 4	9.46E-02	2.57E-03	4.94E-03
6039	642936.2	4166248.9	Worker	Scenario 4	9.29E-02	2.51E-03	5.24E-03
6040	644236.2	4166248.9	Worker	Scenario 4	8.71E-02	2.09E-03	2.10E-03
6041	644336.2	4166248.9	Worker	Scenario 4	8.61E-02	2.05E-03	2.11E-03
6042	644436.2	4166248.9	Worker	Scenario 4	8.37E-02	1.98E-03	2.20E-03
6043	644536.2	4166248.9	Worker	Scenario 4	8.14E-02	1.91E-03	2.22E-03
6044	644636.2	4166248.9	Worker	Scenario 4	7.81E-02	1.82E-03	2.25E-03
6045	644736.2	4166248.9	Worker	Scenario 4	7.62E-02	1.76E-03	2.21E-03
6046	644836.2	4166248.9	Worker	Scenario 4	7.44E-02	1.69E-03	2.30E-03
6047	644936.2	4166248.9	Worker	Scenario 4	7.26E-02	1.63E-03	2.51E-03
6048	645036.2	4166248.9	Worker	Scenario 4	7.08E-02	1.56E-03	2.74E-03
6049	645136.2	4166248.9	Worker	Scenario 4	6.91E-02	1.50E-03	2.95E-03
6050	645236.2	4166248.9	Worker	Scenario 4	6.74E-02	1.44E-03	3.13E-03
6051	645336.2	4166248.9	Worker	Scenario 4	6.59E-02	1.38E-03	3.25E-03
6052	645436.2	4166248.9	Worker	Scenario 4	6.43E-02	1.33E-03	3.37E-03
6053	645536.2	4166248.9	Worker	Scenario 4	6.29E-02	1.28E-03	3.41E-03
6054	645636.2	4166248.9	Worker	Scenario 4	6.16E-02	1.24E-03	3.41E-03
6055	645736.2	4166248.9	Worker	Scenario 4	6.03E-02	1.19E-03	3.38E-03
6056	645836.2	4166248.9	Worker	Scenario 4	5.90E-02	1.16E-03	3.31E-03
6057	645936.2	4166248.9	Worker	Scenario 4	5.79E-02	1.12E-03	3.22E-03
6058	646036.2	4166248.9	Worker	Scenario 4	5.67E-02	1.09E-03	3.11E-03
6059	646136.2	4166248.9	Worker	Scenario 4	5.55E-02	1.06E-03	2.98E-03
6060	646336.2	4166248.9	Worker	Scenario 4	5.33E-02	1.00E-03	2.68E-03
6061	646436.2	4166248.9	Worker	Scenario 4	5.22E-02	9.76E-04	2.53E-03
6062	646536.2	4166248.9	Worker	Scenario 4	5.11E-02	9.50E-04	2.37E-03
6063	646636.2	4166248.9	Worker	Scenario 4	5.00E-02	9.26E-04	2.21E-03
6064	646736.2	4166248.9	Worker	Scenario 4	4.89E-02	9.02E-04	2.06E-03
6065	646836.2	4166248.9	Worker	Scenario 4	4.78E-02	8.79E-04	1.91E-03
6066	646936.2	4166248.9	Worker	Scenario 4	4.68E-02	8.57E-04	1.76E-03
6067	638136.2	4166348.9	Worker	Scenario 4	7.95E-03	2.88E-04	2.66E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6068	638236.2	4166348.9	Worker	Scenario 4	9.00E-03	3.16E-04	3.43E-03
6069	638336.2	4166348.9	Worker	Scenario 4	8.82E-03	3.14E-04	4.32E-03
6070	638436.2	4166348.9	Worker	Scenario 4	8.84E-03	3.17E-04	5.28E-03
6071	638536.2	4166348.9	Worker	Scenario 4	8.06E-03	3.00E-04	6.22E-03
6072	638636.2	4166348.9	Worker	Scenario 4	8.54E-03	3.15E-04	7.01E-03
6073	638736.2	4166348.9	Worker	Scenario 4	9.58E-03	3.45E-04	7.50E-03
6074	638836.2	4166348.9	Worker	Scenario 4	9.91E-03	3.57E-04	7.56E-03
6075	638936.2	4166348.9	Worker	Scenario 4	9.49E-03	3.49E-04	7.11E-03
6076	639036.2	4166348.9	Worker	Scenario 4	1.01E-02	3.67E-04	6.19E-03
6077	639136.2	4166348.9	Worker	Scenario 4	1.05E-02	3.81E-04	4.95E-03
6078	639236.2	4166348.9	Worker	Scenario 4	1.16E-02	4.12E-04	3.61E-03
6079	639336.2	4166348.9	Worker	Scenario 4	1.16E-02	4.15E-04	2.59E-03
6080	639436.2	4166348.9	Worker	Scenario 4	1.33E-02	4.60E-04	3.40E-03
6081	639536.2	4166348.9	Worker	Scenario 4	1.56E-02	5.19E-04	4.38E-03
6082	639636.2	4166348.9	Worker	Scenario 4	1.44E-02	4.95E-04	3.50E-03
6083	639736.2	4166348.9	Worker	Scenario 4	1.44E-02	5.00E-04	3.40E-03
6084	639836.2	4166348.9	Worker	Scenario 4	1.74E-02	5.76E-04	4.92E-03
6085	639936.2	4166348.9	Worker	Scenario 4	1.84E-02	6.06E-04	5.20E-03
6086	640036.2	4166348.9	Worker	Scenario 4	1.93E-02	6.34E-04	5.00E-03
6087	640136.2	4166348.9	Worker	Scenario 4	2.02E-02	6.59E-04	5.42E-03
6088	640236.2	4166348.9	Worker	Scenario 4	2.21E-02	7.08E-04	6.57E-03
6089	640336.2	4166348.9	Worker	Scenario 4	2.49E-02	7.80E-04	7.30E-03
6090	640436.2	4166348.9	Worker	Scenario 4	2.92E-02	8.80E-04	9.15E-03
6091	640536.2	4166348.9	Worker	Scenario 4	3.33E-02	9.78E-04	1.00E-02
6092	640636.2	4166348.9	Worker	Scenario 4	3.67E-02	1.07E-03	1.09E-02
6093	640736.2	4166348.9	Worker	Scenario 4	3.93E-02	1.14E-03	1.40E-02
6094	640836.2	4166348.9	Worker	Scenario 4	4.06E-02	1.19E-03	1.61E-02
6095	640936.2	4166348.9	Worker	Scenario 4	4.28E-02	1.27E-03	1.75E-02
6096	641036.2	4166348.9	Worker	Scenario 4	4.56E-02	1.36E-03	1.56E-02
6097	641136.2	4166348.9	Worker	Scenario 4	5.01E-02	1.48E-03	1.56E-02
6098	641236.2	4166348.9	Worker	Scenario 4	5.43E-02	1.60E-03	1.86E-02
6099	641336.2	4166348.9	Worker	Scenario 4	5.90E-02	1.74E-03	1.82E-02
6100	641436.2	4166348.9	Worker	Scenario 4	6.53E-02	1.94E-03	1.63E-02
6101	641536.2	4166348.9	Worker	Scenario 4	7.26E-02	2.19E-03	1.94E-02
6102	641636.2	4166348.9	Worker	Scenario 4	8.03E-02	2.40E-03	1.95E-02
6103	641936.2	4166348.9	Worker	Scenario 4	1.03E-01	2.94E-03	1.27E-02
6104	642036.2	4166348.9	Worker	Scenario 4	1.12E-01	3.15E-03	1.07E-02
6105	642136.2	4166348.9	Worker	Scenario 4	1.18E-01	3.30E-03	8.67E-03
6106	642236.2	4166348.9	Worker	Scenario 4	1.20E-01	3.35E-03	8.43E-03
6107	642336.2	4166348.9	Worker	Scenario 4	1.19E-01	3.33E-03	7.57E-03
6108	642436.2	4166348.9	Worker	Scenario 4	1.17E-01	3.26E-03	7.08E-03
6109	642536.2	4166348.9	Worker	Scenario 4	1.15E-01	3.15E-03	6.73E-03
6110	642636.2	4166348.9	Worker	Scenario 4	1.12E-01	3.04E-03	5.82E-03
6111	642736.2	4166348.9	Worker	Scenario 4	1.10E-01	2.95E-03	5.83E-03
6112	642836.2	4166348.9	Worker	Scenario 4	1.08E-01	2.88E-03	5.88E-03
6113	643036.2	4166348.9	Worker	Scenario 4	1.07E-01	2.85E-03	4.69E-03
6114	643136.2	4166348.9	Worker	Scenario 4	1.08E-01	2.86E-03	4.38E-03
6115	643236.2	4166348.9	Worker	Scenario 4	1.08E-01	2.87E-03	4.34E-03
6116	643336.2	4166348.9	Worker	Scenario 4	1.09E-01	2.87E-03	4.10E-03
6117	643436.2	4166348.9	Worker	Scenario 4	1.09E-01	2.85E-03	3.81E-03
6118	643536.2	4166348.9	Worker	Scenario 4	1.08E-01	2.80E-03	3.66E-03
6119	643636.2	4166348.9	Worker	Scenario 4	1.07E-01	2.73E-03	3.41E-03
6120	643736.2	4166348.9	Worker	Scenario 4	1.06E-01	2.68E-03	3.24E-03
6121	643836.2	4166348.9	Worker	Scenario 4	1.05E-01	2.62E-03	2.87E-03
6122	643936.2	4166348.9	Worker	Scenario 4	1.05E-01	2.56E-03	2.56E-03
6123	644036.2	4166348.9	Worker	Scenario 4	1.04E-01	2.51E-03	2.37E-03
6124	644136.2	4166348.9	Worker	Scenario 4	1.01E-01	2.42E-03	2.51E-03
6125	644236.2	4166348.9	Worker	Scenario 4	9.80E-02	2.34E-03	2.54E-03
6126	644336.2	4166348.9	Worker	Scenario 4	9.51E-02	2.25E-03	2.51E-03
6127	644436.2	4166348.9	Worker	Scenario 4	9.24E-02	2.17E-03	2.46E-03
6128	644536.2	4166348.9	Worker	Scenario 4	8.97E-02	2.09E-03	2.52E-03
6129	644636.2	4166348.9	Worker	Scenario 4	8.60E-02	1.99E-03	2.86E-03
6130	644736.2	4166348.9	Worker	Scenario 4	8.38E-02	1.91E-03	3.10E-03
6131	644836.2	4166348.9	Worker	Scenario 4	8.15E-02	1.83E-03	3.32E-03
6132	644936.2	4166348.9	Worker	Scenario 4	7.94E-02	1.75E-03	3.48E-03
6133	645036.2	4166348.9	Worker	Scenario 4	7.73E-02	1.67E-03	3.59E-03
6134	645136.2	4166348.9	Worker	Scenario 4	7.52E-02	1.59E-03	3.66E-03
6135	645236.2	4166348.9	Worker	Scenario 4	7.32E-02	1.52E-03	3.70E-03
6136	645336.2	4166348.9	Worker	Scenario 4	7.13E-02	1.46E-03	3.67E-03
6137	645436.2	4166348.9	Worker	Scenario 4	6.94E-02	1.40E-03	3.63E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6138	645536.2	4166348.9	Worker	Scenario 4	6.77E-02	1.34E-03	3.53E-03
6139	645636.2	4166348.9	Worker	Scenario 4	6.62E-02	1.29E-03	3.39E-03
6140	645736.2	4166348.9	Worker	Scenario 4	6.47E-02	1.25E-03	3.23E-03
6141	645836.2	4166348.9	Worker	Scenario 4	6.32E-02	1.21E-03	3.06E-03
6142	645936.2	4166348.9	Worker	Scenario 4	6.18E-02	1.17E-03	2.88E-03
6143	646036.2	4166348.9	Worker	Scenario 4	6.04E-02	1.13E-03	2.70E-03
6144	646136.2	4166348.9	Worker	Scenario 4	5.90E-02	1.10E-03	2.51E-03
6145	646336.2	4166348.9	Worker	Scenario 4	5.64E-02	1.04E-03	2.15E-03
6146	646436.2	4166348.9	Worker	Scenario 4	5.51E-02	1.01E-03	1.98E-03
6147	646536.2	4166348.9	Worker	Scenario 4	5.38E-02	9.80E-04	1.81E-03
6148	646636.2	4166348.9	Worker	Scenario 4	5.25E-02	9.53E-04	1.66E-03
6149	646736.2	4166348.9	Worker	Scenario 4	5.12E-02	9.27E-04	1.52E-03
6150	646836.2	4166348.9	Worker	Scenario 4	5.00E-02	9.02E-04	1.38E-03
6151	637936.2	4166448.9	Worker	Scenario 4	7.25E-03	2.67E-04	1.17E-03
6152	638036.2	4166448.9	Worker	Scenario 4	7.53E-03	2.76E-04	1.37E-03
6153	638136.2	4166448.9	Worker	Scenario 4	7.74E-03	2.84E-04	1.58E-03
6154	638236.2	4166448.9	Worker	Scenario 4	8.07E-03	2.94E-04	1.79E-03
6155	638336.2	4166448.9	Worker	Scenario 4	1.02E-02	3.46E-04	2.68E-03
6156	638436.2	4166448.9	Worker	Scenario 4	9.09E-03	3.24E-04	2.74E-03
6157	638536.2	4166448.9	Worker	Scenario 4	8.40E-03	3.10E-04	3.61E-03
6158	638636.2	4166448.9	Worker	Scenario 4	9.30E-03	3.36E-04	4.63E-03
6159	638736.2	4166448.9	Worker	Scenario 4	1.02E-02	3.61E-04	5.75E-03
6160	638836.2	4166448.9	Worker	Scenario 4	1.06E-02	3.76E-04	6.84E-03
6161	638936.2	4166448.9	Worker	Scenario 4	1.07E-02	3.81E-04	7.73E-03
6162	639036.2	4166448.9	Worker	Scenario 4	1.27E-02	4.32E-04	8.21E-03
6163	639136.2	4166448.9	Worker	Scenario 4	1.21E-02	4.23E-04	8.11E-03
6164	639236.2	4166448.9	Worker	Scenario 4	1.28E-02	4.46E-04	7.37E-03
6165	639336.2	4166448.9	Worker	Scenario 4	1.38E-02	4.73E-04	6.09E-03
6166	639436.2	4166448.9	Worker	Scenario 4	1.48E-02	5.00E-04	4.53E-03
6167	639536.2	4166448.9	Worker	Scenario 4	1.66E-02	5.45E-04	4.24E-03
6168	639636.2	4166448.9	Worker	Scenario 4	1.82E-02	5.87E-04	4.95E-03
6169	639736.2	4166448.9	Worker	Scenario 4	1.97E-02	6.26E-04	5.24E-03
6170	639836.2	4166448.9	Worker	Scenario 4	2.20E-02	6.84E-04	6.21E-03
6171	639936.2	4166448.9	Worker	Scenario 4	2.40E-02	7.37E-04	7.47E-03
6172	640036.2	4166448.9	Worker	Scenario 4	2.59E-02	7.89E-04	8.82E-03
6173	640136.2	4166448.9	Worker	Scenario 4	2.65E-02	8.10E-04	8.73E-03
6174	640236.2	4166448.9	Worker	Scenario 4	2.69E-02	8.26E-04	6.11E-03
6175	640336.2	4166448.9	Worker	Scenario 4	2.96E-02	8.94E-04	9.15E-03
6176	640436.2	4166448.9	Worker	Scenario 4	3.31E-02	9.80E-04	1.17E-02
6177	640536.2	4166448.9	Worker	Scenario 4	3.70E-02	1.08E-03	1.10E-02
6178	641436.2	4166448.9	Worker	Scenario 4	8.34E-02	2.56E-03	1.91E-02
6179	641536.2	4166448.9	Worker	Scenario 4	9.22E-02	2.83E-03	2.19E-02
6180	641736.2	4166448.9	Worker	Scenario 4	1.11E-01	3.21E-03	1.98E-02
6181	641836.2	4166448.9	Worker	Scenario 4	1.20E-01	3.42E-03	1.67E-02
6182	641936.2	4166448.9	Worker	Scenario 4	1.31E-01	3.69E-03	1.41E-02
6183	642036.2	4166448.9	Worker	Scenario 4	1.40E-01	3.91E-03	1.02E-02
6184	642136.2	4166448.9	Worker	Scenario 4	1.43E-01	4.00E-03	1.00E-02
6185	642236.2	4166448.9	Worker	Scenario 4	1.43E-01	3.99E-03	9.13E-03
6186	642336.2	4166448.9	Worker	Scenario 4	1.40E-01	3.89E-03	8.26E-03
6187	642436.2	4166448.9	Worker	Scenario 4	1.36E-01	3.74E-03	7.85E-03
6188	642536.2	4166448.9	Worker	Scenario 4	1.32E-01	3.58E-03	6.34E-03
6189	642636.2	4166448.9	Worker	Scenario 4	1.29E-01	3.44E-03	6.89E-03
6190	642936.2	4166448.9	Worker	Scenario 4	1.22E-01	3.23E-03	5.12E-03
6191	643036.2	4166448.9	Worker	Scenario 4	1.24E-01	3.28E-03	5.05E-03
6192	643136.2	4166448.9	Worker	Scenario 4	1.24E-01	3.31E-03	4.78E-03
6193	643236.2	4166448.9	Worker	Scenario 4	1.25E-01	3.32E-03	4.41E-03
6194	643336.2	4166448.9	Worker	Scenario 4	1.25E-01	3.32E-03	4.17E-03
6195	643436.2	4166448.9	Worker	Scenario 4	1.26E-01	3.29E-03	3.89E-03
6196	643536.2	4166448.9	Worker	Scenario 4	1.25E-01	3.23E-03	3.60E-03
6197	643636.2	4166448.9	Worker	Scenario 4	1.25E-01	3.17E-03	3.14E-03
6198	643736.2	4166448.9	Worker	Scenario 4	1.24E-01	3.09E-03	2.78E-03
6199	643836.2	4166448.9	Worker	Scenario 4	1.22E-01	3.01E-03	2.89E-03
6200	643936.2	4166448.9	Worker	Scenario 4	1.20E-01	2.92E-03	2.96E-03
6201	644036.2	4166448.9	Worker	Scenario 4	1.17E-01	2.82E-03	2.89E-03
6202	644136.2	4166448.9	Worker	Scenario 4	1.13E-01	2.72E-03	2.83E-03
6203	644236.2	4166448.9	Worker	Scenario 4	1.10E-01	2.61E-03	2.87E-03
6204	644336.2	4166448.9	Worker	Scenario 4	1.06E-01	2.51E-03	3.13E-03
6205	644436.2	4166448.9	Worker	Scenario 4	1.03E-01	2.41E-03	3.41E-03
6206	644536.2	4166448.9	Worker	Scenario 4	9.96E-02	2.31E-03	3.64E-03
6207	644636.2	4166448.9	Worker	Scenario 4	9.54E-02	2.19E-03	3.93E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6208	644736.2	4166448.9	Worker	Scenario 4	9.27E-02	2.09E-03	4.01E-03
6209	644836.2	4166448.9	Worker	Scenario 4	8.99E-02	1.98E-03	4.03E-03
6210	644936.2	4166448.9	Worker	Scenario 4	8.72E-02	1.88E-03	3.99E-03
6211	645036.2	4166448.9	Worker	Scenario 4	8.46E-02	1.79E-03	3.91E-03
6212	645136.2	4166448.9	Worker	Scenario 4	8.20E-02	1.69E-03	3.80E-03
6213	645236.2	4166448.9	Worker	Scenario 4	7.95E-02	1.61E-03	3.67E-03
6214	645336.2	4166448.9	Worker	Scenario 4	7.73E-02	1.54E-03	3.49E-03
6215	645436.2	4166448.9	Worker	Scenario 4	7.51E-02	1.47E-03	3.32E-03
6216	645536.2	4166448.9	Worker	Scenario 4	7.31E-02	1.41E-03	3.10E-03
6217	645636.2	4166448.9	Worker	Scenario 4	7.12E-02	1.36E-03	2.89E-03
6218	645736.2	4166448.9	Worker	Scenario 4	6.94E-02	1.31E-03	2.67E-03
6219	645836.2	4166448.9	Worker	Scenario 4	6.76E-02	1.26E-03	2.45E-03
6220	645936.2	4166448.9	Worker	Scenario 4	6.59E-02	1.22E-03	2.24E-03
6221	646036.2	4166448.9	Worker	Scenario 4	6.43E-02	1.18E-03	2.04E-03
6222	646136.2	4166448.9	Worker	Scenario 4	6.27E-02	1.14E-03	1.86E-03
6223	646336.2	4166448.9	Worker	Scenario 4	5.95E-02	1.07E-03	1.53E-03
6224	646436.2	4166448.9	Worker	Scenario 4	5.80E-02	1.04E-03	1.41E-03
6225	646536.2	4166448.9	Worker	Scenario 4	5.64E-02	1.01E-03	1.32E-03
6226	646636.2	4166448.9	Worker	Scenario 4	5.49E-02	9.79E-04	1.24E-03
6227	646736.2	4166448.9	Worker	Scenario 4	5.35E-02	9.51E-04	1.18E-03
6228	646836.2	4166448.9	Worker	Scenario 4	5.22E-02	9.25E-04	1.14E-03
6229	637736.2	4166548.9	Worker	Scenario 4	7.62E-03	2.73E-04	1.32E-03
6230	637836.2	4166548.9	Worker	Scenario 4	7.17E-03	2.64E-04	8.41E-04
6231	637936.2	4166548.9	Worker	Scenario 4	7.41E-03	2.72E-04	9.40E-04
6232	638036.2	4166548.9	Worker	Scenario 4	7.75E-03	2.83E-04	1.03E-03
6233	638136.2	4166548.9	Worker	Scenario 4	8.27E-03	2.98E-04	1.17E-03
6234	638236.2	4166548.9	Worker	Scenario 4	9.53E-03	3.29E-04	2.36E-03
6235	638336.2	4166548.9	Worker	Scenario 4	9.85E-03	3.40E-04	2.43E-03
6236	638436.2	4166548.9	Worker	Scenario 4	1.01E-02	3.49E-04	2.45E-03
6237	638536.2	4166548.9	Worker	Scenario 4	1.01E-02	3.53E-04	2.48E-03
6238	638636.2	4166548.9	Worker	Scenario 4	1.08E-02	3.72E-04	2.80E-03
6239	638736.2	4166548.9	Worker	Scenario 4	1.14E-02	3.90E-04	3.04E-03
6240	638836.2	4166548.9	Worker	Scenario 4	1.25E-02	4.19E-04	3.79E-03
6241	638936.2	4166548.9	Worker	Scenario 4	1.32E-02	4.41E-04	4.99E-03
6242	639036.2	4166548.9	Worker	Scenario 4	1.51E-02	4.88E-04	6.31E-03
6243	639136.2	4166548.9	Worker	Scenario 4	1.66E-02	5.26E-04	7.59E-03
6244	639236.2	4166548.9	Worker	Scenario 4	1.80E-02	5.63E-04	8.59E-03
6245	639336.2	4166548.9	Worker	Scenario 4	1.72E-02	5.51E-04	9.02E-03
6246	639436.2	4166548.9	Worker	Scenario 4	1.78E-02	5.72E-04	8.67E-03
6247	639536.2	4166548.9	Worker	Scenario 4	1.84E-02	5.91E-04	7.50E-03
6248	639636.2	4166548.9	Worker	Scenario 4	2.05E-02	6.43E-04	6.02E-03
6249	639736.2	4166548.9	Worker	Scenario 4	2.16E-02	6.75E-04	6.12E-03
6250	639836.2	4166548.9	Worker	Scenario 4	2.35E-02	7.25E-04	6.99E-03
6251	639936.2	4166548.9	Worker	Scenario 4	2.60E-02	7.89E-04	7.64E-03
6252	640036.2	4166548.9	Worker	Scenario 4	2.86E-02	8.58E-04	7.17E-03
6253	640136.2	4166548.9	Worker	Scenario 4	2.99E-02	8.98E-04	1.04E-02
6254	640236.2	4166548.9	Worker	Scenario 4	3.10E-02	9.31E-04	1.06E-02
6255	640336.2	4166548.9	Worker	Scenario 4	3.36E-02	9.95E-04	9.79E-03
6256	640436.2	4166548.9	Worker	Scenario 4	3.68E-02	1.07E-03	1.07E-02
6257	640536.2	4166548.9	Worker	Scenario 4	4.09E-02	1.18E-03	1.40E-02
6258	641636.2	4166548.9	Worker	Scenario 4	1.30E-01	3.82E-03	2.28E-02
6259	641736.2	4166548.9	Worker	Scenario 4	1.42E-01	4.10E-03	2.35E-02
6260	641836.2	4166548.9	Worker	Scenario 4	1.57E-01	4.45E-03	1.66E-02
6261	641936.2	4166548.9	Worker	Scenario 4	1.70E-01	4.75E-03	1.52E-02
6262	642036.2	4166548.9	Worker	Scenario 4	1.77E-01	4.94E-03	1.17E-02
6263	642136.2	4166548.9	Worker	Scenario 4	1.78E-01	4.95E-03	1.11E-02
6264	642236.2	4166548.9	Worker	Scenario 4	1.73E-01	4.82E-03	9.80E-03
6265	642336.2	4166548.9	Worker	Scenario 4	1.67E-01	4.59E-03	9.29E-03
6266	642436.2	4166548.9	Worker	Scenario 4	1.60E-01	4.32E-03	7.53E-03
6267	642536.2	4166548.9	Worker	Scenario 4	1.54E-01	4.09E-03	8.23E-03
6268	642836.2	4166548.9	Worker	Scenario 4	1.45E-01	3.79E-03	6.03E-03
6269	642936.2	4166548.9	Worker	Scenario 4	1.43E-01	3.79E-03	5.75E-03
6270	643036.2	4166548.9	Worker	Scenario 4	1.45E-01	3.88E-03	5.20E-03
6271	643136.2	4166548.9	Worker	Scenario 4	1.46E-01	3.93E-03	4.84E-03
6272	643236.2	4166548.9	Worker	Scenario 4	1.47E-01	3.95E-03	4.53E-03
6273	643336.2	4166548.9	Worker	Scenario 4	1.47E-01	3.93E-03	4.05E-03
6274	643436.2	4166548.9	Worker	Scenario 4	1.47E-01	3.87E-03	3.51E-03
6275	643536.2	4166548.9	Worker	Scenario 4	1.47E-01	3.78E-03	3.36E-03
6276	643636.2	4166548.9	Worker	Scenario 4	1.46E-01	3.69E-03	3.49E-03
6277	643736.2	4166548.9	Worker	Scenario 4	1.44E-01	3.59E-03	3.43E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6278	643836.2	4166548.9	Worker	Scenario 4	1.41E-01	3.48E-03	3.30E-03
6279	643936.2	4166548.9	Worker	Scenario 4	1.37E-01	3.36E-03	3.31E-03
6280	644036.2	4166548.9	Worker	Scenario 4	1.33E-01	3.24E-03	3.60E-03
6281	644136.2	4166548.9	Worker	Scenario 4	1.28E-01	3.11E-03	3.90E-03
6282	644236.2	4166548.9	Worker	Scenario 4	1.24E-01	2.99E-03	4.13E-03
6283	644336.2	4166548.9	Worker	Scenario 4	1.20E-01	2.86E-03	4.27E-03
6284	644436.2	4166548.9	Worker	Scenario 4	1.16E-01	2.73E-03	4.34E-03
6285	644536.2	4166548.9	Worker	Scenario 4	1.12E-01	2.59E-03	4.33E-03
6286	644636.2	4166548.9	Worker	Scenario 4	1.07E-01	2.43E-03	4.35E-03
6287	644736.2	4166548.9	Worker	Scenario 4	1.03E-01	2.29E-03	4.20E-03
6288	644836.2	4166548.9	Worker	Scenario 4	9.97E-02	2.16E-03	3.99E-03
6289	644936.2	4166548.9	Worker	Scenario 4	9.63E-02	2.03E-03	3.76E-03
6290	645036.2	4166548.9	Worker	Scenario 4	9.30E-02	1.91E-03	3.52E-03
6291	645136.2	4166548.9	Worker	Scenario 4	8.97E-02	1.80E-03	3.28E-03
6292	645236.2	4166548.9	Worker	Scenario 4	8.67E-02	1.70E-03	3.04E-03
6293	645336.2	4166548.9	Worker	Scenario 4	8.39E-02	1.62E-03	2.79E-03
6294	645436.2	4166548.9	Worker	Scenario 4	8.12E-02	1.54E-03	2.56E-03
6295	645536.2	4166548.9	Worker	Scenario 4	7.88E-02	1.48E-03	2.33E-03
6296	645636.2	4166548.9	Worker	Scenario 4	7.65E-02	1.42E-03	2.11E-03
6297	645736.2	4166548.9	Worker	Scenario 4	7.43E-02	1.36E-03	1.90E-03
6298	645836.2	4166548.9	Worker	Scenario 4	7.22E-02	1.31E-03	1.71E-03
6299	645936.2	4166548.9	Worker	Scenario 4	7.02E-02	1.26E-03	1.59E-03
6300	646036.2	4166548.9	Worker	Scenario 4	6.82E-02	1.22E-03	1.48E-03
6301	646136.2	4166548.9	Worker	Scenario 4	6.62E-02	1.18E-03	1.40E-03
6302	646336.2	4166548.9	Worker	Scenario 4	6.24E-02	1.10E-03	1.29E-03
6303	646436.2	4166548.9	Worker	Scenario 4	6.06E-02	1.07E-03	1.24E-03
6304	646536.2	4166548.9	Worker	Scenario 4	5.89E-02	1.03E-03	1.19E-03
6305	646636.2	4166548.9	Worker	Scenario 4	5.73E-02	1.00E-03	1.13E-03
6306	646936.2	4166548.9	Worker	Scenario 4	5.29E-02	9.19E-04	9.98E-04
6307	637636.2	4166648.9	Worker	Scenario 4	8.77E-03	2.97E-04	2.14E-03
6308	637736.2	4166648.9	Worker	Scenario 4	8.97E-03	3.04E-04	2.17E-03
6309	637836.2	4166648.9	Worker	Scenario 4	8.99E-03	3.07E-04	2.16E-03
6310	637936.2	4166648.9	Worker	Scenario 4	8.97E-03	3.09E-04	2.11E-03
6311	638036.2	4166648.9	Worker	Scenario 4	1.01E-02	3.36E-04	2.55E-03
6312	638136.2	4166648.9	Worker	Scenario 4	1.02E-02	3.42E-04	2.53E-03
6313	638236.2	4166648.9	Worker	Scenario 4	1.07E-02	3.56E-04	2.59E-03
6314	638336.2	4166648.9	Worker	Scenario 4	1.07E-02	3.59E-04	2.40E-03
6315	638436.2	4166648.9	Worker	Scenario 4	1.16E-02	3.81E-04	2.46E-03
6316	638536.2	4166648.9	Worker	Scenario 4	1.22E-02	3.99E-04	2.53E-03
6317	638636.2	4166648.9	Worker	Scenario 4	1.28E-02	4.16E-04	2.89E-03
6318	638736.2	4166648.9	Worker	Scenario 4	1.34E-02	4.35E-04	3.25E-03
6319	638836.2	4166648.9	Worker	Scenario 4	1.37E-02	4.47E-04	3.50E-03
6320	638936.2	4166648.9	Worker	Scenario 4	1.46E-02	4.71E-04	3.71E-03
6321	639036.2	4166648.9	Worker	Scenario 4	1.60E-02	5.08E-04	4.16E-03
6322	639136.2	4166648.9	Worker	Scenario 4	1.78E-02	5.53E-04	5.12E-03
6323	639236.2	4166648.9	Worker	Scenario 4	1.96E-02	5.98E-04	6.04E-03
6324	639336.2	4166648.9	Worker	Scenario 4	2.00E-02	6.14E-04	6.99E-03
6325	639436.2	4166648.9	Worker	Scenario 4	1.95E-02	6.11E-04	8.53E-03
6326	639536.2	4166648.9	Worker	Scenario 4	2.07E-02	6.46E-04	9.67E-03
6327	639636.2	4166648.9	Worker	Scenario 4	2.12E-02	6.65E-04	9.98E-03
6328	639736.2	4166648.9	Worker	Scenario 4	2.33E-02	7.19E-04	9.19E-03
6329	639836.2	4166648.9	Worker	Scenario 4	2.52E-02	7.71E-04	7.53E-03
6330	639936.2	4166648.9	Worker	Scenario 4	2.76E-02	8.33E-04	8.73E-03
6331	640036.2	4166648.9	Worker	Scenario 4	3.04E-02	9.08E-04	8.83E-03
6332	640136.2	4166648.9	Worker	Scenario 4	3.34E-02	9.86E-04	9.92E-03
6333	640236.2	4166648.9	Worker	Scenario 4	3.52E-02	1.04E-03	1.00E-02
6334	640336.2	4166648.9	Worker	Scenario 4	3.79E-02	1.11E-03	1.33E-02
6335	640436.2	4166648.9	Worker	Scenario 4	4.13E-02	1.19E-03	1.41E-02
6336	640536.2	4166648.9	Worker	Scenario 4	4.58E-02	1.31E-03	1.10E-02
6337	641536.2	4166648.9	Worker	Scenario 4	1.65E-01	4.88E-03	2.80E-02
6338	641636.2	4166648.9	Worker	Scenario 4	1.75E-01	5.06E-03	2.65E-02
6339	641736.2	4166648.9	Worker	Scenario 4	1.97E-01	5.58E-03	2.29E-02
6340	641836.2	4166648.9	Worker	Scenario 4	2.17E-01	6.08E-03	1.94E-02
6341	641936.2	4166648.9	Worker	Scenario 4	2.32E-01	6.45E-03	1.45E-02
6342	642036.2	4166648.9	Worker	Scenario 4	2.34E-01	6.50E-03	1.35E-02
6343	642136.2	4166648.9	Worker	Scenario 4	2.28E-01	6.32E-03	1.19E-02
6344	642236.2	4166648.9	Worker	Scenario 4	2.16E-01	5.94E-03	1.11E-02
6345	642336.2	4166648.9	Worker	Scenario 4	2.03E-01	5.48E-03	9.63E-03
6346	642436.2	4166648.9	Worker	Scenario 4	1.92E-01	5.04E-03	9.61E-03
6347	642736.2	4166648.9	Worker	Scenario 4	1.74E-01	4.46E-03	7.00E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6348	642836.2	4166648.9	Worker	Scenario 4	1.74E-01	4.55E-03	6.32E-03
6349	642936.2	4166648.9	Worker	Scenario 4	1.72E-01	4.63E-03	5.80E-03
6350	643036.2	4166648.9	Worker	Scenario 4	1.74E-01	4.77E-03	5.33E-03
6351	643136.2	4166648.9	Worker	Scenario 4	1.76E-01	4.86E-03	4.58E-03
6352	643236.2	4166648.9	Worker	Scenario 4	1.77E-01	4.88E-03	3.99E-03
6353	643336.2	4166648.9	Worker	Scenario 4	1.77E-01	4.81E-03	4.21E-03
6354	643436.2	4166648.9	Worker	Scenario 4	1.77E-01	4.70E-03	4.16E-03
6355	643536.2	4166648.9	Worker	Scenario 4	1.76E-01	4.58E-03	3.93E-03
6356	643636.2	4166648.9	Worker	Scenario 4	1.74E-01	4.45E-03	3.87E-03
6357	643736.2	4166648.9	Worker	Scenario 4	1.71E-01	4.30E-03	4.19E-03
6358	643836.2	4166648.9	Worker	Scenario 4	1.66E-01	4.15E-03	4.51E-03
6359	643936.2	4166648.9	Worker	Scenario 4	1.60E-01	4.00E-03	4.72E-03
6360	644036.2	4166648.9	Worker	Scenario 4	1.55E-01	3.85E-03	4.82E-03
6361	644136.2	4166648.9	Worker	Scenario 4	1.49E-01	3.70E-03	4.81E-03
6362	644236.2	4166648.9	Worker	Scenario 4	1.44E-01	3.54E-03	4.72E-03
6363	644336.2	4166648.9	Worker	Scenario 4	1.39E-01	3.36E-03	4.55E-03
6364	644436.2	4166648.9	Worker	Scenario 4	1.33E-01	3.16E-03	4.33E-03
6365	644536.2	4166648.9	Worker	Scenario 4	1.28E-01	2.95E-03	4.07E-03
6366	644636.2	4166648.9	Worker	Scenario 4	1.21E-01	2.73E-03	3.84E-03
6367	644736.2	4166648.9	Worker	Scenario 4	1.16E-01	2.54E-03	3.52E-03
6368	644836.2	4166648.9	Worker	Scenario 4	1.11E-01	2.36E-03	3.20E-03
6369	644936.2	4166648.9	Worker	Scenario 4	1.07E-01	2.19E-03	2.89E-03
6370	645036.2	4166648.9	Worker	Scenario 4	1.02E-01	2.04E-03	2.61E-03
6371	645136.2	4166648.9	Worker	Scenario 4	9.82E-02	1.91E-03	2.35E-03
6372	645236.2	4166648.9	Worker	Scenario 4	9.44E-02	1.80E-03	2.12E-03
6373	645336.2	4166648.9	Worker	Scenario 4	9.10E-02	1.70E-03	1.95E-03
6374	645436.2	4166648.9	Worker	Scenario 4	8.78E-02	1.62E-03	1.81E-03
6375	645536.2	4166648.9	Worker	Scenario 4	8.49E-02	1.54E-03	1.70E-03
6376	645636.2	4166648.9	Worker	Scenario 4	8.21E-02	1.48E-03	1.63E-03
6377	645736.2	4166648.9	Worker	Scenario 4	7.94E-02	1.42E-03	1.56E-03
6378	645836.2	4166648.9	Worker	Scenario 4	7.68E-02	1.36E-03	1.49E-03
6379	646836.2	4166648.9	Worker	Scenario 4	5.64E-02	9.65E-04	1.07E-03
6380	646936.2	4166648.9	Worker	Scenario 4	5.49E-02	9.37E-04	1.04E-03
6381	647036.2	4166648.9	Worker	Scenario 4	5.34E-02	9.11E-04	1.02E-03
6382	637436.2	4166748.9	Worker	Scenario 4	7.86E-03	2.73E-04	1.69E-03
6383	637536.2	4166748.9	Worker	Scenario 4	7.87E-03	2.75E-04	1.61E-03
6384	637636.2	4166748.9	Worker	Scenario 4	8.67E-03	2.96E-04	1.90E-03
6385	637736.2	4166748.9	Worker	Scenario 4	9.14E-03	3.09E-04	2.00E-03
6386	637836.2	4166748.9	Worker	Scenario 4	1.01E-02	3.32E-04	2.40E-03
6387	637936.2	4166748.9	Worker	Scenario 4	1.09E-02	3.52E-04	2.65E-03
6388	638036.2	4166748.9	Worker	Scenario 4	1.19E-02	3.76E-04	2.85E-03
6389	638136.2	4166748.9	Worker	Scenario 4	1.19E-02	3.79E-04	2.95E-03
6390	638236.2	4166748.9	Worker	Scenario 4	1.11E-02	3.66E-04	2.82E-03
6391	638336.2	4166748.9	Worker	Scenario 4	1.13E-02	3.74E-04	2.88E-03
6392	638436.2	4166748.9	Worker	Scenario 4	1.19E-02	3.90E-04	3.08E-03
6393	638536.2	4166748.9	Worker	Scenario 4	1.25E-02	4.07E-04	3.23E-03
6394	638636.2	4166748.9	Worker	Scenario 4	1.35E-02	4.33E-04	3.38E-03
6395	638736.2	4166748.9	Worker	Scenario 4	1.43E-02	4.55E-04	3.41E-03
6396	638836.2	4166748.9	Worker	Scenario 4	1.49E-02	4.74E-04	3.33E-03
6397	638936.2	4166748.9	Worker	Scenario 4	1.60E-02	5.03E-04	3.23E-03
6398	639036.2	4166748.9	Worker	Scenario 4	1.73E-02	5.36E-04	3.93E-03
6399	639136.2	4166748.9	Worker	Scenario 4	1.89E-02	5.76E-04	5.38E-03
6400	639236.2	4166748.9	Worker	Scenario 4	2.09E-02	6.27E-04	6.70E-03
6401	639336.2	4166748.9	Worker	Scenario 4	2.15E-02	6.47E-04	6.85E-03
6402	639436.2	4166748.9	Worker	Scenario 4	2.22E-02	6.69E-04	6.41E-03
6403	639536.2	4166748.9	Worker	Scenario 4	2.31E-02	6.99E-04	6.99E-03
6404	639636.2	4166748.9	Worker	Scenario 4	2.42E-02	7.32E-04	7.84E-03
6405	639736.2	4166748.9	Worker	Scenario 4	2.55E-02	7.71E-04	9.75E-03
6406	639836.2	4166748.9	Worker	Scenario 4	2.73E-02	8.21E-04	1.10E-02
6407	639936.2	4166748.9	Worker	Scenario 4	2.99E-02	8.92E-04	1.11E-02
6408	640036.2	4166748.9	Worker	Scenario 4	3.26E-02	9.65E-04	9.73E-03
6409	640136.2	4166748.9	Worker	Scenario 4	3.59E-02	1.05E-03	1.37E-02
6410	640236.2	4166748.9	Worker	Scenario 4	3.92E-02	1.14E-03	1.15E-02
6411	640336.2	4166748.9	Worker	Scenario 4	4.26E-02	1.22E-03	1.23E-02
6412	640436.2	4166748.9	Worker	Scenario 4	4.63E-02	1.32E-03	1.40E-02
6413	640536.2	4166748.9	Worker	Scenario 4	5.12E-02	1.44E-03	1.65E-02
6414	644536.2	4166748.9	Worker	Scenario 4	1.49E-01	3.45E-03	3.02E-03
6415	644636.2	4166748.9	Worker	Scenario 4	1.39E-01	3.12E-03	2.72E-03
6416	644836.2	4166748.9	Worker	Scenario 4	1.25E-01	2.58E-03	2.24E-03
6417	644936.2	4166748.9	Worker	Scenario 4	1.18E-01	2.36E-03	2.10E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6418	645036.2	4166748.9	Worker	Scenario 4	1.13E-01	2.16E-03	2.00E-03
6419	645136.2	4166748.9	Worker	Scenario 4	1.07E-01	2.01E-03	1.91E-03
6420	645236.2	4166748.9	Worker	Scenario 4	1.03E-01	1.88E-03	1.81E-03
6421	645336.2	4166748.9	Worker	Scenario 4	9.84E-02	1.78E-03	1.71E-03
6422	645436.2	4166748.9	Worker	Scenario 4	9.45E-02	1.69E-03	1.63E-03
6423	645536.2	4166748.9	Worker	Scenario 4	9.09E-02	1.60E-03	1.55E-03
6424	645636.2	4166748.9	Worker	Scenario 4	8.75E-02	1.53E-03	1.47E-03
6425	645736.2	4166748.9	Worker	Scenario 4	8.43E-02	1.46E-03	1.44E-03
6426	645936.2	4166748.9	Worker	Scenario 4	7.83E-02	1.35E-03	1.38E-03
6427	646036.2	4166748.9	Worker	Scenario 4	7.55E-02	1.29E-03	1.35E-03
6428	646436.2	4166748.9	Worker	Scenario 4	6.59E-02	1.12E-03	1.20E-03
6429	646536.2	4166748.9	Worker	Scenario 4	6.39E-02	1.08E-03	1.16E-03
6430	646636.2	4166748.9	Worker	Scenario 4	6.20E-02	1.05E-03	1.12E-03
6431	646736.2	4166748.9	Worker	Scenario 4	6.02E-02	1.01E-03	1.10E-03
6432	646836.2	4166748.9	Worker	Scenario 4	5.84E-02	9.82E-04	1.07E-03
6433	646936.2	4166748.9	Worker	Scenario 4	5.67E-02	9.53E-04	1.05E-03
6434	647036.2	4166748.9	Worker	Scenario 4	5.52E-02	9.26E-04	1.02E-03
6435	637336.2	4166848.9	Worker	Scenario 4	7.76E-03	2.69E-04	1.66E-03
6436	637436.2	4166848.9	Worker	Scenario 4	8.28E-03	2.83E-04	1.87E-03
6437	637536.2	4166848.9	Worker	Scenario 4	8.31E-03	2.87E-04	1.84E-03
6438	637636.2	4166848.9	Worker	Scenario 4	9.09E-03	3.06E-04	2.12E-03
6439	637736.2	4166848.9	Worker	Scenario 4	9.84E-03	3.25E-04	2.30E-03
6440	637836.2	4166848.9	Worker	Scenario 4	1.06E-02	3.44E-04	2.45E-03
6441	637936.2	4166848.9	Worker	Scenario 4	1.18E-02	3.71E-04	3.02E-03
6442	638036.2	4166848.9	Worker	Scenario 4	1.26E-02	3.92E-04	3.33E-03
6443	638136.2	4166848.9	Worker	Scenario 4	1.27E-02	3.98E-04	3.31E-03
6444	638236.2	4166848.9	Worker	Scenario 4	1.19E-02	3.85E-04	2.75E-03
6445	638336.2	4166848.9	Worker	Scenario 4	1.20E-02	3.92E-04	2.77E-03
6446	638436.2	4166848.9	Worker	Scenario 4	1.28E-02	4.12E-04	3.07E-03
6447	638536.2	4166848.9	Worker	Scenario 4	1.33E-02	4.27E-04	3.30E-03
6448	638636.2	4166848.9	Worker	Scenario 4	1.40E-02	4.48E-04	3.52E-03
6449	638736.2	4166848.9	Worker	Scenario 4	1.51E-02	4.75E-04	3.73E-03
6450	638836.2	4166848.9	Worker	Scenario 4	1.59E-02	4.99E-04	3.86E-03
6451	638936.2	4166848.9	Worker	Scenario 4	1.69E-02	5.26E-04	4.08E-03
6452	639036.2	4166848.9	Worker	Scenario 4	1.83E-02	5.63E-04	4.22E-03
6453	639136.2	4166848.9	Worker	Scenario 4	2.01E-02	6.08E-04	4.22E-03
6454	639236.2	4166848.9	Worker	Scenario 4	2.20E-02	6.55E-04	4.12E-03
6455	639336.2	4166848.9	Worker	Scenario 4	2.31E-02	6.85E-04	4.90E-03
6456	639436.2	4166848.9	Worker	Scenario 4	2.40E-02	7.12E-04	6.25E-03
6457	639536.2	4166848.9	Worker	Scenario 4	2.52E-02	7.47E-04	7.61E-03
6458	639636.2	4166848.9	Worker	Scenario 4	2.67E-02	7.89E-04	8.63E-03
6459	639736.2	4166848.9	Worker	Scenario 4	2.82E-02	8.32E-04	8.89E-03
6460	644836.2	4166848.9	Worker	Scenario 4	1.40E-01	2.81E-03	2.04E-03
6461	644936.2	4166848.9	Worker	Scenario 4	1.31E-01	2.50E-03	1.91E-03
6462	645036.2	4166848.9	Worker	Scenario 4	1.23E-01	2.28E-03	1.87E-03
6463	645136.2	4166848.9	Worker	Scenario 4	1.16E-01	2.10E-03	1.83E-03
6464	645236.2	4166848.9	Worker	Scenario 4	1.11E-01	1.96E-03	1.78E-03
6465	645336.2	4166848.9	Worker	Scenario 4	1.06E-01	1.84E-03	1.72E-03
6466	645436.2	4166848.9	Worker	Scenario 4	1.01E-01	1.74E-03	1.67E-03
6467	645536.2	4166848.9	Worker	Scenario 4	9.66E-02	1.65E-03	1.61E-03
6468	645636.2	4166848.9	Worker	Scenario 4	9.26E-02	1.57E-03	1.54E-03
6469	645836.2	4166848.9	Worker	Scenario 4	8.52E-02	1.44E-03	1.44E-03
6470	645936.2	4166848.9	Worker	Scenario 4	8.16E-02	1.37E-03	1.40E-03
6471	646436.2	4166848.9	Worker	Scenario 4	6.84E-02	1.14E-03	1.19E-03
6472	646536.2	4166848.9	Worker	Scenario 4	6.62E-02	1.10E-03	1.15E-03
6473	646636.2	4166848.9	Worker	Scenario 4	6.41E-02	1.06E-03	1.13E-03
6474	646736.2	4166848.9	Worker	Scenario 4	6.22E-02	1.03E-03	1.10E-03
6475	646836.2	4166848.9	Worker	Scenario 4	6.02E-02	9.98E-04	1.07E-03
6476	646936.2	4166848.9	Worker	Scenario 4	5.85E-02	9.68E-04	1.05E-03
6477	647036.2	4166848.9	Worker	Scenario 4	5.68E-02	9.40E-04	1.02E-03
6478	637136.2	4166948.9	Worker	Scenario 4	7.75E-03	2.67E-04	1.73E-03
6479	637236.2	4166948.9	Worker	Scenario 4	7.99E-03	2.74E-04	1.79E-03
6480	637336.2	4166948.9	Worker	Scenario 4	8.04E-03	2.78E-04	1.75E-03
6481	637436.2	4166948.9	Worker	Scenario 4	8.79E-03	2.97E-04	2.00E-03
6482	637536.2	4166948.9	Worker	Scenario 4	8.88E-03	3.01E-04	1.98E-03
6483	637636.2	4166948.9	Worker	Scenario 4	9.66E-03	3.21E-04	2.16E-03
6484	637736.2	4166948.9	Worker	Scenario 4	1.04E-02	3.39E-04	2.26E-03
6485	637836.2	4166948.9	Worker	Scenario 4	1.01E-02	3.36E-04	2.22E-03
6486	637936.2	4166948.9	Worker	Scenario 4	1.05E-02	3.47E-04	2.37E-03
6487	638036.2	4166948.9	Worker	Scenario 4	1.19E-02	3.81E-04	2.66E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6488	638136.2	4166948.9	Worker	Scenario 4	1.40E-02	4.30E-04	2.87E-03
6489	638236.2	4166948.9	Worker	Scenario 4	1.26E-02	4.03E-04	2.91E-03
6490	638336.2	4166948.9	Worker	Scenario 4	1.27E-02	4.09E-04	3.00E-03
6491	638436.2	4166948.9	Worker	Scenario 4	1.41E-02	4.43E-04	3.42E-03
6492	638536.2	4166948.9	Worker	Scenario 4	1.40E-02	4.47E-04	3.44E-03
6493	638636.2	4166948.9	Worker	Scenario 4	1.49E-02	4.70E-04	3.81E-03
6494	638736.2	4166948.9	Worker	Scenario 4	1.58E-02	4.96E-04	4.13E-03
6495	638836.2	4166948.9	Worker	Scenario 4	1.70E-02	5.28E-04	4.46E-03
6496	638936.2	4166948.9	Worker	Scenario 4	1.79E-02	5.54E-04	4.56E-03
6497	639036.2	4166948.9	Worker	Scenario 4	1.92E-02	5.89E-04	4.93E-03
6498	639136.2	4166948.9	Worker	Scenario 4	2.07E-02	6.28E-04	5.22E-03
6499	639236.2	4166948.9	Worker	Scenario 4	2.24E-02	6.72E-04	5.88E-03
6500	639336.2	4166948.9	Worker	Scenario 4	2.44E-02	7.23E-04	6.46E-03
6501	639436.2	4166948.9	Worker	Scenario 4	2.63E-02	7.72E-04	6.63E-03
6502	639536.2	4166948.9	Worker	Scenario 4	2.73E-02	8.03E-04	6.22E-03
6503	639636.2	4166948.9	Worker	Scenario 4	2.91E-02	8.53E-04	5.62E-03
6504	639736.2	4166948.9	Worker	Scenario 4	3.10E-02	9.05E-04	6.56E-03
6505	639836.2	4166948.9	Worker	Scenario 4	3.32E-02	9.66E-04	8.73E-03
6506	639936.2	4166948.9	Worker	Scenario 4	3.57E-02	1.04E-03	1.08E-02
6507	640036.2	4166948.9	Worker	Scenario 4	3.92E-02	1.13E-03	1.22E-02
6508	640136.2	4166948.9	Worker	Scenario 4	4.29E-02	1.23E-03	1.41E-02
6509	640236.2	4166948.9	Worker	Scenario 4	4.71E-02	1.34E-03	2.06E-02
6510	640336.2	4166948.9	Worker	Scenario 4	5.17E-02	1.46E-03	2.67E-02
6511	640436.2	4166948.9	Worker	Scenario 4	5.72E-02	1.60E-03	2.93E-02
6512	640536.2	4166948.9	Worker	Scenario 4	6.33E-02	1.75E-03	2.57E-02
6513	640636.2	4166948.9	Worker	Scenario 4	7.00E-02	1.92E-03	1.79E-02
6514	640736.2	4166948.9	Worker	Scenario 4	7.99E-02	2.17E-03	1.82E-02
6515	645636.2	4166948.9	Worker	Scenario 4	9.67E-02	1.61E-03	1.55E-03
6516	637036.2	4167048.9	Worker	Scenario 4	7.30E-03	2.56E-04	1.29E-03
6517	637136.2	4167048.9	Worker	Scenario 4	8.28E-03	2.81E-04	1.66E-03
6518	637236.2	4167048.9	Worker	Scenario 4	8.71E-03	2.92E-04	1.79E-03
6519	637336.2	4167048.9	Worker	Scenario 4	8.35E-03	2.87E-04	1.71E-03
6520	637436.2	4167048.9	Worker	Scenario 4	9.21E-03	3.08E-04	1.98E-03
6521	637536.2	4167048.9	Worker	Scenario 4	9.41E-03	3.15E-04	2.06E-03
6522	637636.2	4167048.9	Worker	Scenario 4	9.49E-03	3.20E-04	2.11E-03
6523	637736.2	4167048.9	Worker	Scenario 4	9.81E-03	3.30E-04	2.21E-03
6524	637836.2	4167048.9	Worker	Scenario 4	1.09E-02	3.56E-04	2.46E-03
6525	637936.2	4167048.9	Worker	Scenario 4	1.12E-02	3.66E-04	2.57E-03
6526	638036.2	4167048.9	Worker	Scenario 4	1.22E-02	3.90E-04	2.92E-03
6527	638136.2	4167048.9	Worker	Scenario 4	1.40E-02	4.32E-04	3.72E-03
6528	638236.2	4167048.9	Worker	Scenario 4	1.41E-02	4.40E-04	3.75E-03
6529	638336.2	4167048.9	Worker	Scenario 4	1.35E-02	4.31E-04	3.33E-03
6530	638436.2	4167048.9	Worker	Scenario 4	1.51E-02	4.70E-04	3.95E-03
6531	638536.2	4167048.9	Worker	Scenario 4	1.49E-02	4.69E-04	3.62E-03
6532	638636.2	4167048.9	Worker	Scenario 4	1.60E-02	5.01E-04	3.91E-03
6533	638736.2	4167048.9	Worker	Scenario 4	1.66E-02	5.20E-04	3.88E-03
6534	638836.2	4167048.9	Worker	Scenario 4	1.80E-02	5.56E-04	4.10E-03
6535	638936.2	4167048.9	Worker	Scenario 4	1.92E-02	5.89E-04	4.14E-03
6536	639036.2	4167048.9	Worker	Scenario 4	2.04E-02	6.22E-04	4.54E-03
6537	639136.2	4167048.9	Worker	Scenario 4	2.19E-02	6.62E-04	5.18E-03
6538	639236.2	4167048.9	Worker	Scenario 4	2.36E-02	7.09E-04	5.80E-03
6539	639336.2	4167048.9	Worker	Scenario 4	2.55E-02	7.59E-04	6.32E-03
6540	639436.2	4167048.9	Worker	Scenario 4	2.78E-02	8.17E-04	6.68E-03
6541	639536.2	4167048.9	Worker	Scenario 4	2.95E-02	8.64E-04	6.98E-03
6542	639636.2	4167048.9	Worker	Scenario 4	3.17E-02	9.25E-04	7.33E-03
6543	639736.2	4167048.9	Worker	Scenario 4	3.41E-02	9.89E-04	8.48E-03
6544	639836.2	4167048.9	Worker	Scenario 4	3.67E-02	1.06E-03	9.37E-03
6545	639936.2	4167048.9	Worker	Scenario 4	3.96E-02	1.14E-03	9.84E-03
6546	640036.2	4167048.9	Worker	Scenario 4	4.33E-02	1.24E-03	9.71E-03
6547	640136.2	4167048.9	Worker	Scenario 4	4.73E-02	1.34E-03	9.15E-03
6548	640236.2	4167048.9	Worker	Scenario 4	5.18E-02	1.46E-03	1.17E-02
6549	640336.2	4167048.9	Worker	Scenario 4	5.71E-02	1.60E-03	1.38E-02
6550	640436.2	4167048.9	Worker	Scenario 4	6.36E-02	1.76E-03	1.58E-02
6551	640536.2	4167048.9	Worker	Scenario 4	7.07E-02	1.94E-03	2.44E-02
6552	641036.2	4167048.9	Worker	Scenario 4	1.32E-01	3.62E-03	3.57E-02
6553	641136.2	4167048.9	Worker	Scenario 4	1.64E-01	4.53E-03	4.39E-02
6554	644836.2	4167048.9	Worker	Scenario 4	1.67E-01	3.08E-03	2.10E-03
6555	644936.2	4167048.9	Worker	Scenario 4	1.51E-01	2.66E-03	2.01E-03
6556	645036.2	4167048.9	Worker	Scenario 4	1.40E-01	2.39E-03	1.92E-03
6557	645136.2	4167048.9	Worker	Scenario 4	1.30E-01	2.20E-03	1.84E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6558	645436.2	4167048.9	Worker	Scenario 4	1.10E-01	1.81E-03	1.60E-03
6559	645536.2	4167048.9	Worker	Scenario 4	1.05E-01	1.71E-03	1.53E-03
6560	645636.2	4167048.9	Worker	Scenario 4	1.00E-01	1.63E-03	1.48E-03
6561	645836.2	4167048.9	Worker	Scenario 4	9.15E-02	1.48E-03	1.41E-03
6562	645936.2	4167048.9	Worker	Scenario 4	8.77E-02	1.42E-03	1.37E-03
6563	646436.2	4167048.9	Worker	Scenario 4	7.25E-02	1.17E-03	1.20E-03
6564	646536.2	4167048.9	Worker	Scenario 4	7.00E-02	1.13E-03	1.17E-03
6565	646636.2	4167048.9	Worker	Scenario 4	6.77E-02	1.09E-03	1.14E-03
6566	646736.2	4167048.9	Worker	Scenario 4	6.55E-02	1.05E-03	1.11E-03
6567	646936.2	4167048.9	Worker	Scenario 4	6.14E-02	9.89E-04	1.05E-03
6568	647036.2	4167048.9	Worker	Scenario 4	5.95E-02	9.59E-04	1.02E-03
6569	636936.2	4167148.9	Worker	Scenario 4	7.70E-03	2.65E-04	1.71E-03
6570	637036.2	4167148.9	Worker	Scenario 4	7.44E-03	2.61E-04	1.55E-03
6571	637136.2	4167148.9	Worker	Scenario 4	8.10E-03	2.79E-04	1.79E-03
6572	637236.2	4167148.9	Worker	Scenario 4	8.59E-03	2.92E-04	1.92E-03
6573	637336.2	4167148.9	Worker	Scenario 4	9.11E-03	3.06E-04	2.03E-03
6574	637436.2	4167148.9	Worker	Scenario 4	9.62E-03	3.20E-04	2.12E-03
6575	637536.2	4167148.9	Worker	Scenario 4	9.71E-03	3.24E-04	2.14E-03
6576	637636.2	4167148.9	Worker	Scenario 4	9.45E-03	3.21E-04	2.05E-03
6577	637736.2	4167148.9	Worker	Scenario 4	1.06E-02	3.49E-04	2.29E-03
6578	637836.2	4167148.9	Worker	Scenario 4	1.09E-02	3.59E-04	2.34E-03
6579	637936.2	4167148.9	Worker	Scenario 4	1.18E-02	3.83E-04	2.76E-03
6580	638036.2	4167148.9	Worker	Scenario 4	1.33E-02	4.18E-04	3.62E-03
6581	638136.2	4167148.9	Worker	Scenario 4	1.34E-02	4.23E-04	3.48E-03
6582	638236.2	4167148.9	Worker	Scenario 4	1.59E-02	4.84E-04	4.56E-03
6583	638336.2	4167148.9	Worker	Scenario 4	1.46E-02	4.58E-04	3.84E-03
6584	638436.2	4167148.9	Worker	Scenario 4	1.58E-02	4.89E-04	4.30E-03
6585	638536.2	4167148.9	Worker	Scenario 4	1.59E-02	4.97E-04	4.09E-03
6586	638636.2	4167148.9	Worker	Scenario 4	1.69E-02	5.25E-04	4.33E-03
6587	638736.2	4167148.9	Worker	Scenario 4	1.78E-02	5.52E-04	4.50E-03
6588	638836.2	4167148.9	Worker	Scenario 4	1.92E-02	5.89E-04	4.82E-03
6589	638936.2	4167148.9	Worker	Scenario 4	2.03E-02	6.20E-04	5.04E-03
6590	639036.2	4167148.9	Worker	Scenario 4	2.17E-02	6.60E-04	5.51E-03
6591	639136.2	4167148.9	Worker	Scenario 4	2.33E-02	7.04E-04	5.99E-03
6592	639236.2	4167148.9	Worker	Scenario 4	2.51E-02	7.52E-04	6.45E-03
6593	639336.2	4167148.9	Worker	Scenario 4	2.71E-02	8.06E-04	6.85E-03
6594	639436.2	4167148.9	Worker	Scenario 4	2.97E-02	8.73E-04	7.22E-03
6595	639536.2	4167148.9	Worker	Scenario 4	3.23E-02	9.41E-04	7.52E-03
6596	639636.2	4167148.9	Worker	Scenario 4	3.42E-02	9.98E-04	7.77E-03
6597	639736.2	4167148.9	Worker	Scenario 4	3.70E-02	1.07E-03	7.92E-03
6598	639836.2	4167148.9	Worker	Scenario 4	4.02E-02	1.16E-03	7.95E-03
6599	639936.2	4167148.9	Worker	Scenario 4	4.38E-02	1.26E-03	7.99E-03
6600	640036.2	4167148.9	Worker	Scenario 4	4.79E-02	1.37E-03	8.47E-03
6601	640136.2	4167148.9	Worker	Scenario 4	5.23E-02	1.49E-03	9.18E-03
6602	640236.2	4167148.9	Worker	Scenario 4	5.75E-02	1.62E-03	1.10E-02
6603	640336.2	4167148.9	Worker	Scenario 4	6.37E-02	1.77E-03	1.25E-02
6604	640436.2	4167148.9	Worker	Scenario 4	7.11E-02	1.96E-03	1.35E-02
6605	640836.2	4167148.9	Worker	Scenario 4	1.13E-01	3.03E-03	3.06E-02
6606	640936.2	4167148.9	Worker	Scenario 4	1.29E-01	3.49E-03	4.58E-02
6607	641036.2	4167148.9	Worker	Scenario 4	1.54E-01	4.18E-03	4.29E-02
6608	641136.2	4167148.9	Worker	Scenario 4	1.96E-01	5.36E-03	4.73E-02
6609	644836.2	4167148.9	Worker	Scenario 4	1.73E-01	3.00E-03	2.10E-03
6610	644936.2	4167148.9	Worker	Scenario 4	1.57E-01	2.62E-03	2.02E-03
6611	645036.2	4167148.9	Worker	Scenario 4	1.45E-01	2.38E-03	1.94E-03
6612	645136.2	4167148.9	Worker	Scenario 4	1.35E-01	2.19E-03	1.86E-03
6613	645436.2	4167148.9	Worker	Scenario 4	1.14E-01	1.82E-03	1.66E-03
6614	645536.2	4167148.9	Worker	Scenario 4	1.08E-01	1.72E-03	1.60E-03
6615	645636.2	4167148.9	Worker	Scenario 4	1.03E-01	1.64E-03	1.54E-03
6616	645836.2	4167148.9	Worker	Scenario 4	9.39E-02	1.49E-03	1.43E-03
6617	645936.2	4167148.9	Worker	Scenario 4	9.00E-02	1.43E-03	1.38E-03
6618	646036.2	4167148.9	Worker	Scenario 4	8.63E-02	1.37E-03	1.33E-03
6619	646336.2	4167148.9	Worker	Scenario 4	7.68E-02	1.22E-03	1.19E-03
6620	646436.2	4167148.9	Worker	Scenario 4	7.41E-02	1.18E-03	1.15E-03
6621	646536.2	4167148.9	Worker	Scenario 4	7.15E-02	1.14E-03	1.11E-03
6622	646636.2	4167148.9	Worker	Scenario 4	6.90E-02	1.10E-03	1.08E-03
6623	646736.2	4167148.9	Worker	Scenario 4	6.67E-02	1.06E-03	1.04E-03
6624	646836.2	4167148.9	Worker	Scenario 4	6.46E-02	1.03E-03	1.01E-03
6625	646936.2	4167148.9	Worker	Scenario 4	6.25E-02	9.95E-04	9.86E-04
6626	647036.2	4167148.9	Worker	Scenario 4	6.06E-02	9.65E-04	9.63E-04
6627	636836.2	4167248.9	Worker	Scenario 4	7.47E-03	2.60E-04	1.52E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6628	636936.2	4167248.9	Worker	Scenario 4	8.25E-03	2.80E-04	1.75E-03
6629	637036.2	4167248.9	Worker	Scenario 4	7.86E-03	2.73E-04	1.62E-03
6630	637136.2	4167248.9	Worker	Scenario 4	8.51E-03	2.90E-04	1.81E-03
6631	637236.2	4167248.9	Worker	Scenario 4	8.87E-03	3.00E-04	1.90E-03
6632	637336.2	4167248.9	Worker	Scenario 4	9.76E-03	3.22E-04	2.21E-03
6633	637436.2	4167248.9	Worker	Scenario 4	1.01E-02	3.33E-04	2.31E-03
6634	637536.2	4167248.9	Worker	Scenario 4	1.02E-02	3.38E-04	2.29E-03
6635	637636.2	4167248.9	Worker	Scenario 4	1.01E-02	3.38E-04	2.22E-03
6636	637736.2	4167248.9	Worker	Scenario 4	1.11E-02	3.62E-04	2.51E-03
6637	637836.2	4167248.9	Worker	Scenario 4	1.28E-02	4.04E-04	3.02E-03
6638	637936.2	4167248.9	Worker	Scenario 4	1.18E-02	3.85E-04	2.66E-03
6639	638036.2	4167248.9	Worker	Scenario 4	1.27E-02	4.08E-04	2.94E-03
6640	638136.2	4167248.9	Worker	Scenario 4	1.47E-02	4.55E-04	3.47E-03
6641	638236.2	4167248.9	Worker	Scenario 4	1.52E-02	4.70E-04	3.61E-03
6642	638336.2	4167248.9	Worker	Scenario 4	1.61E-02	4.95E-04	3.83E-03
6643	638436.2	4167248.9	Worker	Scenario 4	1.65E-02	5.08E-04	3.96E-03
6644	638536.2	4167248.9	Worker	Scenario 4	1.76E-02	5.39E-04	4.23E-03
6645	638636.2	4167248.9	Worker	Scenario 4	1.78E-02	5.50E-04	4.30E-03
6646	638736.2	4167248.9	Worker	Scenario 4	1.87E-02	5.79E-04	4.55E-03
6647	638836.2	4167248.9	Worker	Scenario 4	2.01E-02	6.16E-04	4.92E-03
6648	638936.2	4167248.9	Worker	Scenario 4	2.15E-02	6.55E-04	5.41E-03
6649	639036.2	4167248.9	Worker	Scenario 4	2.30E-02	6.95E-04	5.89E-03
6650	639136.2	4167248.9	Worker	Scenario 4	2.48E-02	7.44E-04	6.45E-03
6651	639236.2	4167248.9	Worker	Scenario 4	2.67E-02	7.97E-04	7.01E-03
6652	639336.2	4167248.9	Worker	Scenario 4	2.90E-02	8.57E-04	7.58E-03
6653	639436.2	4167248.9	Worker	Scenario 4	3.14E-02	9.22E-04	8.11E-03
6654	639536.2	4167248.9	Worker	Scenario 4	3.42E-02	9.98E-04	8.58E-03
6655	639636.2	4167248.9	Worker	Scenario 4	3.71E-02	1.08E-03	9.05E-03
6656	639736.2	4167248.9	Worker	Scenario 4	4.02E-02	1.16E-03	9.54E-03
6657	639836.2	4167248.9	Worker	Scenario 4	4.40E-02	1.27E-03	9.88E-03
6658	639936.2	4167248.9	Worker	Scenario 4	4.83E-02	1.38E-03	1.02E-02
6659	640036.2	4167248.9	Worker	Scenario 4	5.30E-02	1.51E-03	1.04E-02
6660	640136.2	4167248.9	Worker	Scenario 4	5.83E-02	1.65E-03	1.06E-02
6661	640236.2	4167248.9	Worker	Scenario 4	6.44E-02	1.80E-03	1.09E-02
6662	640336.2	4167248.9	Worker	Scenario 4	7.15E-02	1.98E-03	1.16E-02
6663	640636.2	4167248.9	Worker	Scenario 4	1.02E-01	2.74E-03	1.54E-02
6664	640736.2	4167248.9	Worker	Scenario 4	1.17E-01	3.11E-03	1.76E-02
6665	640836.2	4167248.9	Worker	Scenario 4	1.30E-01	3.47E-03	2.08E-02
6666	640936.2	4167248.9	Worker	Scenario 4	1.51E-01	4.03E-03	2.85E-02
6667	641036.2	4167248.9	Worker	Scenario 4	1.81E-01	4.87E-03	3.70E-02
6668	641136.2	4167248.9	Worker	Scenario 4	2.33E-01	6.35E-03	4.83E-02
6669	645036.2	4167248.9	Worker	Scenario 4	1.47E-01	2.33E-03	1.92E-03
6670	645136.2	4167248.9	Worker	Scenario 4	1.37E-01	2.16E-03	1.85E-03
6671	645336.2	4167248.9	Worker	Scenario 4	1.22E-01	1.91E-03	1.72E-03
6672	645436.2	4167248.9	Worker	Scenario 4	1.16E-01	1.81E-03	1.66E-03
6673	645536.2	4167248.9	Worker	Scenario 4	1.10E-01	1.72E-03	1.61E-03
6674	645636.2	4167248.9	Worker	Scenario 4	1.05E-01	1.64E-03	1.55E-03
6675	645736.2	4167248.9	Worker	Scenario 4	1.00E-01	1.56E-03	1.50E-03
6676	645836.2	4167248.9	Worker	Scenario 4	9.56E-02	1.49E-03	1.45E-03
6677	645936.2	4167248.9	Worker	Scenario 4	9.16E-02	1.43E-03	1.41E-03
6678	646036.2	4167248.9	Worker	Scenario 4	8.78E-02	1.37E-03	1.36E-03
6679	646136.2	4167248.9	Worker	Scenario 4	8.43E-02	1.32E-03	1.32E-03
6680	646336.2	4167248.9	Worker	Scenario 4	7.80E-02	1.22E-03	1.24E-03
6681	646436.2	4167248.9	Worker	Scenario 4	7.52E-02	1.18E-03	1.21E-03
6682	646536.2	4167248.9	Worker	Scenario 4	7.25E-02	1.14E-03	1.17E-03
6683	646636.2	4167248.9	Worker	Scenario 4	7.00E-02	1.10E-03	1.14E-03
6684	646736.2	4167248.9	Worker	Scenario 4	6.76E-02	1.06E-03	1.11E-03
6685	646836.2	4167248.9	Worker	Scenario 4	6.54E-02	1.03E-03	1.08E-03
6686	646936.2	4167248.9	Worker	Scenario 4	6.33E-02	9.98E-04	1.05E-03
6687	647036.2	4167248.9	Worker	Scenario 4	6.13E-02	9.67E-04	1.02E-03
6688	636736.2	4167348.9	Worker	Scenario 4	7.83E-03	2.68E-04	1.60E-03
6689	636836.2	4167348.9	Worker	Scenario 4	7.70E-03	2.66E-04	1.57E-03
6690	636936.2	4167348.9	Worker	Scenario 4	8.66E-03	2.90E-04	1.76E-03
6691	637036.2	4167348.9	Worker	Scenario 4	8.84E-03	2.96E-04	1.80E-03
6692	637136.2	4167348.9	Worker	Scenario 4	8.43E-03	2.89E-04	1.74E-03
6693	637236.2	4167348.9	Worker	Scenario 4	8.64E-03	2.96E-04	1.78E-03
6694	637336.2	4167348.9	Worker	Scenario 4	9.19E-03	3.11E-04	1.91E-03
6695	637436.2	4167348.9	Worker	Scenario 4	1.06E-02	3.45E-04	2.07E-03
6696	637536.2	4167348.9	Worker	Scenario 4	1.09E-02	3.54E-04	2.14E-03
6697	637636.2	4167348.9	Worker	Scenario 4	1.08E-02	3.56E-04	2.20E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6698	637736.2	4167348.9	Worker	Scenario 4	1.13E-02	3.69E-04	2.28E-03
6699	637836.2	4167348.9	Worker	Scenario 4	1.33E-02	4.17E-04	2.66E-03
6700	637936.2	4167348.9	Worker	Scenario 4	1.35E-02	4.23E-04	2.67E-03
6701	638036.2	4167348.9	Worker	Scenario 4	1.41E-02	4.39E-04	2.81E-03
6702	638136.2	4167348.9	Worker	Scenario 4	1.49E-02	4.62E-04	3.02E-03
6703	638236.2	4167348.9	Worker	Scenario 4	1.52E-02	4.73E-04	3.08E-03
6704	638336.2	4167348.9	Worker	Scenario 4	1.80E-02	5.39E-04	3.67E-03
6705	638436.2	4167348.9	Worker	Scenario 4	1.86E-02	5.58E-04	3.82E-03
6706	638536.2	4167348.9	Worker	Scenario 4	1.76E-02	5.41E-04	3.62E-03
6707	638636.2	4167348.9	Worker	Scenario 4	1.90E-02	5.79E-04	3.95E-03
6708	638736.2	4167348.9	Worker	Scenario 4	2.00E-02	6.10E-04	4.15E-03
6709	638836.2	4167348.9	Worker	Scenario 4	2.13E-02	6.47E-04	4.43E-03
6710	638936.2	4167348.9	Worker	Scenario 4	2.29E-02	6.92E-04	4.78E-03
6711	639036.2	4167348.9	Worker	Scenario 4	2.44E-02	7.34E-04	5.08E-03
6712	639136.2	4167348.9	Worker	Scenario 4	2.61E-02	7.83E-04	5.45E-03
6713	639236.2	4167348.9	Worker	Scenario 4	2.84E-02	8.45E-04	5.87E-03
6714	639336.2	4167348.9	Worker	Scenario 4	3.09E-02	9.12E-04	6.28E-03
6715	639436.2	4167348.9	Worker	Scenario 4	3.38E-02	9.88E-04	6.67E-03
6716	639536.2	4167348.9	Worker	Scenario 4	3.68E-02	1.07E-03	7.06E-03
6717	639636.2	4167348.9	Worker	Scenario 4	4.04E-02	1.17E-03	7.37E-03
6718	639736.2	4167348.9	Worker	Scenario 4	4.38E-02	1.26E-03	7.83E-03
6719	639836.2	4167348.9	Worker	Scenario 4	4.80E-02	1.38E-03	8.18E-03
6720	639936.2	4167348.9	Worker	Scenario 4	5.30E-02	1.52E-03	8.44E-03
6721	640036.2	4167348.9	Worker	Scenario 4	5.90E-02	1.67E-03	8.42E-03
6722	640136.2	4167348.9	Worker	Scenario 4	6.55E-02	1.84E-03	8.61E-03
6723	640236.2	4167348.9	Worker	Scenario 4	7.30E-02	2.04E-03	8.35E-03
6724	640536.2	4167348.9	Worker	Scenario 4	1.04E-01	2.82E-03	1.23E-02
6725	640636.2	4167348.9	Worker	Scenario 4	1.20E-01	3.20E-03	1.43E-02
6726	640736.2	4167348.9	Worker	Scenario 4	1.32E-01	3.53E-03	1.70E-02
6727	640836.2	4167348.9	Worker	Scenario 4	1.52E-01	4.02E-03	2.08E-02
6728	640936.2	4167348.9	Worker	Scenario 4	1.77E-01	4.68E-03	2.63E-02
6729	641036.2	4167348.9	Worker	Scenario 4	2.14E-01	5.64E-03	3.47E-02
6730	641136.2	4167348.9	Worker	Scenario 4	2.73E-01	7.28E-03	4.93E-02
6731	644836.2	4167348.9	Worker	Scenario 4	1.68E-01	2.65E-03	2.09E-03
6732	644936.2	4167348.9	Worker	Scenario 4	1.57E-01	2.45E-03	2.00E-03
6733	645036.2	4167348.9	Worker	Scenario 4	1.47E-01	2.28E-03	1.92E-03
6734	645136.2	4167348.9	Worker	Scenario 4	1.38E-01	2.13E-03	1.85E-03
6735	645236.2	4167348.9	Worker	Scenario 4	1.30E-01	2.01E-03	1.78E-03
6736	645336.2	4167348.9	Worker	Scenario 4	1.23E-01	1.90E-03	1.72E-03
6737	645436.2	4167348.9	Worker	Scenario 4	1.17E-01	1.80E-03	1.66E-03
6738	645536.2	4167348.9	Worker	Scenario 4	1.11E-01	1.71E-03	1.60E-03
6739	645636.2	4167348.9	Worker	Scenario 4	1.06E-01	1.63E-03	1.55E-03
6740	645736.2	4167348.9	Worker	Scenario 4	1.01E-01	1.56E-03	1.50E-03
6741	645836.2	4167348.9	Worker	Scenario 4	9.66E-02	1.49E-03	1.45E-03
6742	645936.2	4167348.9	Worker	Scenario 4	9.24E-02	1.43E-03	1.40E-03
6743	646036.2	4167348.9	Worker	Scenario 4	8.86E-02	1.37E-03	1.36E-03
6744	646336.2	4167348.9	Worker	Scenario 4	7.87E-02	1.22E-03	1.24E-03
6745	646436.2	4167348.9	Worker	Scenario 4	7.58E-02	1.18E-03	1.20E-03
6746	646536.2	4167348.9	Worker	Scenario 4	7.31E-02	1.14E-03	1.17E-03
6747	646636.2	4167348.9	Worker	Scenario 4	7.06E-02	1.10E-03	1.13E-03
6748	646736.2	4167348.9	Worker	Scenario 4	6.82E-02	1.06E-03	1.10E-03
6749	646836.2	4167348.9	Worker	Scenario 4	6.60E-02	1.03E-03	1.07E-03
6750	646936.2	4167348.9	Worker	Scenario 4	6.38E-02	9.96E-04	1.04E-03
6751	647036.2	4167348.9	Worker	Scenario 4	6.18E-02	9.65E-04	1.02E-03
6752	636636.2	4167448.9	Worker	Scenario 4	7.56E-03	2.61E-04	1.62E-03
6753	636736.2	4167448.9	Worker	Scenario 4	8.27E-03	2.79E-04	1.75E-03
6754	636836.2	4167448.9	Worker	Scenario 4	8.93E-03	2.95E-04	1.91E-03
6755	636936.2	4167448.9	Worker	Scenario 4	9.09E-03	3.01E-04	1.93E-03
6756	637036.2	4167448.9	Worker	Scenario 4	8.27E-03	2.85E-04	1.75E-03
6757	637136.2	4167448.9	Worker	Scenario 4	8.75E-03	2.98E-04	1.86E-03
6758	637236.2	4167448.9	Worker	Scenario 4	9.13E-03	3.09E-04	1.93E-03
6759	637336.2	4167448.9	Worker	Scenario 4	9.86E-03	3.28E-04	2.06E-03
6760	637436.2	4167448.9	Worker	Scenario 4	1.03E-02	3.40E-04	2.18E-03
6761	637536.2	4167448.9	Worker	Scenario 4	1.16E-02	3.72E-04	2.94E-03
6762	637636.2	4167448.9	Worker	Scenario 4	1.16E-02	3.75E-04	2.81E-03
6763	637736.2	4167448.9	Worker	Scenario 4	1.21E-02	3.89E-04	2.97E-03
6764	637836.2	4167448.9	Worker	Scenario 4	1.22E-02	3.94E-04	2.86E-03
6765	637936.2	4167448.9	Worker	Scenario 4	1.46E-02	4.50E-04	3.93E-03
6766	638036.2	4167448.9	Worker	Scenario 4	1.46E-02	4.54E-04	3.92E-03
6767	638136.2	4167448.9	Worker	Scenario 4	1.51E-02	4.68E-04	4.04E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6768	638236.2	4167448.9	Worker	Scenario 4	1.66E-02	5.05E-04	4.47E-03
6769	638336.2	4167448.9	Worker	Scenario 4	1.72E-02	5.25E-04	4.64E-03
6770	638436.2	4167448.9	Worker	Scenario 4	1.97E-02	5.86E-04	4.93E-03
6771	638536.2	4167448.9	Worker	Scenario 4	1.89E-02	5.73E-04	5.00E-03
6772	638636.2	4167448.9	Worker	Scenario 4	2.00E-02	6.07E-04	5.23E-03
6773	638736.2	4167448.9	Worker	Scenario 4	2.14E-02	6.47E-04	5.50E-03
6774	638836.2	4167448.9	Worker	Scenario 4	2.28E-02	6.86E-04	5.74E-03
6775	638936.2	4167448.9	Worker	Scenario 4	2.44E-02	7.33E-04	6.00E-03
6776	639036.2	4167448.9	Worker	Scenario 4	2.61E-02	7.81E-04	6.25E-03
6777	639136.2	4167448.9	Worker	Scenario 4	2.79E-02	8.32E-04	6.51E-03
6778	639236.2	4167448.9	Worker	Scenario 4	3.03E-02	8.98E-04	6.75E-03
6779	639336.2	4167448.9	Worker	Scenario 4	3.30E-02	9.74E-04	6.94E-03
6780	639436.2	4167448.9	Worker	Scenario 4	3.61E-02	1.06E-03	7.10E-03
6781	639536.2	4167448.9	Worker	Scenario 4	3.98E-02	1.16E-03	7.14E-03
6782	639636.2	4167448.9	Worker	Scenario 4	4.46E-02	1.29E-03	6.79E-03
6783	639736.2	4167448.9	Worker	Scenario 4	4.78E-02	1.38E-03	7.26E-03
6784	639836.2	4167448.9	Worker	Scenario 4	5.27E-02	1.51E-03	7.26E-03
6785	639936.2	4167448.9	Worker	Scenario 4	5.86E-02	1.68E-03	7.10E-03
6786	640036.2	4167448.9	Worker	Scenario 4	6.57E-02	1.87E-03	6.70E-03
6787	640136.2	4167448.9	Worker	Scenario 4	7.46E-02	2.10E-03	5.75E-03
6788	640436.2	4167448.9	Worker	Scenario 4	1.06E-01	2.93E-03	9.60E-03
6789	640536.2	4167448.9	Worker	Scenario 4	1.23E-01	3.34E-03	1.15E-02
6790	640636.2	4167448.9	Worker	Scenario 4	1.38E-01	3.74E-03	1.38E-02
6791	640736.2	4167448.9	Worker	Scenario 4	1.58E-01	4.22E-03	1.63E-02
6792	640836.2	4167448.9	Worker	Scenario 4	1.83E-01	4.83E-03	1.87E-02
6793	644836.2	4167448.9	Worker	Scenario 4	1.66E-01	2.55E-03	1.86E-03
6794	644936.2	4167448.9	Worker	Scenario 4	1.55E-01	2.37E-03	1.79E-03
6795	645036.2	4167448.9	Worker	Scenario 4	1.46E-01	2.22E-03	1.73E-03
6796	645136.2	4167448.9	Worker	Scenario 4	1.37E-01	2.09E-03	1.66E-03
6797	645236.2	4167448.9	Worker	Scenario 4	1.30E-01	1.98E-03	1.61E-03
6798	645336.2	4167448.9	Worker	Scenario 4	1.23E-01	1.87E-03	1.55E-03
6799	645436.2	4167448.9	Worker	Scenario 4	1.17E-01	1.78E-03	1.50E-03
6800	645536.2	4167448.9	Worker	Scenario 4	1.11E-01	1.69E-03	1.45E-03
6801	645636.2	4167448.9	Worker	Scenario 4	1.06E-01	1.61E-03	1.40E-03
6802	645736.2	4167448.9	Worker	Scenario 4	1.01E-01	1.54E-03	1.35E-03
6803	645836.2	4167448.9	Worker	Scenario 4	9.67E-02	1.48E-03	1.31E-03
6804	645936.2	4167448.9	Worker	Scenario 4	9.26E-02	1.41E-03	1.27E-03
6805	646336.2	4167448.9	Worker	Scenario 4	7.88E-02	1.21E-03	1.13E-03
6806	646436.2	4167448.9	Worker	Scenario 4	7.60E-02	1.17E-03	1.09E-03
6807	646536.2	4167448.9	Worker	Scenario 4	7.33E-02	1.13E-03	1.06E-03
6808	646636.2	4167448.9	Worker	Scenario 4	7.07E-02	1.09E-03	1.03E-03
6809	646736.2	4167448.9	Worker	Scenario 4	6.84E-02	1.06E-03	1.01E-03
6810	646836.2	4167448.9	Worker	Scenario 4	6.61E-02	1.02E-03	9.80E-04
6811	646936.2	4167448.9	Worker	Scenario 4	6.40E-02	9.90E-04	9.55E-04
6812	647036.2	4167448.9	Worker	Scenario 4	6.19E-02	9.59E-04	9.30E-04
6813	636536.2	4167548.9	Worker	Scenario 4	7.86E-03	2.66E-04	1.62E-03
6814	636636.2	4167548.9	Worker	Scenario 4	8.40E-03	2.80E-04	1.73E-03
6815	636736.2	4167548.9	Worker	Scenario 4	8.65E-03	2.88E-04	1.77E-03
6816	636836.2	4167548.9	Worker	Scenario 4	8.93E-03	2.97E-04	1.82E-03
6817	636936.2	4167548.9	Worker	Scenario 4	8.54E-03	2.90E-04	1.72E-03
6818	637036.2	4167548.9	Worker	Scenario 4	8.46E-03	2.91E-04	1.67E-03
6819	637136.2	4167548.9	Worker	Scenario 4	9.18E-03	3.10E-04	1.82E-03
6820	637236.2	4167548.9	Worker	Scenario 4	9.78E-03	3.25E-04	1.91E-03
6821	637336.2	4167548.9	Worker	Scenario 4	9.81E-03	3.29E-04	1.91E-03
6822	637436.2	4167548.9	Worker	Scenario 4	1.10E-02	3.59E-04	2.16E-03
6823	637536.2	4167548.9	Worker	Scenario 4	1.11E-02	3.63E-04	2.06E-03
6824	637636.2	4167548.9	Worker	Scenario 4	1.29E-02	4.05E-04	2.72E-03
6825	637736.2	4167548.9	Worker	Scenario 4	1.29E-02	4.10E-04	2.59E-03
6826	637836.2	4167548.9	Worker	Scenario 4	1.33E-02	4.22E-04	2.55E-03
6827	637936.2	4167548.9	Worker	Scenario 4	1.57E-02	4.81E-04	3.16E-03
6828	638036.2	4167548.9	Worker	Scenario 4	1.64E-02	4.99E-04	3.19E-03
6829	638136.2	4167548.9	Worker	Scenario 4	1.55E-02	4.81E-04	2.81E-03
6830	638236.2	4167548.9	Worker	Scenario 4	1.79E-02	5.41E-04	3.24E-03
6831	638336.2	4167548.9	Worker	Scenario 4	1.74E-02	5.34E-04	3.25E-03
6832	638436.2	4167548.9	Worker	Scenario 4	2.04E-02	6.08E-04	3.46E-03
6833	638536.2	4167548.9	Worker	Scenario 4	2.01E-02	6.08E-04	3.72E-03
6834	638636.2	4167548.9	Worker	Scenario 4	2.13E-02	6.43E-04	3.96E-03
6835	638736.2	4167548.9	Worker	Scenario 4	2.32E-02	6.96E-04	4.14E-03
6836	638836.2	4167548.9	Worker	Scenario 4	2.41E-02	7.25E-04	4.43E-03
6837	638936.2	4167548.9	Worker	Scenario 4	2.61E-02	7.83E-04	4.59E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6838	639036.2	4167548.9	Worker	Scenario 4	2.78E-02	8.33E-04	4.81E-03
6839	639136.2	4167548.9	Worker	Scenario 4	2.98E-02	8.91E-04	4.99E-03
6840	639236.2	4167548.9	Worker	Scenario 4	3.24E-02	9.65E-04	5.08E-03
6841	639336.2	4167548.9	Worker	Scenario 4	3.55E-02	1.05E-03	5.22E-03
6842	639436.2	4167548.9	Worker	Scenario 4	3.90E-02	1.15E-03	5.24E-03
6843	639536.2	4167548.9	Worker	Scenario 4	4.29E-02	1.26E-03	5.45E-03
6844	639636.2	4167548.9	Worker	Scenario 4	4.78E-02	1.39E-03	5.94E-03
6845	639736.2	4167548.9	Worker	Scenario 4	5.23E-02	1.52E-03	6.56E-03
6846	639836.2	4167548.9	Worker	Scenario 4	5.83E-02	1.68E-03	6.93E-03
6847	639936.2	4167548.9	Worker	Scenario 4	6.56E-02	1.89E-03	6.99E-03
6848	640036.2	4167548.9	Worker	Scenario 4	7.42E-02	2.12E-03	6.44E-03
6849	640236.2	4167548.9	Worker	Scenario 4	9.76E-02	2.74E-03	7.32E-03
6850	640336.2	4167548.9	Worker	Scenario 4	1.13E-01	3.15E-03	8.30E-03
6851	640436.2	4167548.9	Worker	Scenario 4	1.28E-01	3.59E-03	9.36E-03
6852	644536.2	4167548.9	Worker	Scenario 4	2.02E-01	3.06E-03	2.38E-03
6853	644736.2	4167548.9	Worker	Scenario 4	1.74E-01	2.63E-03	2.11E-03
6854	644836.2	4167548.9	Worker	Scenario 4	1.63E-01	2.46E-03	1.99E-03
6855	644936.2	4167548.9	Worker	Scenario 4	1.52E-01	2.30E-03	1.87E-03
6856	645036.2	4167548.9	Worker	Scenario 4	1.43E-01	2.16E-03	1.78E-03
6857	645136.2	4167548.9	Worker	Scenario 4	1.35E-01	2.04E-03	1.70E-03
6858	645236.2	4167548.9	Worker	Scenario 4	1.28E-01	1.93E-03	1.64E-03
6859	645336.2	4167548.9	Worker	Scenario 4	1.22E-01	1.84E-03	1.58E-03
6860	645436.2	4167548.9	Worker	Scenario 4	1.16E-01	1.75E-03	1.52E-03
6861	645536.2	4167548.9	Worker	Scenario 4	1.10E-01	1.67E-03	1.47E-03
6862	645636.2	4167548.9	Worker	Scenario 4	1.05E-01	1.59E-03	1.42E-03
6863	645736.2	4167548.9	Worker	Scenario 4	1.00E-01	1.52E-03	1.37E-03
6864	645836.2	4167548.9	Worker	Scenario 4	9.60E-02	1.46E-03	1.32E-03
6865	645936.2	4167548.9	Worker	Scenario 4	9.20E-02	1.40E-03	1.28E-03
6866	646036.2	4167548.9	Worker	Scenario 4	8.82E-02	1.34E-03	1.24E-03
6867	646236.2	4167548.9	Worker	Scenario 4	8.15E-02	1.24E-03	1.15E-03
6868	646336.2	4167548.9	Worker	Scenario 4	7.85E-02	1.20E-03	1.12E-03
6869	646436.2	4167548.9	Worker	Scenario 4	7.57E-02	1.16E-03	1.08E-03
6870	646536.2	4167548.9	Worker	Scenario 4	7.30E-02	1.12E-03	1.04E-03
6871	646636.2	4167548.9	Worker	Scenario 4	7.05E-02	1.08E-03	1.01E-03
6872	646736.2	4167548.9	Worker	Scenario 4	6.82E-02	1.04E-03	9.80E-04
6873	646836.2	4167548.9	Worker	Scenario 4	6.59E-02	1.01E-03	9.49E-04
6874	646936.2	4167548.9	Worker	Scenario 4	6.38E-02	9.81E-04	9.20E-04
6875	647036.2	4167548.9	Worker	Scenario 4	6.18E-02	9.51E-04	8.91E-04
6876	636436.2	4167648.9	Worker	Scenario 4	7.94E-03	2.67E-04	1.33E-03
6877	636536.2	4167648.9	Worker	Scenario 4	8.43E-03	2.80E-04	1.37E-03
6878	636636.2	4167648.9	Worker	Scenario 4	9.04E-03	2.96E-04	1.47E-03
6879	636736.2	4167648.9	Worker	Scenario 4	8.96E-03	2.96E-04	1.47E-03
6880	636836.2	4167648.9	Worker	Scenario 4	9.39E-03	3.09E-04	1.63E-03
6881	636936.2	4167648.9	Worker	Scenario 4	9.33E-03	3.10E-04	1.62E-03
6882	637036.2	4167648.9	Worker	Scenario 4	9.14E-03	3.08E-04	1.51E-03
6883	637136.2	4167648.9	Worker	Scenario 4	9.79E-03	3.26E-04	1.79E-03
6884	637236.2	4167648.9	Worker	Scenario 4	9.89E-03	3.31E-04	1.80E-03
6885	637336.2	4167648.9	Worker	Scenario 4	1.07E-02	3.51E-04	2.11E-03
6886	637436.2	4167648.9	Worker	Scenario 4	1.18E-02	3.80E-04	2.47E-03
6887	637536.2	4167648.9	Worker	Scenario 4	1.12E-02	3.68E-04	2.27E-03
6888	637636.2	4167648.9	Worker	Scenario 4	1.29E-02	4.09E-04	2.75E-03
6889	637736.2	4167648.9	Worker	Scenario 4	1.38E-02	4.34E-04	2.93E-03
6890	637836.2	4167648.9	Worker	Scenario 4	1.33E-02	4.26E-04	2.88E-03
6891	637936.2	4167648.9	Worker	Scenario 4	1.52E-02	4.74E-04	3.17E-03
6892	638036.2	4167648.9	Worker	Scenario 4	1.78E-02	5.38E-04	3.09E-03
6893	638136.2	4167648.9	Worker	Scenario 4	1.64E-02	5.07E-04	3.35E-03
6894	638236.2	4167648.9	Worker	Scenario 4	1.76E-02	5.40E-04	3.48E-03
6895	638336.2	4167648.9	Worker	Scenario 4	1.89E-02	5.75E-04	3.64E-03
6896	638436.2	4167648.9	Worker	Scenario 4	2.03E-02	6.13E-04	3.75E-03
6897	638536.2	4167648.9	Worker	Scenario 4	2.25E-02	6.73E-04	3.70E-03
6898	638636.2	4167648.9	Worker	Scenario 4	2.25E-02	6.81E-04	4.07E-03
6899	638736.2	4167648.9	Worker	Scenario 4	2.44E-02	7.35E-04	4.10E-03
6900	638836.2	4167648.9	Worker	Scenario 4	2.58E-02	7.76E-04	4.39E-03
6901	638936.2	4167648.9	Worker	Scenario 4	2.79E-02	8.39E-04	4.70E-03
6902	639036.2	4167648.9	Worker	Scenario 4	2.97E-02	8.93E-04	5.10E-03
6903	639136.2	4167648.9	Worker	Scenario 4	3.20E-02	9.60E-04	5.49E-03
6904	639236.2	4167648.9	Worker	Scenario 4	3.48E-02	1.04E-03	5.79E-03
6905	639336.2	4167648.9	Worker	Scenario 4	3.84E-02	1.14E-03	5.91E-03
6906	639436.2	4167648.9	Worker	Scenario 4	4.30E-02	1.27E-03	5.73E-03
6907	639536.2	4167648.9	Worker	Scenario 4	4.70E-02	1.38E-03	6.00E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6908	639636.2	4167648.9	Worker	Scenario 4	5.25E-02	1.54E-03	6.26E-03
6909	639736.2	4167648.9	Worker	Scenario 4	5.92E-02	1.72E-03	6.00E-03
6910	639836.2	4167648.9	Worker	Scenario 4	6.53E-02	1.90E-03	6.60E-03
6911	639936.2	4167648.9	Worker	Scenario 4	7.43E-02	2.16E-03	5.37E-03
6912	640136.2	4167648.9	Worker	Scenario 4	9.92E-02	2.86E-03	5.92E-03
6913	643436.2	4167648.9	Worker	Scenario 4	5.35E-01	7.30E-03	4.47E-03
6914	643536.2	4167648.9	Worker	Scenario 4	4.89E-01	6.62E-03	4.16E-03
6915	643636.2	4167648.9	Worker	Scenario 4	4.36E-01	5.96E-03	3.93E-03
6916	643736.2	4167648.9	Worker	Scenario 4	3.89E-01	5.38E-03	3.71E-03
6917	643836.2	4167648.9	Worker	Scenario 4	3.50E-01	4.91E-03	3.48E-03
6918	643936.2	4167648.9	Worker	Scenario 4	3.16E-01	4.49E-03	3.24E-03
6919	644036.2	4167648.9	Worker	Scenario 4	2.87E-01	4.14E-03	3.01E-03
6920	644136.2	4167648.9	Worker	Scenario 4	2.62E-01	3.82E-03	2.88E-03
6921	644236.2	4167648.9	Worker	Scenario 4	2.41E-01	3.54E-03	2.78E-03
6922	644336.2	4167648.9	Worker	Scenario 4	2.23E-01	3.29E-03	2.67E-03
6923	644436.2	4167648.9	Worker	Scenario 4	2.06E-01	3.07E-03	2.56E-03
6924	644536.2	4167648.9	Worker	Scenario 4	1.92E-01	2.86E-03	2.44E-03
6925	645136.2	4167648.9	Worker	Scenario 4	1.32E-01	1.97E-03	1.99E-03
6926	645336.2	4167648.9	Worker	Scenario 4	1.19E-01	1.78E-03	1.90E-03
6927	645436.2	4167648.9	Worker	Scenario 4	1.13E-01	1.70E-03	1.85E-03
6928	645536.2	4167648.9	Worker	Scenario 4	1.08E-01	1.63E-03	1.80E-03
6929	645636.2	4167648.9	Worker	Scenario 4	1.03E-01	1.56E-03	1.75E-03
6930	645736.2	4167648.9	Worker	Scenario 4	9.87E-02	1.49E-03	1.69E-03
6931	645836.2	4167648.9	Worker	Scenario 4	9.46E-02	1.43E-03	1.64E-03
6932	645936.2	4167648.9	Worker	Scenario 4	9.07E-02	1.37E-03	1.59E-03
6933	646036.2	4167648.9	Worker	Scenario 4	8.71E-02	1.32E-03	1.54E-03
6934	646236.2	4167648.9	Worker	Scenario 4	8.06E-02	1.22E-03	1.44E-03
6935	646336.2	4167648.9	Worker	Scenario 4	7.77E-02	1.18E-03	1.39E-03
6936	646436.2	4167648.9	Worker	Scenario 4	7.49E-02	1.14E-03	1.34E-03
6937	646536.2	4167648.9	Worker	Scenario 4	7.23E-02	1.10E-03	1.29E-03
6938	646636.2	4167648.9	Worker	Scenario 4	6.99E-02	1.06E-03	1.25E-03
6939	646736.2	4167648.9	Worker	Scenario 4	6.76E-02	1.03E-03	1.21E-03
6940	646836.2	4167648.9	Worker	Scenario 4	6.54E-02	9.98E-04	1.16E-03
6941	646936.2	4167648.9	Worker	Scenario 4	6.33E-02	9.68E-04	1.12E-03
6942	647036.2	4167648.9	Worker	Scenario 4	6.14E-02	9.39E-04	1.08E-03
6943	636336.2	4167748.9	Worker	Scenario 4	7.25E-03	2.50E-04	1.26E-03
6944	636436.2	4167748.9	Worker	Scenario 4	7.99E-03	2.69E-04	1.59E-03
6945	636536.2	4167748.9	Worker	Scenario 4	7.96E-03	2.70E-04	1.53E-03
6946	636636.2	4167748.9	Worker	Scenario 4	9.06E-03	2.97E-04	1.97E-03
6947	636736.2	4167748.9	Worker	Scenario 4	9.74E-03	3.15E-04	2.14E-03
6948	636836.2	4167748.9	Worker	Scenario 4	1.04E-02	3.32E-04	2.25E-03
6949	636936.2	4167748.9	Worker	Scenario 4	1.07E-02	3.42E-04	2.30E-03
6950	637036.2	4167748.9	Worker	Scenario 4	1.05E-02	3.40E-04	2.25E-03
6951	637136.2	4167748.9	Worker	Scenario 4	9.78E-03	3.28E-04	1.95E-03
6952	637236.2	4167748.9	Worker	Scenario 4	1.03E-02	3.42E-04	2.08E-03
6953	637336.2	4167748.9	Worker	Scenario 4	1.06E-02	3.54E-04	2.19E-03
6954	637436.2	4167748.9	Worker	Scenario 4	1.24E-02	3.97E-04	2.66E-03
6955	637536.2	4167748.9	Worker	Scenario 4	1.17E-02	3.84E-04	2.49E-03
6956	637636.2	4167748.9	Worker	Scenario 4	1.35E-02	4.29E-04	2.86E-03
6957	637736.2	4167748.9	Worker	Scenario 4	1.47E-02	4.60E-04	2.95E-03
6958	637836.2	4167748.9	Worker	Scenario 4	1.45E-02	4.59E-04	2.96E-03
6959	637936.2	4167748.9	Worker	Scenario 4	1.70E-02	5.21E-04	3.05E-03
6960	638036.2	4167748.9	Worker	Scenario 4	1.86E-02	5.64E-04	3.05E-03
6961	638136.2	4167748.9	Worker	Scenario 4	1.70E-02	5.28E-04	3.42E-03
6962	638236.2	4167748.9	Worker	Scenario 4	1.98E-02	6.00E-04	3.57E-03
6963	638336.2	4167748.9	Worker	Scenario 4	1.93E-02	5.91E-04	3.94E-03
6964	638436.2	4167748.9	Worker	Scenario 4	2.21E-02	6.64E-04	3.99E-03
6965	638536.2	4167748.9	Worker	Scenario 4	2.41E-02	7.20E-04	4.05E-03
6966	638636.2	4167748.9	Worker	Scenario 4	2.37E-02	7.20E-04	4.43E-03
6967	638736.2	4167748.9	Worker	Scenario 4	2.66E-02	8.00E-04	4.33E-03
6968	638836.2	4167748.9	Worker	Scenario 4	2.77E-02	8.35E-04	4.42E-03
6969	638936.2	4167748.9	Worker	Scenario 4	2.99E-02	9.01E-04	4.66E-03
6970	639036.2	4167748.9	Worker	Scenario 4	3.20E-02	9.65E-04	5.33E-03
6971	639136.2	4167748.9	Worker	Scenario 4	3.46E-02	1.04E-03	5.94E-03
6972	639236.2	4167748.9	Worker	Scenario 4	3.76E-02	1.13E-03	6.45E-03
6973	639336.2	4167748.9	Worker	Scenario 4	4.18E-02	1.25E-03	6.52E-03
6974	639436.2	4167748.9	Worker	Scenario 4	4.65E-02	1.39E-03	6.42E-03
6975	639536.2	4167748.9	Worker	Scenario 4	5.23E-02	1.55E-03	5.87E-03
6976	639636.2	4167748.9	Worker	Scenario 4	5.86E-02	1.73E-03	5.35E-03
6977	639736.2	4167748.9	Worker	Scenario 4	6.79E-02	1.99E-03	3.92E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
6978	640036.2	4167748.9	Worker	Scenario 4	1.02E-01	3.00E-03	4.88E-03
6979	643336.2	4167748.9	Worker	Scenario 4	3.10E-01	5.30E-03	4.68E-03
6980	643436.2	4167748.9	Worker	Scenario 4	3.18E-01	5.09E-03	4.40E-03
6981	643536.2	4167748.9	Worker	Scenario 4	3.22E-01	4.92E-03	4.11E-03
6982	643636.2	4167748.9	Worker	Scenario 4	3.16E-01	4.70E-03	3.88E-03
6983	643736.2	4167748.9	Worker	Scenario 4	3.00E-01	4.43E-03	3.63E-03
6984	643836.2	4167748.9	Worker	Scenario 4	2.84E-01	4.17E-03	3.46E-03
6985	643936.2	4167748.9	Worker	Scenario 4	2.67E-01	3.91E-03	3.25E-03
6986	644036.2	4167748.9	Worker	Scenario 4	2.49E-01	3.67E-03	3.11E-03
6987	644336.2	4167748.9	Worker	Scenario 4	2.04E-01	3.02E-03	2.69E-03
6988	644436.2	4167748.9	Worker	Scenario 4	1.90E-01	2.83E-03	2.57E-03
6989	644636.2	4167748.9	Worker	Scenario 4	1.68E-01	2.50E-03	2.32E-03
6990	644736.2	4167748.9	Worker	Scenario 4	1.58E-01	2.36E-03	2.19E-03
6991	644836.2	4167748.9	Worker	Scenario 4	1.49E-01	2.23E-03	2.05E-03
6992	644936.2	4167748.9	Worker	Scenario 4	1.41E-01	2.11E-03	1.98E-03
6993	646036.2	4167748.9	Worker	Scenario 4	8.55E-02	1.29E-03	1.67E-03
6994	646236.2	4167748.9	Worker	Scenario 4	7.92E-02	1.20E-03	1.62E-03
6995	646336.2	4167748.9	Worker	Scenario 4	7.64E-02	1.16E-03	1.59E-03
6996	646436.2	4167748.9	Worker	Scenario 4	7.37E-02	1.12E-03	1.55E-03
6997	646536.2	4167748.9	Worker	Scenario 4	7.12E-02	1.08E-03	1.52E-03
6998	646636.2	4167748.9	Worker	Scenario 4	6.89E-02	1.05E-03	1.49E-03
6999	646736.2	4167748.9	Worker	Scenario 4	6.66E-02	1.01E-03	1.46E-03
7000	646836.2	4167748.9	Worker	Scenario 4	6.45E-02	9.82E-04	1.42E-03
7001	646936.2	4167748.9	Worker	Scenario 4	6.25E-02	9.52E-04	1.39E-03
7002	647036.2	4167748.9	Worker	Scenario 4	6.07E-02	9.24E-04	1.35E-03
7003	636236.2	4167848.9	Worker	Scenario 4	6.94E-03	2.42E-04	1.41E-03
7004	636336.2	4167848.9	Worker	Scenario 4	7.40E-03	2.54E-04	1.53E-03
7005	636436.2	4167848.9	Worker	Scenario 4	7.40E-03	2.57E-04	1.53E-03
7006	636536.2	4167848.9	Worker	Scenario 4	7.92E-03	2.71E-04	1.65E-03
7007	636636.2	4167848.9	Worker	Scenario 4	7.92E-03	2.73E-04	1.65E-03
7008	636736.2	4167848.9	Worker	Scenario 4	8.50E-03	2.89E-04	1.75E-03
7009	636836.2	4167848.9	Worker	Scenario 4	1.02E-02	3.29E-04	2.18E-03
7010	636936.2	4167848.9	Worker	Scenario 4	1.14E-02	3.59E-04	2.29E-03
7011	637036.2	4167848.9	Worker	Scenario 4	1.09E-02	3.52E-04	2.29E-03
7012	637136.2	4167848.9	Worker	Scenario 4	9.88E-03	3.32E-04	1.98E-03
7013	637236.2	4167848.9	Worker	Scenario 4	1.12E-02	3.64E-04	2.39E-03
7014	637336.2	4167848.9	Worker	Scenario 4	1.14E-02	3.74E-04	2.44E-03
7015	637436.2	4167848.9	Worker	Scenario 4	1.24E-02	3.99E-04	2.61E-03
7016	637536.2	4167848.9	Worker	Scenario 4	1.29E-02	4.15E-04	2.78E-03
7017	637636.2	4167848.9	Worker	Scenario 4	1.32E-02	4.25E-04	2.91E-03
7018	637736.2	4167848.9	Worker	Scenario 4	1.54E-02	4.81E-04	3.25E-03
7019	637836.2	4167848.9	Worker	Scenario 4	1.55E-02	4.86E-04	3.36E-03
7020	637936.2	4167848.9	Worker	Scenario 4	1.64E-02	5.12E-04	3.46E-03
7021	638036.2	4167848.9	Worker	Scenario 4	1.97E-02	5.97E-04	3.22E-03
7022	638136.2	4167848.9	Worker	Scenario 4	1.81E-02	5.61E-04	3.51E-03
7023	638236.2	4167848.9	Worker	Scenario 4	2.05E-02	6.22E-04	3.37E-03
7024	638336.2	4167848.9	Worker	Scenario 4	2.11E-02	6.41E-04	3.49E-03
7025	638436.2	4167848.9	Worker	Scenario 4	2.25E-02	6.81E-04	3.99E-03
7026	638536.2	4167848.9	Worker	Scenario 4	2.52E-02	7.56E-04	4.24E-03
7027	638636.2	4167848.9	Worker	Scenario 4	2.55E-02	7.73E-04	4.91E-03
7028	638736.2	4167848.9	Worker	Scenario 4	2.86E-02	8.60E-04	4.95E-03
7029	638836.2	4167848.9	Worker	Scenario 4	2.98E-02	8.99E-04	5.40E-03
7030	638936.2	4167848.9	Worker	Scenario 4	3.23E-02	9.75E-04	5.44E-03
7031	639036.2	4167848.9	Worker	Scenario 4	3.47E-02	1.05E-03	5.47E-03
7032	639136.2	4167848.9	Worker	Scenario 4	3.76E-02	1.14E-03	5.32E-03
7033	639236.2	4167848.9	Worker	Scenario 4	4.14E-02	1.25E-03	4.94E-03
7034	639336.2	4167848.9	Worker	Scenario 4	4.65E-02	1.40E-03	4.41E-03
7035	639436.2	4167848.9	Worker	Scenario 4	5.17E-02	1.56E-03	4.47E-03
7036	639536.2	4167848.9	Worker	Scenario 4	5.86E-02	1.75E-03	4.07E-03
7037	639636.2	4167848.9	Worker	Scenario 4	6.71E-02	2.00E-03	3.05E-03
7038	639836.2	4167848.9	Worker	Scenario 4	8.81E-02	2.64E-03	4.76E-03
7039	643336.2	4167848.9	Worker	Scenario 4	2.59E-01	4.55E-03	4.60E-03
7040	643436.2	4167848.9	Worker	Scenario 4	2.48E-01	4.25E-03	4.31E-03
7041	643536.2	4167848.9	Worker	Scenario 4	2.44E-01	4.04E-03	4.05E-03
7042	643636.2	4167848.9	Worker	Scenario 4	2.42E-01	3.88E-03	3.74E-03
7043	643736.2	4167848.9	Worker	Scenario 4	2.38E-01	3.73E-03	3.51E-03
7044	643836.2	4167848.9	Worker	Scenario 4	2.31E-01	3.57E-03	3.39E-03
7045	643936.2	4167848.9	Worker	Scenario 4	2.23E-01	3.41E-03	3.22E-03
7046	644036.2	4167848.9	Worker	Scenario 4	2.14E-01	3.24E-03	3.05E-03
7047	644136.2	4167848.9	Worker	Scenario 4	2.03E-01	3.07E-03	2.92E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7048	644236.2	4167848.9	Worker	Scenario 4	1.93E-01	2.91E-03	2.75E-03
7049	644336.2	4167848.9	Worker	Scenario 4	1.83E-01	2.76E-03	2.66E-03
7050	644436.2	4167848.9	Worker	Scenario 4	1.73E-01	2.61E-03	2.54E-03
7051	644536.2	4167848.9	Worker	Scenario 4	1.64E-01	2.47E-03	2.40E-03
7052	644636.2	4167848.9	Worker	Scenario 4	1.56E-01	2.34E-03	2.32E-03
7053	644736.2	4167848.9	Worker	Scenario 4	1.48E-01	2.22E-03	2.23E-03
7054	644836.2	4167848.9	Worker	Scenario 4	1.40E-01	2.11E-03	2.13E-03
7055	644936.2	4167848.9	Worker	Scenario 4	1.33E-01	2.00E-03	2.04E-03
7056	645036.2	4167848.9	Worker	Scenario 4	1.27E-01	1.91E-03	1.98E-03
7057	645136.2	4167848.9	Worker	Scenario 4	1.21E-01	1.82E-03	1.91E-03
7058	645236.2	4167848.9	Worker	Scenario 4	1.16E-01	1.74E-03	1.83E-03
7059	645336.2	4167848.9	Worker	Scenario 4	1.11E-01	1.66E-03	1.76E-03
7060	645436.2	4167848.9	Worker	Scenario 4	1.06E-01	1.59E-03	1.68E-03
7061	645536.2	4167848.9	Worker	Scenario 4	1.01E-01	1.53E-03	1.60E-03
7062	645636.2	4167848.9	Worker	Scenario 4	9.73E-02	1.46E-03	1.52E-03
7063	645736.2	4167848.9	Worker	Scenario 4	9.35E-02	1.41E-03	1.46E-03
7064	645836.2	4167848.9	Worker	Scenario 4	8.99E-02	1.35E-03	1.44E-03
7065	645936.2	4167848.9	Worker	Scenario 4	8.65E-02	1.30E-03	1.42E-03
7066	646036.2	4167848.9	Worker	Scenario 4	8.33E-02	1.26E-03	1.42E-03
7067	646236.2	4167848.9	Worker	Scenario 4	7.75E-02	1.17E-03	1.45E-03
7068	646336.2	4167848.9	Worker	Scenario 4	7.48E-02	1.13E-03	1.45E-03
7069	646436.2	4167848.9	Worker	Scenario 4	7.22E-02	1.09E-03	1.45E-03
7070	646536.2	4167848.9	Worker	Scenario 4	6.98E-02	1.06E-03	1.45E-03
7071	646636.2	4167848.9	Worker	Scenario 4	6.76E-02	1.02E-03	1.45E-03
7072	646736.2	4167848.9	Worker	Scenario 4	6.54E-02	9.93E-04	1.44E-03
7073	646836.2	4167848.9	Worker	Scenario 4	6.34E-02	9.63E-04	1.43E-03
7074	646936.2	4167848.9	Worker	Scenario 4	6.15E-02	9.34E-04	1.42E-03
7075	636136.2	4167948.9	Worker	Scenario 4	7.26E-03	2.47E-04	1.46E-03
7076	636236.2	4167948.9	Worker	Scenario 4	7.65E-03	2.58E-04	1.51E-03
7077	636336.2	4167948.9	Worker	Scenario 4	7.43E-03	2.55E-04	1.44E-03
7078	636436.2	4167948.9	Worker	Scenario 4	7.76E-03	2.65E-04	1.48E-03
7079	636536.2	4167948.9	Worker	Scenario 4	7.99E-03	2.73E-04	1.52E-03
7080	636636.2	4167948.9	Worker	Scenario 4	8.55E-03	2.88E-04	1.70E-03
7081	636736.2	4167948.9	Worker	Scenario 4	9.68E-03	3.16E-04	2.05E-03
7082	636836.2	4167948.9	Worker	Scenario 4	1.09E-02	3.45E-04	2.40E-03
7083	636936.2	4167948.9	Worker	Scenario 4	1.13E-02	3.59E-04	2.53E-03
7084	637036.2	4167948.9	Worker	Scenario 4	1.20E-02	3.77E-04	2.64E-03
7085	637136.2	4167948.9	Worker	Scenario 4	1.28E-02	3.98E-04	2.71E-03
7086	637236.2	4167948.9	Worker	Scenario 4	1.16E-02	3.75E-04	2.61E-03
7087	637336.2	4167948.9	Worker	Scenario 4	1.17E-02	3.82E-04	2.55E-03
7088	637436.2	4167948.9	Worker	Scenario 4	1.31E-02	4.17E-04	2.74E-03
7089	637536.2	4167948.9	Worker	Scenario 4	1.28E-02	4.13E-04	2.54E-03
7090	637636.2	4167948.9	Worker	Scenario 4	1.34E-02	4.32E-04	2.59E-03
7091	637736.2	4167948.9	Worker	Scenario 4	1.62E-02	5.01E-04	2.74E-03
7092	637836.2	4167948.9	Worker	Scenario 4	1.65E-02	5.14E-04	3.03E-03
7093	637936.2	4167948.9	Worker	Scenario 4	1.67E-02	5.23E-04	3.36E-03
7094	638036.2	4167948.9	Worker	Scenario 4	2.07E-02	6.25E-04	3.47E-03
7095	638136.2	4167948.9	Worker	Scenario 4	1.98E-02	6.06E-04	4.12E-03
7096	638236.2	4167948.9	Worker	Scenario 4	2.02E-02	6.18E-04	4.44E-03
7097	638336.2	4167948.9	Worker	Scenario 4	2.34E-02	7.05E-04	4.24E-03
7098	638436.2	4167948.9	Worker	Scenario 4	2.37E-02	7.16E-04	4.62E-03
7099	638536.2	4167948.9	Worker	Scenario 4	2.68E-02	8.04E-04	4.20E-03
7100	638636.2	4167948.9	Worker	Scenario 4	2.75E-02	8.31E-04	4.38E-03
7101	638736.2	4167948.9	Worker	Scenario 4	3.05E-02	9.19E-04	3.99E-03
7102	638836.2	4167948.9	Worker	Scenario 4	3.22E-02	9.76E-04	3.80E-03
7103	638936.2	4167948.9	Worker	Scenario 4	3.52E-02	1.07E-03	3.76E-03
7104	639036.2	4167948.9	Worker	Scenario 4	3.79E-02	1.15E-03	4.23E-03
7105	639136.2	4167948.9	Worker	Scenario 4	4.14E-02	1.27E-03	4.46E-03
7106	639236.2	4167948.9	Worker	Scenario 4	4.59E-02	1.40E-03	4.43E-03
7107	639336.2	4167948.9	Worker	Scenario 4	5.17E-02	1.58E-03	3.99E-03
7108	639436.2	4167948.9	Worker	Scenario 4	5.83E-02	1.78E-03	3.77E-03
7109	639536.2	4167948.9	Worker	Scenario 4	6.65E-02	2.02E-03	3.78E-03
7110	639736.2	4167948.9	Worker	Scenario 4	9.00E-02	2.72E-03	4.61E-03
7111	643236.2	4167948.9	Worker	Scenario 4	2.58E-01	4.54E-03	4.82E-03
7112	643336.2	4167948.9	Worker	Scenario 4	2.36E-01	4.13E-03	4.43E-03
7113	643436.2	4167948.9	Worker	Scenario 4	2.21E-01	3.82E-03	4.20E-03
7114	643536.2	4167948.9	Worker	Scenario 4	2.12E-01	3.60E-03	3.93E-03
7115	643636.2	4167948.9	Worker	Scenario 4	2.06E-01	3.43E-03	3.73E-03
7116	643736.2	4167948.9	Worker	Scenario 4	2.01E-01	3.28E-03	3.53E-03
7117	643836.2	4167948.9	Worker	Scenario 4	1.96E-01	3.15E-03	3.31E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7118	643936.2	4167948.9	Worker	Scenario 4	1.91E-01	3.02E-03	3.18E-03
7119	644036.2	4167948.9	Worker	Scenario 4	1.85E-01	2.90E-03	2.98E-03
7120	644136.2	4167948.9	Worker	Scenario 4	1.79E-01	2.77E-03	2.76E-03
7121	644236.2	4167948.9	Worker	Scenario 4	1.72E-01	2.65E-03	2.71E-03
7122	644336.2	4167948.9	Worker	Scenario 4	1.65E-01	2.52E-03	2.62E-03
7123	644436.2	4167948.9	Worker	Scenario 4	1.57E-01	2.40E-03	2.49E-03
7124	644536.2	4167948.9	Worker	Scenario 4	1.51E-01	2.29E-03	2.39E-03
7125	644636.2	4167948.9	Worker	Scenario 4	1.44E-01	2.18E-03	2.30E-03
7126	644736.2	4167948.9	Worker	Scenario 4	1.37E-01	2.08E-03	2.19E-03
7127	644836.2	4167948.9	Worker	Scenario 4	1.31E-01	1.98E-03	2.11E-03
7128	644936.2	4167948.9	Worker	Scenario 4	1.25E-01	1.90E-03	2.04E-03
7129	645036.2	4167948.9	Worker	Scenario 4	1.20E-01	1.81E-03	1.95E-03
7130	645136.2	4167948.9	Worker	Scenario 4	1.15E-01	1.74E-03	1.86E-03
7131	645236.2	4167948.9	Worker	Scenario 4	1.10E-01	1.66E-03	1.82E-03
7132	645336.2	4167948.9	Worker	Scenario 4	1.06E-01	1.59E-03	1.76E-03
7133	645436.2	4167948.9	Worker	Scenario 4	1.02E-01	1.53E-03	1.70E-03
7134	645536.2	4167948.9	Worker	Scenario 4	9.75E-02	1.47E-03	1.63E-03
7135	645636.2	4167948.9	Worker	Scenario 4	9.37E-02	1.41E-03	1.58E-03
7136	645736.2	4167948.9	Worker	Scenario 4	9.02E-02	1.36E-03	1.54E-03
7137	645836.2	4167948.9	Worker	Scenario 4	8.69E-02	1.31E-03	1.49E-03
7138	645936.2	4167948.9	Worker	Scenario 4	8.38E-02	1.26E-03	1.45E-03
7139	646036.2	4167948.9	Worker	Scenario 4	8.08E-02	1.22E-03	1.39E-03
7140	646236.2	4167948.9	Worker	Scenario 4	7.53E-02	1.14E-03	1.28E-03
7141	646336.2	4167948.9	Worker	Scenario 4	7.28E-02	1.10E-03	1.23E-03
7142	646436.2	4167948.9	Worker	Scenario 4	7.04E-02	1.07E-03	1.18E-03
7143	646536.2	4167948.9	Worker	Scenario 4	6.82E-02	1.03E-03	1.15E-03
7144	646636.2	4167948.9	Worker	Scenario 4	6.60E-02	1.00E-03	1.16E-03
7145	646736.2	4167948.9	Worker	Scenario 4	6.40E-02	9.70E-04	1.17E-03
7146	646836.2	4167948.9	Worker	Scenario 4	6.21E-02	9.42E-04	1.19E-03
7147	646936.2	4167948.9	Worker	Scenario 4	6.02E-02	9.14E-04	1.21E-03
7148	636036.2	4168048.9	Worker	Scenario 4	7.29E-03	2.45E-04	1.44E-03
7149	636136.2	4168048.9	Worker	Scenario 4	7.71E-03	2.56E-04	1.57E-03
7150	636236.2	4168048.9	Worker	Scenario 4	8.20E-03	2.69E-04	1.80E-03
7151	636336.2	4168048.9	Worker	Scenario 4	8.56E-03	2.80E-04	1.93E-03
7152	636436.2	4168048.9	Worker	Scenario 4	8.93E-03	2.90E-04	2.03E-03
7153	636536.2	4168048.9	Worker	Scenario 4	9.41E-03	3.03E-04	2.14E-03
7154	636636.2	4168048.9	Worker	Scenario 4	9.72E-03	3.13E-04	2.17E-03
7155	636736.2	4168048.9	Worker	Scenario 4	9.98E-03	3.22E-04	2.15E-03
7156	636836.2	4168048.9	Worker	Scenario 4	1.01E-02	3.27E-04	2.06E-03
7157	636936.2	4168048.9	Worker	Scenario 4	1.05E-02	3.40E-04	2.09E-03
7158	637036.2	4168048.9	Worker	Scenario 4	1.16E-02	3.68E-04	2.22E-03
7159	637136.2	4168048.9	Worker	Scenario 4	1.27E-02	3.96E-04	2.27E-03
7160	637236.2	4168048.9	Worker	Scenario 4	1.38E-02	4.26E-04	2.45E-03
7161	637336.2	4168048.9	Worker	Scenario 4	1.24E-02	3.98E-04	2.37E-03
7162	637436.2	4168048.9	Worker	Scenario 4	1.44E-02	4.47E-04	3.00E-03
7163	637536.2	4168048.9	Worker	Scenario 4	1.31E-02	4.21E-04	2.85E-03
7164	637636.2	4168048.9	Worker	Scenario 4	1.49E-02	4.67E-04	3.46E-03
7165	637736.2	4168048.9	Worker	Scenario 4	1.68E-02	5.18E-04	3.72E-03
7166	637836.2	4168048.9	Worker	Scenario 4	1.68E-02	5.22E-04	3.86E-03
7167	637936.2	4168048.9	Worker	Scenario 4	1.84E-02	5.66E-04	3.90E-03
7168	638036.2	4168048.9	Worker	Scenario 4	2.15E-02	6.48E-04	3.45E-03
7169	638136.2	4168048.9	Worker	Scenario 4	2.13E-02	6.45E-04	3.68E-03
7170	638236.2	4168048.9	Worker	Scenario 4	2.18E-02	6.64E-04	3.56E-03
7171	638336.2	4168048.9	Worker	Scenario 4	2.43E-02	7.33E-04	3.24E-03
7172	638436.2	4168048.9	Worker	Scenario 4	2.54E-02	7.69E-04	3.02E-03
7173	638536.2	4168048.9	Worker	Scenario 4	2.93E-02	8.78E-04	2.83E-03
7174	638636.2	4168048.9	Worker	Scenario 4	2.95E-02	8.95E-04	3.66E-03
7175	638736.2	4168048.9	Worker	Scenario 4	3.35E-02	1.01E-03	3.30E-03
7176	638836.2	4168048.9	Worker	Scenario 4	3.54E-02	1.08E-03	3.70E-03
7177	638936.2	4168048.9	Worker	Scenario 4	3.86E-02	1.18E-03	3.65E-03
7178	639036.2	4168048.9	Worker	Scenario 4	4.18E-02	1.28E-03	3.82E-03
7179	639136.2	4168048.9	Worker	Scenario 4	4.61E-02	1.42E-03	3.94E-03
7180	639236.2	4168048.9	Worker	Scenario 4	5.16E-02	1.60E-03	4.08E-03
7181	639336.2	4168048.9	Worker	Scenario 4	5.83E-02	1.81E-03	4.32E-03
7182	643136.2	4168048.9	Worker	Scenario 4	2.65E-01	4.60E-03	5.02E-03
7183	643236.2	4168048.9	Worker	Scenario 4	2.39E-01	4.14E-03	4.66E-03
7184	643336.2	4168048.9	Worker	Scenario 4	2.20E-01	3.80E-03	4.38E-03
7185	643436.2	4168048.9	Worker	Scenario 4	2.06E-01	3.54E-03	3.97E-03
7186	643536.2	4168048.9	Worker	Scenario 4	1.95E-01	3.32E-03	3.88E-03
7187	643636.2	4168048.9	Worker	Scenario 4	1.87E-01	3.15E-03	3.60E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7188	643736.2	4168048.9	Worker	Scenario 4	1.80E-01	3.00E-03	3.44E-03
7189	643836.2	4168048.9	Worker	Scenario 4	1.74E-01	2.86E-03	3.27E-03
7190	643936.2	4168048.9	Worker	Scenario 4	1.69E-01	2.74E-03	3.12E-03
7191	644036.2	4168048.9	Worker	Scenario 4	1.64E-01	2.63E-03	2.94E-03
7192	644136.2	4168048.9	Worker	Scenario 4	1.60E-01	2.53E-03	2.83E-03
7193	644236.2	4168048.9	Worker	Scenario 4	1.54E-01	2.43E-03	2.68E-03
7194	644336.2	4168048.9	Worker	Scenario 4	1.49E-01	2.33E-03	2.58E-03
7195	644436.2	4168048.9	Worker	Scenario 4	1.43E-01	2.23E-03	2.44E-03
7196	644536.2	4168048.9	Worker	Scenario 4	1.38E-01	2.13E-03	2.27E-03
7197	644636.2	4168048.9	Worker	Scenario 4	1.33E-01	2.04E-03	2.21E-03
7198	644736.2	4168048.9	Worker	Scenario 4	1.27E-01	1.95E-03	2.17E-03
7199	644836.2	4168048.9	Worker	Scenario 4	1.22E-01	1.87E-03	2.09E-03
7200	644936.2	4168048.9	Worker	Scenario 4	1.17E-01	1.79E-03	2.00E-03
7201	645036.2	4168048.9	Worker	Scenario 4	1.13E-01	1.72E-03	1.93E-03
7202	645136.2	4168048.9	Worker	Scenario 4	1.08E-01	1.65E-03	1.87E-03
7203	645236.2	4168048.9	Worker	Scenario 4	1.04E-01	1.59E-03	1.80E-03
7204	645336.2	4168048.9	Worker	Scenario 4	1.01E-01	1.53E-03	1.73E-03
7205	645436.2	4168048.9	Worker	Scenario 4	9.69E-02	1.47E-03	1.69E-03
7206	645536.2	4168048.9	Worker	Scenario 4	9.33E-02	1.41E-03	1.63E-03
7207	645636.2	4168048.9	Worker	Scenario 4	8.99E-02	1.36E-03	1.57E-03
7208	645736.2	4168048.9	Worker	Scenario 4	8.67E-02	1.31E-03	1.51E-03
7209	645836.2	4168048.9	Worker	Scenario 4	8.37E-02	1.27E-03	1.48E-03
7210	645936.2	4168048.9	Worker	Scenario 4	8.08E-02	1.22E-03	1.44E-03
7211	646036.2	4168048.9	Worker	Scenario 4	7.81E-02	1.18E-03	1.39E-03
7212	646236.2	4168048.9	Worker	Scenario 4	7.29E-02	1.11E-03	1.29E-03
7213	646336.2	4168048.9	Worker	Scenario 4	7.06E-02	1.07E-03	1.26E-03
7214	646436.2	4168048.9	Worker	Scenario 4	6.84E-02	1.04E-03	1.24E-03
7215	646536.2	4168048.9	Worker	Scenario 4	6.63E-02	1.01E-03	1.20E-03
7216	646636.2	4168048.9	Worker	Scenario 4	6.43E-02	9.76E-04	1.17E-03
7217	646736.2	4168048.9	Worker	Scenario 4	6.24E-02	9.47E-04	1.13E-03
7218	646836.2	4168048.9	Worker	Scenario 4	6.05E-02	9.19E-04	1.10E-03
7219	646936.2	4168048.9	Worker	Scenario 4	5.88E-02	8.93E-04	1.06E-03
7220	636036.2	4168148.9	Worker	Scenario 4	7.05E-03	2.39E-04	1.40E-03
7221	636136.2	4168148.9	Worker	Scenario 4	7.14E-03	2.44E-04	1.39E-03
7222	636236.2	4168148.9	Worker	Scenario 4	7.16E-03	2.46E-04	1.35E-03
7223	636336.2	4168148.9	Worker	Scenario 4	7.50E-03	2.56E-04	1.43E-03
7224	636436.2	4168148.9	Worker	Scenario 4	8.09E-03	2.71E-04	1.60E-03
7225	636536.2	4168148.9	Worker	Scenario 4	8.39E-03	2.80E-04	1.70E-03
7226	636636.2	4168148.9	Worker	Scenario 4	8.86E-03	2.93E-04	1.80E-03
7227	636736.2	4168148.9	Worker	Scenario 4	9.14E-03	3.03E-04	1.88E-03
7228	636836.2	4168148.9	Worker	Scenario 4	9.71E-03	3.19E-04	1.96E-03
7229	636936.2	4168148.9	Worker	Scenario 4	1.05E-02	3.40E-04	2.21E-03
7230	637036.2	4168148.9	Worker	Scenario 4	1.13E-02	3.60E-04	2.58E-03
7231	637136.2	4168148.9	Worker	Scenario 4	1.24E-02	3.89E-04	2.98E-03
7232	637236.2	4168148.9	Worker	Scenario 4	1.36E-02	4.20E-04	3.20E-03
7233	637336.2	4168148.9	Worker	Scenario 4	1.47E-02	4.50E-04	3.27E-03
7234	637436.2	4168148.9	Worker	Scenario 4	1.53E-02	4.70E-04	3.31E-03
7235	637536.2	4168148.9	Worker	Scenario 4	1.39E-02	4.40E-04	3.06E-03
7236	637636.2	4168148.9	Worker	Scenario 4	1.50E-02	4.71E-04	3.07E-03
7237	637736.2	4168148.9	Worker	Scenario 4	1.73E-02	5.31E-04	3.05E-03
7238	637836.2	4168148.9	Worker	Scenario 4	1.79E-02	5.49E-04	2.83E-03
7239	637936.2	4168148.9	Worker	Scenario 4	2.00E-02	6.07E-04	2.61E-03
7240	638036.2	4168148.9	Worker	Scenario 4	2.30E-02	6.88E-04	2.25E-03
7241	638136.2	4168148.9	Worker	Scenario 4	2.17E-02	6.58E-04	3.00E-03
7242	638236.2	4168148.9	Worker	Scenario 4	2.31E-02	7.02E-04	3.31E-03
7243	638336.2	4168148.9	Worker	Scenario 4	2.67E-02	8.01E-04	2.93E-03
7244	638436.2	4168148.9	Worker	Scenario 4	2.67E-02	8.11E-04	3.62E-03
7245	638536.2	4168148.9	Worker	Scenario 4	3.14E-02	9.46E-04	2.70E-03
7246	638636.2	4168148.9	Worker	Scenario 4	3.19E-02	9.75E-04	3.35E-03
7247	638736.2	4168148.9	Worker	Scenario 4	3.54E-02	1.08E-03	3.27E-03
7248	638836.2	4168148.9	Worker	Scenario 4	3.95E-02	1.21E-03	2.94E-03
7249	638936.2	4168148.9	Worker	Scenario 4	4.27E-02	1.32E-03	3.45E-03
7250	639036.2	4168148.9	Worker	Scenario 4	4.70E-02	1.46E-03	3.84E-03
7251	639136.2	4168148.9	Worker	Scenario 4	5.21E-02	1.64E-03	4.00E-03
7252	639236.2	4168148.9	Worker	Scenario 4	5.87E-02	1.86E-03	3.79E-03
7253	642936.2	4168148.9	Worker	Scenario 4	2.90E-01	5.05E-03	6.15E-03
7254	643036.2	4168148.9	Worker	Scenario 4	2.67E-01	4.59E-03	6.01E-03
7255	643136.2	4168148.9	Worker	Scenario 4	2.45E-01	4.18E-03	5.20E-03
7256	643236.2	4168148.9	Worker	Scenario 4	2.24E-01	3.83E-03	4.54E-03
7257	643336.2	4168148.9	Worker	Scenario 4	2.07E-01	3.54E-03	4.22E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7258	643436.2	4168148.9	Worker	Scenario 4	1.94E-01	3.30E-03	3.97E-03
7259	643536.2	4168148.9	Worker	Scenario 4	1.84E-01	3.11E-03	3.75E-03
7260	643636.2	4168148.9	Worker	Scenario 4	1.75E-01	2.94E-03	3.55E-03
7261	643736.2	4168148.9	Worker	Scenario 4	1.67E-01	2.79E-03	3.31E-03
7262	643836.2	4168148.9	Worker	Scenario 4	1.60E-01	2.66E-03	3.21E-03
7263	643936.2	4168148.9	Worker	Scenario 4	1.55E-01	2.54E-03	3.00E-03
7264	644036.2	4168148.9	Worker	Scenario 4	1.50E-01	2.43E-03	2.87E-03
7265	644136.2	4168148.9	Worker	Scenario 4	1.45E-01	2.34E-03	2.78E-03
7266	644236.2	4168148.9	Worker	Scenario 4	1.40E-01	2.25E-03	2.64E-03
7267	644336.2	4168148.9	Worker	Scenario 4	1.36E-01	2.16E-03	2.54E-03
7268	644436.2	4168148.9	Worker	Scenario 4	1.31E-01	2.07E-03	2.42E-03
7269	644536.2	4168148.9	Worker	Scenario 4	1.27E-01	1.99E-03	2.33E-03
7270	644636.2	4168148.9	Worker	Scenario 4	1.23E-01	1.91E-03	2.22E-03
7271	644736.2	4168148.9	Worker	Scenario 4	1.18E-01	1.84E-03	2.15E-03
7272	644836.2	4168148.9	Worker	Scenario 4	1.14E-01	1.76E-03	2.05E-03
7273	644936.2	4168148.9	Worker	Scenario 4	1.10E-01	1.70E-03	1.92E-03
7274	645036.2	4168148.9	Worker	Scenario 4	1.06E-01	1.63E-03	1.84E-03
7275	645136.2	4168148.9	Worker	Scenario 4	1.02E-01	1.57E-03	1.82E-03
7276	645236.2	4168148.9	Worker	Scenario 4	9.87E-02	1.51E-03	1.78E-03
7277	645336.2	4168148.9	Worker	Scenario 4	9.53E-02	1.46E-03	1.73E-03
7278	645436.2	4168148.9	Worker	Scenario 4	9.20E-02	1.41E-03	1.66E-03
7279	645536.2	4168148.9	Worker	Scenario 4	8.88E-02	1.36E-03	1.61E-03
7280	645636.2	4168148.9	Worker	Scenario 4	8.58E-02	1.31E-03	1.57E-03
7281	645736.2	4168148.9	Worker	Scenario 4	8.30E-02	1.26E-03	1.51E-03
7282	645836.2	4168148.9	Worker	Scenario 4	8.03E-02	1.22E-03	1.45E-03
7283	645936.2	4168148.9	Worker	Scenario 4	7.76E-02	1.18E-03	1.42E-03
7284	646036.2	4168148.9	Worker	Scenario 4	7.51E-02	1.14E-03	1.38E-03
7285	646236.2	4168148.9	Worker	Scenario 4	7.04E-02	1.07E-03	1.29E-03
7286	646336.2	4168148.9	Worker	Scenario 4	6.83E-02	1.04E-03	1.24E-03
7287	646436.2	4168148.9	Worker	Scenario 4	6.62E-02	1.01E-03	1.22E-03
7288	646536.2	4168148.9	Worker	Scenario 4	6.43E-02	9.78E-04	1.19E-03
7289	646636.2	4168148.9	Worker	Scenario 4	6.24E-02	9.49E-04	1.16E-03
7290	646736.2	4168148.9	Worker	Scenario 4	6.06E-02	9.22E-04	1.13E-03
7291	646836.2	4168148.9	Worker	Scenario 4	5.89E-02	8.96E-04	1.09E-03
7292	635936.2	4168248.9	Worker	Scenario 4	6.70E-03	2.29E-04	1.35E-03
7293	636036.2	4168248.9	Worker	Scenario 4	6.86E-03	2.35E-04	1.41E-03
7294	636136.2	4168248.9	Worker	Scenario 4	6.85E-03	2.36E-04	1.41E-03
7295	636236.2	4168248.9	Worker	Scenario 4	7.15E-03	2.45E-04	1.49E-03
7296	636336.2	4168248.9	Worker	Scenario 4	7.47E-03	2.55E-04	1.57E-03
7297	636436.2	4168248.9	Worker	Scenario 4	7.75E-03	2.63E-04	1.62E-03
7298	636536.2	4168248.9	Worker	Scenario 4	8.16E-03	2.74E-04	1.67E-03
7299	636636.2	4168248.9	Worker	Scenario 4	8.58E-03	2.87E-04	1.71E-03
7300	636736.2	4168248.9	Worker	Scenario 4	9.07E-03	3.00E-04	1.83E-03
7301	636836.2	4168248.9	Worker	Scenario 4	9.63E-03	3.16E-04	2.03E-03
7302	636936.2	4168248.9	Worker	Scenario 4	1.03E-02	3.34E-04	2.25E-03
7303	637036.2	4168248.9	Worker	Scenario 4	1.11E-02	3.54E-04	2.41E-03
7304	637136.2	4168248.9	Worker	Scenario 4	1.22E-02	3.84E-04	2.58E-03
7305	637236.2	4168248.9	Worker	Scenario 4	1.35E-02	4.16E-04	2.60E-03
7306	637336.2	4168248.9	Worker	Scenario 4	1.48E-02	4.53E-04	2.49E-03
7307	637436.2	4168248.9	Worker	Scenario 4	1.61E-02	4.87E-04	2.31E-03
7308	637536.2	4168248.9	Worker	Scenario 4	1.47E-02	4.58E-04	2.24E-03
7309	637636.2	4168248.9	Worker	Scenario 4	1.57E-02	4.89E-04	2.29E-03
7310	637736.2	4168248.9	Worker	Scenario 4	1.77E-02	5.41E-04	2.65E-03
7311	637836.2	4168248.9	Worker	Scenario 4	1.97E-02	5.96E-04	2.81E-03
7312	637936.2	4168248.9	Worker	Scenario 4	1.98E-02	6.05E-04	3.21E-03
7313	638036.2	4168248.9	Worker	Scenario 4	2.30E-02	6.94E-04	2.82E-03
7314	638136.2	4168248.9	Worker	Scenario 4	2.37E-02	7.17E-04	3.08E-03
7315	638236.2	4168248.9	Worker	Scenario 4	2.45E-02	7.42E-04	3.23E-03
7316	638336.2	4168248.9	Worker	Scenario 4	2.79E-02	8.41E-04	2.78E-03
7317	638436.2	4168248.9	Worker	Scenario 4	2.91E-02	8.86E-04	3.19E-03
7318	638536.2	4168248.9	Worker	Scenario 4	3.35E-02	1.02E-03	2.49E-03
7319	638636.2	4168248.9	Worker	Scenario 4	3.51E-02	1.08E-03	3.15E-03
7320	638736.2	4168248.9	Worker	Scenario 4	3.85E-02	1.19E-03	3.42E-03
7321	638836.2	4168248.9	Worker	Scenario 4	4.36E-02	1.36E-03	3.17E-03
7322	638936.2	4168248.9	Worker	Scenario 4	4.81E-02	1.51E-03	3.18E-03
7323	639036.2	4168248.9	Worker	Scenario 4	5.36E-02	1.70E-03	3.21E-03
7324	639136.2	4168248.9	Worker	Scenario 4	6.03E-02	1.94E-03	2.96E-03
7325	642836.2	4168248.9	Worker	Scenario 4	2.89E-01	5.01E-03	6.22E-03
7326	642936.2	4168248.9	Worker	Scenario 4	2.67E-01	4.56E-03	5.83E-03
7327	643036.2	4168248.9	Worker	Scenario 4	2.46E-01	4.18E-03	5.31E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7328	643136.2	4168248.9	Worker	Scenario 4	2.28E-01	3.86E-03	5.59E-03
7329	643236.2	4168248.9	Worker	Scenario 4	2.11E-01	3.56E-03	5.40E-03
7330	643336.2	4168248.9	Worker	Scenario 4	1.96E-01	3.31E-03	4.72E-03
7331	643436.2	4168248.9	Worker	Scenario 4	1.83E-01	3.10E-03	3.98E-03
7332	643536.2	4168248.9	Worker	Scenario 4	1.73E-01	2.92E-03	3.68E-03
7333	643636.2	4168248.9	Worker	Scenario 4	1.65E-01	2.76E-03	3.49E-03
7334	643736.2	4168248.9	Worker	Scenario 4	1.57E-01	2.62E-03	3.31E-03
7335	643836.2	4168248.9	Worker	Scenario 4	1.50E-01	2.49E-03	3.14E-03
7336	643936.2	4168248.9	Worker	Scenario 4	1.44E-01	2.38E-03	2.93E-03
7337	644036.2	4168248.9	Worker	Scenario 4	1.39E-01	2.28E-03	2.81E-03
7338	644136.2	4168248.9	Worker	Scenario 4	1.34E-01	2.18E-03	2.73E-03
7339	644236.2	4168248.9	Worker	Scenario 4	1.30E-01	2.10E-03	2.56E-03
7340	644336.2	4168248.9	Worker	Scenario 4	1.25E-01	2.01E-03	2.44E-03
7341	644436.2	4168248.9	Worker	Scenario 4	1.21E-01	1.94E-03	2.39E-03
7342	644536.2	4168248.9	Worker	Scenario 4	1.18E-01	1.87E-03	2.28E-03
7343	644636.2	4168248.9	Worker	Scenario 4	1.14E-01	1.80E-03	2.20E-03
7344	644736.2	4168248.9	Worker	Scenario 4	1.10E-01	1.73E-03	2.11E-03
7345	644836.2	4168248.9	Worker	Scenario 4	1.07E-01	1.67E-03	2.04E-03
7346	644936.2	4168248.9	Worker	Scenario 4	1.03E-01	1.61E-03	1.96E-03
7347	645036.2	4168248.9	Worker	Scenario 4	9.96E-02	1.55E-03	1.88E-03
7348	645136.2	4168248.9	Worker	Scenario 4	9.64E-02	1.50E-03	1.83E-03
7349	645236.2	4168248.9	Worker	Scenario 4	9.33E-02	1.44E-03	1.75E-03
7350	645336.2	4168248.9	Worker	Scenario 4	9.03E-02	1.39E-03	1.66E-03
7351	645436.2	4168248.9	Worker	Scenario 4	8.74E-02	1.35E-03	1.57E-03
7352	645536.2	4168248.9	Worker	Scenario 4	8.46E-02	1.30E-03	1.56E-03
7353	645636.2	4168248.9	Worker	Scenario 4	8.19E-02	1.26E-03	1.54E-03
7354	645736.2	4168248.9	Worker	Scenario 4	7.93E-02	1.22E-03	1.50E-03
7355	645836.2	4168248.9	Worker	Scenario 4	7.69E-02	1.18E-03	1.46E-03
7356	645936.2	4168248.9	Worker	Scenario 4	7.44E-02	1.14E-03	1.40E-03
7357	646036.2	4168248.9	Worker	Scenario 4	7.22E-02	1.10E-03	1.36E-03
7358	646236.2	4168248.9	Worker	Scenario 4	6.78E-02	1.04E-03	1.29E-03
7359	646336.2	4168248.9	Worker	Scenario 4	6.59E-02	1.01E-03	1.24E-03
7360	646436.2	4168248.9	Worker	Scenario 4	6.40E-02	9.76E-04	1.21E-03
7361	646536.2	4168248.9	Worker	Scenario 4	6.21E-02	9.49E-04	1.18E-03
7362	646636.2	4168248.9	Worker	Scenario 4	6.04E-02	9.22E-04	1.16E-03
7363	646736.2	4168248.9	Worker	Scenario 4	5.87E-02	8.97E-04	1.12E-03
7364	646836.2	4168248.9	Worker	Scenario 4	5.72E-02	8.72E-04	1.09E-03
7365	635936.2	4168348.9	Worker	Scenario 4	6.61E-03	2.27E-04	1.35E-03
7366	636036.2	4168348.9	Worker	Scenario 4	6.69E-03	2.30E-04	1.33E-03
7367	636136.2	4168348.9	Worker	Scenario 4	7.00E-03	2.39E-04	1.36E-03
7368	636236.2	4168348.9	Worker	Scenario 4	7.32E-03	2.48E-04	1.39E-03
7369	636336.2	4168348.9	Worker	Scenario 4	7.62E-03	2.57E-04	1.40E-03
7370	636436.2	4168348.9	Worker	Scenario 4	8.03E-03	2.68E-04	1.48E-03
7371	636536.2	4168348.9	Worker	Scenario 4	8.38E-03	2.78E-04	1.50E-03
7372	636636.2	4168348.9	Worker	Scenario 4	8.77E-03	2.90E-04	1.58E-03
7373	636736.2	4168348.9	Worker	Scenario 4	9.32E-03	3.05E-04	1.73E-03
7374	636836.2	4168348.9	Worker	Scenario 4	9.93E-03	3.22E-04	1.87E-03
7375	636936.2	4168348.9	Worker	Scenario 4	1.05E-02	3.38E-04	1.97E-03
7376	637036.2	4168348.9	Worker	Scenario 4	1.12E-02	3.56E-04	2.04E-03
7377	637136.2	4168348.9	Worker	Scenario 4	1.20E-02	3.77E-04	2.06E-03
7378	637236.2	4168348.9	Worker	Scenario 4	1.35E-02	4.15E-04	2.02E-03
7379	637336.2	4168348.9	Worker	Scenario 4	1.51E-02	4.57E-04	2.32E-03
7380	637436.2	4168348.9	Worker	Scenario 4	1.66E-02	4.99E-04	2.47E-03
7381	637536.2	4168348.9	Worker	Scenario 4	1.55E-02	4.79E-04	2.89E-03
7382	637636.2	4168348.9	Worker	Scenario 4	1.71E-02	5.24E-04	3.02E-03
7383	637736.2	4168348.9	Worker	Scenario 4	1.78E-02	5.46E-04	3.14E-03
7384	637836.2	4168348.9	Worker	Scenario 4	1.99E-02	6.06E-04	2.96E-03
7385	637936.2	4168348.9	Worker	Scenario 4	2.20E-02	6.66E-04	2.67E-03
7386	638036.2	4168348.9	Worker	Scenario 4	2.32E-02	7.04E-04	2.87E-03
7387	638136.2	4168348.9	Worker	Scenario 4	2.69E-02	8.06E-04	2.09E-03
7388	638236.2	4168348.9	Worker	Scenario 4	2.67E-02	8.09E-04	2.93E-03
7389	638336.2	4168348.9	Worker	Scenario 4	2.98E-02	9.02E-04	2.71E-03
7390	638436.2	4168348.9	Worker	Scenario 4	3.16E-02	9.66E-04	3.12E-03
7391	638536.2	4168348.9	Worker	Scenario 4	3.70E-02	1.13E-03	2.22E-03
7392	638636.2	4168348.9	Worker	Scenario 4	3.85E-02	1.20E-03	3.05E-03
7393	638736.2	4168348.9	Worker	Scenario 4	4.33E-02	1.36E-03	2.80E-03
7394	638836.2	4168348.9	Worker	Scenario 4	4.91E-02	1.55E-03	2.47E-03
7395	638936.2	4168348.9	Worker	Scenario 4	5.49E-02	1.77E-03	2.66E-03
7396	642636.2	4168348.9	Worker	Scenario 4	3.14E-01	5.46E-03	6.52E-03
7397	642736.2	4168348.9	Worker	Scenario 4	2.89E-01	4.96E-03	6.21E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7398	642836.2	4168348.9	Worker	Scenario 4	2.67E-01	4.53E-03	5.94E-03
7399	642936.2	4168348.9	Worker	Scenario 4	2.47E-01	4.17E-03	5.53E-03
7400	643036.2	4168348.9	Worker	Scenario 4	2.29E-01	3.85E-03	5.20E-03
7401	643136.2	4168348.9	Worker	Scenario 4	2.13E-01	3.57E-03	4.88E-03
7402	643236.2	4168348.9	Worker	Scenario 4	1.98E-01	3.32E-03	4.83E-03
7403	643336.2	4168348.9	Worker	Scenario 4	1.84E-01	3.10E-03	5.13E-03
7404	643436.2	4168348.9	Worker	Scenario 4	1.73E-01	2.91E-03	4.92E-03
7405	643536.2	4168348.9	Worker	Scenario 4	1.64E-01	2.75E-03	4.33E-03
7406	643636.2	4168348.9	Worker	Scenario 4	1.56E-01	2.61E-03	3.60E-03
7407	643736.2	4168348.9	Worker	Scenario 4	1.49E-01	2.48E-03	3.26E-03
7408	643836.2	4168348.9	Worker	Scenario 4	1.42E-01	2.35E-03	3.06E-03
7409	643936.2	4168348.9	Worker	Scenario 4	1.36E-01	2.25E-03	2.91E-03
7410	644036.2	4168348.9	Worker	Scenario 4	1.30E-01	2.15E-03	2.77E-03
7411	644136.2	4168348.9	Worker	Scenario 4	1.25E-01	2.06E-03	2.67E-03
7412	644236.2	4168348.9	Worker	Scenario 4	1.21E-01	1.98E-03	2.46E-03
7413	644336.2	4168348.9	Worker	Scenario 4	1.17E-01	1.89E-03	2.42E-03
7414	644436.2	4168348.9	Worker	Scenario 4	1.13E-01	1.82E-03	2.35E-03
7415	644536.2	4168348.9	Worker	Scenario 4	1.10E-01	1.76E-03	2.21E-03
7416	644636.2	4168348.9	Worker	Scenario 4	1.06E-01	1.70E-03	2.13E-03
7417	644736.2	4168348.9	Worker	Scenario 4	1.03E-01	1.64E-03	2.08E-03
7418	644836.2	4168348.9	Worker	Scenario 4	9.99E-02	1.58E-03	2.00E-03
7419	644936.2	4168348.9	Worker	Scenario 4	9.68E-02	1.52E-03	1.93E-03
7420	645036.2	4168348.9	Worker	Scenario 4	9.38E-02	1.47E-03	1.87E-03
7421	645136.2	4168348.9	Worker	Scenario 4	9.10E-02	1.42E-03	1.79E-03
7422	645236.2	4168348.9	Worker	Scenario 4	8.83E-02	1.38E-03	1.75E-03
7423	645336.2	4168348.9	Worker	Scenario 4	8.56E-02	1.33E-03	1.68E-03
7424	645436.2	4168348.9	Worker	Scenario 4	8.30E-02	1.29E-03	1.63E-03
7425	645536.2	4168348.9	Worker	Scenario 4	8.04E-02	1.25E-03	1.59E-03
7426	645636.2	4168348.9	Worker	Scenario 4	7.80E-02	1.21E-03	1.53E-03
7427	645736.2	4168348.9	Worker	Scenario 4	7.58E-02	1.17E-03	1.46E-03
7428	645836.2	4168348.9	Worker	Scenario 4	7.35E-02	1.13E-03	1.37E-03
7429	645936.2	4168348.9	Worker	Scenario 4	7.12E-02	1.10E-03	1.35E-03
7430	646036.2	4168348.9	Worker	Scenario 4	6.92E-02	1.06E-03	1.34E-03
7431	646236.2	4168348.9	Worker	Scenario 4	6.52E-02	1.00E-03	1.28E-03
7432	646336.2	4168348.9	Worker	Scenario 4	6.34E-02	9.72E-04	1.24E-03
7433	646436.2	4168348.9	Worker	Scenario 4	6.16E-02	9.45E-04	1.19E-03
7434	646536.2	4168348.9	Worker	Scenario 4	5.99E-02	9.19E-04	1.17E-03
7435	646636.2	4168348.9	Worker	Scenario 4	5.83E-02	8.94E-04	1.15E-03
7436	646736.2	4168348.9	Worker	Scenario 4	5.68E-02	8.70E-04	1.12E-03
7437	646836.2	4168348.9	Worker	Scenario 4	5.53E-02	8.48E-04	1.08E-03
7438	635836.2	4168448.9	Worker	Scenario 4	6.29E-03	2.17E-04	1.08E-03
7439	635936.2	4168448.9	Worker	Scenario 4	6.52E-03	2.24E-04	1.07E-03
7440	636036.2	4168448.9	Worker	Scenario 4	6.81E-03	2.33E-04	1.11E-03
7441	636136.2	4168448.9	Worker	Scenario 4	7.12E-03	2.41E-04	1.25E-03
7442	636236.2	4168448.9	Worker	Scenario 4	7.49E-03	2.52E-04	1.40E-03
7443	636336.2	4168448.9	Worker	Scenario 4	8.18E-03	2.68E-04	1.58E-03
7444	636436.2	4168448.9	Worker	Scenario 4	8.12E-03	2.70E-04	1.62E-03
7445	636536.2	4168448.9	Worker	Scenario 4	8.55E-03	2.81E-04	1.73E-03
7446	636636.2	4168448.9	Worker	Scenario 4	9.11E-03	2.96E-04	1.82E-03
7447	636736.2	4168448.9	Worker	Scenario 4	9.53E-03	3.08E-04	1.87E-03
7448	636836.2	4168448.9	Worker	Scenario 4	1.01E-02	3.24E-04	1.89E-03
7449	636936.2	4168448.9	Worker	Scenario 4	1.07E-02	3.41E-04	1.88E-03
7450	637036.2	4168448.9	Worker	Scenario 4	1.18E-02	3.68E-04	2.20E-03
7451	637136.2	4168448.9	Worker	Scenario 4	1.23E-02	3.84E-04	2.45E-03
7452	637236.2	4168448.9	Worker	Scenario 4	1.33E-02	4.11E-04	2.70E-03
7453	637336.2	4168448.9	Worker	Scenario 4	1.53E-02	4.63E-04	2.73E-03
7454	637436.2	4168448.9	Worker	Scenario 4	1.68E-02	5.05E-04	2.60E-03
7455	637536.2	4168448.9	Worker	Scenario 4	1.61E-02	4.93E-04	2.74E-03
7456	637636.2	4168448.9	Worker	Scenario 4	1.79E-02	5.43E-04	2.72E-03
7457	637736.2	4168448.9	Worker	Scenario 4	1.90E-02	5.79E-04	2.92E-03
7458	637836.2	4168448.9	Worker	Scenario 4	2.05E-02	6.23E-04	2.97E-03
7459	637936.2	4168448.9	Worker	Scenario 4	2.29E-02	6.92E-04	2.73E-03
7460	638036.2	4168448.9	Worker	Scenario 4	2.46E-02	7.45E-04	2.77E-03
7461	638136.2	4168448.9	Worker	Scenario 4	2.79E-02	8.39E-04	2.50E-03
7462	638236.2	4168448.9	Worker	Scenario 4	2.91E-02	8.81E-04	2.86E-03
7463	638336.2	4168448.9	Worker	Scenario 4	3.21E-02	9.75E-04	2.67E-03
7464	638436.2	4168448.9	Worker	Scenario 4	3.51E-02	1.07E-03	2.53E-03
7465	638536.2	4168448.9	Worker	Scenario 4	4.04E-02	1.24E-03	2.12E-03
7466	638636.2	4168448.9	Worker	Scenario 4	4.34E-02	1.36E-03	2.58E-03
7467	638736.2	4168448.9	Worker	Scenario 4	4.97E-02	1.58E-03	2.38E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7468	638836.2	4168448.9	Worker	Scenario 4	5.63E-02	1.83E-03	2.41E-03
7469	642536.2	4168448.9	Worker	Scenario 4	3.14E-01	5.37E-03	6.74E-03
7470	642636.2	4168448.9	Worker	Scenario 4	2.87E-01	4.88E-03	6.45E-03
7471	642736.2	4168448.9	Worker	Scenario 4	2.65E-01	4.48E-03	5.86E-03
7472	642836.2	4168448.9	Worker	Scenario 4	2.45E-01	4.14E-03	5.46E-03
7473	642936.2	4168448.9	Worker	Scenario 4	2.28E-01	3.83E-03	5.29E-03
7474	643036.2	4168448.9	Worker	Scenario 4	2.12E-01	3.56E-03	4.99E-03
7475	643136.2	4168448.9	Worker	Scenario 4	1.98E-01	3.32E-03	4.69E-03
7476	643236.2	4168448.9	Worker	Scenario 4	1.85E-01	3.10E-03	4.44E-03
7477	643336.2	4168448.9	Worker	Scenario 4	1.73E-01	2.91E-03	4.24E-03
7478	643436.2	4168448.9	Worker	Scenario 4	1.63E-01	2.73E-03	4.56E-03
7479	643536.2	4168448.9	Worker	Scenario 4	1.54E-01	2.58E-03	4.74E-03
7480	643636.2	4168448.9	Worker	Scenario 4	1.47E-01	2.46E-03	4.52E-03
7481	643736.2	4168448.9	Worker	Scenario 4	1.40E-01	2.34E-03	4.00E-03
7482	643836.2	4168448.9	Worker	Scenario 4	1.34E-01	2.22E-03	3.32E-03
7483	643936.2	4168448.9	Worker	Scenario 4	1.28E-01	2.12E-03	2.92E-03
7484	644036.2	4168448.9	Worker	Scenario 4	1.23E-01	2.03E-03	2.71E-03
7485	644136.2	4168448.9	Worker	Scenario 4	1.18E-01	1.95E-03	2.60E-03
7486	644236.2	4168448.9	Worker	Scenario 4	1.14E-01	1.87E-03	2.50E-03
7487	644336.2	4168448.9	Worker	Scenario 4	1.10E-01	1.79E-03	2.39E-03
7488	644436.2	4168448.9	Worker	Scenario 4	1.06E-01	1.72E-03	2.28E-03
7489	644536.2	4168448.9	Worker	Scenario 4	1.03E-01	1.66E-03	2.11E-03
7490	644636.2	4168448.9	Worker	Scenario 4	9.95E-02	1.60E-03	2.12E-03
7491	644736.2	4168448.9	Worker	Scenario 4	9.66E-02	1.55E-03	2.05E-03
7492	644836.2	4168448.9	Worker	Scenario 4	9.37E-02	1.50E-03	1.94E-03
7493	644936.2	4168448.9	Worker	Scenario 4	9.10E-02	1.45E-03	1.87E-03
7494	645036.2	4168448.9	Worker	Scenario 4	8.84E-02	1.40E-03	1.83E-03
7495	645136.2	4168448.9	Worker	Scenario 4	8.59E-02	1.36E-03	1.78E-03
7496	645236.2	4168448.9	Worker	Scenario 4	8.35E-02	1.31E-03	1.70E-03
7497	645336.2	4168448.9	Worker	Scenario 4	8.11E-02	1.27E-03	1.67E-03
7498	645436.2	4168448.9	Worker	Scenario 4	7.88E-02	1.23E-03	1.61E-03
7499	645536.2	4168448.9	Worker	Scenario 4	7.65E-02	1.20E-03	1.56E-03
7500	645636.2	4168448.9	Worker	Scenario 4	7.43E-02	1.16E-03	1.52E-03
7501	645736.2	4168448.9	Worker	Scenario 4	7.22E-02	1.12E-03	1.46E-03
7502	645836.2	4168448.9	Worker	Scenario 4	7.01E-02	1.09E-03	1.42E-03
7503	645936.2	4168448.9	Worker	Scenario 4	6.81E-02	1.06E-03	1.39E-03
7504	646036.2	4168448.9	Worker	Scenario 4	6.62E-02	1.03E-03	1.34E-03
7505	646236.2	4168448.9	Worker	Scenario 4	6.25E-02	9.67E-04	1.21E-03
7506	646336.2	4168448.9	Worker	Scenario 4	6.09E-02	9.40E-04	1.17E-03
7507	646436.2	4168448.9	Worker	Scenario 4	5.93E-02	9.14E-04	1.17E-03
7508	646536.2	4168448.9	Worker	Scenario 4	5.77E-02	8.90E-04	1.16E-03
7509	646636.2	4168448.9	Worker	Scenario 4	5.62E-02	8.66E-04	1.14E-03
7510	646736.2	4168448.9	Worker	Scenario 4	5.48E-02	8.44E-04	1.11E-03
7511	635836.2	4168548.9	Worker	Scenario 4	6.37E-03	2.19E-04	1.18E-03
7512	635936.2	4168548.9	Worker	Scenario 4	6.72E-03	2.29E-04	1.32E-03
7513	636036.2	4168548.9	Worker	Scenario 4	7.13E-03	2.39E-04	1.45E-03
7514	636136.2	4168548.9	Worker	Scenario 4	7.25E-03	2.44E-04	1.49E-03
7515	636236.2	4168548.9	Worker	Scenario 4	7.59E-03	2.53E-04	1.56E-03
7516	636336.2	4168548.9	Worker	Scenario 4	8.20E-03	2.67E-04	1.64E-03
7517	636436.2	4168548.9	Worker	Scenario 4	8.81E-03	2.84E-04	1.69E-03
7518	636536.2	4168548.9	Worker	Scenario 4	8.92E-03	2.88E-04	1.65E-03
7519	636636.2	4168548.9	Worker	Scenario 4	9.51E-03	3.03E-04	1.66E-03
7520	636736.2	4168548.9	Worker	Scenario 4	1.01E-02	3.19E-04	2.00E-03
7521	636836.2	4168548.9	Worker	Scenario 4	1.07E-02	3.36E-04	2.24E-03
7522	636936.2	4168548.9	Worker	Scenario 4	1.13E-02	3.52E-04	2.39E-03
7523	637036.2	4168548.9	Worker	Scenario 4	1.20E-02	3.72E-04	2.47E-03
7524	637136.2	4168548.9	Worker	Scenario 4	1.32E-02	4.03E-04	2.49E-03
7525	637236.2	4168548.9	Worker	Scenario 4	1.40E-02	4.26E-04	2.39E-03
7526	637336.2	4168548.9	Worker	Scenario 4	1.55E-02	4.68E-04	2.55E-03
7527	637436.2	4168548.9	Worker	Scenario 4	1.74E-02	5.18E-04	2.51E-03
7528	637536.2	4168548.9	Worker	Scenario 4	1.76E-02	5.32E-04	2.72E-03
7529	637636.2	4168548.9	Worker	Scenario 4	1.81E-02	5.50E-04	2.88E-03
7530	637736.2	4168548.9	Worker	Scenario 4	2.04E-02	6.17E-04	2.76E-03
7531	637836.2	4168548.9	Worker	Scenario 4	2.20E-02	6.67E-04	2.74E-03
7532	637936.2	4168548.9	Worker	Scenario 4	2.39E-02	7.22E-04	2.83E-03
7533	638036.2	4168548.9	Worker	Scenario 4	2.61E-02	7.91E-04	2.72E-03
7534	638136.2	4168548.9	Worker	Scenario 4	2.82E-02	8.58E-04	2.56E-03
7535	638236.2	4168548.9	Worker	Scenario 4	3.36E-02	1.01E-03	1.84E-03
7536	638336.2	4168548.9	Worker	Scenario 4	3.57E-02	1.09E-03	1.93E-03
7537	638436.2	4168548.9	Worker	Scenario 4	3.94E-02	1.22E-03	2.06E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7538	638536.2	4168548.9	Worker	Scenario 4	4.45E-02	1.39E-03	2.13E-03
7539	638636.2	4168548.9	Worker	Scenario 4	5.13E-02	1.63E-03	2.11E-03
7540	638736.2	4168548.9	Worker	Scenario 4	5.85E-02	1.91E-03	2.09E-03
7541	642336.2	4168548.9	Worker	Scenario 4	3.39E-01	5.78E-03	7.01E-03
7542	642436.2	4168548.9	Worker	Scenario 4	3.07E-01	5.24E-03	6.88E-03
7543	642536.2	4168548.9	Worker	Scenario 4	2.80E-01	4.76E-03	6.15E-03
7544	642636.2	4168548.9	Worker	Scenario 4	2.58E-01	4.39E-03	5.92E-03
7545	642736.2	4168548.9	Worker	Scenario 4	2.40E-01	4.07E-03	5.68E-03
7546	642836.2	4168548.9	Worker	Scenario 4	2.24E-01	3.78E-03	5.30E-03
7547	642936.2	4168548.9	Worker	Scenario 4	2.09E-01	3.53E-03	5.01E-03
7548	643036.2	4168548.9	Worker	Scenario 4	1.96E-01	3.29E-03	4.74E-03
7549	643136.2	4168548.9	Worker	Scenario 4	1.84E-01	3.08E-03	4.55E-03
7550	643236.2	4168548.9	Worker	Scenario 4	1.72E-01	2.89E-03	4.23E-03
7551	643336.2	4168548.9	Worker	Scenario 4	1.62E-01	2.72E-03	4.06E-03
7552	643436.2	4168548.9	Worker	Scenario 4	1.53E-01	2.56E-03	3.84E-03
7553	643536.2	4168548.9	Worker	Scenario 4	1.44E-01	2.43E-03	3.85E-03
7554	643636.2	4168548.9	Worker	Scenario 4	1.38E-01	2.31E-03	4.29E-03
7555	643736.2	4168548.9	Worker	Scenario 4	1.32E-01	2.20E-03	4.39E-03
7556	643836.2	4168548.9	Worker	Scenario 4	1.26E-01	2.10E-03	4.17E-03
7557	643936.2	4168548.9	Worker	Scenario 4	1.21E-01	2.01E-03	3.71E-03
7558	644036.2	4168548.9	Worker	Scenario 4	1.16E-01	1.92E-03	3.12E-03
7559	644136.2	4168548.9	Worker	Scenario 4	1.11E-01	1.84E-03	2.64E-03
7560	644236.2	4168548.9	Worker	Scenario 4	1.07E-01	1.77E-03	2.46E-03
7561	644336.2	4168548.9	Worker	Scenario 4	1.03E-01	1.70E-03	2.35E-03
7562	644436.2	4168548.9	Worker	Scenario 4	9.99E-02	1.64E-03	2.25E-03
7563	644536.2	4168548.9	Worker	Scenario 4	9.66E-02	1.58E-03	2.15E-03
7564	644636.2	4168548.9	Worker	Scenario 4	9.36E-02	1.52E-03	2.10E-03
7565	644736.2	4168548.9	Worker	Scenario 4	9.08E-02	1.47E-03	1.98E-03
7566	645436.2	4168548.9	Worker	Scenario 4	7.48E-02	1.18E-03	1.60E-03
7567	645536.2	4168548.9	Worker	Scenario 4	7.28E-02	1.15E-03	1.54E-03
7568	645636.2	4168548.9	Worker	Scenario 4	7.08E-02	1.11E-03	1.50E-03
7569	645736.2	4168548.9	Worker	Scenario 4	6.88E-02	1.08E-03	1.46E-03
7570	645836.2	4168548.9	Worker	Scenario 4	6.70E-02	1.05E-03	1.40E-03
7571	645936.2	4168548.9	Worker	Scenario 4	6.51E-02	1.02E-03	1.37E-03
7572	646036.2	4168548.9	Worker	Scenario 4	6.34E-02	9.88E-04	1.33E-03
7573	646236.2	4168548.9	Worker	Scenario 4	6.00E-02	9.34E-04	1.25E-03
7574	646336.2	4168548.9	Worker	Scenario 4	5.84E-02	9.08E-04	1.23E-03
7575	646436.2	4168548.9	Worker	Scenario 4	5.70E-02	8.84E-04	1.19E-03
7576	646536.2	4168548.9	Worker	Scenario 4	5.55E-02	8.61E-04	1.14E-03
7577	646636.2	4168548.9	Worker	Scenario 4	5.41E-02	8.39E-04	1.08E-03
7578	635736.2	4168648.9	Worker	Scenario 4	6.13E-03	2.11E-04	1.21E-03
7579	635836.2	4168648.9	Worker	Scenario 4	6.43E-03	2.20E-04	1.29E-03
7580	635936.2	4168648.9	Worker	Scenario 4	6.71E-03	2.28E-04	1.34E-03
7581	636036.2	4168648.9	Worker	Scenario 4	7.07E-03	2.37E-04	1.39E-03
7582	636136.2	4168648.9	Worker	Scenario 4	8.02E-03	2.60E-04	1.49E-03
7583	636236.2	4168648.9	Worker	Scenario 4	7.94E-03	2.60E-04	1.42E-03
7584	636336.2	4168648.9	Worker	Scenario 4	8.38E-03	2.71E-04	1.50E-03
7585	636436.2	4168648.9	Worker	Scenario 4	8.95E-03	2.86E-04	1.80E-03
7586	636536.2	4168648.9	Worker	Scenario 4	9.34E-03	2.96E-04	1.94E-03
7587	636636.2	4168648.9	Worker	Scenario 4	9.67E-03	3.07E-04	2.01E-03
7588	636736.2	4168648.9	Worker	Scenario 4	1.02E-02	3.22E-04	2.12E-03
7589	636836.2	4168648.9	Worker	Scenario 4	1.11E-02	3.44E-04	2.24E-03
7590	636936.2	4168648.9	Worker	Scenario 4	1.20E-02	3.68E-04	2.27E-03
7591	637036.2	4168648.9	Worker	Scenario 4	1.31E-02	3.96E-04	2.44E-03
7592	637136.2	4168648.9	Worker	Scenario 4	1.34E-02	4.08E-04	2.59E-03
7593	637236.2	4168648.9	Worker	Scenario 4	1.45E-02	4.37E-04	2.64E-03
7594	637336.2	4168648.9	Worker	Scenario 4	1.64E-02	4.89E-04	2.52E-03
7595	637436.2	4168648.9	Worker	Scenario 4	1.83E-02	5.39E-04	2.35E-03
7596	637536.2	4168648.9	Worker	Scenario 4	1.93E-02	5.71E-04	2.42E-03
7597	637636.2	4168648.9	Worker	Scenario 4	1.91E-02	5.75E-04	2.80E-03
7598	637736.2	4168648.9	Worker	Scenario 4	2.07E-02	6.25E-04	2.78E-03
7599	637836.2	4168648.9	Worker	Scenario 4	2.32E-02	6.99E-04	2.50E-03
7600	637936.2	4168648.9	Worker	Scenario 4	2.52E-02	7.62E-04	2.51E-03
7601	638036.2	4168648.9	Worker	Scenario 4	2.79E-02	8.45E-04	2.47E-03
7602	638136.2	4168648.9	Worker	Scenario 4	3.02E-02	9.21E-04	2.57E-03
7603	638236.2	4168648.9	Worker	Scenario 4	3.48E-02	1.06E-03	1.88E-03
7604	638336.2	4168648.9	Worker	Scenario 4	3.95E-02	1.21E-03	1.90E-03
7605	638436.2	4168648.9	Worker	Scenario 4	4.69E-02	1.45E-03	1.86E-03
7606	638536.2	4168648.9	Worker	Scenario 4	5.06E-02	1.62E-03	1.86E-03
7607	642136.2	4168648.9	Worker	Scenario 4	3.47E-01	6.04E-03	7.15E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7608	642236.2	4168648.9	Worker	Scenario 4	3.16E-01	5.49E-03	6.84E-03
7609	642336.2	4168648.9	Worker	Scenario 4	2.88E-01	5.01E-03	6.39E-03
7610	642436.2	4168648.9	Worker	Scenario 4	2.66E-01	4.62E-03	6.16E-03
7611	642536.2	4168648.9	Worker	Scenario 4	2.47E-01	4.26E-03	6.07E-03
7612	642636.2	4168648.9	Worker	Scenario 4	2.31E-01	3.96E-03	5.55E-03
7613	642736.2	4168648.9	Worker	Scenario 4	2.16E-01	3.70E-03	5.31E-03
7614	642836.2	4168648.9	Worker	Scenario 4	2.03E-01	3.46E-03	5.08E-03
7615	642936.2	4168648.9	Worker	Scenario 4	1.91E-01	3.25E-03	4.81E-03
7616	643036.2	4168648.9	Worker	Scenario 4	1.80E-01	3.05E-03	4.55E-03
7617	643136.2	4168648.9	Worker	Scenario 4	1.69E-01	2.87E-03	4.31E-03
7618	643236.2	4168648.9	Worker	Scenario 4	1.60E-01	2.70E-03	4.10E-03
7619	643336.2	4168648.9	Worker	Scenario 4	1.51E-01	2.55E-03	3.91E-03
7620	643436.2	4168648.9	Worker	Scenario 4	1.43E-01	2.41E-03	3.72E-03
7621	643536.2	4168648.9	Worker	Scenario 4	1.35E-01	2.28E-03	3.52E-03
7622	643636.2	4168648.9	Worker	Scenario 4	1.29E-01	2.17E-03	3.43E-03
7623	643736.2	4168648.9	Worker	Scenario 4	1.24E-01	2.08E-03	3.72E-03
7624	643836.2	4168648.9	Worker	Scenario 4	1.19E-01	1.99E-03	4.05E-03
7625	643936.2	4168648.9	Worker	Scenario 4	1.14E-01	1.90E-03	4.09E-03
7626	644036.2	4168648.9	Worker	Scenario 4	1.09E-01	1.82E-03	3.87E-03
7627	644136.2	4168648.9	Worker	Scenario 4	1.05E-01	1.75E-03	3.46E-03
7628	644236.2	4168648.9	Worker	Scenario 4	1.01E-01	1.68E-03	2.94E-03
7629	644336.2	4168648.9	Worker	Scenario 4	9.78E-02	1.62E-03	2.46E-03
7630	644436.2	4168648.9	Worker	Scenario 4	9.45E-02	1.56E-03	2.27E-03
7631	644536.2	4168648.9	Worker	Scenario 4	9.13E-02	1.50E-03	2.13E-03
7632	644636.2	4168648.9	Worker	Scenario 4	8.84E-02	1.45E-03	2.03E-03
7633	644736.2	4168648.9	Worker	Scenario 4	8.57E-02	1.40E-03	1.98E-03
7634	644836.2	4168648.9	Worker	Scenario 4	8.31E-02	1.35E-03	1.90E-03
7635	644936.2	4168648.9	Worker	Scenario 4	8.08E-02	1.31E-03	1.84E-03
7636	645036.2	4168648.9	Worker	Scenario 4	7.86E-02	1.27E-03	1.73E-03
7637	645136.2	4168648.9	Worker	Scenario 4	7.66E-02	1.23E-03	1.68E-03
7638	645236.2	4168648.9	Worker	Scenario 4	7.47E-02	1.20E-03	1.67E-03
7639	645336.2	4168648.9	Worker	Scenario 4	7.28E-02	1.16E-03	1.62E-03
7640	645436.2	4168648.9	Worker	Scenario 4	7.09E-02	1.13E-03	1.54E-03
7641	645536.2	4168648.9	Worker	Scenario 4	6.91E-02	1.10E-03	1.50E-03
7642	645636.2	4168648.9	Worker	Scenario 4	6.73E-02	1.07E-03	1.49E-03
7643	645736.2	4168648.9	Worker	Scenario 4	6.56E-02	1.04E-03	1.49E-03
7644	645836.2	4168648.9	Worker	Scenario 4	6.39E-02	1.01E-03	1.46E-03
7645	645936.2	4168648.9	Worker	Scenario 4	6.22E-02	9.80E-04	1.40E-03
7646	646036.2	4168648.9	Worker	Scenario 4	6.06E-02	9.52E-04	1.33E-03
7647	646236.2	4168648.9	Worker	Scenario 4	5.75E-02	9.01E-04	1.23E-03
7648	646336.2	4168648.9	Worker	Scenario 4	5.61E-02	8.78E-04	1.21E-03
7649	646436.2	4168648.9	Worker	Scenario 4	5.47E-02	8.55E-04	1.18E-03
7650	646536.2	4168648.9	Worker	Scenario 4	5.34E-02	8.33E-04	1.13E-03
7651	635736.2	4168748.9	Worker	Scenario 4	6.23E-03	2.13E-04	1.14E-03
7652	635836.2	4168748.9	Worker	Scenario 4	6.51E-03	2.21E-04	1.14E-03
7653	635936.2	4168748.9	Worker	Scenario 4	6.87E-03	2.31E-04	1.15E-03
7654	636036.2	4168748.9	Worker	Scenario 4	7.26E-03	2.40E-04	1.23E-03
7655	636136.2	4168748.9	Worker	Scenario 4	7.65E-03	2.51E-04	1.42E-03
7656	636236.2	4168748.9	Worker	Scenario 4	8.12E-03	2.63E-04	1.63E-03
7657	636336.2	4168748.9	Worker	Scenario 4	8.65E-03	2.76E-04	1.82E-03
7658	636436.2	4168748.9	Worker	Scenario 4	9.44E-03	2.96E-04	2.00E-03
7659	636536.2	4168748.9	Worker	Scenario 4	1.07E-02	3.26E-04	2.03E-03
7660	636636.2	4168748.9	Worker	Scenario 4	1.04E-02	3.21E-04	2.11E-03
7661	636736.2	4168748.9	Worker	Scenario 4	1.07E-02	3.31E-04	2.16E-03
7662	636836.2	4168748.9	Worker	Scenario 4	1.11E-02	3.45E-04	2.28E-03
7663	636936.2	4168748.9	Worker	Scenario 4	1.19E-02	3.66E-04	2.37E-03
7664	637036.2	4168748.9	Worker	Scenario 4	1.28E-02	3.89E-04	2.50E-03
7665	637136.2	4168748.9	Worker	Scenario 4	1.44E-02	4.30E-04	2.56E-03
7666	637236.2	4168748.9	Worker	Scenario 4	1.55E-02	4.61E-04	2.50E-03
7667	637336.2	4168748.9	Worker	Scenario 4	1.70E-02	5.03E-04	2.49E-03
7668	637436.2	4168748.9	Worker	Scenario 4	1.84E-02	5.42E-04	2.47E-03
7669	637536.2	4168748.9	Worker	Scenario 4	2.01E-02	5.92E-04	2.25E-03
7670	637636.2	4168748.9	Worker	Scenario 4	2.06E-02	6.13E-04	2.37E-03
7671	637736.2	4168748.9	Worker	Scenario 4	2.24E-02	6.69E-04	2.49E-03
7672	637836.2	4168748.9	Worker	Scenario 4	2.47E-02	7.40E-04	2.44E-03
7673	637936.2	4168748.9	Worker	Scenario 4	2.71E-02	8.16E-04	2.48E-03
7674	638036.2	4168748.9	Worker	Scenario 4	2.98E-02	9.01E-04	2.53E-03
7675	638136.2	4168748.9	Worker	Scenario 4	3.31E-02	1.01E-03	2.38E-03
7676	638236.2	4168748.9	Worker	Scenario 4	3.75E-02	1.15E-03	1.67E-03
7677	638336.2	4168748.9	Worker	Scenario 4	4.35E-02	1.35E-03	1.67E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7678	638436.2	4168748.9	Worker	Scenario 4	5.23E-02	1.65E-03	1.90E-03
7679	641936.2	4168748.9	Worker	Scenario 4	3.41E-01	6.30E-03	9.40E-03
7680	642036.2	4168748.9	Worker	Scenario 4	3.11E-01	5.70E-03	6.53E-03
7681	642136.2	4168748.9	Worker	Scenario 4	2.86E-01	5.20E-03	6.61E-03
7682	642236.2	4168748.9	Worker	Scenario 4	2.65E-01	4.78E-03	6.28E-03
7683	642336.2	4168748.9	Worker	Scenario 4	2.47E-01	4.43E-03	5.99E-03
7684	642436.2	4168748.9	Worker	Scenario 4	2.32E-01	4.12E-03	5.75E-03
7685	642536.2	4168748.9	Worker	Scenario 4	2.18E-01	3.84E-03	5.51E-03
7686	642636.2	4168748.9	Worker	Scenario 4	2.05E-01	3.59E-03	5.38E-03
7687	642736.2	4168748.9	Worker	Scenario 4	1.94E-01	3.37E-03	5.01E-03
7688	642836.2	4168748.9	Worker	Scenario 4	1.83E-01	3.17E-03	4.78E-03
7689	642936.2	4168748.9	Worker	Scenario 4	1.73E-01	2.99E-03	4.59E-03
7690	643036.2	4168748.9	Worker	Scenario 4	1.64E-01	2.82E-03	4.37E-03
7691	643136.2	4168748.9	Worker	Scenario 4	1.56E-01	2.66E-03	4.12E-03
7692	643236.2	4168748.9	Worker	Scenario 4	1.48E-01	2.52E-03	3.87E-03
7693	643336.2	4168748.9	Worker	Scenario 4	1.40E-01	2.38E-03	3.77E-03
7694	643436.2	4168748.9	Worker	Scenario 4	1.33E-01	2.26E-03	3.62E-03
7695	643536.2	4168748.9	Worker	Scenario 4	1.26E-01	2.15E-03	3.42E-03
7696	643636.2	4168748.9	Worker	Scenario 4	1.21E-01	2.05E-03	3.29E-03
7697	643736.2	4168748.9	Worker	Scenario 4	1.16E-01	1.96E-03	3.16E-03
7698	643836.2	4168748.9	Worker	Scenario 4	1.12E-01	1.88E-03	3.16E-03
7699	643936.2	4168748.9	Worker	Scenario 4	1.07E-01	1.80E-03	3.58E-03
7700	644036.2	4168748.9	Worker	Scenario 4	1.03E-01	1.73E-03	3.82E-03
7701	644136.2	4168748.9	Worker	Scenario 4	9.94E-02	1.66E-03	3.83E-03
7702	644236.2	4168748.9	Worker	Scenario 4	9.58E-02	1.59E-03	3.61E-03
7703	644336.2	4168748.9	Worker	Scenario 4	9.25E-02	1.54E-03	3.24E-03
7704	644436.2	4168748.9	Worker	Scenario 4	8.95E-02	1.48E-03	2.78E-03
7705	644536.2	4168748.9	Worker	Scenario 4	8.65E-02	1.43E-03	2.31E-03
7706	644636.2	4168748.9	Worker	Scenario 4	8.37E-02	1.38E-03	2.10E-03
7707	644736.2	4168748.9	Worker	Scenario 4	8.11E-02	1.33E-03	1.95E-03
7708	644836.2	4168748.9	Worker	Scenario 4	7.87E-02	1.29E-03	1.88E-03
7709	644936.2	4168748.9	Worker	Scenario 4	7.65E-02	1.25E-03	1.82E-03
7710	645036.2	4168748.9	Worker	Scenario 4	7.44E-02	1.21E-03	1.75E-03
7711	645136.2	4168748.9	Worker	Scenario 4	7.25E-02	1.18E-03	1.71E-03
7712	645236.2	4168748.9	Worker	Scenario 4	7.07E-02	1.14E-03	1.64E-03
7713	645336.2	4168748.9	Worker	Scenario 4	6.90E-02	1.11E-03	1.53E-03
7714	645436.2	4168748.9	Worker	Scenario 4	6.73E-02	1.08E-03	1.52E-03
7715	645536.2	4168748.9	Worker	Scenario 4	6.57E-02	1.05E-03	1.51E-03
7716	645636.2	4168748.9	Worker	Scenario 4	6.41E-02	1.02E-03	1.46E-03
7717	645736.2	4168748.9	Worker	Scenario 4	6.25E-02	9.97E-04	1.39E-03
7718	645836.2	4168748.9	Worker	Scenario 4	6.10E-02	9.70E-04	1.37E-03
7719	645936.2	4168748.9	Worker	Scenario 4	5.95E-02	9.44E-04	1.40E-03
7720	646036.2	4168748.9	Worker	Scenario 4	5.80E-02	9.18E-04	1.40E-03
7721	646236.2	4168748.9	Worker	Scenario 4	5.51E-02	8.70E-04	1.34E-03
7722	646336.2	4168748.9	Worker	Scenario 4	5.38E-02	8.48E-04	1.27E-03
7723	646436.2	4168748.9	Worker	Scenario 4	5.25E-02	8.27E-04	1.20E-03
7724	646536.2	4168748.9	Worker	Scenario 4	5.13E-02	8.06E-04	1.13E-03
7725	635736.2	4168848.9	Worker	Scenario 4	6.39E-03	2.16E-04	1.09E-03
7726	635836.2	4168848.9	Worker	Scenario 4	6.68E-03	2.24E-04	1.25E-03
7727	635936.2	4168848.9	Worker	Scenario 4	7.01E-03	2.34E-04	1.41E-03
7728	636036.2	4168848.9	Worker	Scenario 4	7.68E-03	2.49E-04	1.64E-03
7729	636136.2	4168848.9	Worker	Scenario 4	7.91E-03	2.56E-04	1.71E-03
7730	636236.2	4168848.9	Worker	Scenario 4	8.27E-03	2.66E-04	1.79E-03
7731	636336.2	4168848.9	Worker	Scenario 4	8.69E-03	2.78E-04	1.84E-03
7732	636436.2	4168848.9	Worker	Scenario 4	9.20E-03	2.91E-04	1.87E-03
7733	636536.2	4168848.9	Worker	Scenario 4	9.76E-03	3.06E-04	2.01E-03
7734	636636.2	4168848.9	Worker	Scenario 4	1.08E-02	3.30E-04	2.16E-03
7735	636736.2	4168848.9	Worker	Scenario 4	1.24E-02	3.69E-04	2.29E-03
7736	636836.2	4168848.9	Worker	Scenario 4	1.20E-02	3.64E-04	2.39E-03
7737	636936.2	4168848.9	Worker	Scenario 4	1.25E-02	3.77E-04	2.38E-03
7738	637036.2	4168848.9	Worker	Scenario 4	1.33E-02	4.00E-04	2.37E-03
7739	637136.2	4168848.9	Worker	Scenario 4	1.42E-02	4.25E-04	2.43E-03
7740	637236.2	4168848.9	Worker	Scenario 4	1.54E-02	4.57E-04	2.34E-03
7741	637336.2	4168848.9	Worker	Scenario 4	1.67E-02	4.93E-04	2.20E-03
7742	637436.2	4168848.9	Worker	Scenario 4	1.85E-02	5.45E-04	2.37E-03
7743	637536.2	4168848.9	Worker	Scenario 4	2.10E-02	6.13E-04	2.20E-03
7744	637636.2	4168848.9	Worker	Scenario 4	2.21E-02	6.51E-04	2.37E-03
7745	637736.2	4168848.9	Worker	Scenario 4	2.39E-02	7.06E-04	2.53E-03
7746	637836.2	4168848.9	Worker	Scenario 4	2.68E-02	7.93E-04	2.34E-03
7747	637936.2	4168848.9	Worker	Scenario 4	2.97E-02	8.87E-04	2.08E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7748	638036.2	4168848.9	Worker	Scenario 4	3.23E-02	9.76E-04	2.12E-03
7749	638136.2	4168848.9	Worker	Scenario 4	3.61E-02	1.10E-03	1.84E-03
7750	638236.2	4168848.9	Worker	Scenario 4	4.12E-02	1.28E-03	1.74E-03
7751	641636.2	4168848.9	Worker	Scenario 4	3.72E-01	8.13E-03	6.90E-03
7752	641736.2	4168848.9	Worker	Scenario 4	3.38E-01	7.00E-03	6.82E-03
7753	641836.2	4168848.9	Worker	Scenario 4	3.08E-01	6.18E-03	8.82E-03
7754	641936.2	4168848.9	Worker	Scenario 4	2.84E-01	5.55E-03	9.87E-03
7755	642036.2	4168848.9	Worker	Scenario 4	2.62E-01	5.02E-03	6.05E-03
7756	642136.2	4168848.9	Worker	Scenario 4	2.44E-01	4.61E-03	5.97E-03
7757	642236.2	4168848.9	Worker	Scenario 4	2.28E-01	4.26E-03	5.82E-03
7758	642336.2	4168848.9	Worker	Scenario 4	2.15E-01	3.96E-03	5.62E-03
7759	642436.2	4168848.9	Worker	Scenario 4	2.03E-01	3.70E-03	5.33E-03
7760	642536.2	4168848.9	Worker	Scenario 4	1.93E-01	3.47E-03	5.17E-03
7761	642636.2	4168848.9	Worker	Scenario 4	1.83E-01	3.27E-03	4.93E-03
7762	642736.2	4168848.9	Worker	Scenario 4	1.74E-01	3.08E-03	4.75E-03
7763	642836.2	4168848.9	Worker	Scenario 4	1.65E-01	2.91E-03	4.53E-03
7764	642936.2	4168848.9	Worker	Scenario 4	1.57E-01	2.75E-03	4.33E-03
7765	643036.2	4168848.9	Worker	Scenario 4	1.50E-01	2.61E-03	4.16E-03
7766	643136.2	4168848.9	Worker	Scenario 4	1.43E-01	2.47E-03	3.99E-03
7767	643236.2	4168848.9	Worker	Scenario 4	1.36E-01	2.35E-03	3.73E-03
7768	643336.2	4168848.9	Worker	Scenario 4	1.30E-01	2.23E-03	3.47E-03
7769	643436.2	4168848.9	Worker	Scenario 4	1.24E-01	2.12E-03	3.44E-03
7770	643536.2	4168848.9	Worker	Scenario 4	1.18E-01	2.02E-03	3.35E-03
7771	643636.2	4168848.9	Worker	Scenario 4	1.13E-01	1.93E-03	3.19E-03
7772	643736.2	4168848.9	Worker	Scenario 4	1.09E-01	1.85E-03	3.06E-03
7773	643836.2	4168848.9	Worker	Scenario 4	1.05E-01	1.77E-03	2.91E-03
7774	643936.2	4168848.9	Worker	Scenario 4	1.01E-01	1.70E-03	2.84E-03
7775	644036.2	4168848.9	Worker	Scenario 4	9.73E-02	1.64E-03	3.05E-03
7776	644136.2	4168848.9	Worker	Scenario 4	9.38E-02	1.57E-03	3.43E-03
7777	644236.2	4168848.9	Worker	Scenario 4	9.05E-02	1.51E-03	3.62E-03
7778	644336.2	4168848.9	Worker	Scenario 4	8.74E-02	1.46E-03	3.60E-03
7779	644436.2	4168848.9	Worker	Scenario 4	8.46E-02	1.41E-03	3.39E-03
7780	644536.2	4168848.9	Worker	Scenario 4	8.19E-02	1.36E-03	3.05E-03
7781	644836.2	4168848.9	Worker	Scenario 4	7.47E-02	1.23E-03	1.94E-03
7782	644936.2	4168848.9	Worker	Scenario 4	7.25E-02	1.19E-03	1.81E-03
7783	645036.2	4168848.9	Worker	Scenario 4	7.06E-02	1.16E-03	1.74E-03
7784	645136.2	4168848.9	Worker	Scenario 4	6.88E-02	1.13E-03	1.66E-03
7785	645236.2	4168848.9	Worker	Scenario 4	6.70E-02	1.09E-03	1.63E-03
7786	645336.2	4168848.9	Worker	Scenario 4	6.54E-02	1.07E-03	1.57E-03
7787	645436.2	4168848.9	Worker	Scenario 4	6.39E-02	1.04E-03	1.53E-03
7788	645536.2	4168848.9	Worker	Scenario 4	6.24E-02	1.01E-03	1.46E-03
7789	645636.2	4168848.9	Worker	Scenario 4	6.09E-02	9.84E-04	1.37E-03
7790	645736.2	4168848.9	Worker	Scenario 4	5.95E-02	9.58E-04	1.38E-03
7791	645836.2	4168848.9	Worker	Scenario 4	5.81E-02	9.33E-04	1.39E-03
7792	645936.2	4168848.9	Worker	Scenario 4	5.68E-02	9.09E-04	1.35E-03
7793	646036.2	4168848.9	Worker	Scenario 4	5.55E-02	8.86E-04	1.29E-03
7794	646236.2	4168848.9	Worker	Scenario 4	5.28E-02	8.40E-04	1.31E-03
7795	646336.2	4168848.9	Worker	Scenario 4	5.16E-02	8.19E-04	1.32E-03
7796	646436.2	4168848.9	Worker	Scenario 4	5.04E-02	7.99E-04	1.31E-03
7797	635736.2	4168948.9	Worker	Scenario 4	6.56E-03	2.20E-04	1.36E-03
7798	635836.2	4168948.9	Worker	Scenario 4	6.88E-03	2.28E-04	1.47E-03
7799	635936.2	4168948.9	Worker	Scenario 4	7.32E-03	2.40E-04	1.58E-03
7800	636036.2	4168948.9	Worker	Scenario 4	7.87E-03	2.53E-04	1.66E-03
7801	636136.2	4168948.9	Worker	Scenario 4	8.17E-03	2.62E-04	1.64E-03
7802	636236.2	4168948.9	Worker	Scenario 4	8.89E-03	2.80E-04	1.84E-03
7803	636336.2	4168948.9	Worker	Scenario 4	9.61E-03	2.97E-04	1.94E-03
7804	636436.2	4168948.9	Worker	Scenario 4	9.97E-03	3.08E-04	2.08E-03
7805	636536.2	4168948.9	Worker	Scenario 4	1.05E-02	3.22E-04	2.18E-03
7806	636636.2	4168948.9	Worker	Scenario 4	1.11E-02	3.38E-04	2.18E-03
7807	636736.2	4168948.9	Worker	Scenario 4	1.16E-02	3.52E-04	2.13E-03
7808	636836.2	4168948.9	Worker	Scenario 4	1.29E-02	3.84E-04	2.25E-03
7809	636936.2	4168948.9	Worker	Scenario 4	1.41E-02	4.15E-04	2.16E-03
7810	637036.2	4168948.9	Worker	Scenario 4	1.44E-02	4.23E-04	2.00E-03
7811	637136.2	4168948.9	Worker	Scenario 4	1.50E-02	4.43E-04	2.23E-03
7812	637236.2	4168948.9	Worker	Scenario 4	1.61E-02	4.73E-04	2.39E-03
7813	637336.2	4168948.9	Worker	Scenario 4	1.75E-02	5.12E-04	2.39E-03
7814	637436.2	4168948.9	Worker	Scenario 4	1.90E-02	5.55E-04	2.53E-03
7815	637536.2	4168948.9	Worker	Scenario 4	2.11E-02	6.15E-04	2.59E-03
7816	637636.2	4168948.9	Worker	Scenario 4	2.35E-02	6.84E-04	2.41E-03
7817	637736.2	4168948.9	Worker	Scenario 4	2.53E-02	7.43E-04	2.42E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7818	637836.2	4168948.9	Worker	Scenario 4	2.75E-02	8.15E-04	2.33E-03
7819	637936.2	4168948.9	Worker	Scenario 4	3.19E-02	9.50E-04	1.44E-03
7820	638036.2	4168948.9	Worker	Scenario 4	3.56E-02	1.07E-03	1.61E-03
7821	638136.2	4168948.9	Worker	Scenario 4	4.03E-02	1.23E-03	1.72E-03
7822	641636.2	4168948.9	Worker	Scenario 4	3.15E-01	7.37E-03	6.32E-03
7823	641736.2	4168948.9	Worker	Scenario 4	2.87E-01	6.30E-03	6.15E-03
7824	641836.2	4168948.9	Worker	Scenario 4	2.64E-01	5.53E-03	7.25E-03
7825	641936.2	4168948.9	Worker	Scenario 4	2.45E-01	4.97E-03	9.69E-03
7826	642036.2	4168948.9	Worker	Scenario 4	2.28E-01	4.53E-03	6.87E-03
7827	642136.2	4168948.9	Worker	Scenario 4	2.14E-01	4.15E-03	5.58E-03
7828	642236.2	4168948.9	Worker	Scenario 4	2.01E-01	3.84E-03	5.43E-03
7829	642336.2	4168948.9	Worker	Scenario 4	1.90E-01	3.58E-03	5.26E-03
7830	642436.2	4168948.9	Worker	Scenario 4	1.80E-01	3.36E-03	5.05E-03
7831	642536.2	4168948.9	Worker	Scenario 4	1.72E-01	3.16E-03	4.79E-03
7832	642636.2	4168948.9	Worker	Scenario 4	1.64E-01	2.98E-03	4.66E-03
7833	642736.2	4168948.9	Worker	Scenario 4	1.57E-01	2.82E-03	4.51E-03
7834	642836.2	4168948.9	Worker	Scenario 4	1.50E-01	2.67E-03	4.19E-03
7835	642936.2	4168948.9	Worker	Scenario 4	1.43E-01	2.54E-03	4.11E-03
7836	643036.2	4168948.9	Worker	Scenario 4	1.37E-01	2.42E-03	3.95E-03
7837	643136.2	4168948.9	Worker	Scenario 4	1.31E-01	2.30E-03	3.80E-03
7838	643236.2	4168948.9	Worker	Scenario 4	1.25E-01	2.19E-03	3.69E-03
7839	643336.2	4168948.9	Worker	Scenario 4	1.20E-01	2.09E-03	3.37E-03
7840	643436.2	4168948.9	Worker	Scenario 4	1.15E-01	2.00E-03	3.29E-03
7841	643536.2	4168948.9	Worker	Scenario 4	1.10E-01	1.90E-03	3.22E-03
7842	643636.2	4168948.9	Worker	Scenario 4	1.06E-01	1.82E-03	3.09E-03
7843	643736.2	4168948.9	Worker	Scenario 4	1.02E-01	1.74E-03	2.95E-03
7844	643836.2	4168948.9	Worker	Scenario 4	9.79E-02	1.68E-03	2.84E-03
7845	643936.2	4168948.9	Worker	Scenario 4	9.48E-02	1.61E-03	2.74E-03
7846	644036.2	4168948.9	Worker	Scenario 4	9.16E-02	1.55E-03	2.64E-03
7847	644136.2	4168948.9	Worker	Scenario 4	8.85E-02	1.50E-03	2.63E-03
7848	644236.2	4168948.9	Worker	Scenario 4	8.55E-02	1.44E-03	2.98E-03
7849	644336.2	4168948.9	Worker	Scenario 4	8.27E-02	1.39E-03	3.29E-03
7850	644436.2	4168948.9	Worker	Scenario 4	8.00E-02	1.34E-03	3.43E-03
7851	644536.2	4168948.9	Worker	Scenario 4	7.76E-02	1.30E-03	3.39E-03
7852	644836.2	4168948.9	Worker	Scenario 4	7.08E-02	1.18E-03	2.51E-03
7853	644936.2	4168948.9	Worker	Scenario 4	6.89E-02	1.14E-03	2.11E-03
7854	645036.2	4168948.9	Worker	Scenario 4	6.71E-02	1.11E-03	1.82E-03
7855	645136.2	4168948.9	Worker	Scenario 4	6.52E-02	1.08E-03	1.70E-03
7856	645236.2	4168948.9	Worker	Scenario 4	6.36E-02	1.05E-03	1.60E-03
7857	645336.2	4168948.9	Worker	Scenario 4	6.20E-02	1.02E-03	1.54E-03
7858	645436.2	4168948.9	Worker	Scenario 4	6.06E-02	9.93E-04	1.51E-03
7859	645536.2	4168948.9	Worker	Scenario 4	5.92E-02	9.68E-04	1.45E-03
7860	645636.2	4168948.9	Worker	Scenario 4	5.79E-02	9.44E-04	1.42E-03
7861	645736.2	4168948.9	Worker	Scenario 4	5.66E-02	9.20E-04	1.38E-03
7862	645836.2	4168948.9	Worker	Scenario 4	5.54E-02	8.97E-04	1.30E-03
7863	646036.2	4168948.9	Worker	Scenario 4	5.29E-02	8.53E-04	1.31E-03
7864	646236.2	4168948.9	Worker	Scenario 4	5.06E-02	8.11E-04	1.28E-03
7865	646336.2	4168948.9	Worker	Scenario 4	4.95E-02	7.92E-04	1.22E-03
7866	635636.2	4169048.9	Worker	Scenario 4	6.38E-03	2.13E-04	1.30E-03
7867	635736.2	4169048.9	Worker	Scenario 4	6.64E-03	2.21E-04	1.33E-03
7868	635836.2	4169048.9	Worker	Scenario 4	7.02E-03	2.31E-04	1.36E-03
7869	635936.2	4169048.9	Worker	Scenario 4	7.60E-03	2.46E-04	1.47E-03
7870	636036.2	4169048.9	Worker	Scenario 4	8.03E-03	2.56E-04	1.50E-03
7871	636136.2	4169048.9	Worker	Scenario 4	8.37E-03	2.66E-04	1.65E-03
7872	636236.2	4169048.9	Worker	Scenario 4	8.78E-03	2.77E-04	1.76E-03
7873	636336.2	4169048.9	Worker	Scenario 4	9.30E-03	2.90E-04	1.82E-03
7874	636436.2	4169048.9	Worker	Scenario 4	9.90E-03	3.06E-04	1.81E-03
7875	636536.2	4169048.9	Worker	Scenario 4	1.06E-02	3.22E-04	1.93E-03
7876	636636.2	4169048.9	Worker	Scenario 4	1.13E-02	3.40E-04	1.93E-03
7877	636736.2	4169048.9	Worker	Scenario 4	1.23E-02	3.66E-04	1.85E-03
7878	636836.2	4169048.9	Worker	Scenario 4	1.32E-02	3.90E-04	1.98E-03
7879	636936.2	4169048.9	Worker	Scenario 4	1.39E-02	4.08E-04	2.19E-03
7880	637036.2	4169048.9	Worker	Scenario 4	1.54E-02	4.47E-04	2.20E-03
7881	637136.2	4169048.9	Worker	Scenario 4	1.72E-02	4.93E-04	2.10E-03
7882	637236.2	4169048.9	Worker	Scenario 4	1.74E-02	5.02E-04	2.47E-03
7883	637336.2	4169048.9	Worker	Scenario 4	1.84E-02	5.33E-04	2.73E-03
7884	637436.2	4169048.9	Worker	Scenario 4	2.01E-02	5.79E-04	2.71E-03
7885	637536.2	4169048.9	Worker	Scenario 4	2.18E-02	6.32E-04	2.57E-03
7886	637636.2	4169048.9	Worker	Scenario 4	2.46E-02	7.11E-04	2.06E-03
7887	637736.2	4169048.9	Worker	Scenario 4	2.69E-02	7.83E-04	1.82E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7888	637836.2	4169048.9	Worker	Scenario 4	2.98E-02	8.74E-04	1.86E-03
7889	637936.2	4169048.9	Worker	Scenario 4	3.39E-02	1.01E-03	1.58E-03
7890	638036.2	4169048.9	Worker	Scenario 4	3.95E-02	1.19E-03	1.62E-03
7891	640236.2	4169048.9	Worker	Scenario 4	2.16E-01	6.52E-03	3.85E-03
7892	641636.2	4169048.9	Worker	Scenario 4	2.75E-01	6.72E-03	5.74E-03
7893	641736.2	4169048.9	Worker	Scenario 4	2.50E-01	5.70E-03	5.43E-03
7894	641836.2	4169048.9	Worker	Scenario 4	2.32E-01	5.01E-03	6.07E-03
7895	641936.2	4169048.9	Worker	Scenario 4	2.16E-01	4.51E-03	9.07E-03
7896	642036.2	4169048.9	Worker	Scenario 4	2.03E-01	4.11E-03	7.77E-03
7897	642136.2	4169048.9	Worker	Scenario 4	1.91E-01	3.78E-03	4.77E-03
7898	642236.2	4169048.9	Worker	Scenario 4	1.80E-01	3.50E-03	4.92E-03
7899	642336.2	4169048.9	Worker	Scenario 4	1.70E-01	3.27E-03	4.88E-03
7900	642436.2	4169048.9	Worker	Scenario 4	1.62E-01	3.06E-03	4.67E-03
7901	642536.2	4169048.9	Worker	Scenario 4	1.55E-01	2.89E-03	4.56E-03
7902	642636.2	4169048.9	Worker	Scenario 4	1.48E-01	2.74E-03	4.39E-03
7903	642736.2	4169048.9	Worker	Scenario 4	1.42E-01	2.60E-03	4.20E-03
7904	642836.2	4169048.9	Worker	Scenario 4	1.36E-01	2.47E-03	4.17E-03
7905	642936.2	4169048.9	Worker	Scenario 4	1.31E-01	2.35E-03	3.70E-03
7906	643036.2	4169048.9	Worker	Scenario 4	1.25E-01	2.24E-03	3.74E-03
7907	643136.2	4169048.9	Worker	Scenario 4	1.21E-01	2.14E-03	3.62E-03
7908	643236.2	4169048.9	Worker	Scenario 4	1.16E-01	2.05E-03	3.49E-03
7909	643336.2	4169048.9	Worker	Scenario 4	1.11E-01	1.96E-03	3.41E-03
7910	643436.2	4169048.9	Worker	Scenario 4	1.07E-01	1.88E-03	3.09E-03
7911	643536.2	4169048.9	Worker	Scenario 4	1.03E-01	1.80E-03	3.09E-03
7912	643636.2	4169048.9	Worker	Scenario 4	9.87E-02	1.72E-03	2.97E-03
7913	643736.2	4169048.9	Worker	Scenario 4	9.50E-02	1.65E-03	2.88E-03
7914	643836.2	4169048.9	Worker	Scenario 4	9.18E-02	1.59E-03	2.78E-03
7915	643936.2	4169048.9	Worker	Scenario 4	8.89E-02	1.53E-03	2.66E-03
7916	644036.2	4169048.9	Worker	Scenario 4	8.62E-02	1.47E-03	2.56E-03
7917	644236.2	4169048.9	Worker	Scenario 4	8.08E-02	1.37E-03	2.42E-03
7918	644336.2	4169048.9	Worker	Scenario 4	7.82E-02	1.32E-03	2.53E-03
7919	644436.2	4169048.9	Worker	Scenario 4	7.59E-02	1.28E-03	2.91E-03
7920	644836.2	4169048.9	Worker	Scenario 4	6.74E-02	1.13E-03	3.01E-03
7921	644936.2	4169048.9	Worker	Scenario 4	6.55E-02	1.09E-03	2.73E-03
7922	645036.2	4169048.9	Worker	Scenario 4	6.38E-02	1.06E-03	2.39E-03
7923	645136.2	4169048.9	Worker	Scenario 4	6.21E-02	1.03E-03	2.03E-03
7924	645236.2	4169048.9	Worker	Scenario 4	6.05E-02	1.00E-03	1.73E-03
7925	645336.2	4169048.9	Worker	Scenario 4	5.90E-02	9.77E-04	1.60E-03
7926	645436.2	4169048.9	Worker	Scenario 4	5.76E-02	9.52E-04	1.50E-03
7927	645536.2	4169048.9	Worker	Scenario 4	5.63E-02	9.29E-04	1.44E-03
7928	645636.2	4169048.9	Worker	Scenario 4	5.51E-02	9.07E-04	1.39E-03
7929	645736.2	4169048.9	Worker	Scenario 4	5.39E-02	8.85E-04	1.37E-03
7930	645836.2	4169048.9	Worker	Scenario 4	5.28E-02	8.64E-04	1.32E-03
7931	645936.2	4169048.9	Worker	Scenario 4	5.17E-02	8.43E-04	1.30E-03
7932	646036.2	4169048.9	Worker	Scenario 4	5.06E-02	8.23E-04	1.25E-03
7933	646236.2	4169048.9	Worker	Scenario 4	4.84E-02	7.84E-04	1.22E-03
7934	635636.2	4169148.9	Worker	Scenario 4	7.43E-03	2.34E-04	1.53E-03
7935	635736.2	4169148.9	Worker	Scenario 4	7.12E-03	2.30E-04	1.33E-03
7936	635836.2	4169148.9	Worker	Scenario 4	7.24E-03	2.35E-04	1.37E-03
7937	635936.2	4169148.9	Worker	Scenario 4	7.70E-03	2.46E-04	1.46E-03
7938	636036.2	4169148.9	Worker	Scenario 4	8.16E-03	2.58E-04	1.53E-03
7939	636136.2	4169148.9	Worker	Scenario 4	8.82E-03	2.74E-04	1.60E-03
7940	636236.2	4169148.9	Worker	Scenario 4	9.44E-03	2.90E-04	1.74E-03
7941	636336.2	4169148.9	Worker	Scenario 4	9.91E-03	3.02E-04	1.73E-03
7942	636436.2	4169148.9	Worker	Scenario 4	1.04E-02	3.15E-04	1.62E-03
7943	636536.2	4169148.9	Worker	Scenario 4	1.10E-02	3.31E-04	1.67E-03
7944	636636.2	4169148.9	Worker	Scenario 4	1.16E-02	3.46E-04	1.93E-03
7945	636736.2	4169148.9	Worker	Scenario 4	1.24E-02	3.67E-04	2.09E-03
7946	636836.2	4169148.9	Worker	Scenario 4	1.33E-02	3.89E-04	2.20E-03
7947	636936.2	4169148.9	Worker	Scenario 4	1.42E-02	4.13E-04	2.35E-03
7948	637036.2	4169148.9	Worker	Scenario 4	1.53E-02	4.43E-04	2.55E-03
7949	637136.2	4169148.9	Worker	Scenario 4	1.66E-02	4.78E-04	2.69E-03
7950	637236.2	4169148.9	Worker	Scenario 4	1.85E-02	5.27E-04	2.48E-03
7951	637336.2	4169148.9	Worker	Scenario 4	2.01E-02	5.72E-04	2.24E-03
7952	637436.2	4169148.9	Worker	Scenario 4	2.12E-02	6.06E-04	2.19E-03
7953	637536.2	4169148.9	Worker	Scenario 4	2.34E-02	6.68E-04	1.81E-03
7954	637636.2	4169148.9	Worker	Scenario 4	2.57E-02	7.39E-04	1.85E-03
7955	637736.2	4169148.9	Worker	Scenario 4	2.83E-02	8.20E-04	1.85E-03
7956	637836.2	4169148.9	Worker	Scenario 4	3.17E-02	9.28E-04	1.72E-03
7957	640136.2	4169148.9	Worker	Scenario 4	2.18E-01	7.55E-03	3.50E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
7958	640236.2	4169148.9	Worker	Scenario 4	2.16E-01	7.42E-03	3.56E-03
7959	641636.2	4169148.9	Worker	Scenario 4	2.45E-01	6.09E-03	5.36E-03
7960	641736.2	4169148.9	Worker	Scenario 4	2.22E-01	5.16E-03	4.95E-03
7961	641836.2	4169148.9	Worker	Scenario 4	2.07E-01	4.55E-03	5.36E-03
7962	641936.2	4169148.9	Worker	Scenario 4	1.94E-01	4.10E-03	8.15E-03
7963	642036.2	4169148.9	Worker	Scenario 4	1.82E-01	3.74E-03	8.24E-03
7964	642136.2	4169148.9	Worker	Scenario 4	1.72E-01	3.45E-03	5.09E-03
7965	642236.2	4169148.9	Worker	Scenario 4	1.63E-01	3.20E-03	4.76E-03
7966	642336.2	4169148.9	Worker	Scenario 4	1.55E-01	2.99E-03	4.58E-03
7967	642436.2	4169148.9	Worker	Scenario 4	1.47E-01	2.81E-03	4.47E-03
7968	642536.2	4169148.9	Worker	Scenario 4	1.41E-01	2.66E-03	4.27E-03
7969	642636.2	4169148.9	Worker	Scenario 4	1.35E-01	2.53E-03	4.06E-03
7970	642736.2	4169148.9	Worker	Scenario 4	1.30E-01	2.40E-03	4.01E-03
7971	642836.2	4169148.9	Worker	Scenario 4	1.25E-01	2.29E-03	3.87E-03
7972	642936.2	4169148.9	Worker	Scenario 4	1.20E-01	2.18E-03	3.84E-03
7973	643036.2	4169148.9	Worker	Scenario 4	1.16E-01	2.09E-03	3.37E-03
7974	643136.2	4169148.9	Worker	Scenario 4	1.11E-01	2.00E-03	3.44E-03
7975	643236.2	4169148.9	Worker	Scenario 4	1.07E-01	1.92E-03	3.33E-03
7976	643336.2	4169148.9	Worker	Scenario 4	1.03E-01	1.84E-03	3.22E-03
7977	643436.2	4169148.9	Worker	Scenario 4	9.97E-02	1.77E-03	3.18E-03
7978	643536.2	4169148.9	Worker	Scenario 4	9.60E-02	1.69E-03	2.92E-03
7979	643636.2	4169148.9	Worker	Scenario 4	9.24E-02	1.63E-03	2.89E-03
7980	643736.2	4169148.9	Worker	Scenario 4	8.91E-02	1.56E-03	2.72E-03
7981	643836.2	4169148.9	Worker	Scenario 4	8.62E-02	1.50E-03	2.66E-03
7982	643936.2	4169148.9	Worker	Scenario 4	8.35E-02	1.45E-03	2.59E-03
7983	644036.2	4169148.9	Worker	Scenario 4	8.12E-02	1.40E-03	2.50E-03
7984	644136.2	4169148.9	Worker	Scenario 4	7.88E-02	1.35E-03	2.41E-03
7985	644636.2	4169148.9	Worker	Scenario 4	6.77E-02	1.14E-03	2.83E-03
7986	644736.2	4169148.9	Worker	Scenario 4	6.58E-02	1.11E-03	3.03E-03
7987	644836.2	4169148.9	Worker	Scenario 4	6.41E-02	1.08E-03	3.10E-03
7988	644936.2	4169148.9	Worker	Scenario 4	6.24E-02	1.05E-03	3.04E-03
7989	645036.2	4169148.9	Worker	Scenario 4	6.08E-02	1.02E-03	2.86E-03
7990	645136.2	4169148.9	Worker	Scenario 4	5.92E-02	9.90E-04	2.60E-03
7991	645236.2	4169148.9	Worker	Scenario 4	5.77E-02	9.63E-04	2.29E-03
7992	645336.2	4169148.9	Worker	Scenario 4	5.63E-02	9.38E-04	1.96E-03
7993	645436.2	4169148.9	Worker	Scenario 4	5.49E-02	9.14E-04	1.65E-03
7994	645536.2	4169148.9	Worker	Scenario 4	5.37E-02	8.92E-04	1.51E-03
7995	645636.2	4169148.9	Worker	Scenario 4	5.25E-02	8.72E-04	1.41E-03
7996	645736.2	4169148.9	Worker	Scenario 4	5.14E-02	8.51E-04	1.35E-03
7997	645836.2	4169148.9	Worker	Scenario 4	5.04E-02	8.32E-04	1.30E-03
7998	645936.2	4169148.9	Worker	Scenario 4	4.93E-02	8.12E-04	1.28E-03
7999	646036.2	4169148.9	Worker	Scenario 4	4.83E-02	7.93E-04	1.24E-03
8000	635636.2	4169248.9	Worker	Scenario 4	7.81E-03	2.41E-04	1.68E-03
8001	635736.2	4169248.9	Worker	Scenario 4	8.33E-03	2.53E-04	1.72E-03
8002	635836.2	4169248.9	Worker	Scenario 4	8.07E-03	2.51E-04	1.50E-03
8003	635936.2	4169248.9	Worker	Scenario 4	8.00E-03	2.51E-04	1.40E-03
8004	636036.2	4169248.9	Worker	Scenario 4	8.51E-03	2.63E-04	1.43E-03
8005	636136.2	4169248.9	Worker	Scenario 4	9.04E-03	2.77E-04	1.41E-03
8006	636236.2	4169248.9	Worker	Scenario 4	9.54E-03	2.90E-04	1.37E-03
8007	636336.2	4169248.9	Worker	Scenario 4	1.02E-02	3.07E-04	1.69E-03
8008	636436.2	4169248.9	Worker	Scenario 4	1.11E-02	3.28E-04	1.92E-03
8009	636536.2	4169248.9	Worker	Scenario 4	1.20E-02	3.52E-04	2.00E-03
8010	636636.2	4169248.9	Worker	Scenario 4	1.22E-02	3.59E-04	2.16E-03
8011	636736.2	4169248.9	Worker	Scenario 4	1.29E-02	3.77E-04	2.28E-03
8012	636836.2	4169248.9	Worker	Scenario 4	1.40E-02	4.05E-04	2.52E-03
8013	636936.2	4169248.9	Worker	Scenario 4	1.49E-02	4.29E-04	2.65E-03
8014	637036.2	4169248.9	Worker	Scenario 4	1.61E-02	4.60E-04	2.59E-03
8015	637136.2	4169248.9	Worker	Scenario 4	1.72E-02	4.91E-04	2.42E-03
8016	637236.2	4169248.9	Worker	Scenario 4	1.87E-02	5.32E-04	2.11E-03
8017	637336.2	4169248.9	Worker	Scenario 4	2.10E-02	5.93E-04	1.70E-03
8018	637436.2	4169248.9	Worker	Scenario 4	2.25E-02	6.37E-04	1.86E-03
8019	637536.2	4169248.9	Worker	Scenario 4	2.49E-02	7.06E-04	1.73E-03
8020	637636.2	4169248.9	Worker	Scenario 4	2.73E-02	7.79E-04	1.64E-03
8021	637736.2	4169248.9	Worker	Scenario 4	3.03E-02	8.74E-04	1.44E-03
8022	637936.2	4169248.9	Worker	Scenario 4	3.90E-02	1.16E-03	1.38E-03
8023	640036.2	4169248.9	Worker	Scenario 4	3.16E-01	1.61E-02	3.23E-03
8024	640136.2	4169248.9	Worker	Scenario 4	3.03E-01	1.52E-02	3.33E-03
8025	640236.2	4169248.9	Worker	Scenario 4	2.96E-01	1.46E-02	3.43E-03
8026	641636.2	4169248.9	Worker	Scenario 4	2.19E-01	5.44E-03	4.98E-03
8027	641736.2	4169248.9	Worker	Scenario 4	1.99E-01	4.64E-03	4.76E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8028	641836.2	4169248.9	Worker	Scenario 4	1.86E-01	4.11E-03	4.81E-03
8029	641936.2	4169248.9	Worker	Scenario 4	1.75E-01	3.72E-03	7.09E-03
8030	642036.2	4169248.9	Worker	Scenario 4	1.65E-01	3.41E-03	8.29E-03
8031	642136.2	4169248.9	Worker	Scenario 4	1.56E-01	3.16E-03	5.89E-03
8032	642236.2	4169248.9	Worker	Scenario 4	1.49E-01	2.94E-03	4.20E-03
8033	642336.2	4169248.9	Worker	Scenario 4	1.41E-01	2.76E-03	4.27E-03
8034	642436.2	4169248.9	Worker	Scenario 4	1.35E-01	2.60E-03	4.18E-03
8035	642536.2	4169248.9	Worker	Scenario 4	1.30E-01	2.46E-03	4.18E-03
8036	642636.2	4169248.9	Worker	Scenario 4	1.25E-01	2.34E-03	3.92E-03
8037	642736.2	4169248.9	Worker	Scenario 4	1.20E-01	2.23E-03	3.76E-03
8038	642836.2	4169248.9	Worker	Scenario 4	1.15E-01	2.13E-03	3.64E-03
8039	642936.2	4169248.9	Worker	Scenario 4	1.11E-01	2.04E-03	3.52E-03
8040	643036.2	4169248.9	Worker	Scenario 4	1.07E-01	1.95E-03	3.52E-03
8041	643136.2	4169248.9	Worker	Scenario 4	1.03E-01	1.87E-03	3.18E-03
8042	643236.2	4169248.9	Worker	Scenario 4	9.98E-02	1.80E-03	3.20E-03
8043	643336.2	4169248.9	Worker	Scenario 4	9.64E-02	1.73E-03	3.09E-03
8044	643436.2	4169248.9	Worker	Scenario 4	9.31E-02	1.66E-03	2.99E-03
8045	643536.2	4169248.9	Worker	Scenario 4	8.99E-02	1.60E-03	2.96E-03
8046	643636.2	4169248.9	Worker	Scenario 4	8.67E-02	1.54E-03	2.75E-03
8047	643736.2	4169248.9	Worker	Scenario 4	8.37E-02	1.48E-03	2.70E-03
8048	643836.2	4169248.9	Worker	Scenario 4	8.10E-02	1.42E-03	2.48E-03
8049	643936.2	4169248.9	Worker	Scenario 4	7.86E-02	1.38E-03	2.52E-03
8050	644036.2	4169248.9	Worker	Scenario 4	7.65E-02	1.33E-03	2.43E-03
8051	644136.2	4169248.9	Worker	Scenario 4	7.44E-02	1.29E-03	2.35E-03
8052	644236.2	4169248.9	Worker	Scenario 4	7.23E-02	1.24E-03	2.26E-03
8053	644636.2	4169248.9	Worker	Scenario 4	6.43E-02	1.10E-03	2.16E-03
8054	644736.2	4169248.9	Worker	Scenario 4	6.26E-02	1.06E-03	2.47E-03
8055	644836.2	4169248.9	Worker	Scenario 4	6.10E-02	1.03E-03	2.75E-03
8056	644936.2	4169248.9	Worker	Scenario 4	5.94E-02	1.00E-03	2.92E-03
8057	645036.2	4169248.9	Worker	Scenario 4	5.79E-02	9.77E-04	2.97E-03
8058	645136.2	4169248.9	Worker	Scenario 4	5.65E-02	9.50E-04	2.89E-03
8059	645236.2	4169248.9	Worker	Scenario 4	5.51E-02	9.25E-04	2.72E-03
8060	645336.2	4169248.9	Worker	Scenario 4	5.37E-02	9.01E-04	2.48E-03
8061	645436.2	4169248.9	Worker	Scenario 4	5.25E-02	8.79E-04	2.19E-03
8062	645536.2	4169248.9	Worker	Scenario 4	5.13E-02	8.58E-04	1.89E-03
8063	645636.2	4169248.9	Worker	Scenario 4	5.02E-02	8.38E-04	1.59E-03
8064	645736.2	4169248.9	Worker	Scenario 4	4.91E-02	8.19E-04	1.42E-03
8065	645836.2	4169248.9	Worker	Scenario 4	4.81E-02	8.01E-04	1.34E-03
8066	645936.2	4169248.9	Worker	Scenario 4	4.71E-02	7.83E-04	1.27E-03
8067	646036.2	4169248.9	Worker	Scenario 4	4.62E-02	7.65E-04	1.23E-03
8068	635636.2	4169348.9	Worker	Scenario 4	9.92E-03	2.82E-04	1.55E-03
8069	635736.2	4169348.9	Worker	Scenario 4	8.87E-03	2.62E-04	1.66E-03
8070	635836.2	4169348.9	Worker	Scenario 4	8.84E-03	2.64E-04	1.51E-03
8071	635936.2	4169348.9	Worker	Scenario 4	8.93E-03	2.68E-04	1.30E-03
8072	636036.2	4169348.9	Worker	Scenario 4	9.17E-03	2.75E-04	1.49E-03
8073	636136.2	4169348.9	Worker	Scenario 4	9.46E-03	2.83E-04	1.65E-03
8074	636236.2	4169348.9	Worker	Scenario 4	9.90E-03	2.95E-04	1.77E-03
8075	636336.2	4169348.9	Worker	Scenario 4	1.06E-02	3.12E-04	1.94E-03
8076	636436.2	4169348.9	Worker	Scenario 4	1.14E-02	3.31E-04	2.09E-03
8077	636536.2	4169348.9	Worker	Scenario 4	1.21E-02	3.49E-04	2.22E-03
8078	636636.2	4169348.9	Worker	Scenario 4	1.33E-02	3.80E-04	2.39E-03
8079	636736.2	4169348.9	Worker	Scenario 4	1.36E-02	3.90E-04	2.55E-03
8080	636836.2	4169348.9	Worker	Scenario 4	1.45E-02	4.15E-04	2.47E-03
8081	636936.2	4169348.9	Worker	Scenario 4	1.60E-02	4.53E-04	2.17E-03
8082	637036.2	4169348.9	Worker	Scenario 4	1.71E-02	4.82E-04	1.91E-03
8083	637136.2	4169348.9	Worker	Scenario 4	1.88E-02	5.28E-04	1.64E-03
8084	637236.2	4169348.9	Worker	Scenario 4	2.04E-02	5.71E-04	1.68E-03
8085	637336.2	4169348.9	Worker	Scenario 4	2.20E-02	6.16E-04	1.67E-03
8086	637436.2	4169348.9	Worker	Scenario 4	2.41E-02	6.75E-04	1.50E-03
8087	637536.2	4169348.9	Worker	Scenario 4	2.64E-02	7.43E-04	1.34E-03
8088	637636.2	4169348.9	Worker	Scenario 4	2.91E-02	8.25E-04	1.34E-03
8089	637836.2	4169348.9	Worker	Scenario 4	3.63E-02	1.06E-03	1.29E-03
8090	639736.2	4169348.9	Worker	Scenario 4	3.35E-01	1.75E-02	2.74E-03
8091	639836.2	4169348.9	Worker	Scenario 4	2.27E-01	9.18E-03	2.89E-03
8092	639936.2	4169348.9	Worker	Scenario 4	2.06E-01	7.79E-03	2.97E-03
8093	640036.2	4169348.9	Worker	Scenario 4	1.97E-01	7.28E-03	3.05E-03
8094	640136.2	4169348.9	Worker	Scenario 4	1.94E-01	7.09E-03	3.13E-03
8095	640236.2	4169348.9	Worker	Scenario 4	1.95E-01	7.14E-03	3.20E-03
8096	641636.2	4169348.9	Worker	Scenario 4	1.99E-01	4.84E-03	4.62E-03
8097	641736.2	4169348.9	Worker	Scenario 4	1.81E-01	4.17E-03	4.54E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8098	641836.2	4169348.9	Worker	Scenario 4	1.68E-01	3.71E-03	4.52E-03
8099	641936.2	4169348.9	Worker	Scenario 4	1.59E-01	3.38E-03	6.02E-03
8100	642036.2	4169348.9	Worker	Scenario 4	1.50E-01	3.12E-03	7.98E-03
8101	642136.2	4169348.9	Worker	Scenario 4	1.43E-01	2.90E-03	6.60E-03
8102	642236.2	4169348.9	Worker	Scenario 4	1.36E-01	2.71E-03	3.90E-03
8103	642336.2	4169348.9	Worker	Scenario 4	1.30E-01	2.55E-03	4.08E-03
8104	642436.2	4169348.9	Worker	Scenario 4	1.25E-01	2.41E-03	3.96E-03
8105	642536.2	4169348.9	Worker	Scenario 4	1.20E-01	2.28E-03	3.90E-03
8106	642636.2	4169348.9	Worker	Scenario 4	1.15E-01	2.18E-03	3.84E-03
8107	642736.2	4169348.9	Worker	Scenario 4	1.11E-01	2.08E-03	3.62E-03
8108	642836.2	4169348.9	Worker	Scenario 4	1.07E-01	1.99E-03	3.50E-03
8109	642936.2	4169348.9	Worker	Scenario 4	1.03E-01	1.90E-03	3.40E-03
8110	643036.2	4169348.9	Worker	Scenario 4	9.97E-02	1.83E-03	3.30E-03
8111	643136.2	4169348.9	Worker	Scenario 4	9.63E-02	1.76E-03	3.22E-03
8112	643236.2	4169348.9	Worker	Scenario 4	9.31E-02	1.69E-03	3.00E-03
8113	643336.2	4169348.9	Worker	Scenario 4	9.01E-02	1.63E-03	2.98E-03
8114	643436.2	4169348.9	Worker	Scenario 4	8.72E-02	1.57E-03	2.88E-03
8115	643536.2	4169348.9	Worker	Scenario 4	8.43E-02	1.51E-03	2.79E-03
8116	643636.2	4169348.9	Worker	Scenario 4	8.15E-02	1.45E-03	2.76E-03
8117	643736.2	4169348.9	Worker	Scenario 4	7.88E-02	1.40E-03	2.60E-03
8118	643836.2	4169348.9	Worker	Scenario 4	7.63E-02	1.35E-03	2.51E-03
8119	643936.2	4169348.9	Worker	Scenario 4	7.40E-02	1.31E-03	2.37E-03
8120	644036.2	4169348.9	Worker	Scenario 4	7.20E-02	1.26E-03	2.37E-03
8121	644136.2	4169348.9	Worker	Scenario 4	7.02E-02	1.23E-03	2.29E-03
8122	644236.2	4169348.9	Worker	Scenario 4	6.84E-02	1.19E-03	2.22E-03
8123	644336.2	4169348.9	Worker	Scenario 4	6.66E-02	1.15E-03	2.15E-03
8124	644636.2	4169348.9	Worker	Scenario 4	6.12E-02	1.05E-03	1.93E-03
8125	644736.2	4169348.9	Worker	Scenario 4	5.96E-02	1.02E-03	1.96E-03
8126	644836.2	4169348.9	Worker	Scenario 4	5.81E-02	9.90E-04	2.12E-03
8127	644936.2	4169348.9	Worker	Scenario 4	5.66E-02	9.63E-04	2.43E-03
8128	645036.2	4169348.9	Worker	Scenario 4	5.53E-02	9.37E-04	2.67E-03
8129	645136.2	4169348.9	Worker	Scenario 4	5.39E-02	9.12E-04	2.81E-03
8130	645236.2	4169348.9	Worker	Scenario 4	5.26E-02	8.89E-04	2.83E-03
8131	645336.2	4169348.9	Worker	Scenario 4	5.14E-02	8.66E-04	2.76E-03
8132	645436.2	4169348.9	Worker	Scenario 4	5.02E-02	8.45E-04	2.59E-03
8133	645536.2	4169348.9	Worker	Scenario 4	4.90E-02	8.25E-04	2.36E-03
8134	645636.2	4169348.9	Worker	Scenario 4	4.79E-02	8.06E-04	2.10E-03
8135	645736.2	4169348.9	Worker	Scenario 4	4.69E-02	7.88E-04	1.82E-03
8136	645836.2	4169348.9	Worker	Scenario 4	4.60E-02	7.71E-04	1.54E-03
8137	645936.2	4169348.9	Worker	Scenario 4	4.51E-02	7.54E-04	1.36E-03
8138	635636.2	4169448.9	Worker	Scenario 4	1.05E-02	2.91E-04	1.13E-03
8139	635736.2	4169448.9	Worker	Scenario 4	1.05E-02	2.93E-04	1.32E-03
8140	635836.2	4169448.9	Worker	Scenario 4	9.76E-03	2.80E-04	1.63E-03
8141	635936.2	4169448.9	Worker	Scenario 4	9.91E-03	2.86E-04	1.73E-03
8142	636036.2	4169448.9	Worker	Scenario 4	1.00E-02	2.90E-04	1.76E-03
8143	636136.2	4169448.9	Worker	Scenario 4	1.01E-02	2.95E-04	1.91E-03
8144	636236.2	4169448.9	Worker	Scenario 4	1.04E-02	3.03E-04	2.01E-03
8145	636336.2	4169448.9	Worker	Scenario 4	1.09E-02	3.16E-04	2.18E-03
8146	636436.2	4169448.9	Worker	Scenario 4	1.16E-02	3.33E-04	2.38E-03
8147	636536.2	4169448.9	Worker	Scenario 4	1.24E-02	3.54E-04	2.43E-03
8148	636636.2	4169448.9	Worker	Scenario 4	1.34E-02	3.79E-04	2.30E-03
8149	636736.2	4169448.9	Worker	Scenario 4	1.46E-02	4.10E-04	2.02E-03
8150	636836.2	4169448.9	Worker	Scenario 4	1.54E-02	4.31E-04	1.80E-03
8151	636936.2	4169448.9	Worker	Scenario 4	1.68E-02	4.68E-04	1.65E-03
8152	637036.2	4169448.9	Worker	Scenario 4	1.76E-02	4.92E-04	1.87E-03
8153	637136.2	4169448.9	Worker	Scenario 4	1.87E-02	5.24E-04	1.95E-03
8154	637236.2	4169448.9	Worker	Scenario 4	2.04E-02	5.68E-04	1.82E-03
8155	637336.2	4169448.9	Worker	Scenario 4	2.22E-02	6.20E-04	1.76E-03
8156	637436.2	4169448.9	Worker	Scenario 4	2.47E-02	6.88E-04	1.46E-03
8157	637736.2	4169448.9	Worker	Scenario 4	3.43E-02	9.75E-04	1.30E-03
8158	637836.2	4169448.9	Worker	Scenario 4	3.93E-02	1.14E-03	1.46E-03
8159	639736.2	4169448.9	Worker	Scenario 4	2.83E-01	1.42E-02	2.67E-03
8160	639836.2	4169448.9	Worker	Scenario 4	1.92E-01	7.22E-03	2.74E-03
8161	639936.2	4169448.9	Worker	Scenario 4	1.74E-01	5.91E-03	2.85E-03
8162	640036.2	4169448.9	Worker	Scenario 4	1.66E-01	5.38E-03	2.85E-03
8163	640136.2	4169448.9	Worker	Scenario 4	1.62E-01	5.15E-03	2.97E-03
8164	640236.2	4169448.9	Worker	Scenario 4	1.62E-01	5.13E-03	3.34E-03
8165	641636.2	4169448.9	Worker	Scenario 4	1.81E-01	4.35E-03	4.29E-03
8166	641736.2	4169448.9	Worker	Scenario 4	1.65E-01	3.77E-03	4.29E-03
8167	641836.2	4169448.9	Worker	Scenario 4	1.54E-01	3.38E-03	4.24E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8168	641936.2	4169448.9	Worker	Scenario 4	1.45E-01	3.08E-03	5.03E-03
8169	642036.2	4169448.9	Worker	Scenario 4	1.38E-01	2.85E-03	7.42E-03
8170	642136.2	4169448.9	Worker	Scenario 4	1.32E-01	2.66E-03	7.03E-03
8171	642236.2	4169448.9	Worker	Scenario 4	1.26E-01	2.50E-03	4.39E-03
8172	642336.2	4169448.9	Worker	Scenario 4	1.20E-01	2.36E-03	3.77E-03
8173	642436.2	4169448.9	Worker	Scenario 4	1.16E-01	2.23E-03	3.73E-03
8174	642536.2	4169448.9	Worker	Scenario 4	1.11E-01	2.13E-03	3.63E-03
8175	642636.2	4169448.9	Worker	Scenario 4	1.07E-01	2.03E-03	3.84E-03
8176	642736.2	4169448.9	Worker	Scenario 4	1.03E-01	1.94E-03	3.46E-03
8177	642836.2	4169448.9	Worker	Scenario 4	9.97E-02	1.86E-03	3.24E-03
8178	642936.2	4169448.9	Worker	Scenario 4	9.63E-02	1.78E-03	3.24E-03
8179	643036.2	4169448.9	Worker	Scenario 4	9.31E-02	1.72E-03	3.12E-03
8180	643136.2	4169448.9	Worker	Scenario 4	9.01E-02	1.65E-03	3.07E-03
8181	643236.2	4169448.9	Worker	Scenario 4	8.72E-02	1.59E-03	2.94E-03
8182	643336.2	4169448.9	Worker	Scenario 4	8.45E-02	1.53E-03	2.83E-03
8183	643436.2	4169448.9	Worker	Scenario 4	8.18E-02	1.48E-03	2.79E-03
8184	643536.2	4169448.9	Worker	Scenario 4	7.93E-02	1.43E-03	2.69E-03
8185	643636.2	4169448.9	Worker	Scenario 4	7.67E-02	1.38E-03	2.60E-03
8186	643736.2	4169448.9	Worker	Scenario 4	7.42E-02	1.33E-03	2.59E-03
8187	643836.2	4169448.9	Worker	Scenario 4	7.19E-02	1.28E-03	2.45E-03
8188	643936.2	4169448.9	Worker	Scenario 4	6.98E-02	1.24E-03	2.33E-03
8189	644036.2	4169448.9	Worker	Scenario 4	6.80E-02	1.20E-03	2.27E-03
8190	644136.2	4169448.9	Worker	Scenario 4	6.64E-02	1.17E-03	2.21E-03
8191	644236.2	4169448.9	Worker	Scenario 4	6.48E-02	1.13E-03	2.15E-03
8192	644336.2	4169448.9	Worker	Scenario 4	6.32E-02	1.10E-03	2.08E-03
8193	644636.2	4169448.9	Worker	Scenario 4	5.84E-02	1.01E-03	1.91E-03
8194	644736.2	4169448.9	Worker	Scenario 4	5.68E-02	9.78E-04	1.86E-03
8195	644836.2	4169448.9	Worker	Scenario 4	5.54E-02	9.50E-04	1.83E-03
8196	644936.2	4169448.9	Worker	Scenario 4	5.40E-02	9.24E-04	1.86E-03
8197	645036.2	4169448.9	Worker	Scenario 4	5.27E-02	9.00E-04	2.11E-03
8198	645136.2	4169448.9	Worker	Scenario 4	5.15E-02	8.76E-04	2.39E-03
8199	645236.2	4169448.9	Worker	Scenario 4	5.03E-02	8.54E-04	2.59E-03
8200	645336.2	4169448.9	Worker	Scenario 4	4.91E-02	8.33E-04	2.70E-03
8201	645436.2	4169448.9	Worker	Scenario 4	4.80E-02	8.12E-04	2.71E-03
8202	645536.2	4169448.9	Worker	Scenario 4	4.69E-02	7.93E-04	2.63E-03
8203	645636.2	4169448.9	Worker	Scenario 4	4.58E-02	7.75E-04	2.47E-03
8204	645736.2	4169448.9	Worker	Scenario 4	4.49E-02	7.58E-04	2.26E-03
8205	635636.2	4169548.9	Worker	Scenario 4	1.06E-02	2.93E-04	1.08E-03
8206	635736.2	4169548.9	Worker	Scenario 4	1.10E-02	3.02E-04	1.09E-03
8207	635836.2	4169548.9	Worker	Scenario 4	1.12E-02	3.09E-04	1.21E-03
8208	635936.2	4169548.9	Worker	Scenario 4	1.11E-02	3.08E-04	1.59E-03
8209	636036.2	4169548.9	Worker	Scenario 4	1.04E-02	2.95E-04	1.93E-03
8210	636136.2	4169548.9	Worker	Scenario 4	1.08E-02	3.06E-04	2.15E-03
8211	636236.2	4169548.9	Worker	Scenario 4	1.12E-02	3.17E-04	2.28E-03
8212	636336.2	4169548.9	Worker	Scenario 4	1.15E-02	3.26E-04	2.29E-03
8213	636436.2	4169548.9	Worker	Scenario 4	1.20E-02	3.40E-04	2.17E-03
8214	636536.2	4169548.9	Worker	Scenario 4	1.28E-02	3.60E-04	1.95E-03
8215	636636.2	4169548.9	Worker	Scenario 4	1.38E-02	3.84E-04	1.73E-03
8216	636736.2	4169548.9	Worker	Scenario 4	1.47E-02	4.07E-04	1.72E-03
8217	636836.2	4169548.9	Worker	Scenario 4	1.55E-02	4.30E-04	1.92E-03
8218	636936.2	4169548.9	Worker	Scenario 4	1.65E-02	4.58E-04	1.98E-03
8219	637036.2	4169548.9	Worker	Scenario 4	1.78E-02	4.92E-04	1.89E-03
8220	637136.2	4169548.9	Worker	Scenario 4	1.93E-02	5.33E-04	1.85E-03
8221	637236.2	4169548.9	Worker	Scenario 4	2.09E-02	5.78E-04	1.73E-03
8222	637336.2	4169548.9	Worker	Scenario 4	2.29E-02	6.34E-04	1.48E-03
8223	637536.2	4169548.9	Worker	Scenario 4	2.88E-02	7.98E-04	1.18E-03
8224	637636.2	4169548.9	Worker	Scenario 4	3.23E-02	9.01E-04	1.33E-03
8225	637736.2	4169548.9	Worker	Scenario 4	3.65E-02	1.03E-03	1.44E-03
8226	639636.2	4169548.9	Worker	Scenario 4	1.90E-01	7.20E-03	2.50E-03
8227	639736.2	4169548.9	Worker	Scenario 4	2.59E-01	1.31E-02	2.56E-03
8228	639836.2	4169548.9	Worker	Scenario 4	1.74E-01	6.49E-03	2.63E-03
8229	639936.2	4169548.9	Worker	Scenario 4	1.57E-01	5.22E-03	2.71E-03
8230	640036.2	4169548.9	Worker	Scenario 4	1.49E-01	4.69E-03	2.79E-03
8231	640136.2	4169548.9	Worker	Scenario 4	1.46E-01	4.45E-03	2.79E-03
8232	640236.2	4169548.9	Worker	Scenario 4	1.45E-01	4.38E-03	3.42E-03
8233	641536.2	4169548.9	Worker	Scenario 4	1.92E-01	4.83E-03	4.07E-03
8234	641636.2	4169548.9	Worker	Scenario 4	1.67E-01	3.95E-03	4.04E-03
8235	641736.2	4169548.9	Worker	Scenario 4	1.52E-01	3.44E-03	4.02E-03
8236	641836.2	4169548.9	Worker	Scenario 4	1.41E-01	3.08E-03	3.92E-03
8237	641936.2	4169548.9	Worker	Scenario 4	1.33E-01	2.82E-03	4.32E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8238	642036.2	4169548.9	Worker	Scenario 4	1.27E-01	2.62E-03	6.71E-03
8239	642136.2	4169548.9	Worker	Scenario 4	1.21E-01	2.46E-03	7.17E-03
8240	642236.2	4169548.9	Worker	Scenario 4	1.16E-01	2.31E-03	5.13E-03
8241	642336.2	4169548.9	Worker	Scenario 4	1.12E-01	2.19E-03	3.33E-03
8242	642436.2	4169548.9	Worker	Scenario 4	1.07E-01	2.08E-03	3.51E-03
8243	642536.2	4169548.9	Worker	Scenario 4	1.04E-01	1.98E-03	3.47E-03
8244	642636.2	4169548.9	Worker	Scenario 4	9.99E-02	1.89E-03	3.56E-03
8245	642736.2	4169548.9	Worker	Scenario 4	9.65E-02	1.82E-03	3.60E-03
8246	642836.2	4169548.9	Worker	Scenario 4	9.32E-02	1.74E-03	3.18E-03
8247	642936.2	4169548.9	Worker	Scenario 4	9.01E-02	1.68E-03	3.07E-03
8248	643036.2	4169548.9	Worker	Scenario 4	8.73E-02	1.61E-03	3.01E-03
8249	643136.2	4169548.9	Worker	Scenario 4	8.46E-02	1.56E-03	2.93E-03
8250	643236.2	4169548.9	Worker	Scenario 4	8.21E-02	1.50E-03	2.90E-03
8251	643336.2	4169548.9	Worker	Scenario 4	7.94E-02	1.45E-03	2.68E-03
8252	643436.2	4169548.9	Worker	Scenario 4	7.70E-02	1.40E-03	2.66E-03
8253	643536.2	4169548.9	Worker	Scenario 4	7.46E-02	1.35E-03	2.60E-03
8254	643636.2	4169548.9	Worker	Scenario 4	7.24E-02	1.31E-03	2.51E-03
8255	643736.2	4169548.9	Worker	Scenario 4	7.01E-02	1.26E-03	2.44E-03
8256	643836.2	4169548.9	Worker	Scenario 4	6.80E-02	1.22E-03	2.43E-03
8257	643936.2	4169548.9	Worker	Scenario 4	6.60E-02	1.18E-03	2.31E-03
8258	644036.2	4169548.9	Worker	Scenario 4	6.43E-02	1.15E-03	2.16E-03
8259	644136.2	4169548.9	Worker	Scenario 4	6.28E-02	1.11E-03	2.16E-03
8260	644236.2	4169548.9	Worker	Scenario 4	6.14E-02	1.08E-03	2.05E-03
8261	644336.2	4169548.9	Worker	Scenario 4	6.00E-02	1.05E-03	2.03E-03
8262	644436.2	4169548.9	Worker	Scenario 4	5.86E-02	1.02E-03	1.98E-03
8263	644636.2	4169548.9	Worker	Scenario 4	5.57E-02	9.66E-04	1.88E-03
8264	644736.2	4169548.9	Worker	Scenario 4	5.42E-02	9.39E-04	1.82E-03
8265	644836.2	4169548.9	Worker	Scenario 4	5.29E-02	9.13E-04	1.76E-03
8266	644936.2	4169548.9	Worker	Scenario 4	5.16E-02	8.88E-04	1.70E-03
8267	645036.2	4169548.9	Worker	Scenario 4	5.04E-02	8.65E-04	1.73E-03
8268	645136.2	4169548.9	Worker	Scenario 4	4.92E-02	8.43E-04	1.82E-03
8269	645236.2	4169548.9	Worker	Scenario 4	4.81E-02	8.22E-04	2.10E-03
8270	645336.2	4169548.9	Worker	Scenario 4	4.70E-02	8.02E-04	2.34E-03
8271	645436.2	4169548.9	Worker	Scenario 4	4.60E-02	7.82E-04	2.51E-03
8272	645536.2	4169548.9	Worker	Scenario 4	4.49E-02	7.64E-04	2.60E-03
8273	635636.2	4169648.9	Worker	Scenario 4	1.07E-02	2.92E-04	1.09E-03
8274	635736.2	4169648.9	Worker	Scenario 4	1.10E-02	3.01E-04	1.15E-03
8275	635836.2	4169648.9	Worker	Scenario 4	1.14E-02	3.11E-04	1.13E-03
8276	635936.2	4169648.9	Worker	Scenario 4	1.16E-02	3.17E-04	1.41E-03
8277	636036.2	4169648.9	Worker	Scenario 4	1.19E-02	3.24E-04	1.61E-03
8278	636136.2	4169648.9	Worker	Scenario 4	1.19E-02	3.27E-04	1.86E-03
8279	636236.2	4169648.9	Worker	Scenario 4	1.19E-02	3.29E-04	1.93E-03
8280	636336.2	4169648.9	Worker	Scenario 4	1.21E-02	3.38E-04	1.77E-03
8281	636436.2	4169648.9	Worker	Scenario 4	1.25E-02	3.47E-04	1.71E-03
8282	636536.2	4169648.9	Worker	Scenario 4	1.31E-02	3.63E-04	1.73E-03
8283	636636.2	4169648.9	Worker	Scenario 4	1.39E-02	3.84E-04	1.90E-03
8284	636736.2	4169648.9	Worker	Scenario 4	1.48E-02	4.08E-04	1.95E-03
8285	636836.2	4169648.9	Worker	Scenario 4	1.59E-02	4.35E-04	1.87E-03
8286	636936.2	4169648.9	Worker	Scenario 4	1.71E-02	4.67E-04	1.88E-03
8287	637036.2	4169648.9	Worker	Scenario 4	1.84E-02	5.02E-04	1.75E-03
8288	637136.2	4169648.9	Worker	Scenario 4	1.99E-02	5.43E-04	1.54E-03
8289	637436.2	4169648.9	Worker	Scenario 4	2.80E-02	7.60E-04	1.21E-03
8290	637536.2	4169648.9	Worker	Scenario 4	3.06E-02	8.39E-04	1.33E-03
8291	637636.2	4169648.9	Worker	Scenario 4	3.41E-02	9.42E-04	1.39E-03
8292	637736.2	4169648.9	Worker	Scenario 4	3.84E-02	1.08E-03	1.38E-03
8293	639536.2	4169648.9	Worker	Scenario 4	1.58E-01	5.13E-03	2.35E-03
8294	639636.2	4169648.9	Worker	Scenario 4	1.76E-01	6.92E-03	2.41E-03
8295	639736.2	4169648.9	Worker	Scenario 4	2.41E-01	1.24E-02	2.48E-03
8296	639836.2	4169648.9	Worker	Scenario 4	1.61E-01	6.07E-03	2.53E-03
8297	639936.2	4169648.9	Worker	Scenario 4	1.44E-01	4.79E-03	2.57E-03
8298	640036.2	4169648.9	Worker	Scenario 4	1.37E-01	4.24E-03	2.63E-03
8299	640136.2	4169648.9	Worker	Scenario 4	1.33E-01	3.98E-03	3.04E-03
8300	640236.2	4169648.9	Worker	Scenario 4	1.33E-01	3.89E-03	3.24E-03
8301	640336.2	4169648.9	Worker	Scenario 4	1.33E-01	3.90E-03	3.32E-03
8302	640836.2	4169648.9	Worker	Scenario 4	1.40E-01	3.84E-03	3.64E-03
8303	640936.2	4169648.9	Worker	Scenario 4	1.43E-01	3.87E-03	3.73E-03
8304	641036.2	4169648.9	Worker	Scenario 4	1.48E-01	3.98E-03	3.69E-03
8305	641136.2	4169648.9	Worker	Scenario 4	1.60E-01	4.33E-03	3.66E-03
8306	641236.2	4169648.9	Worker	Scenario 4	1.96E-01	5.71E-03	3.73E-03
8307	641336.2	4169648.9	Worker	Scenario 4	5.87E-01	2.08E-02	3.66E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8308	641436.2	4169648.9	Worker	Scenario 4	2.33E-01	6.38E-03	3.74E-03
8309	641536.2	4169648.9	Worker	Scenario 4	1.78E-01	4.44E-03	3.81E-03
8310	641636.2	4169648.9	Worker	Scenario 4	1.54E-01	3.61E-03	3.81E-03
8311	641736.2	4169648.9	Worker	Scenario 4	1.40E-01	3.13E-03	3.74E-03
8312	641836.2	4169648.9	Worker	Scenario 4	1.30E-01	2.82E-03	3.57E-03
8313	641936.2	4169648.9	Worker	Scenario 4	1.23E-01	2.59E-03	3.85E-03
8314	642036.2	4169648.9	Worker	Scenario 4	1.17E-01	2.42E-03	5.92E-03
8315	642136.2	4169648.9	Worker	Scenario 4	1.12E-01	2.27E-03	7.06E-03
8316	642236.2	4169648.9	Worker	Scenario 4	1.08E-01	2.15E-03	5.72E-03
8317	642336.2	4169648.9	Worker	Scenario 4	1.04E-01	2.04E-03	3.43E-03
8318	642436.2	4169648.9	Worker	Scenario 4	1.00E-01	1.94E-03	3.36E-03
8319	642536.2	4169648.9	Worker	Scenario 4	9.66E-02	1.85E-03	3.29E-03
8320	642636.2	4169648.9	Worker	Scenario 4	9.33E-02	1.77E-03	3.21E-03
8321	642736.2	4169648.9	Worker	Scenario 4	9.02E-02	1.70E-03	3.55E-03
8322	642836.2	4169648.9	Worker	Scenario 4	8.73E-02	1.64E-03	3.25E-03
8323	642936.2	4169648.9	Worker	Scenario 4	8.45E-02	1.58E-03	2.95E-03
8324	643036.2	4169648.9	Worker	Scenario 4	8.19E-02	1.52E-03	2.89E-03
8325	643136.2	4169648.9	Worker	Scenario 4	7.96E-02	1.47E-03	2.81E-03
8326	643236.2	4169648.9	Worker	Scenario 4	7.72E-02	1.42E-03	2.72E-03
8327	643336.2	4169648.9	Worker	Scenario 4	7.49E-02	1.37E-03	2.72E-03
8328	643436.2	4169648.9	Worker	Scenario 4	7.27E-02	1.33E-03	2.45E-03
8329	643536.2	4169648.9	Worker	Scenario 4	7.06E-02	1.28E-03	2.51E-03
8330	643636.2	4169648.9	Worker	Scenario 4	6.85E-02	1.24E-03	2.45E-03
8331	643736.2	4169648.9	Worker	Scenario 4	6.64E-02	1.20E-03	2.36E-03
8332	643836.2	4169648.9	Worker	Scenario 4	6.44E-02	1.16E-03	2.29E-03
8333	643936.2	4169648.9	Worker	Scenario 4	6.25E-02	1.13E-03	2.28E-03
8334	644036.2	4169648.9	Worker	Scenario 4	6.09E-02	1.09E-03	2.18E-03
8335	644136.2	4169648.9	Worker	Scenario 4	5.95E-02	1.06E-03	2.01E-03
8336	644236.2	4169648.9	Worker	Scenario 4	5.82E-02	1.03E-03	2.05E-03
8337	644336.2	4169648.9	Worker	Scenario 4	5.70E-02	1.01E-03	1.90E-03
8338	644436.2	4169648.9	Worker	Scenario 4	5.58E-02	9.81E-04	1.94E-03
8339	644636.2	4169648.9	Worker	Scenario 4	5.32E-02	9.28E-04	1.84E-03
8340	644736.2	4169648.9	Worker	Scenario 4	5.18E-02	9.02E-04	1.77E-03
8341	644836.2	4169648.9	Worker	Scenario 4	5.06E-02	8.78E-04	1.71E-03
8342	644936.2	4169648.9	Worker	Scenario 4	4.93E-02	8.55E-04	1.68E-03
8343	645036.2	4169648.9	Worker	Scenario 4	4.82E-02	8.33E-04	1.64E-03
8344	645136.2	4169648.9	Worker	Scenario 4	4.71E-02	8.12E-04	1.62E-03
8345	645236.2	4169648.9	Worker	Scenario 4	4.61E-02	7.92E-04	1.63E-03
8346	635636.2	4169748.9	Worker	Scenario 4	1.10E-02	2.98E-04	7.84E-04
8347	635736.2	4169748.9	Worker	Scenario 4	1.14E-02	3.08E-04	7.77E-04
8348	635836.2	4169748.9	Worker	Scenario 4	1.18E-02	3.17E-04	7.57E-04
8349	635936.2	4169748.9	Worker	Scenario 4	1.19E-02	3.21E-04	1.15E-03
8350	636036.2	4169748.9	Worker	Scenario 4	1.23E-02	3.32E-04	1.15E-03
8351	636136.2	4169748.9	Worker	Scenario 4	1.26E-02	3.40E-04	1.23E-03
8352	636236.2	4169748.9	Worker	Scenario 4	1.28E-02	3.47E-04	1.25E-03
8353	636336.2	4169748.9	Worker	Scenario 4	1.25E-02	3.43E-04	1.60E-03
8354	636436.2	4169748.9	Worker	Scenario 4	1.32E-02	3.60E-04	1.76E-03
8355	636536.2	4169748.9	Worker	Scenario 4	1.38E-02	3.76E-04	1.83E-03
8356	636636.2	4169748.9	Worker	Scenario 4	1.44E-02	3.92E-04	1.82E-03
8357	636736.2	4169748.9	Worker	Scenario 4	1.53E-02	4.15E-04	1.87E-03
8358	636836.2	4169748.9	Worker	Scenario 4	1.64E-02	4.43E-04	1.76E-03
8359	636936.2	4169748.9	Worker	Scenario 4	1.76E-02	4.75E-04	1.60E-03
8360	637036.2	4169748.9	Worker	Scenario 4	1.90E-02	5.10E-04	1.47E-03
8361	637236.2	4169748.9	Worker	Scenario 4	2.25E-02	6.04E-04	1.32E-03
8362	637336.2	4169748.9	Worker	Scenario 4	2.76E-02	7.25E-04	1.21E-03
8363	637436.2	4169748.9	Worker	Scenario 4	2.93E-02	7.81E-04	1.29E-03
8364	637536.2	4169748.9	Worker	Scenario 4	3.21E-02	8.66E-04	1.30E-03
8365	637636.2	4169748.9	Worker	Scenario 4	3.58E-02	9.78E-04	1.26E-03
8366	637836.2	4169748.9	Worker	Scenario 4	4.88E-02	1.36E-03	1.43E-03
8367	639336.2	4169748.9	Worker	Scenario 4	1.50E-01	4.72E-03	1.94E-03
8368	639436.2	4169748.9	Worker	Scenario 4	1.45E-01	4.68E-03	2.20E-03
8369	639536.2	4169748.9	Worker	Scenario 4	1.46E-01	5.00E-03	2.27E-03
8370	639636.2	4169748.9	Worker	Scenario 4	1.67E-01	6.88E-03	2.32E-03
8371	639736.2	4169748.9	Worker	Scenario 4	2.27E-01	1.18E-02	2.37E-03
8372	639836.2	4169748.9	Worker	Scenario 4	1.50E-01	5.76E-03	2.35E-03
8373	639936.2	4169748.9	Worker	Scenario 4	1.33E-01	4.42E-03	2.46E-03
8374	640036.2	4169748.9	Worker	Scenario 4	1.26E-01	3.86E-03	2.56E-03
8375	640136.2	4169748.9	Worker	Scenario 4	1.23E-01	3.61E-03	3.04E-03
8376	640236.2	4169748.9	Worker	Scenario 4	1.22E-01	3.49E-03	2.97E-03
8377	640336.2	4169748.9	Worker	Scenario 4	1.22E-01	3.45E-03	3.16E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8378	640436.2	4169748.9	Worker	Scenario 4	1.22E-01	3.43E-03	3.22E-03
8379	640536.2	4169748.9	Worker	Scenario 4	1.23E-01	3.41E-03	3.17E-03
8380	640636.2	4169748.9	Worker	Scenario 4	1.24E-01	3.38E-03	3.34E-03
8381	640736.2	4169748.9	Worker	Scenario 4	1.25E-01	3.35E-03	3.39E-03
8382	640836.2	4169748.9	Worker	Scenario 4	1.27E-01	3.35E-03	3.53E-03
8383	640936.2	4169748.9	Worker	Scenario 4	1.30E-01	3.39E-03	3.45E-03
8384	641036.2	4169748.9	Worker	Scenario 4	1.35E-01	3.53E-03	3.41E-03
8385	641136.2	4169748.9	Worker	Scenario 4	1.47E-01	3.90E-03	3.33E-03
8386	641236.2	4169748.9	Worker	Scenario 4	1.86E-01	5.38E-03	3.50E-03
8387	641336.2	4169748.9	Worker	Scenario 4	5.48E-01	1.92E-02	3.42E-03
8388	641436.2	4169748.9	Worker	Scenario 4	2.18E-01	5.95E-03	3.53E-03
8389	641536.2	4169748.9	Worker	Scenario 4	1.65E-01	4.07E-03	3.59E-03
8390	641636.2	4169748.9	Worker	Scenario 4	1.42E-01	3.29E-03	3.59E-03
8391	641736.2	4169748.9	Worker	Scenario 4	1.29E-01	2.86E-03	3.55E-03
8392	641836.2	4169748.9	Worker	Scenario 4	1.20E-01	2.58E-03	3.24E-03
8393	641936.2	4169748.9	Worker	Scenario 4	1.14E-01	2.38E-03	3.49E-03
8394	642036.2	4169748.9	Worker	Scenario 4	1.08E-01	2.23E-03	5.13E-03
8395	642136.2	4169748.9	Worker	Scenario 4	1.04E-01	2.11E-03	6.74E-03
8396	642236.2	4169748.9	Worker	Scenario 4	1.00E-01	2.00E-03	6.12E-03
8397	642336.2	4169748.9	Worker	Scenario 4	9.70E-02	1.90E-03	3.95E-03
8398	642436.2	4169748.9	Worker	Scenario 4	9.35E-02	1.81E-03	3.00E-03
8399	642536.2	4169748.9	Worker	Scenario 4	9.04E-02	1.73E-03	3.04E-03
8400	642636.2	4169748.9	Worker	Scenario 4	8.74E-02	1.66E-03	3.07E-03
8401	642736.2	4169748.9	Worker	Scenario 4	8.45E-02	1.60E-03	3.27E-03
8402	642836.2	4169748.9	Worker	Scenario 4	8.17E-02	1.54E-03	3.38E-03
8403	642936.2	4169748.9	Worker	Scenario 4	7.93E-02	1.48E-03	2.88E-03
8404	643036.2	4169748.9	Worker	Scenario 4	7.71E-02	1.44E-03	2.68E-03
8405	643136.2	4169748.9	Worker	Scenario 4	7.50E-02	1.39E-03	2.69E-03
8406	643236.2	4169748.9	Worker	Scenario 4	7.29E-02	1.35E-03	2.63E-03
8407	643336.2	4169748.9	Worker	Scenario 4	7.09E-02	1.30E-03	2.56E-03
8408	643436.2	4169748.9	Worker	Scenario 4	6.88E-02	1.26E-03	2.55E-03
8409	643536.2	4169748.9	Worker	Scenario 4	6.69E-02	1.22E-03	2.23E-03
8410	643636.2	4169748.9	Worker	Scenario 4	6.49E-02	1.18E-03	2.37E-03
8411	643736.2	4169748.9	Worker	Scenario 4	6.30E-02	1.15E-03	2.30E-03
8412	643836.2	4169748.9	Worker	Scenario 4	6.11E-02	1.11E-03	2.22E-03
8413	643936.2	4169748.9	Worker	Scenario 4	5.94E-02	1.08E-03	2.16E-03
8414	644036.2	4169748.9	Worker	Scenario 4	5.78E-02	1.04E-03	2.15E-03
8415	644136.2	4169748.9	Worker	Scenario 4	5.65E-02	1.02E-03	2.06E-03
8416	644236.2	4169748.9	Worker	Scenario 4	5.53E-02	9.89E-04	1.91E-03
8417	644336.2	4169748.9	Worker	Scenario 4	5.42E-02	9.64E-04	1.95E-03
8418	644436.2	4169748.9	Worker	Scenario 4	5.31E-02	9.40E-04	1.81E-03
8419	644636.2	4169748.9	Worker	Scenario 4	5.08E-02	8.92E-04	1.78E-03
8420	644736.2	4169748.9	Worker	Scenario 4	4.96E-02	8.68E-04	1.73E-03
8421	644836.2	4169748.9	Worker	Scenario 4	4.84E-02	8.45E-04	1.69E-03
8422	644936.2	4169748.9	Worker	Scenario 4	4.73E-02	8.23E-04	1.65E-03
8423	635636.2	4169848.9	Worker	Scenario 4	1.11E-02	2.99E-04	7.08E-04
8424	635736.2	4169848.9	Worker	Scenario 4	1.15E-02	3.08E-04	7.03E-04
8425	635836.2	4169848.9	Worker	Scenario 4	1.20E-02	3.20E-04	6.95E-04
8426	635936.2	4169848.9	Worker	Scenario 4	1.25E-02	3.33E-04	7.14E-04
8427	636036.2	4169848.9	Worker	Scenario 4	1.27E-02	3.39E-04	7.85E-04
8428	636136.2	4169848.9	Worker	Scenario 4	1.30E-02	3.48E-04	1.00E-03
8429	636236.2	4169848.9	Worker	Scenario 4	1.35E-02	3.60E-04	1.09E-03
8430	636336.2	4169848.9	Worker	Scenario 4	1.38E-02	3.68E-04	1.33E-03
8431	636436.2	4169848.9	Worker	Scenario 4	1.35E-02	3.64E-04	1.69E-03
8432	636536.2	4169848.9	Worker	Scenario 4	1.43E-02	3.84E-04	1.71E-03
8433	636636.2	4169848.9	Worker	Scenario 4	1.49E-02	3.99E-04	1.72E-03
8434	636736.2	4169848.9	Worker	Scenario 4	1.58E-02	4.22E-04	1.66E-03
8435	636836.2	4169848.9	Worker	Scenario 4	1.69E-02	4.50E-04	1.55E-03
8436	636936.2	4169848.9	Worker	Scenario 4	1.81E-02	4.81E-04	1.47E-03
8437	637136.2	4169848.9	Worker	Scenario 4	2.12E-02	5.62E-04	1.42E-03
8438	637236.2	4169848.9	Worker	Scenario 4	2.31E-02	6.14E-04	1.20E-03
8439	637336.2	4169848.9	Worker	Scenario 4	2.83E-02	7.42E-04	1.22E-03
8440	637436.2	4169848.9	Worker	Scenario 4	3.07E-02	8.09E-04	1.20E-03
8441	637536.2	4169848.9	Worker	Scenario 4	3.30E-02	8.81E-04	1.16E-03
8442	637836.2	4169848.9	Worker	Scenario 4	5.11E-02	1.41E-03	1.38E-03
8443	639236.2	4169848.9	Worker	Scenario 4	1.47E-01	5.07E-03	1.82E-03
8444	639336.2	4169848.9	Worker	Scenario 4	1.41E-01	4.94E-03	2.06E-03
8445	639436.2	4169848.9	Worker	Scenario 4	1.39E-01	4.96E-03	2.13E-03
8446	639536.2	4169848.9	Worker	Scenario 4	1.41E-01	5.28E-03	2.26E-03
8447	639636.2	4169848.9	Worker	Scenario 4	1.63E-01	7.16E-03	2.24E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8448	639736.2	4169848.9	Worker	Scenario 4	2.16E-01	1.15E-02	2.29E-03
8449	639836.2	4169848.9	Worker	Scenario 4	1.39E-01	5.41E-03	2.34E-03
8450	639936.2	4169848.9	Worker	Scenario 4	1.22E-01	4.03E-03	2.33E-03
8451	640036.2	4169848.9	Worker	Scenario 4	1.15E-01	3.50E-03	2.78E-03
8452	640136.2	4169848.9	Worker	Scenario 4	1.13E-01	3.26E-03	2.90E-03
8453	640236.2	4169848.9	Worker	Scenario 4	1.12E-01	3.14E-03	2.96E-03
8454	640336.2	4169848.9	Worker	Scenario 4	1.11E-01	3.07E-03	2.94E-03
8455	640436.2	4169848.9	Worker	Scenario 4	1.12E-01	3.03E-03	3.04E-03
8456	640536.2	4169848.9	Worker	Scenario 4	1.12E-01	3.00E-03	2.84E-03
8457	640636.2	4169848.9	Worker	Scenario 4	1.13E-01	2.98E-03	3.11E-03
8458	640736.2	4169848.9	Worker	Scenario 4	1.15E-01	2.97E-03	3.20E-03
8459	640836.2	4169848.9	Worker	Scenario 4	1.16E-01	2.98E-03	3.41E-03
8460	640936.2	4169848.9	Worker	Scenario 4	1.19E-01	3.03E-03	3.29E-03
8461	641036.2	4169848.9	Worker	Scenario 4	1.25E-01	3.17E-03	3.22E-03
8462	641136.2	4169848.9	Worker	Scenario 4	1.36E-01	3.57E-03	3.03E-03
8463	641236.2	4169848.9	Worker	Scenario 4	1.76E-01	5.11E-03	3.33E-03
8464	641336.2	4169848.9	Worker	Scenario 4	5.11E-01	1.77E-02	3.20E-03
8465	641436.2	4169848.9	Worker	Scenario 4	2.04E-01	5.50E-03	3.34E-03
8466	641536.2	4169848.9	Worker	Scenario 4	1.52E-01	3.68E-03	3.38E-03
8467	641636.2	4169848.9	Worker	Scenario 4	1.31E-01	2.96E-03	3.39E-03
8468	641736.2	4169848.9	Worker	Scenario 4	1.19E-01	2.59E-03	3.37E-03
8469	641836.2	4169848.9	Worker	Scenario 4	1.11E-01	2.36E-03	3.08E-03
8470	641936.2	4169848.9	Worker	Scenario 4	1.05E-01	2.19E-03	3.30E-03
8471	642036.2	4169848.9	Worker	Scenario 4	1.00E-01	2.05E-03	4.38E-03
8472	642136.2	4169848.9	Worker	Scenario 4	9.66E-02	1.95E-03	6.26E-03
8473	642236.2	4169848.9	Worker	Scenario 4	9.32E-02	1.85E-03	6.31E-03
8474	642336.2	4169848.9	Worker	Scenario 4	9.03E-02	1.77E-03	4.54E-03
8475	642436.2	4169848.9	Worker	Scenario 4	8.75E-02	1.70E-03	2.80E-03
8476	642536.2	4169848.9	Worker	Scenario 4	8.46E-02	1.62E-03	2.99E-03
8477	642636.2	4169848.9	Worker	Scenario 4	8.18E-02	1.56E-03	2.93E-03
8478	642736.2	4169848.9	Worker	Scenario 4	7.92E-02	1.50E-03	2.89E-03
8479	642836.2	4169848.9	Worker	Scenario 4	7.68E-02	1.45E-03	3.29E-03
8480	642936.2	4169848.9	Worker	Scenario 4	7.46E-02	1.40E-03	3.11E-03
8481	643036.2	4169848.9	Worker	Scenario 4	7.27E-02	1.36E-03	2.67E-03
8482	643136.2	4169848.9	Worker	Scenario 4	7.08E-02	1.32E-03	2.57E-03
8483	643236.2	4169848.9	Worker	Scenario 4	6.89E-02	1.28E-03	2.54E-03
8484	643336.2	4169848.9	Worker	Scenario 4	6.71E-02	1.24E-03	2.45E-03
8485	643436.2	4169848.9	Worker	Scenario 4	6.53E-02	1.20E-03	2.42E-03
8486	643536.2	4169848.9	Worker	Scenario 4	6.35E-02	1.16E-03	2.38E-03
8487	643636.2	4169848.9	Worker	Scenario 4	6.17E-02	1.13E-03	2.10E-03
8488	643736.2	4169848.9	Worker	Scenario 4	5.99E-02	1.09E-03	2.23E-03
8489	643836.2	4169848.9	Worker	Scenario 4	5.81E-02	1.06E-03	2.16E-03
8490	643936.2	4169848.9	Worker	Scenario 4	5.65E-02	1.03E-03	2.09E-03
8491	644036.2	4169848.9	Worker	Scenario 4	5.50E-02	9.99E-04	2.04E-03
8492	644136.2	4169848.9	Worker	Scenario 4	5.37E-02	9.72E-04	2.03E-03
8493	644236.2	4169848.9	Worker	Scenario 4	5.26E-02	9.47E-04	1.95E-03
8494	644336.2	4169848.9	Worker	Scenario 4	5.16E-02	9.24E-04	1.83E-03
8495	644436.2	4169848.9	Worker	Scenario 4	5.06E-02	9.02E-04	1.84E-03
8496	635636.2	4169948.9	Worker	Scenario 4	1.13E-02	3.02E-04	6.51E-04
8497	635736.2	4169948.9	Worker	Scenario 4	1.18E-02	3.13E-04	6.85E-04
8498	635836.2	4169948.9	Worker	Scenario 4	1.20E-02	3.19E-04	7.49E-04
8499	635936.2	4169948.9	Worker	Scenario 4	1.26E-02	3.34E-04	8.05E-04
8500	636036.2	4169948.9	Worker	Scenario 4	1.30E-02	3.45E-04	8.46E-04
8501	636136.2	4169948.9	Worker	Scenario 4	1.34E-02	3.54E-04	8.70E-04
8502	636236.2	4169948.9	Worker	Scenario 4	1.38E-02	3.66E-04	8.78E-04
8503	636336.2	4169948.9	Worker	Scenario 4	1.43E-02	3.79E-04	1.05E-03
8504	636436.2	4169948.9	Worker	Scenario 4	1.47E-02	3.89E-04	1.22E-03
8505	636536.2	4169948.9	Worker	Scenario 4	1.46E-02	3.89E-04	1.56E-03
8506	636636.2	4169948.9	Worker	Scenario 4	1.54E-02	4.09E-04	1.52E-03
8507	636736.2	4169948.9	Worker	Scenario 4	1.63E-02	4.30E-04	1.55E-03
8508	637036.2	4169948.9	Worker	Scenario 4	2.01E-02	5.29E-04	1.53E-03
8509	637136.2	4169948.9	Worker	Scenario 4	2.17E-02	5.72E-04	1.44E-03
8510	637236.2	4169948.9	Worker	Scenario 4	2.36E-02	6.24E-04	1.16E-03
8511	637336.2	4169948.9	Worker	Scenario 4	2.86E-02	7.48E-04	1.09E-03
8512	637436.2	4169948.9	Worker	Scenario 4	3.10E-02	8.13E-04	1.17E-03
8513	637536.2	4169948.9	Worker	Scenario 4	3.25E-02	8.69E-04	1.28E-03
8514	637736.2	4169948.9	Worker	Scenario 4	4.36E-02	1.18E-03	1.28E-03
8515	637836.2	4169948.9	Worker	Scenario 4	5.23E-02	1.43E-03	1.21E-03
8516	639136.2	4169948.9	Worker	Scenario 4	1.64E-01	7.12E-03	1.72E-03
8517	639236.2	4169948.9	Worker	Scenario 4	1.58E-01	6.92E-03	1.93E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8518	639336.2	4169948.9	Worker	Scenario 4	1.55E-01	6.81E-03	2.00E-03
8519	639436.2	4169948.9	Worker	Scenario 4	1.54E-01	6.81E-03	2.22E-03
8520	639536.2	4169948.9	Worker	Scenario 4	1.55E-01	7.01E-03	2.08E-03
8521	639736.2	4169948.9	Worker	Scenario 4	2.05E-01	1.12E-02	2.17E-03
8522	639836.2	4169948.9	Worker	Scenario 4	1.26E-01	4.76E-03	2.23E-03
8523	639936.2	4169948.9	Worker	Scenario 4	1.11E-01	3.54E-03	2.41E-03
8524	640036.2	4169948.9	Worker	Scenario 4	1.05E-01	3.11E-03	2.72E-03
8525	640136.2	4169948.9	Worker	Scenario 4	1.03E-01	2.92E-03	2.65E-03
8526	640236.2	4169948.9	Worker	Scenario 4	1.02E-01	2.81E-03	2.82E-03
8527	640336.2	4169948.9	Worker	Scenario 4	1.02E-01	2.75E-03	2.85E-03
8528	640436.2	4169948.9	Worker	Scenario 4	1.03E-01	2.71E-03	2.89E-03
8529	640536.2	4169948.9	Worker	Scenario 4	1.03E-01	2.69E-03	2.91E-03
8530	640636.2	4169948.9	Worker	Scenario 4	1.04E-01	2.67E-03	2.94E-03
8531	640736.2	4169948.9	Worker	Scenario 4	1.05E-01	2.67E-03	3.04E-03
8532	640836.2	4169948.9	Worker	Scenario 4	1.07E-01	2.68E-03	3.22E-03
8533	640936.2	4169948.9	Worker	Scenario 4	1.10E-01	2.73E-03	3.09E-03
8534	641036.2	4169948.9	Worker	Scenario 4	1.15E-01	2.88E-03	3.12E-03
8535	641136.2	4169948.9	Worker	Scenario 4	1.26E-01	3.26E-03	2.91E-03
8536	641236.2	4169948.9	Worker	Scenario 4	1.66E-01	4.82E-03	3.17E-03
8537	641336.2	4169948.9	Worker	Scenario 4	4.76E-01	1.63E-02	3.03E-03
8538	641436.2	4169948.9	Worker	Scenario 4	1.86E-01	4.86E-03	3.17E-03
8539	641536.2	4169948.9	Worker	Scenario 4	1.38E-01	3.21E-03	3.21E-03
8540	641636.2	4169948.9	Worker	Scenario 4	1.19E-01	2.63E-03	3.20E-03
8541	641736.2	4169948.9	Worker	Scenario 4	1.09E-01	2.34E-03	3.19E-03
8542	641836.2	4169948.9	Worker	Scenario 4	1.02E-01	2.14E-03	3.02E-03
8543	641936.2	4169948.9	Worker	Scenario 4	9.70E-02	2.00E-03	3.13E-03
8544	642036.2	4169948.9	Worker	Scenario 4	9.31E-02	1.90E-03	3.72E-03
8545	642136.2	4169948.9	Worker	Scenario 4	8.95E-02	1.80E-03	5.69E-03
8546	642236.2	4169948.9	Worker	Scenario 4	8.66E-02	1.72E-03	6.30E-03
8547	643236.2	4169948.9	Worker	Scenario 4	6.52E-02	1.21E-03	2.45E-03
8548	643336.2	4169948.9	Worker	Scenario 4	6.36E-02	1.18E-03	2.36E-03
8549	643436.2	4169948.9	Worker	Scenario 4	6.20E-02	1.15E-03	2.33E-03
8550	643536.2	4169948.9	Worker	Scenario 4	6.04E-02	1.11E-03	2.28E-03
8551	643636.2	4169948.9	Worker	Scenario 4	5.87E-02	1.08E-03	2.22E-03
8552	643736.2	4169948.9	Worker	Scenario 4	5.71E-02	1.05E-03	2.02E-03
8553	643836.2	4169948.9	Worker	Scenario 4	5.54E-02	1.02E-03	2.10E-03
8554	643936.2	4169948.9	Worker	Scenario 4	5.39E-02	9.86E-04	2.04E-03
8555	644036.2	4169948.9	Worker	Scenario 4	5.24E-02	9.58E-04	1.98E-03
8556	644236.2	4169948.9	Worker	Scenario 4	5.01E-02	9.08E-04	1.92E-03
8557	635636.2	4170048.9	Worker	Scenario 4	1.14E-02	3.03E-04	7.17E-04
8558	635736.2	4170048.9	Worker	Scenario 4	1.09E-02	2.93E-04	1.32E-03
8559	635836.2	4170048.9	Worker	Scenario 4	1.14E-02	3.06E-04	1.34E-03
8560	635936.2	4170048.9	Worker	Scenario 4	1.25E-02	3.30E-04	8.24E-04
8561	636036.2	4170048.9	Worker	Scenario 4	1.32E-02	3.47E-04	8.31E-04
8562	636136.2	4170048.9	Worker	Scenario 4	1.38E-02	3.61E-04	8.61E-04
8563	636236.2	4170048.9	Worker	Scenario 4	1.42E-02	3.73E-04	8.72E-04
8564	636336.2	4170048.9	Worker	Scenario 4	1.48E-02	3.87E-04	8.63E-04
8565	636436.2	4170048.9	Worker	Scenario 4	1.55E-02	4.06E-04	8.75E-04
8566	636536.2	4170048.9	Worker	Scenario 4	1.60E-02	4.20E-04	9.92E-04
8567	636636.2	4170048.9	Worker	Scenario 4	1.61E-02	4.23E-04	1.33E-03
8568	636936.2	4170048.9	Worker	Scenario 4	2.09E-02	5.42E-04	1.09E-03
8569	637036.2	4170048.9	Worker	Scenario 4	2.23E-02	5.79E-04	1.10E-03
8570	637136.2	4170048.9	Worker	Scenario 4	2.40E-02	6.23E-04	1.07E-03
8571	637236.2	4170048.9	Worker	Scenario 4	2.59E-02	6.75E-04	1.05E-03
8572	637336.2	4170048.9	Worker	Scenario 4	2.81E-02	7.36E-04	1.16E-03
8573	637436.2	4170048.9	Worker	Scenario 4	3.03E-02	8.02E-04	1.23E-03
8574	637636.2	4170048.9	Worker	Scenario 4	3.93E-02	1.05E-03	1.17E-03
8575	637736.2	4170048.9	Worker	Scenario 4	4.52E-02	1.22E-03	1.11E-03
8576	637836.2	4170048.9	Worker	Scenario 4	5.30E-02	1.46E-03	1.23E-03
8577	639036.2	4170048.9	Worker	Scenario 4	2.03E-01	1.10E-02	1.63E-03
8578	639136.2	4170048.9	Worker	Scenario 4	2.06E-01	1.13E-02	1.81E-03
8579	639236.2	4170048.9	Worker	Scenario 4	2.09E-01	1.17E-02	1.89E-03
8580	639336.2	4170048.9	Worker	Scenario 4	2.14E-01	1.22E-02	2.15E-03
8581	639436.2	4170048.9	Worker	Scenario 4	2.20E-01	1.28E-02	2.00E-03
8582	639536.2	4170048.9	Worker	Scenario 4	2.29E-01	1.35E-02	2.01E-03
8583	639636.2	4170048.9	Worker	Scenario 4	2.41E-01	1.45E-02	1.99E-03
8584	639736.2	4170048.9	Worker	Scenario 4	1.39E-01	6.24E-03	2.10E-03
8585	639836.2	4170048.9	Worker	Scenario 4	1.06E-01	3.57E-03	2.08E-03
8586	639936.2	4170048.9	Worker	Scenario 4	9.86E-02	2.97E-03	2.54E-03
8587	640036.2	4170048.9	Worker	Scenario 4	9.58E-02	2.72E-03	2.61E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8588	640136.2	4170048.9	Worker	Scenario 4	9.46E-02	2.59E-03	2.66E-03
8589	640236.2	4170048.9	Worker	Scenario 4	9.41E-02	2.52E-03	2.67E-03
8590	640336.2	4170048.9	Worker	Scenario 4	9.42E-02	2.48E-03	2.74E-03
8591	640436.2	4170048.9	Worker	Scenario 4	9.46E-02	2.45E-03	2.61E-03
8592	640536.2	4170048.9	Worker	Scenario 4	9.52E-02	2.43E-03	2.83E-03
8593	640636.2	4170048.9	Worker	Scenario 4	9.61E-02	2.42E-03	2.87E-03
8594	640736.2	4170048.9	Worker	Scenario 4	9.73E-02	2.42E-03	2.93E-03
8595	640836.2	4170048.9	Worker	Scenario 4	9.90E-02	2.44E-03	3.00E-03
8596	640936.2	4170048.9	Worker	Scenario 4	1.01E-01	2.48E-03	2.96E-03
8597	641036.2	4170048.9	Worker	Scenario 4	1.06E-01	2.60E-03	2.99E-03
8598	641136.2	4170048.9	Worker	Scenario 4	1.15E-01	2.93E-03	2.85E-03
8599	641236.2	4170048.9	Worker	Scenario 4	1.51E-01	4.30E-03	3.01E-03
8600	641336.2	4170048.9	Worker	Scenario 4	4.16E-01	1.38E-02	2.90E-03
8601	641436.2	4170048.9	Worker	Scenario 4	1.55E-01	3.72E-03	3.01E-03
8602	641536.2	4170048.9	Worker	Scenario 4	1.19E-01	2.66E-03	3.05E-03
8603	641636.2	4170048.9	Worker	Scenario 4	1.06E-01	2.28E-03	3.02E-03
8604	641736.2	4170048.9	Worker	Scenario 4	9.84E-02	2.08E-03	3.01E-03
8605	641836.2	4170048.9	Worker	Scenario 4	9.32E-02	1.94E-03	2.94E-03
8606	641936.2	4170048.9	Worker	Scenario 4	8.91E-02	1.84E-03	2.97E-03
8607	642036.2	4170048.9	Worker	Scenario 4	8.58E-02	1.75E-03	3.27E-03
8608	642136.2	4170048.9	Worker	Scenario 4	8.30E-02	1.67E-03	5.08E-03
8609	635736.2	4170148.9	Worker	Scenario 4	1.11E-02	2.95E-04	1.35E-03
8610	635836.2	4170148.9	Worker	Scenario 4	1.09E-02	2.92E-04	1.53E-03
8611	635936.2	4170148.9	Worker	Scenario 4	1.18E-02	3.13E-04	1.45E-03
8612	636036.2	4170148.9	Worker	Scenario 4	1.30E-02	3.42E-04	8.31E-04
8613	636136.2	4170148.9	Worker	Scenario 4	1.40E-02	3.64E-04	8.16E-04
8614	636236.2	4170148.9	Worker	Scenario 4	1.44E-02	3.75E-04	8.41E-04
8615	636336.2	4170148.9	Worker	Scenario 4	1.52E-02	3.94E-04	8.82E-04
8616	636436.2	4170148.9	Worker	Scenario 4	1.59E-02	4.13E-04	9.17E-04
8617	636536.2	4170148.9	Worker	Scenario 4	1.67E-02	4.32E-04	9.43E-04
8618	636736.2	4170148.9	Worker	Scenario 4	1.77E-02	4.62E-04	1.23E-03
8619	636836.2	4170148.9	Worker	Scenario 4	2.04E-02	5.22E-04	1.04E-03
8620	636936.2	4170148.9	Worker	Scenario 4	2.18E-02	5.58E-04	1.03E-03
8621	637036.2	4170148.9	Worker	Scenario 4	2.32E-02	5.95E-04	9.69E-04
8622	637136.2	4170148.9	Worker	Scenario 4	2.50E-02	6.41E-04	1.05E-03
8623	637236.2	4170148.9	Worker	Scenario 4	2.70E-02	6.97E-04	1.14E-03
8624	637336.2	4170148.9	Worker	Scenario 4	2.87E-02	7.46E-04	1.18E-03
8625	637636.2	4170148.9	Worker	Scenario 4	3.95E-02	1.06E-03	1.05E-03
8626	637736.2	4170148.9	Worker	Scenario 4	4.47E-02	1.21E-03	1.21E-03
8627	637836.2	4170148.9	Worker	Scenario 4	5.15E-02	1.43E-03	1.32E-03
8628	639036.2	4170148.9	Worker	Scenario 4	1.08E-01	3.95E-03	1.70E-03
8629	639136.2	4170148.9	Worker	Scenario 4	1.07E-01	3.94E-03	1.80E-03
8630	639236.2	4170148.9	Worker	Scenario 4	1.06E-01	3.95E-03	2.07E-03
8631	639336.2	4170148.9	Worker	Scenario 4	1.06E-01	3.98E-03	2.03E-03
8632	639436.2	4170148.9	Worker	Scenario 4	1.07E-01	4.03E-03	1.92E-03
8633	639536.2	4170148.9	Worker	Scenario 4	1.07E-01	4.03E-03	1.94E-03
8634	639636.2	4170148.9	Worker	Scenario 4	1.03E-01	3.76E-03	2.00E-03
8635	639736.2	4170148.9	Worker	Scenario 4	9.58E-02	3.16E-03	2.01E-03
8636	639836.2	4170148.9	Worker	Scenario 4	9.08E-02	2.73E-03	2.26E-03
8637	639936.2	4170148.9	Worker	Scenario 4	8.85E-02	2.51E-03	2.45E-03
8638	640036.2	4170148.9	Worker	Scenario 4	8.73E-02	2.39E-03	2.38E-03
8639	640136.2	4170148.9	Worker	Scenario 4	8.69E-02	2.32E-03	2.54E-03
8640	640236.2	4170148.9	Worker	Scenario 4	8.69E-02	2.27E-03	2.54E-03
8641	640336.2	4170148.9	Worker	Scenario 4	8.71E-02	2.24E-03	2.63E-03
8642	640436.2	4170148.9	Worker	Scenario 4	8.76E-02	2.22E-03	2.48E-03
8643	640536.2	4170148.9	Worker	Scenario 4	8.81E-02	2.21E-03	2.65E-03
8644	640636.2	4170148.9	Worker	Scenario 4	8.90E-02	2.20E-03	2.71E-03
8645	640736.2	4170148.9	Worker	Scenario 4	9.00E-02	2.20E-03	2.85E-03
8646	640836.2	4170148.9	Worker	Scenario 4	9.14E-02	2.22E-03	2.79E-03
8647	640936.2	4170148.9	Worker	Scenario 4	9.35E-02	2.26E-03	2.81E-03
8648	641036.2	4170148.9	Worker	Scenario 4	9.69E-02	2.34E-03	2.83E-03
8649	641136.2	4170148.9	Worker	Scenario 4	1.04E-01	2.55E-03	2.77E-03
8650	641236.2	4170148.9	Worker	Scenario 4	1.20E-01	3.11E-03	2.85E-03
8651	641336.2	4170148.9	Worker	Scenario 4	1.27E-01	3.23E-03	2.78E-03
8652	641436.2	4170148.9	Worker	Scenario 4	1.08E-01	2.48E-03	2.87E-03
8653	641536.2	4170148.9	Worker	Scenario 4	9.86E-02	2.16E-03	2.91E-03
8654	641636.2	4170148.9	Worker	Scenario 4	9.26E-02	1.98E-03	2.89E-03
8655	641736.2	4170148.9	Worker	Scenario 4	8.83E-02	1.86E-03	2.87E-03
8656	641836.2	4170148.9	Worker	Scenario 4	8.48E-02	1.76E-03	2.85E-03
8657	641936.2	4170148.9	Worker	Scenario 4	8.18E-02	1.68E-03	2.79E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8658	642036.2	4170148.9	Worker	Scenario 4	7.91E-02	1.61E-03	2.95E-03
8659	642436.2	4170148.9	Worker	Scenario 4	7.13E-02	1.39E-03	4.06E-03
8660	642536.2	4170148.9	Worker	Scenario 4	6.95E-02	1.34E-03	2.51E-03
8661	642636.2	4170148.9	Worker	Scenario 4	6.77E-02	1.30E-03	2.53E-03
8662	642736.2	4170148.9	Worker	Scenario 4	6.58E-02	1.26E-03	2.44E-03
8663	642836.2	4170148.9	Worker	Scenario 4	6.40E-02	1.22E-03	2.47E-03
8664	642936.2	4170148.9	Worker	Scenario 4	6.25E-02	1.19E-03	2.81E-03
8665	643036.2	4170148.9	Worker	Scenario 4	6.11E-02	1.15E-03	3.00E-03
8666	643136.2	4170148.9	Worker	Scenario 4	5.97E-02	1.12E-03	2.69E-03
8667	643236.2	4170148.9	Worker	Scenario 4	5.84E-02	1.10E-03	2.29E-03
8668	643336.2	4170148.9	Worker	Scenario 4	5.71E-02	1.07E-03	2.20E-03
8669	635836.2	4170248.9	Worker	Scenario 4	1.12E-02	2.96E-04	1.50E-03
8670	635936.2	4170248.9	Worker	Scenario 4	1.13E-02	3.00E-04	1.62E-03
8671	636036.2	4170248.9	Worker	Scenario 4	1.22E-02	3.22E-04	1.45E-03
8672	636136.2	4170248.9	Worker	Scenario 4	1.35E-02	3.51E-04	9.85E-04
8673	636236.2	4170248.9	Worker	Scenario 4	1.53E-02	3.91E-04	8.53E-04
8674	636336.2	4170248.9	Worker	Scenario 4	1.55E-02	3.99E-04	9.06E-04
8675	636636.2	4170248.9	Worker	Scenario 4	1.74E-02	4.47E-04	9.93E-04
8676	636736.2	4170248.9	Worker	Scenario 4	1.91E-02	4.88E-04	9.88E-04
8677	636836.2	4170248.9	Worker	Scenario 4	2.08E-02	5.28E-04	9.46E-04
8678	636936.2	4170248.9	Worker	Scenario 4	2.23E-02	5.68E-04	9.48E-04
8679	637036.2	4170248.9	Worker	Scenario 4	2.37E-02	6.06E-04	1.05E-03
8680	637136.2	4170248.9	Worker	Scenario 4	2.53E-02	6.51E-04	1.10E-03
8681	637236.2	4170248.9	Worker	Scenario 4	2.69E-02	6.95E-04	1.12E-03
8682	637536.2	4170248.9	Worker	Scenario 4	3.54E-02	9.36E-04	1.05E-03
8683	637636.2	4170248.9	Worker	Scenario 4	3.92E-02	1.05E-03	1.19E-03
8684	637736.2	4170248.9	Worker	Scenario 4	4.38E-02	1.19E-03	1.27E-03
8685	637836.2	4170248.9	Worker	Scenario 4	4.95E-02	1.37E-03	1.27E-03
8686	637936.2	4170248.9	Worker	Scenario 4	5.63E-02	1.62E-03	1.29E-03
8687	638036.2	4170248.9	Worker	Scenario 4	6.39E-02	1.89E-03	1.34E-03
8688	638936.2	4170248.9	Worker	Scenario 4	8.81E-02	2.86E-03	1.59E-03
8689	639036.2	4170248.9	Worker	Scenario 4	8.77E-02	2.84E-03	1.71E-03
8690	639136.2	4170248.9	Worker	Scenario 4	8.75E-02	2.84E-03	1.97E-03
8691	639236.2	4170248.9	Worker	Scenario 4	8.76E-02	2.85E-03	2.03E-03
8692	639336.2	4170248.9	Worker	Scenario 4	8.75E-02	2.86E-03	1.82E-03
8693	639436.2	4170248.9	Worker	Scenario 4	8.55E-02	2.79E-03	1.83E-03
8694	639536.2	4170248.9	Worker	Scenario 4	8.67E-02	2.78E-03	1.87E-03
8695	639636.2	4170248.9	Worker	Scenario 4	8.50E-02	2.63E-03	1.91E-03
8696	639736.2	4170248.9	Worker	Scenario 4	8.32E-02	2.46E-03	1.93E-03
8697	639836.2	4170248.9	Worker	Scenario 4	8.17E-02	2.31E-03	2.33E-03
8698	639936.2	4170248.9	Worker	Scenario 4	8.09E-02	2.21E-03	2.37E-03
8699	640036.2	4170248.9	Worker	Scenario 4	8.04E-02	2.14E-03	2.41E-03
8700	640136.2	4170248.9	Worker	Scenario 4	8.03E-02	2.09E-03	2.44E-03
8701	640236.2	4170248.9	Worker	Scenario 4	8.05E-02	2.06E-03	2.50E-03
8702	640336.2	4170248.9	Worker	Scenario 4	8.09E-02	2.04E-03	2.45E-03
8703	640436.2	4170248.9	Worker	Scenario 4	8.14E-02	2.03E-03	2.52E-03
8704	640536.2	4170248.9	Worker	Scenario 4	8.20E-02	2.02E-03	2.51E-03
8705	640636.2	4170248.9	Worker	Scenario 4	8.28E-02	2.02E-03	2.62E-03
8706	640736.2	4170248.9	Worker	Scenario 4	8.37E-02	2.02E-03	2.77E-03
8707	640836.2	4170248.9	Worker	Scenario 4	8.49E-02	2.03E-03	2.66E-03
8708	640936.2	4170248.9	Worker	Scenario 4	8.65E-02	2.06E-03	2.64E-03
8709	641036.2	4170248.9	Worker	Scenario 4	8.88E-02	2.11E-03	2.67E-03
8710	641136.2	4170248.9	Worker	Scenario 4	9.19E-02	2.18E-03	2.68E-03
8711	641236.2	4170248.9	Worker	Scenario 4	9.45E-02	2.23E-03	2.70E-03
8712	641336.2	4170248.9	Worker	Scenario 4	9.30E-02	2.14E-03	2.66E-03
8713	641436.2	4170248.9	Worker	Scenario 4	8.90E-02	1.99E-03	2.74E-03
8714	641536.2	4170248.9	Worker	Scenario 4	8.54E-02	1.86E-03	2.78E-03
8715	641636.2	4170248.9	Worker	Scenario 4	8.24E-02	1.76E-03	2.77E-03
8716	641736.2	4170248.9	Worker	Scenario 4	7.98E-02	1.68E-03	2.75E-03
8717	641836.2	4170248.9	Worker	Scenario 4	7.76E-02	1.61E-03	2.74E-03
8718	641936.2	4170248.9	Worker	Scenario 4	7.54E-02	1.55E-03	2.60E-03
8719	642036.2	4170248.9	Worker	Scenario 4	7.33E-02	1.50E-03	2.69E-03
8720	642136.2	4170248.9	Worker	Scenario 4	7.14E-02	1.44E-03	3.88E-03
8721	642236.2	4170248.9	Worker	Scenario 4	6.97E-02	1.40E-03	5.40E-03
8722	642336.2	4170248.9	Worker	Scenario 4	6.82E-02	1.35E-03	5.66E-03
8723	642436.2	4170248.9	Worker	Scenario 4	6.68E-02	1.31E-03	4.49E-03
8724	642536.2	4170248.9	Worker	Scenario 4	6.53E-02	1.27E-03	2.90E-03
8725	642636.2	4170248.9	Worker	Scenario 4	6.37E-02	1.23E-03	2.28E-03
8726	642736.2	4170248.9	Worker	Scenario 4	6.21E-02	1.19E-03	2.39E-03
8727	642836.2	4170248.9	Worker	Scenario 4	6.05E-02	1.15E-03	2.37E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8728	642936.2	4170248.9	Worker	Scenario 4	5.91E-02	1.12E-03	2.46E-03
8729	643036.2	4170248.9	Worker	Scenario 4	5.79E-02	1.10E-03	2.88E-03
8730	643136.2	4170248.9	Worker	Scenario 4	5.66E-02	1.07E-03	2.84E-03
8731	643236.2	4170248.9	Worker	Scenario 4	5.54E-02	1.04E-03	2.39E-03
8732	643336.2	4170248.9	Worker	Scenario 4	5.42E-02	1.02E-03	2.10E-03
8733	635636.2	4170348.9	Worker	Scenario 4	1.09E-02	2.85E-04	1.34E-03
8734	635936.2	4170348.9	Worker	Scenario 4	1.19E-02	3.12E-04	1.41E-03
8735	636036.2	4170348.9	Worker	Scenario 4	1.19E-02	3.14E-04	1.64E-03
8736	636136.2	4170348.9	Worker	Scenario 4	1.32E-02	3.43E-04	1.30E-03
8737	636236.2	4170348.9	Worker	Scenario 4	1.48E-02	3.79E-04	9.10E-04
8738	636536.2	4170348.9	Worker	Scenario 4	1.71E-02	4.37E-04	9.46E-04
8739	636636.2	4170348.9	Worker	Scenario 4	1.80E-02	4.60E-04	9.23E-04
8740	636736.2	4170348.9	Worker	Scenario 4	1.93E-02	4.90E-04	8.65E-04
8741	636836.2	4170348.9	Worker	Scenario 4	2.07E-02	5.24E-04	9.62E-04
8742	636936.2	4170348.9	Worker	Scenario 4	2.23E-02	5.67E-04	1.03E-03
8743	637036.2	4170348.9	Worker	Scenario 4	2.39E-02	6.11E-04	1.06E-03
8744	637136.2	4170348.9	Worker	Scenario 4	2.54E-02	6.52E-04	1.04E-03
8745	637236.2	4170348.9	Worker	Scenario 4	2.68E-02	6.92E-04	9.88E-04
8746	637436.2	4170348.9	Worker	Scenario 4	3.08E-02	8.09E-04	1.07E-03
8747	637536.2	4170348.9	Worker	Scenario 4	3.48E-02	9.25E-04	1.15E-03
8748	637636.2	4170348.9	Worker	Scenario 4	3.86E-02	1.03E-03	1.21E-03
8749	637736.2	4170348.9	Worker	Scenario 4	4.26E-02	1.16E-03	1.19E-03
8750	637836.2	4170348.9	Worker	Scenario 4	4.72E-02	1.31E-03	1.24E-03
8751	637936.2	4170348.9	Worker	Scenario 4	5.22E-02	1.48E-03	1.27E-03
8752	638036.2	4170348.9	Worker	Scenario 4	5.74E-02	1.65E-03	1.32E-03
8753	638136.2	4170348.9	Worker	Scenario 4	6.16E-02	1.82E-03	1.35E-03
8754	638236.2	4170348.9	Worker	Scenario 4	6.36E-02	1.90E-03	1.29E-03
8755	638336.2	4170348.9	Worker	Scenario 4	6.83E-02	2.07E-03	1.41E-03
8756	638436.2	4170348.9	Worker	Scenario 4	7.29E-02	2.20E-03	1.46E-03
8757	638736.2	4170348.9	Worker	Scenario 4	7.61E-02	2.31E-03	1.41E-03
8758	638836.2	4170348.9	Worker	Scenario 4	7.64E-02	2.32E-03	1.49E-03
8759	638936.2	4170348.9	Worker	Scenario 4	7.66E-02	2.33E-03	1.63E-03
8760	639036.2	4170348.9	Worker	Scenario 4	7.66E-02	2.33E-03	1.87E-03
8761	639136.2	4170348.9	Worker	Scenario 4	7.68E-02	2.34E-03	2.00E-03
8762	639236.2	4170348.9	Worker	Scenario 4	7.53E-02	2.30E-03	1.72E-03
8763	639336.2	4170348.9	Worker	Scenario 4	7.51E-02	2.28E-03	1.72E-03
8764	639436.2	4170348.9	Worker	Scenario 4	7.49E-02	2.25E-03	1.68E-03
8765	639536.2	4170348.9	Worker	Scenario 4	7.66E-02	2.26E-03	1.83E-03
8766	639636.2	4170348.9	Worker	Scenario 4	7.60E-02	2.18E-03	1.81E-03
8767	639736.2	4170348.9	Worker	Scenario 4	7.54E-02	2.11E-03	2.12E-03
8768	639836.2	4170348.9	Worker	Scenario 4	7.50E-02	2.04E-03	2.23E-03
8769	639936.2	4170348.9	Worker	Scenario 4	7.47E-02	1.99E-03	2.17E-03
8770	640036.2	4170348.9	Worker	Scenario 4	7.46E-02	1.95E-03	2.30E-03
8771	640136.2	4170348.9	Worker	Scenario 4	7.47E-02	1.91E-03	2.27E-03
8772	640236.2	4170348.9	Worker	Scenario 4	7.50E-02	1.89E-03	2.38E-03
8773	640336.2	4170348.9	Worker	Scenario 4	7.54E-02	1.88E-03	2.19E-03
8774	640436.2	4170348.9	Worker	Scenario 4	7.59E-02	1.87E-03	2.46E-03
8775	640536.2	4170348.9	Worker	Scenario 4	7.65E-02	1.86E-03	2.48E-03
8776	640636.2	4170348.9	Worker	Scenario 4	7.72E-02	1.86E-03	2.48E-03
8777	640736.2	4170348.9	Worker	Scenario 4	7.80E-02	1.86E-03	2.64E-03
8778	640836.2	4170348.9	Worker	Scenario 4	7.90E-02	1.87E-03	2.55E-03
8779	640936.2	4170348.9	Worker	Scenario 4	8.00E-02	1.88E-03	2.45E-03
8780	641036.2	4170348.9	Worker	Scenario 4	8.12E-02	1.89E-03	2.50E-03
8781	641136.2	4170348.9	Worker	Scenario 4	8.21E-02	1.89E-03	2.58E-03
8782	641236.2	4170348.9	Worker	Scenario 4	8.21E-02	1.86E-03	2.57E-03
8783	641336.2	4170348.9	Worker	Scenario 4	8.10E-02	1.81E-03	2.56E-03
8784	641436.2	4170348.9	Worker	Scenario 4	7.90E-02	1.73E-03	2.62E-03
8785	641536.2	4170348.9	Worker	Scenario 4	7.71E-02	1.66E-03	2.66E-03
8786	641636.2	4170348.9	Worker	Scenario 4	7.51E-02	1.59E-03	2.65E-03
8787	641736.2	4170348.9	Worker	Scenario 4	7.34E-02	1.54E-03	2.64E-03
8788	641836.2	4170348.9	Worker	Scenario 4	7.17E-02	1.49E-03	2.62E-03
8789	641936.2	4170348.9	Worker	Scenario 4	7.01E-02	1.44E-03	2.41E-03
8790	642036.2	4170348.9	Worker	Scenario 4	6.83E-02	1.40E-03	2.58E-03
8791	642136.2	4170348.9	Worker	Scenario 4	6.68E-02	1.35E-03	3.34E-03
8792	642236.2	4170348.9	Worker	Scenario 4	6.54E-02	1.31E-03	4.94E-03
8793	642336.2	4170348.9	Worker	Scenario 4	6.41E-02	1.27E-03	5.59E-03
8794	642436.2	4170348.9	Worker	Scenario 4	6.28E-02	1.24E-03	4.83E-03
8795	642536.2	4170348.9	Worker	Scenario 4	6.15E-02	1.20E-03	3.26E-03
8796	642636.2	4170348.9	Worker	Scenario 4	6.01E-02	1.16E-03	2.17E-03
8797	642736.2	4170348.9	Worker	Scenario 4	5.87E-02	1.13E-03	2.33E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8798	642836.2	4170348.9	Worker	Scenario 4	5.73E-02	1.10E-03	2.24E-03
8799	642936.2	4170348.9	Worker	Scenario 4	5.61E-02	1.07E-03	2.28E-03
8800	643036.2	4170348.9	Worker	Scenario 4	5.48E-02	1.04E-03	2.63E-03
8801	643136.2	4170348.9	Worker	Scenario 4	5.37E-02	1.02E-03	2.84E-03
8802	643236.2	4170348.9	Worker	Scenario 4	5.27E-02	9.94E-04	2.61E-03
8803	643336.2	4170348.9	Worker	Scenario 4	5.16E-02	9.71E-04	2.14E-03
8804	643436.2	4170348.9	Worker	Scenario 4	5.06E-02	9.50E-04	1.97E-03
8805	643536.2	4170348.9	Worker	Scenario 4	4.96E-02	9.30E-04	1.98E-03
8806	643636.2	4170348.9	Worker	Scenario 4	4.86E-02	9.09E-04	1.95E-03
8807	635636.2	4170448.9	Worker	Scenario 4	1.10E-02	2.88E-04	1.23E-03
8808	635836.2	4170448.9	Worker	Scenario 4	1.19E-02	3.10E-04	1.21E-03
8809	636036.2	4170448.9	Worker	Scenario 4	1.30E-02	3.34E-04	1.28E-03
8810	636336.2	4170448.9	Worker	Scenario 4	1.55E-02	3.96E-04	9.03E-04
8811	636436.2	4170448.9	Worker	Scenario 4	1.67E-02	4.23E-04	8.91E-04
8812	636536.2	4170448.9	Worker	Scenario 4	1.75E-02	4.43E-04	8.50E-04
8813	636636.2	4170448.9	Worker	Scenario 4	1.83E-02	4.64E-04	8.76E-04
8814	636736.2	4170448.9	Worker	Scenario 4	1.94E-02	4.91E-04	9.59E-04
8815	636836.2	4170448.9	Worker	Scenario 4	2.08E-02	5.26E-04	1.01E-03
8816	636936.2	4170448.9	Worker	Scenario 4	2.23E-02	5.65E-04	1.01E-03
8817	637036.2	4170448.9	Worker	Scenario 4	2.38E-02	6.09E-04	9.74E-04
8818	637136.2	4170448.9	Worker	Scenario 4	2.56E-02	6.60E-04	9.22E-04
8819	637436.2	4170448.9	Worker	Scenario 4	3.20E-02	8.40E-04	1.13E-03
8820	637536.2	4170448.9	Worker	Scenario 4	3.47E-02	9.17E-04	1.16E-03
8821	637636.2	4170448.9	Worker	Scenario 4	3.77E-02	1.01E-03	1.12E-03
8822	637736.2	4170448.9	Worker	Scenario 4	4.11E-02	1.12E-03	1.20E-03
8823	637836.2	4170448.9	Worker	Scenario 4	4.48E-02	1.23E-03	1.22E-03
8824	637936.2	4170448.9	Worker	Scenario 4	4.86E-02	1.36E-03	1.25E-03
8825	638036.2	4170448.9	Worker	Scenario 4	5.25E-02	1.48E-03	1.31E-03
8826	638136.2	4170448.9	Worker	Scenario 4	5.36E-02	1.55E-03	1.23E-03
8827	638236.2	4170448.9	Worker	Scenario 4	5.48E-02	1.59E-03	1.29E-03
8828	638336.2	4170448.9	Worker	Scenario 4	6.20E-02	1.79E-03	1.40E-03
8829	638636.2	4170448.9	Worker	Scenario 4	6.67E-02	1.94E-03	1.38E-03
8830	638736.2	4170448.9	Worker	Scenario 4	6.51E-02	1.91E-03	1.36E-03
8831	638836.2	4170448.9	Worker	Scenario 4	6.56E-02	1.92E-03	1.51E-03
8832	638936.2	4170448.9	Worker	Scenario 4	6.36E-02	1.86E-03	1.64E-03
8833	639036.2	4170448.9	Worker	Scenario 4	6.41E-02	1.88E-03	1.83E-03
8834	639136.2	4170448.9	Worker	Scenario 4	6.46E-02	1.89E-03	1.68E-03
8835	639236.2	4170448.9	Worker	Scenario 4	6.54E-02	1.90E-03	1.59E-03
8836	639336.2	4170448.9	Worker	Scenario 4	6.46E-02	1.86E-03	1.57E-03
8837	639436.2	4170448.9	Worker	Scenario 4	6.63E-02	1.89E-03	1.67E-03
8838	639536.2	4170448.9	Worker	Scenario 4	6.99E-02	1.96E-03	1.76E-03
8839	639636.2	4170448.9	Worker	Scenario 4	6.97E-02	1.92E-03	1.85E-03
8840	639736.2	4170448.9	Worker	Scenario 4	6.96E-02	1.88E-03	2.15E-03
8841	639836.2	4170448.9	Worker	Scenario 4	6.96E-02	1.84E-03	2.17E-03
8842	639936.2	4170448.9	Worker	Scenario 4	6.96E-02	1.81E-03	2.21E-03
8843	640036.2	4170448.9	Worker	Scenario 4	6.97E-02	1.78E-03	2.24E-03
8844	640136.2	4170448.9	Worker	Scenario 4	6.99E-02	1.76E-03	2.27E-03
8845	640236.2	4170448.9	Worker	Scenario 4	7.02E-02	1.75E-03	2.28E-03
8846	640336.2	4170448.9	Worker	Scenario 4	7.06E-02	1.74E-03	2.20E-03
8847	640436.2	4170448.9	Worker	Scenario 4	7.11E-02	1.73E-03	2.31E-03
8848	640536.2	4170448.9	Worker	Scenario 4	7.17E-02	1.72E-03	2.37E-03
8849	640636.2	4170448.9	Worker	Scenario 4	7.23E-02	1.72E-03	2.43E-03
8850	640736.2	4170448.9	Worker	Scenario 4	7.29E-02	1.72E-03	2.47E-03
8851	640836.2	4170448.9	Worker	Scenario 4	7.36E-02	1.72E-03	2.41E-03
8852	640936.2	4170448.9	Worker	Scenario 4	7.42E-02	1.72E-03	2.38E-03
8853	641036.2	4170448.9	Worker	Scenario 4	7.45E-02	1.70E-03	2.32E-03
8854	641136.2	4170448.9	Worker	Scenario 4	7.46E-02	1.68E-03	2.47E-03
8855	641236.2	4170448.9	Worker	Scenario 4	7.42E-02	1.65E-03	2.47E-03
8856	641336.2	4170448.9	Worker	Scenario 4	7.33E-02	1.61E-03	2.46E-03
8857	641436.2	4170448.9	Worker	Scenario 4	7.21E-02	1.56E-03	2.51E-03
8858	641536.2	4170448.9	Worker	Scenario 4	7.07E-02	1.51E-03	2.54E-03
8859	641636.2	4170448.9	Worker	Scenario 4	6.94E-02	1.46E-03	2.54E-03
8860	641736.2	4170448.9	Worker	Scenario 4	6.80E-02	1.42E-03	2.52E-03
8861	641836.2	4170448.9	Worker	Scenario 4	6.67E-02	1.38E-03	2.50E-03
8862	641936.2	4170448.9	Worker	Scenario 4	6.54E-02	1.34E-03	2.25E-03
8863	642036.2	4170448.9	Worker	Scenario 4	6.41E-02	1.31E-03	2.46E-03
8864	642136.2	4170448.9	Worker	Scenario 4	6.27E-02	1.27E-03	2.89E-03
8865	642236.2	4170448.9	Worker	Scenario 4	6.15E-02	1.24E-03	4.46E-03
8866	642336.2	4170448.9	Worker	Scenario 4	6.04E-02	1.20E-03	5.40E-03
8867	642436.2	4170448.9	Worker	Scenario 4	5.92E-02	1.17E-03	5.05E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8868	642536.2	4170448.9	Worker	Scenario 4	5.80E-02	1.14E-03	3.70E-03
8869	642636.2	4170448.9	Worker	Scenario 4	5.68E-02	1.10E-03	2.41E-03
8870	642736.2	4170448.9	Worker	Scenario 4	5.56E-02	1.07E-03	2.15E-03
8871	642836.2	4170448.9	Worker	Scenario 4	5.44E-02	1.04E-03	2.15E-03
8872	642936.2	4170448.9	Worker	Scenario 4	5.31E-02	1.02E-03	2.17E-03
8873	643036.2	4170448.9	Worker	Scenario 4	5.21E-02	9.91E-04	2.30E-03
8874	643136.2	4170448.9	Worker	Scenario 4	5.11E-02	9.70E-04	2.70E-03
8875	643236.2	4170448.9	Worker	Scenario 4	5.01E-02	9.48E-04	2.72E-03
8876	643336.2	4170448.9	Worker	Scenario 4	4.91E-02	9.27E-04	2.35E-03
8877	643436.2	4170448.9	Worker	Scenario 4	4.82E-02	9.08E-04	2.00E-03
8878	643536.2	4170448.9	Worker	Scenario 4	4.73E-02	8.89E-04	1.92E-03
8879	635836.2	4170548.9	Worker	Scenario 4	1.21E-02	3.12E-04	1.19E-03
8880	635936.2	4170548.9	Worker	Scenario 4	1.27E-02	3.25E-04	1.30E-03
8881	636236.2	4170548.9	Worker	Scenario 4	1.49E-02	3.78E-04	8.92E-04
8882	636336.2	4170548.9	Worker	Scenario 4	1.57E-02	3.98E-04	8.30E-04
8883	636436.2	4170548.9	Worker	Scenario 4	1.64E-02	4.15E-04	8.02E-04
8884	636536.2	4170548.9	Worker	Scenario 4	1.75E-02	4.42E-04	8.81E-04
8885	636636.2	4170548.9	Worker	Scenario 4	1.85E-02	4.68E-04	9.45E-04
8886	636736.2	4170548.9	Worker	Scenario 4	1.93E-02	4.91E-04	9.73E-04
8887	636836.2	4170548.9	Worker	Scenario 4	2.09E-02	5.31E-04	9.59E-04
8888	636936.2	4170548.9	Worker	Scenario 4	2.24E-02	5.70E-04	9.03E-04
8889	637036.2	4170548.9	Worker	Scenario 4	2.40E-02	6.15E-04	8.67E-04
8890	637136.2	4170548.9	Worker	Scenario 4	2.51E-02	6.48E-04	9.25E-04
8891	637336.2	4170548.9	Worker	Scenario 4	2.85E-02	7.45E-04	1.11E-03
8892	637436.2	4170548.9	Worker	Scenario 4	3.16E-02	8.31E-04	1.10E-03
8893	637536.2	4170548.9	Worker	Scenario 4	3.40E-02	8.99E-04	1.09E-03
8894	637636.2	4170548.9	Worker	Scenario 4	3.66E-02	9.80E-04	1.16E-03
8895	637736.2	4170548.9	Worker	Scenario 4	3.96E-02	1.07E-03	1.18E-03
8896	637836.2	4170548.9	Worker	Scenario 4	4.26E-02	1.16E-03	1.21E-03
8897	637936.2	4170548.9	Worker	Scenario 4	4.56E-02	1.26E-03	1.25E-03
8898	638036.2	4170548.9	Worker	Scenario 4	4.87E-02	1.35E-03	1.22E-03
8899	638136.2	4170548.9	Worker	Scenario 4	4.87E-02	1.38E-03	1.26E-03
8900	638236.2	4170548.9	Worker	Scenario 4	5.03E-02	1.43E-03	1.27E-03
8901	638336.2	4170548.9	Worker	Scenario 4	5.61E-02	1.58E-03	1.36E-03
8902	638536.2	4170548.9	Worker	Scenario 4	5.94E-02	1.68E-03	1.36E-03
8903	638636.2	4170548.9	Worker	Scenario 4	5.85E-02	1.67E-03	1.28E-03
8904	638736.2	4170548.9	Worker	Scenario 4	5.91E-02	1.68E-03	1.44E-03
8905	638836.2	4170548.9	Worker	Scenario 4	6.01E-02	1.71E-03	1.60E-03
8906	638936.2	4170548.9	Worker	Scenario 4	5.83E-02	1.66E-03	1.77E-03
8907	639036.2	4170548.9	Worker	Scenario 4	5.90E-02	1.68E-03	1.71E-03
8908	639136.2	4170548.9	Worker	Scenario 4	5.96E-02	1.69E-03	1.52E-03
8909	639236.2	4170548.9	Worker	Scenario 4	5.87E-02	1.65E-03	1.51E-03
8910	639336.2	4170548.9	Worker	Scenario 4	6.00E-02	1.67E-03	1.53E-03
8911	639436.2	4170548.9	Worker	Scenario 4	6.45E-02	1.77E-03	1.67E-03
8912	639536.2	4170548.9	Worker	Scenario 4	6.46E-02	1.75E-03	1.65E-03
8913	639636.2	4170548.9	Worker	Scenario 4	6.47E-02	1.73E-03	1.99E-03
8914	639736.2	4170548.9	Worker	Scenario 4	6.48E-02	1.71E-03	2.06E-03
8915	639836.2	4170548.9	Worker	Scenario 4	6.50E-02	1.69E-03	2.00E-03
8916	639936.2	4170548.9	Worker	Scenario 4	6.52E-02	1.67E-03	2.11E-03
8917	640036.2	4170548.9	Worker	Scenario 4	6.54E-02	1.65E-03	2.06E-03
8918	640136.2	4170548.9	Worker	Scenario 4	6.57E-02	1.63E-03	2.18E-03
8919	640236.2	4170548.9	Worker	Scenario 4	6.60E-02	1.62E-03	2.10E-03
8920	640336.2	4170548.9	Worker	Scenario 4	6.63E-02	1.61E-03	2.22E-03
8921	640436.2	4170548.9	Worker	Scenario 4	6.68E-02	1.61E-03	2.18E-03
8922	640536.2	4170548.9	Worker	Scenario 4	6.72E-02	1.60E-03	2.28E-03
8923	640636.2	4170548.9	Worker	Scenario 4	6.78E-02	1.60E-03	2.38E-03
8924	640736.2	4170548.9	Worker	Scenario 4	6.83E-02	1.60E-03	2.33E-03
8925	640836.2	4170548.9	Worker	Scenario 4	6.87E-02	1.59E-03	2.34E-03
8926	640936.2	4170548.9	Worker	Scenario 4	6.89E-02	1.58E-03	2.33E-03
8927	641036.2	4170548.9	Worker	Scenario 4	6.90E-02	1.56E-03	2.23E-03
8928	641136.2	4170548.9	Worker	Scenario 4	6.88E-02	1.53E-03	2.37E-03
8929	641236.2	4170548.9	Worker	Scenario 4	6.81E-02	1.50E-03	2.37E-03
8930	641336.2	4170548.9	Worker	Scenario 4	6.75E-02	1.47E-03	2.36E-03
8931	641436.2	4170548.9	Worker	Scenario 4	6.66E-02	1.43E-03	2.40E-03
8932	641536.2	4170548.9	Worker	Scenario 4	6.55E-02	1.39E-03	2.44E-03
8933	641636.2	4170548.9	Worker	Scenario 4	6.45E-02	1.35E-03	2.44E-03
8934	641736.2	4170548.9	Worker	Scenario 4	6.35E-02	1.32E-03	2.41E-03
8935	641836.2	4170548.9	Worker	Scenario 4	6.25E-02	1.29E-03	2.37E-03
8936	641936.2	4170548.9	Worker	Scenario 4	6.13E-02	1.26E-03	2.19E-03
8937	642036.2	4170548.9	Worker	Scenario 4	6.03E-02	1.23E-03	2.37E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
8938	642136.2	4170548.9	Worker	Scenario 4	5.92E-02	1.20E-03	2.60E-03
8939	642236.2	4170548.9	Worker	Scenario 4	5.81E-02	1.17E-03	3.97E-03
8940	642336.2	4170548.9	Worker	Scenario 4	5.71E-02	1.14E-03	5.12E-03
8941	642436.2	4170548.9	Worker	Scenario 4	5.60E-02	1.11E-03	5.15E-03
8942	642536.2	4170548.9	Worker	Scenario 4	5.49E-02	1.08E-03	4.08E-03
8943	642636.2	4170548.9	Worker	Scenario 4	5.38E-02	1.05E-03	2.73E-03
8944	642736.2	4170548.9	Worker	Scenario 4	5.27E-02	1.02E-03	1.97E-03
8945	642836.2	4170548.9	Worker	Scenario 4	5.17E-02	9.95E-04	2.14E-03
8946	642936.2	4170548.9	Worker	Scenario 4	5.05E-02	9.68E-04	2.07E-03
8947	643036.2	4170548.9	Worker	Scenario 4	4.96E-02	9.45E-04	2.10E-03
8948	643136.2	4170548.9	Worker	Scenario 4	4.87E-02	9.25E-04	2.47E-03
8949	643236.2	4170548.9	Worker	Scenario 4	4.78E-02	9.06E-04	2.69E-03
8950	643336.2	4170548.9	Worker	Scenario 4	4.69E-02	8.86E-04	2.53E-03
8951	643436.2	4170548.9	Worker	Scenario 4	4.60E-02	8.68E-04	2.08E-03
8952	643536.2	4170548.9	Worker	Scenario 4	4.52E-02	8.51E-04	1.84E-03
8953	635736.2	4170648.9	Worker	Scenario 4	1.19E-02	3.03E-04	1.23E-03
8954	635836.2	4170648.9	Worker	Scenario 4	1.24E-02	3.15E-04	1.31E-03
8955	636236.2	4170648.9	Worker	Scenario 4	1.49E-02	3.78E-04	8.16E-04
8956	636336.2	4170648.9	Worker	Scenario 4	1.57E-02	3.97E-04	8.06E-04
8957	636436.2	4170648.9	Worker	Scenario 4	1.65E-02	4.17E-04	8.78E-04
8958	636536.2	4170648.9	Worker	Scenario 4	1.85E-02	4.65E-04	9.14E-04
8959	636636.2	4170648.9	Worker	Scenario 4	1.93E-02	4.87E-04	9.24E-04
8960	636736.2	4170648.9	Worker	Scenario 4	1.95E-02	4.95E-04	9.00E-04
8961	636836.2	4170648.9	Worker	Scenario 4	2.10E-02	5.35E-04	8.49E-04
8962	636936.2	4170648.9	Worker	Scenario 4	2.20E-02	5.64E-04	8.25E-04
8963	637036.2	4170648.9	Worker	Scenario 4	2.37E-02	6.10E-04	9.23E-04
8964	637336.2	4170648.9	Worker	Scenario 4	2.92E-02	7.61E-04	1.05E-03
8965	637436.2	4170648.9	Worker	Scenario 4	3.11E-02	8.19E-04	1.06E-03
8966	637536.2	4170648.9	Worker	Scenario 4	3.33E-02	8.84E-04	1.11E-03
8967	637636.2	4170648.9	Worker	Scenario 4	3.55E-02	9.47E-04	1.14E-03
8968	637736.2	4170648.9	Worker	Scenario 4	3.80E-02	1.02E-03	1.17E-03
8969	637836.2	4170648.9	Worker	Scenario 4	4.05E-02	1.10E-03	1.20E-03
8970	637936.2	4170648.9	Worker	Scenario 4	4.30E-02	1.17E-03	1.18E-03
8971	638036.2	4170648.9	Worker	Scenario 4	4.55E-02	1.25E-03	1.26E-03
8972	638136.2	4170648.9	Worker	Scenario 4	4.61E-02	1.28E-03	1.24E-03
8973	638236.2	4170648.9	Worker	Scenario 4	4.77E-02	1.33E-03	1.26E-03
8974	638336.2	4170648.9	Worker	Scenario 4	5.15E-02	1.42E-03	1.34E-03
8975	638536.2	4170648.9	Worker	Scenario 4	5.45E-02	1.51E-03	1.24E-03
8976	638636.2	4170648.9	Worker	Scenario 4	5.46E-02	1.52E-03	1.38E-03
8977	638736.2	4170648.9	Worker	Scenario 4	5.52E-02	1.54E-03	1.51E-03
8978	638836.2	4170648.9	Worker	Scenario 4	5.60E-02	1.56E-03	1.79E-03
8979	638936.2	4170648.9	Worker	Scenario 4	5.41E-02	1.50E-03	1.71E-03
8980	639036.2	4170648.9	Worker	Scenario 4	5.49E-02	1.52E-03	1.47E-03
8981	639136.2	4170648.9	Worker	Scenario 4	5.56E-02	1.54E-03	1.48E-03
8982	639236.2	4170648.9	Worker	Scenario 4	5.40E-02	1.47E-03	1.37E-03
8983	639336.2	4170648.9	Worker	Scenario 4	5.81E-02	1.58E-03	1.57E-03
8984	639436.2	4170648.9	Worker	Scenario 4	6.00E-02	1.61E-03	1.61E-03
8985	639536.2	4170648.9	Worker	Scenario 4	6.03E-02	1.60E-03	1.77E-03
8986	639636.2	4170648.9	Worker	Scenario 4	6.05E-02	1.58E-03	1.98E-03
8987	639736.2	4170648.9	Worker	Scenario 4	6.07E-02	1.57E-03	1.99E-03
8988	639836.2	4170648.9	Worker	Scenario 4	6.10E-02	1.56E-03	2.03E-03
8989	639936.2	4170648.9	Worker	Scenario 4	6.12E-02	1.54E-03	2.07E-03
8990	640036.2	4170648.9	Worker	Scenario 4	6.15E-02	1.53E-03	2.08E-03
8991	640136.2	4170648.9	Worker	Scenario 4	6.18E-02	1.52E-03	2.11E-03
8992	640236.2	4170648.9	Worker	Scenario 4	6.22E-02	1.51E-03	1.90E-03
8993	640336.2	4170648.9	Worker	Scenario 4	6.25E-02	1.51E-03	2.16E-03
8994	640436.2	4170648.9	Worker	Scenario 4	6.29E-02	1.50E-03	2.17E-03
8995	640536.2	4170648.9	Worker	Scenario 4	6.33E-02	1.50E-03	2.20E-03
8996	640636.2	4170648.9	Worker	Scenario 4	6.38E-02	1.49E-03	2.32E-03
8997	640736.2	4170648.9	Worker	Scenario 4	6.41E-02	1.49E-03	2.21E-03
8998	640836.2	4170648.9	Worker	Scenario 4	6.43E-02	1.48E-03	2.25E-03
8999	640936.2	4170648.9	Worker	Scenario 4	6.44E-02	1.46E-03	2.26E-03
9000	641036.2	4170648.9	Worker	Scenario 4	6.42E-02	1.44E-03	2.19E-03
9001	641136.2	4170648.9	Worker	Scenario 4	6.39E-02	1.41E-03	2.26E-03
9002	641236.2	4170648.9	Worker	Scenario 4	6.33E-02	1.38E-03	2.28E-03
9003	641336.2	4170648.9	Worker	Scenario 4	6.27E-02	1.35E-03	2.26E-03
9004	641436.2	4170648.9	Worker	Scenario 4	6.20E-02	1.33E-03	2.30E-03
9005	641536.2	4170648.9	Worker	Scenario 4	6.11E-02	1.29E-03	2.34E-03
9006	641636.2	4170648.9	Worker	Scenario 4	6.03E-02	1.26E-03	2.33E-03
9007	641736.2	4170648.9	Worker	Scenario 4	5.95E-02	1.24E-03	2.30E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9008	641836.2	4170648.9	Worker	Scenario 4	5.87E-02	1.21E-03	2.30E-03
9009	641936.2	4170648.9	Worker	Scenario 4	5.78E-02	1.18E-03	2.16E-03
9010	642036.2	4170648.9	Worker	Scenario 4	5.69E-02	1.16E-03	2.26E-03
9011	642136.2	4170648.9	Worker	Scenario 4	5.59E-02	1.13E-03	2.38E-03
9012	642236.2	4170648.9	Worker	Scenario 4	5.50E-02	1.11E-03	3.50E-03
9013	642336.2	4170648.9	Worker	Scenario 4	5.41E-02	1.08E-03	4.77E-03
9014	642436.2	4170648.9	Worker	Scenario 4	5.31E-02	1.05E-03	5.14E-03
9015	642536.2	4170648.9	Worker	Scenario 4	5.21E-02	1.03E-03	4.38E-03
9016	642636.2	4170648.9	Worker	Scenario 4	5.11E-02	1.00E-03	3.01E-03
9017	642736.2	4170648.9	Worker	Scenario 4	5.01E-02	9.74E-04	2.00E-03
9018	642836.2	4170648.9	Worker	Scenario 4	4.91E-02	9.49E-04	2.02E-03
9019	642936.2	4170648.9	Worker	Scenario 4	4.81E-02	9.25E-04	1.94E-03
9020	643036.2	4170648.9	Worker	Scenario 4	4.72E-02	9.04E-04	1.99E-03
9021	643136.2	4170648.9	Worker	Scenario 4	4.64E-02	8.84E-04	2.17E-03
9022	643236.2	4170648.9	Worker	Scenario 4	4.56E-02	8.66E-04	2.55E-03
9023	643336.2	4170648.9	Worker	Scenario 4	4.48E-02	8.48E-04	2.59E-03
9024	643436.2	4170648.9	Worker	Scenario 4	4.40E-02	8.32E-04	2.31E-03
9025	635736.2	4170748.9	Worker	Scenario 4	1.21E-02	3.06E-04	1.29E-03
9026	636336.2	4170748.9	Worker	Scenario 4	1.58E-02	3.99E-04	8.65E-04
9027	636436.2	4170748.9	Worker	Scenario 4	1.66E-02	4.20E-04	8.91E-04
9028	636536.2	4170748.9	Worker	Scenario 4	1.85E-02	4.64E-04	8.77E-04
9029	636636.2	4170748.9	Worker	Scenario 4	1.95E-02	4.92E-04	8.32E-04
9030	636736.2	4170748.9	Worker	Scenario 4	2.05E-02	5.21E-04	7.96E-04
9031	636836.2	4170748.9	Worker	Scenario 4	2.16E-02	5.52E-04	8.00E-04
9032	636936.2	4170748.9	Worker	Scenario 4	2.27E-02	5.81E-04	9.13E-04
9033	637236.2	4170748.9	Worker	Scenario 4	2.66E-02	6.92E-04	9.97E-04
9034	637336.2	4170748.9	Worker	Scenario 4	2.88E-02	7.52E-04	1.03E-03
9035	637436.2	4170748.9	Worker	Scenario 4	3.06E-02	8.05E-04	1.06E-03
9036	637536.2	4170748.9	Worker	Scenario 4	3.25E-02	8.61E-04	1.09E-03
9037	637636.2	4170748.9	Worker	Scenario 4	3.46E-02	9.22E-04	1.12E-03
9038	637736.2	4170748.9	Worker	Scenario 4	3.65E-02	9.79E-04	1.15E-03
9039	637836.2	4170748.9	Worker	Scenario 4	3.86E-02	1.04E-03	1.14E-03
9040	637936.2	4170748.9	Worker	Scenario 4	4.07E-02	1.10E-03	1.21E-03
9041	638036.2	4170748.9	Worker	Scenario 4	4.27E-02	1.16E-03	1.23E-03
9042	638136.2	4170748.9	Worker	Scenario 4	4.46E-02	1.22E-03	1.24E-03
9043	638236.2	4170748.9	Worker	Scenario 4	4.64E-02	1.26E-03	1.31E-03
9044	638336.2	4170748.9	Worker	Scenario 4	4.79E-02	1.30E-03	1.32E-03
9045	638636.2	4170748.9	Worker	Scenario 4	5.11E-02	1.39E-03	1.43E-03
9046	638736.2	4170748.9	Worker	Scenario 4	5.20E-02	1.42E-03	1.74E-03
9047	638836.2	4170748.9	Worker	Scenario 4	5.34E-02	1.44E-03	1.84E-03
9048	638936.2	4170748.9	Worker	Scenario 4	5.06E-02	1.38E-03	1.49E-03
9049	639036.2	4170748.9	Worker	Scenario 4	5.14E-02	1.40E-03	1.40E-03
9050	639136.2	4170748.9	Worker	Scenario 4	5.24E-02	1.41E-03	1.42E-03
9051	639236.2	4170748.9	Worker	Scenario 4	5.09E-02	1.36E-03	1.41E-03
9052	639336.2	4170748.9	Worker	Scenario 4	5.43E-02	1.44E-03	1.51E-03
9053	639436.2	4170748.9	Worker	Scenario 4	5.62E-02	1.48E-03	1.52E-03
9054	639536.2	4170748.9	Worker	Scenario 4	5.66E-02	1.47E-03	1.86E-03
9055	639636.2	4170748.9	Worker	Scenario 4	5.69E-02	1.46E-03	1.91E-03
9056	639736.2	4170748.9	Worker	Scenario 4	5.72E-02	1.45E-03	1.84E-03
9057	639836.2	4170748.9	Worker	Scenario 4	5.75E-02	1.44E-03	1.95E-03
9058	639936.2	4170748.9	Worker	Scenario 4	5.77E-02	1.43E-03	1.92E-03
9059	640036.2	4170748.9	Worker	Scenario 4	5.80E-02	1.43E-03	2.02E-03
9060	640136.2	4170748.9	Worker	Scenario 4	5.83E-02	1.42E-03	1.99E-03
9061	640236.2	4170748.9	Worker	Scenario 4	5.87E-02	1.42E-03	1.98E-03
9062	640336.2	4170748.9	Worker	Scenario 4	5.91E-02	1.41E-03	2.04E-03
9063	640436.2	4170748.9	Worker	Scenario 4	5.95E-02	1.41E-03	2.11E-03
9064	640536.2	4170748.9	Worker	Scenario 4	5.98E-02	1.40E-03	2.12E-03
9065	640636.2	4170748.9	Worker	Scenario 4	6.01E-02	1.40E-03	2.22E-03
9066	640736.2	4170748.9	Worker	Scenario 4	6.03E-02	1.39E-03	2.15E-03
9067	640836.2	4170748.9	Worker	Scenario 4	6.04E-02	1.38E-03	2.14E-03
9068	640936.2	4170748.9	Worker	Scenario 4	6.04E-02	1.36E-03	2.17E-03
9069	641036.2	4170748.9	Worker	Scenario 4	6.02E-02	1.34E-03	2.15E-03
9070	641136.2	4170748.9	Worker	Scenario 4	5.98E-02	1.31E-03	2.16E-03
9071	641236.2	4170748.9	Worker	Scenario 4	5.92E-02	1.28E-03	2.19E-03
9072	641336.2	4170748.9	Worker	Scenario 4	5.86E-02	1.26E-03	2.18E-03
9073	641436.2	4170748.9	Worker	Scenario 4	5.80E-02	1.24E-03	2.21E-03
9074	641536.2	4170748.9	Worker	Scenario 4	5.74E-02	1.21E-03	2.25E-03
9075	641636.2	4170748.9	Worker	Scenario 4	5.66E-02	1.18E-03	2.23E-03
9076	641736.2	4170748.9	Worker	Scenario 4	5.59E-02	1.16E-03	2.20E-03
9077	641836.2	4170748.9	Worker	Scenario 4	5.53E-02	1.14E-03	2.22E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9078	641936.2	4170748.9	Worker	Scenario 4	5.46E-02	1.12E-03	2.13E-03
9079	642036.2	4170748.9	Worker	Scenario 4	5.39E-02	1.10E-03	2.14E-03
9080	642136.2	4170748.9	Worker	Scenario 4	5.31E-02	1.07E-03	2.19E-03
9081	642236.2	4170748.9	Worker	Scenario 4	5.22E-02	1.05E-03	3.06E-03
9082	642336.2	4170748.9	Worker	Scenario 4	5.14E-02	1.03E-03	4.39E-03
9083	642436.2	4170748.9	Worker	Scenario 4	5.05E-02	1.00E-03	5.03E-03
9084	642536.2	4170748.9	Worker	Scenario 4	4.95E-02	9.80E-04	4.60E-03
9085	642636.2	4170748.9	Worker	Scenario 4	4.86E-02	9.55E-04	3.39E-03
9086	642736.2	4170748.9	Worker	Scenario 4	4.77E-02	9.31E-04	2.31E-03
9087	642836.2	4170748.9	Worker	Scenario 4	4.68E-02	9.08E-04	1.84E-03
9088	642936.2	4170748.9	Worker	Scenario 4	4.59E-02	8.85E-04	1.95E-03
9089	643036.2	4170748.9	Worker	Scenario 4	4.51E-02	8.65E-04	1.92E-03
9090	643136.2	4170748.9	Worker	Scenario 4	4.43E-02	8.46E-04	1.95E-03
9091	643236.2	4170748.9	Worker	Scenario 4	4.36E-02	8.29E-04	2.32E-03
9092	643336.2	4170748.9	Worker	Scenario 4	4.28E-02	8.13E-04	2.55E-03
9093	636436.2	4170848.9	Worker	Scenario 4	1.68E-02	4.24E-04	8.30E-04
9094	636536.2	4170848.9	Worker	Scenario 4	1.77E-02	4.48E-04	7.83E-04
9095	636936.2	4170848.9	Worker	Scenario 4	2.19E-02	5.65E-04	9.68E-04
9096	637336.2	4170848.9	Worker	Scenario 4	2.81E-02	7.35E-04	1.02E-03
9097	637436.2	4170848.9	Worker	Scenario 4	2.99E-02	7.85E-04	1.05E-03
9098	637536.2	4170848.9	Worker	Scenario 4	3.16E-02	8.36E-04	1.09E-03
9099	637636.2	4170848.9	Worker	Scenario 4	3.33E-02	8.90E-04	1.08E-03
9100	637736.2	4170848.9	Worker	Scenario 4	3.51E-02	9.41E-04	1.09E-03
9101	637836.2	4170848.9	Worker	Scenario 4	3.70E-02	9.93E-04	1.15E-03
9102	637936.2	4170848.9	Worker	Scenario 4	3.88E-02	1.04E-03	1.17E-03
9103	638036.2	4170848.9	Worker	Scenario 4	4.04E-02	1.09E-03	1.20E-03
9104	638136.2	4170848.9	Worker	Scenario 4	4.21E-02	1.13E-03	1.28E-03
9105	638236.2	4170848.9	Worker	Scenario 4	4.36E-02	1.17E-03	1.30E-03
9106	638336.2	4170848.9	Worker	Scenario 4	4.50E-02	1.21E-03	1.19E-03
9107	638536.2	4170848.9	Worker	Scenario 4	4.74E-02	1.27E-03	1.37E-03
9108	638636.2	4170848.9	Worker	Scenario 4	4.83E-02	1.30E-03	1.69E-03
9109	638736.2	4170848.9	Worker	Scenario 4	4.93E-02	1.32E-03	1.82E-03
9110	638836.2	4170848.9	Worker	Scenario 4	4.95E-02	1.32E-03	1.62E-03
9111	638936.2	4170848.9	Worker	Scenario 4	4.76E-02	1.27E-03	1.35E-03
9112	639036.2	4170848.9	Worker	Scenario 4	4.84E-02	1.29E-03	1.37E-03
9113	639136.2	4170848.9	Worker	Scenario 4	4.91E-02	1.30E-03	1.37E-03
9114	639236.2	4170848.9	Worker	Scenario 4	4.81E-02	1.27E-03	1.36E-03
9115	639336.2	4170848.9	Worker	Scenario 4	5.11E-02	1.34E-03	1.42E-03
9116	639436.2	4170848.9	Worker	Scenario 4	5.26E-02	1.36E-03	1.67E-03
9117	639536.2	4170848.9	Worker	Scenario 4	5.29E-02	1.35E-03	1.81E-03
9118	639636.2	4170848.9	Worker	Scenario 4	5.37E-02	1.36E-03	1.83E-03
9119	639736.2	4170848.9	Worker	Scenario 4	5.40E-02	1.35E-03	1.88E-03
9120	639836.2	4170848.9	Worker	Scenario 4	5.43E-02	1.35E-03	1.91E-03
9121	639936.2	4170848.9	Worker	Scenario 4	5.46E-02	1.34E-03	1.89E-03
9122	640036.2	4170848.9	Worker	Scenario 4	5.49E-02	1.33E-03	1.95E-03
9123	640136.2	4170848.9	Worker	Scenario 4	5.52E-02	1.33E-03	1.81E-03
9124	640236.2	4170848.9	Worker	Scenario 4	5.56E-02	1.33E-03	1.98E-03
9125	640336.2	4170848.9	Worker	Scenario 4	5.59E-02	1.32E-03	1.92E-03
9126	640436.2	4170848.9	Worker	Scenario 4	5.63E-02	1.32E-03	2.01E-03
9127	640536.2	4170848.9	Worker	Scenario 4	5.65E-02	1.31E-03	2.06E-03
9128	640636.2	4170848.9	Worker	Scenario 4	5.68E-02	1.31E-03	2.10E-03
9129	640736.2	4170848.9	Worker	Scenario 4	5.69E-02	1.30E-03	2.07E-03
9130	640836.2	4170848.9	Worker	Scenario 4	5.69E-02	1.29E-03	2.01E-03
9131	640936.2	4170848.9	Worker	Scenario 4	5.68E-02	1.27E-03	2.07E-03
9132	641036.2	4170848.9	Worker	Scenario 4	5.66E-02	1.25E-03	2.10E-03
9133	641136.2	4170848.9	Worker	Scenario 4	5.62E-02	1.23E-03	2.08E-03
9134	641236.2	4170848.9	Worker	Scenario 4	5.56E-02	1.20E-03	2.10E-03
9135	641336.2	4170848.9	Worker	Scenario 4	5.51E-02	1.18E-03	2.10E-03
9136	641436.2	4170848.9	Worker	Scenario 4	5.46E-02	1.16E-03	2.13E-03
9137	641536.2	4170848.9	Worker	Scenario 4	5.40E-02	1.14E-03	2.16E-03
9138	641636.2	4170848.9	Worker	Scenario 4	5.34E-02	1.12E-03	2.14E-03
9139	641736.2	4170848.9	Worker	Scenario 4	5.28E-02	1.10E-03	2.13E-03
9140	641836.2	4170848.9	Worker	Scenario 4	5.23E-02	1.08E-03	2.13E-03
9141	641936.2	4170848.9	Worker	Scenario 4	5.17E-02	1.06E-03	2.09E-03
9142	642036.2	4170848.9	Worker	Scenario 4	5.11E-02	1.04E-03	2.02E-03
9143	642136.2	4170848.9	Worker	Scenario 4	5.04E-02	1.02E-03	2.10E-03
9144	642236.2	4170848.9	Worker	Scenario 4	4.97E-02	1.00E-03	2.66E-03
9145	642336.2	4170848.9	Worker	Scenario 4	4.89E-02	9.80E-04	3.98E-03
9146	642436.2	4170848.9	Worker	Scenario 4	4.80E-02	9.59E-04	4.84E-03
9147	642536.2	4170848.9	Worker	Scenario 4	4.72E-02	9.37E-04	4.72E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9148	642636.2	4170848.9	Worker	Scenario 4	4.63E-02	9.15E-04	3.72E-03
9149	642736.2	4170848.9	Worker	Scenario 4	4.55E-02	8.92E-04	2.57E-03
9150	642836.2	4170848.9	Worker	Scenario 4	4.47E-02	8.71E-04	1.75E-03
9151	642936.2	4170848.9	Worker	Scenario 4	4.39E-02	8.49E-04	1.88E-03
9152	643036.2	4170848.9	Worker	Scenario 4	4.31E-02	8.31E-04	1.76E-03
9153	643136.2	4170848.9	Worker	Scenario 4	4.24E-02	8.13E-04	1.83E-03
9154	643236.2	4170848.9	Worker	Scenario 4	4.17E-02	7.96E-04	2.05E-03
9155	643336.2	4170848.9	Worker	Scenario 4	4.09E-02	7.79E-04	2.40E-03
9156	637336.2	4170948.9	Worker	Scenario 4	2.77E-02	7.23E-04	1.02E-03
9157	637436.2	4170948.9	Worker	Scenario 4	2.92E-02	7.67E-04	1.05E-03
9158	637536.2	4170948.9	Worker	Scenario 4	3.09E-02	8.16E-04	1.04E-03
9159	637636.2	4170948.9	Worker	Scenario 4	3.15E-02	8.41E-04	1.02E-03
9160	637736.2	4170948.9	Worker	Scenario 4	3.29E-02	8.80E-04	1.07E-03
9161	637836.2	4170948.9	Worker	Scenario 4	3.46E-02	9.28E-04	1.10E-03
9162	637936.2	4170948.9	Worker	Scenario 4	3.66E-02	9.81E-04	1.13E-03
9163	638036.2	4170948.9	Worker	Scenario 4	3.84E-02	1.02E-03	1.26E-03
9164	638136.2	4170948.9	Worker	Scenario 4	3.99E-02	1.06E-03	1.28E-03
9165	638236.2	4170948.9	Worker	Scenario 4	4.12E-02	1.10E-03	1.18E-03
9166	638536.2	4170948.9	Worker	Scenario 4	4.46E-02	1.18E-03	1.60E-03
9167	638636.2	4170948.9	Worker	Scenario 4	4.55E-02	1.20E-03	1.77E-03
9168	638736.2	4170948.9	Worker	Scenario 4	4.63E-02	1.22E-03	1.68E-03
9169	638836.2	4170948.9	Worker	Scenario 4	4.51E-02	1.20E-03	1.34E-03
9170	638936.2	4170948.9	Worker	Scenario 4	4.49E-02	1.19E-03	1.31E-03
9171	639036.2	4170948.9	Worker	Scenario 4	4.57E-02	1.20E-03	1.27E-03
9172	639136.2	4170948.9	Worker	Scenario 4	4.44E-02	1.16E-03	1.30E-03
9173	639236.2	4170948.9	Worker	Scenario 4	4.49E-02	1.16E-03	1.30E-03
9174	639336.2	4170948.9	Worker	Scenario 4	4.85E-02	1.25E-03	1.44E-03
9175	639436.2	4170948.9	Worker	Scenario 4	4.96E-02	1.26E-03	1.72E-03
9176	639536.2	4170948.9	Worker	Scenario 4	5.01E-02	1.26E-03	1.76E-03
9177	639636.2	4170948.9	Worker	Scenario 4	5.06E-02	1.26E-03	1.70E-03
9178	639736.2	4170948.9	Worker	Scenario 4	5.12E-02	1.27E-03	1.81E-03
9179	639836.2	4170948.9	Worker	Scenario 4	5.15E-02	1.26E-03	1.80E-03
9180	639936.2	4170948.9	Worker	Scenario 4	5.18E-02	1.26E-03	1.87E-03
9181	640036.2	4170948.9	Worker	Scenario 4	5.21E-02	1.25E-03	1.87E-03
9182	640136.2	4170948.9	Worker	Scenario 4	5.24E-02	1.25E-03	1.73E-03
9183	640236.2	4170948.9	Worker	Scenario 4	5.27E-02	1.25E-03	1.93E-03
9184	640336.2	4170948.9	Worker	Scenario 4	5.31E-02	1.24E-03	1.93E-03
9185	640436.2	4170948.9	Worker	Scenario 4	5.34E-02	1.24E-03	1.96E-03
9186	640536.2	4170948.9	Worker	Scenario 4	5.36E-02	1.24E-03	2.03E-03
9187	640636.2	4170948.9	Worker	Scenario 4	5.38E-02	1.23E-03	2.00E-03
9188	640736.2	4170948.9	Worker	Scenario 4	5.38E-02	1.22E-03	1.97E-03
9189	640836.2	4170948.9	Worker	Scenario 4	5.38E-02	1.21E-03	1.90E-03
9190	640936.2	4170948.9	Worker	Scenario 4	5.37E-02	1.19E-03	1.97E-03
9191	641036.2	4170948.9	Worker	Scenario 4	5.34E-02	1.18E-03	2.05E-03
9192	641136.2	4170948.9	Worker	Scenario 4	5.30E-02	1.15E-03	2.01E-03
9193	641236.2	4170948.9	Worker	Scenario 4	5.24E-02	1.13E-03	2.01E-03
9194	641336.2	4170948.9	Worker	Scenario 4	5.19E-02	1.11E-03	2.01E-03
9195	641436.2	4170948.9	Worker	Scenario 4	5.14E-02	1.09E-03	2.04E-03
9196	641536.2	4170948.9	Worker	Scenario 4	5.09E-02	1.07E-03	2.07E-03
9197	641636.2	4170948.9	Worker	Scenario 4	5.04E-02	1.05E-03	2.05E-03
9198	641736.2	4170948.9	Worker	Scenario 4	4.99E-02	1.04E-03	2.05E-03
9199	641836.2	4170948.9	Worker	Scenario 4	4.95E-02	1.02E-03	2.04E-03
9200	641936.2	4170948.9	Worker	Scenario 4	4.90E-02	1.00E-03	2.03E-03
9201	642036.2	4170948.9	Worker	Scenario 4	4.86E-02	9.88E-04	1.89E-03
9202	642136.2	4170948.9	Worker	Scenario 4	4.80E-02	9.71E-04	2.01E-03
9203	642236.2	4170948.9	Worker	Scenario 4	4.73E-02	9.53E-04	2.36E-03
9204	642336.2	4170948.9	Worker	Scenario 4	4.66E-02	9.35E-04	3.58E-03
9205	642436.2	4170948.9	Worker	Scenario 4	4.58E-02	9.17E-04	4.57E-03
9206	642536.2	4170948.9	Worker	Scenario 4	4.50E-02	8.97E-04	4.74E-03
9207	642636.2	4170948.9	Worker	Scenario 4	4.42E-02	8.77E-04	4.00E-03
9208	642736.2	4170948.9	Worker	Scenario 4	4.34E-02	8.56E-04	2.80E-03
9209	642836.2	4170948.9	Worker	Scenario 4	4.27E-02	8.36E-04	1.95E-03
9210	642936.2	4170948.9	Worker	Scenario 4	4.20E-02	8.16E-04	1.74E-03
9211	643036.2	4170948.9	Worker	Scenario 4	4.13E-02	7.98E-04	1.79E-03
9212	643136.2	4170948.9	Worker	Scenario 4	4.06E-02	7.81E-04	1.78E-03
9213	643236.2	4170948.9	Worker	Scenario 4	4.00E-02	7.66E-04	1.82E-03
9214	636836.2	4171048.9	Worker	Scenario 4	2.08E-02	5.36E-04	8.92E-04
9215	637036.2	4171048.9	Worker	Scenario 4	2.32E-02	6.01E-04	9.41E-04
9216	637136.2	4171048.9	Worker	Scenario 4	2.47E-02	6.43E-04	9.33E-04
9217	637236.2	4171048.9	Worker	Scenario 4	2.60E-02	6.79E-04	9.63E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9218	637336.2	4171048.9	Worker	Scenario 4	2.67E-02	7.04E-04	9.78E-04
9219	637436.2	4171048.9	Worker	Scenario 4	2.84E-02	7.50E-04	9.88E-04
9220	637536.2	4171048.9	Worker	Scenario 4	2.99E-02	7.88E-04	1.02E-03
9221	637636.2	4171048.9	Worker	Scenario 4	3.13E-02	8.26E-04	1.07E-03
9222	637736.2	4171048.9	Worker	Scenario 4	3.18E-02	8.46E-04	1.05E-03
9223	637836.2	4171048.9	Worker	Scenario 4	3.31E-02	8.81E-04	1.06E-03
9224	637936.2	4171048.9	Worker	Scenario 4	3.54E-02	9.37E-04	1.21E-03
9225	638036.2	4171048.9	Worker	Scenario 4	3.68E-02	9.72E-04	1.23E-03
9226	638136.2	4171048.9	Worker	Scenario 4	3.80E-02	1.00E-03	1.17E-03
9227	638236.2	4171048.9	Worker	Scenario 4	3.92E-02	1.03E-03	1.12E-03
9228	638436.2	4171048.9	Worker	Scenario 4	4.14E-02	1.09E-03	1.52E-03
9229	638536.2	4171048.9	Worker	Scenario 4	4.24E-02	1.11E-03	1.73E-03
9230	638636.2	4171048.9	Worker	Scenario 4	4.32E-02	1.13E-03	1.72E-03
9231	638736.2	4171048.9	Worker	Scenario 4	4.40E-02	1.15E-03	1.43E-03
9232	638836.2	4171048.9	Worker	Scenario 4	4.22E-02	1.10E-03	1.26E-03
9233	638936.2	4171048.9	Worker	Scenario 4	4.25E-02	1.11E-03	1.24E-03
9234	639036.2	4171048.9	Worker	Scenario 4	4.37E-02	1.13E-03	1.31E-03
9235	639136.2	4171048.9	Worker	Scenario 4	4.41E-02	1.14E-03	1.32E-03
9236	639236.2	4171048.9	Worker	Scenario 4	4.45E-02	1.14E-03	1.28E-03
9237	639336.2	4171048.9	Worker	Scenario 4	4.64E-02	1.18E-03	1.57E-03
9238	639436.2	4171048.9	Worker	Scenario 4	4.60E-02	1.16E-03	1.63E-03
9239	639536.2	4171048.9	Worker	Scenario 4	4.65E-02	1.16E-03	1.64E-03
9240	639636.2	4171048.9	Worker	Scenario 4	4.80E-02	1.19E-03	1.73E-03
9241	639736.2	4171048.9	Worker	Scenario 4	4.86E-02	1.19E-03	1.77E-03
9242	639836.2	4171048.9	Worker	Scenario 4	4.89E-02	1.19E-03	1.73E-03
9243	639936.2	4171048.9	Worker	Scenario 4	4.92E-02	1.18E-03	1.79E-03
9244	640036.2	4171048.9	Worker	Scenario 4	4.95E-02	1.18E-03	1.74E-03
9245	640136.2	4171048.9	Worker	Scenario 4	4.98E-02	1.18E-03	1.78E-03
9246	640236.2	4171048.9	Worker	Scenario 4	5.01E-02	1.18E-03	1.82E-03
9247	640336.2	4171048.9	Worker	Scenario 4	5.04E-02	1.17E-03	1.88E-03
9248	640436.2	4171048.9	Worker	Scenario 4	5.06E-02	1.17E-03	1.87E-03
9249	640536.2	4171048.9	Worker	Scenario 4	5.08E-02	1.16E-03	1.98E-03
9250	640636.2	4171048.9	Worker	Scenario 4	5.10E-02	1.16E-03	1.91E-03
9251	640736.2	4171048.9	Worker	Scenario 4	5.11E-02	1.15E-03	1.93E-03
9252	640836.2	4171048.9	Worker	Scenario 4	5.10E-02	1.14E-03	1.88E-03
9253	640936.2	4171048.9	Worker	Scenario 4	5.08E-02	1.12E-03	1.91E-03
9254	641036.2	4171048.9	Worker	Scenario 4	5.05E-02	1.11E-03	2.00E-03
9255	641136.2	4171048.9	Worker	Scenario 4	5.01E-02	1.09E-03	1.95E-03
9256	641236.2	4171048.9	Worker	Scenario 4	4.97E-02	1.07E-03	1.93E-03
9257	641336.2	4171048.9	Worker	Scenario 4	4.92E-02	1.05E-03	1.95E-03
9258	641436.2	4171048.9	Worker	Scenario 4	4.87E-02	1.03E-03	1.97E-03
9259	641536.2	4171048.9	Worker	Scenario 4	4.83E-02	1.02E-03	2.00E-03
9260	641636.2	4171048.9	Worker	Scenario 4	4.79E-02	1.00E-03	1.97E-03
9261	641736.2	4171048.9	Worker	Scenario 4	4.74E-02	9.84E-04	1.98E-03
9262	641836.2	4171048.9	Worker	Scenario 4	4.70E-02	9.68E-04	1.96E-03
9263	641936.2	4171048.9	Worker	Scenario 4	4.66E-02	9.54E-04	1.97E-03
9264	642036.2	4171048.9	Worker	Scenario 4	4.62E-02	9.40E-04	1.78E-03
9265	642136.2	4171048.9	Worker	Scenario 4	4.57E-02	9.25E-04	1.94E-03
9266	642236.2	4171048.9	Worker	Scenario 4	4.51E-02	9.09E-04	2.13E-03
9267	642336.2	4171048.9	Worker	Scenario 4	4.45E-02	8.93E-04	3.18E-03
9268	642436.2	4171048.9	Worker	Scenario 4	4.37E-02	8.77E-04	4.26E-03
9269	642536.2	4171048.9	Worker	Scenario 4	4.30E-02	8.59E-04	4.68E-03
9270	642636.2	4171048.9	Worker	Scenario 4	4.22E-02	8.41E-04	4.20E-03
9271	642736.2	4171048.9	Worker	Scenario 4	4.15E-02	8.22E-04	3.12E-03
9272	642836.2	4171048.9	Worker	Scenario 4	4.08E-02	8.03E-04	2.22E-03
9273	642936.2	4171048.9	Worker	Scenario 4	4.02E-02	7.86E-04	1.61E-03
9274	643036.2	4171048.9	Worker	Scenario 4	3.96E-02	7.69E-04	1.76E-03
9275	643136.2	4171048.9	Worker	Scenario 4	3.90E-02	7.52E-04	1.66E-03
9276	636936.2	4171148.9	Worker	Scenario 4	2.22E-02	5.72E-04	9.07E-04
9277	637036.2	4171148.9	Worker	Scenario 4	2.32E-02	6.02E-04	9.02E-04
9278	637136.2	4171148.9	Worker	Scenario 4	2.42E-02	6.31E-04	9.15E-04
9279	637236.2	4171148.9	Worker	Scenario 4	2.53E-02	6.63E-04	9.55E-04
9280	637336.2	4171148.9	Worker	Scenario 4	2.58E-02	6.80E-04	9.18E-04
9281	637436.2	4171148.9	Worker	Scenario 4	2.69E-02	7.12E-04	9.40E-04
9282	637536.2	4171148.9	Worker	Scenario 4	2.81E-02	7.45E-04	9.85E-04
9283	637636.2	4171148.9	Worker	Scenario 4	3.03E-02	7.96E-04	1.05E-03
9284	637736.2	4171148.9	Worker	Scenario 4	3.16E-02	8.29E-04	1.07E-03
9285	637836.2	4171148.9	Worker	Scenario 4	3.27E-02	8.60E-04	1.20E-03
9286	637936.2	4171148.9	Worker	Scenario 4	3.27E-02	8.67E-04	1.13E-03
9287	638036.2	4171148.9	Worker	Scenario 4	3.52E-02	9.25E-04	1.16E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9288	638136.2	4171148.9	Worker	Scenario 4	3.63E-02	9.52E-04	1.06E-03
9289	638436.2	4171148.9	Worker	Scenario 4	3.94E-02	1.03E-03	1.68E-03
9290	638536.2	4171148.9	Worker	Scenario 4	4.03E-02	1.05E-03	1.71E-03
9291	638636.2	4171148.9	Worker	Scenario 4	4.11E-02	1.06E-03	1.50E-03
9292	638736.2	4171148.9	Worker	Scenario 4	4.19E-02	1.08E-03	1.29E-03
9293	638836.2	4171148.9	Worker	Scenario 4	3.99E-02	1.03E-03	1.22E-03
9294	638936.2	4171148.9	Worker	Scenario 4	4.08E-02	1.05E-03	1.23E-03
9295	639036.2	4171148.9	Worker	Scenario 4	4.13E-02	1.06E-03	1.26E-03
9296	639136.2	4171148.9	Worker	Scenario 4	4.14E-02	1.05E-03	1.24E-03
9297	639236.2	4171148.9	Worker	Scenario 4	4.19E-02	1.06E-03	1.33E-03
9298	639336.2	4171148.9	Worker	Scenario 4	4.48E-02	1.12E-03	1.62E-03
9299	639436.2	4171148.9	Worker	Scenario 4	4.39E-02	1.09E-03	1.59E-03
9300	639536.2	4171148.9	Worker	Scenario 4	4.42E-02	1.09E-03	1.53E-03
9301	639636.2	4171148.9	Worker	Scenario 4	4.57E-02	1.12E-03	1.68E-03
9302	639736.2	4171148.9	Worker	Scenario 4	4.63E-02	1.12E-03	1.69E-03
9303	639836.2	4171148.9	Worker	Scenario 4	4.66E-02	1.12E-03	1.74E-03
9304	639936.2	4171148.9	Worker	Scenario 4	4.69E-02	1.12E-03	1.75E-03
9305	640036.2	4171148.9	Worker	Scenario 4	4.71E-02	1.12E-03	1.57E-03
9306	640136.2	4171148.9	Worker	Scenario 4	4.74E-02	1.11E-03	1.78E-03
9307	640236.2	4171148.9	Worker	Scenario 4	4.77E-02	1.11E-03	1.71E-03
9308	640336.2	4171148.9	Worker	Scenario 4	4.80E-02	1.11E-03	1.80E-03
9309	640436.2	4171148.9	Worker	Scenario 4	4.82E-02	1.10E-03	1.83E-03
9310	640536.2	4171148.9	Worker	Scenario 4	4.83E-02	1.10E-03	1.91E-03
9311	640636.2	4171148.9	Worker	Scenario 4	4.84E-02	1.09E-03	1.84E-03
9312	640736.2	4171148.9	Worker	Scenario 4	4.85E-02	1.09E-03	1.86E-03
9313	640836.2	4171148.9	Worker	Scenario 4	4.84E-02	1.07E-03	1.85E-03
9314	640936.2	4171148.9	Worker	Scenario 4	4.82E-02	1.06E-03	1.90E-03
9315	641036.2	4171148.9	Worker	Scenario 4	4.80E-02	1.05E-03	1.95E-03
9316	641136.2	4171148.9	Worker	Scenario 4	4.75E-02	1.03E-03	1.88E-03
9317	641236.2	4171148.9	Worker	Scenario 4	4.72E-02	1.01E-03	1.86E-03
9318	641336.2	4171148.9	Worker	Scenario 4	4.68E-02	9.99E-04	1.88E-03
9319	641436.2	4171148.9	Worker	Scenario 4	4.64E-02	9.85E-04	1.91E-03
9320	641536.2	4171148.9	Worker	Scenario 4	4.59E-02	9.67E-04	1.93E-03
9321	641636.2	4171148.9	Worker	Scenario 4	4.55E-02	9.52E-04	1.90E-03
9322	641736.2	4171148.9	Worker	Scenario 4	4.52E-02	9.37E-04	1.92E-03
9323	641836.2	4171148.9	Worker	Scenario 4	4.48E-02	9.22E-04	1.88E-03
9324	641936.2	4171148.9	Worker	Scenario 4	4.44E-02	9.08E-04	1.90E-03
9325	642036.2	4171148.9	Worker	Scenario 4	4.41E-02	8.96E-04	1.70E-03
9326	642136.2	4171148.9	Worker	Scenario 4	4.36E-02	8.81E-04	1.87E-03
9327	642236.2	4171148.9	Worker	Scenario 4	4.31E-02	8.68E-04	1.97E-03
9328	642336.2	4171148.9	Worker	Scenario 4	4.25E-02	8.54E-04	2.81E-03
9329	642436.2	4171148.9	Worker	Scenario 4	4.18E-02	8.39E-04	3.93E-03
9330	642536.2	4171148.9	Worker	Scenario 4	4.11E-02	8.24E-04	4.54E-03
9331	642636.2	4171148.9	Worker	Scenario 4	4.04E-02	8.08E-04	4.32E-03
9332	642736.2	4171148.9	Worker	Scenario 4	3.98E-02	7.91E-04	3.41E-03
9333	642836.2	4171148.9	Worker	Scenario 4	3.91E-02	7.74E-04	2.42E-03
9334	642936.2	4171148.9	Worker	Scenario 4	3.86E-02	7.58E-04	1.63E-03
9335	643036.2	4171148.9	Worker	Scenario 4	3.79E-02	7.40E-04	1.65E-03
9336	636836.2	4171248.9	Worker	Scenario 4	2.06E-02	5.33E-04	8.78E-04
9337	636936.2	4171248.9	Worker	Scenario 4	2.19E-02	5.67E-04	8.72E-04
9338	637036.2	4171248.9	Worker	Scenario 4	2.28E-02	5.93E-04	8.81E-04
9339	637136.2	4171248.9	Worker	Scenario 4	2.37E-02	6.19E-04	9.16E-04
9340	637236.2	4171248.9	Worker	Scenario 4	2.48E-02	6.49E-04	9.01E-04
9341	637336.2	4171248.9	Worker	Scenario 4	2.51E-02	6.61E-04	9.02E-04
9342	637436.2	4171248.9	Worker	Scenario 4	2.61E-02	6.88E-04	9.38E-04
9343	637536.2	4171248.9	Worker	Scenario 4	2.71E-02	7.14E-04	9.55E-04
9344	637636.2	4171248.9	Worker	Scenario 4	2.87E-02	7.56E-04	9.88E-04
9345	637736.2	4171248.9	Worker	Scenario 4	3.04E-02	7.95E-04	1.17E-03
9346	637836.2	4171248.9	Worker	Scenario 4	3.16E-02	8.24E-04	1.22E-03
9347	637936.2	4171248.9	Worker	Scenario 4	3.28E-02	8.55E-04	1.14E-03
9348	638336.2	4171248.9	Worker	Scenario 4	3.68E-02	9.52E-04	1.62E-03
9349	638436.2	4171248.9	Worker	Scenario 4	3.77E-02	9.73E-04	1.69E-03
9350	638536.2	4171248.9	Worker	Scenario 4	3.85E-02	9.89E-04	1.55E-03
9351	638636.2	4171248.9	Worker	Scenario 4	3.92E-02	1.00E-03	1.27E-03
9352	638736.2	4171248.9	Worker	Scenario 4	3.99E-02	1.02E-03	1.25E-03
9353	638836.2	4171248.9	Worker	Scenario 4	3.82E-02	9.78E-04	1.14E-03
9354	638936.2	4171248.9	Worker	Scenario 4	4.01E-02	1.02E-03	1.26E-03
9355	639036.2	4171248.9	Worker	Scenario 4	3.92E-02	9.91E-04	1.22E-03
9356	639136.2	4171248.9	Worker	Scenario 4	3.96E-02	9.95E-04	1.17E-03
9357	639236.2	4171248.9	Worker	Scenario 4	3.99E-02	1.00E-03	1.41E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9358	639336.2	4171248.9	Worker	Scenario 4	4.29E-02	1.06E-03	1.58E-03
9359	639436.2	4171248.9	Worker	Scenario 4	4.19E-02	1.03E-03	1.52E-03
9360	639536.2	4171248.9	Worker	Scenario 4	4.23E-02	1.03E-03	1.57E-03
9361	639636.2	4171248.9	Worker	Scenario 4	4.36E-02	1.05E-03	1.64E-03
9362	639736.2	4171248.9	Worker	Scenario 4	4.41E-02	1.06E-03	1.58E-03
9363	639836.2	4171248.9	Worker	Scenario 4	4.44E-02	1.06E-03	1.67E-03
9364	639936.2	4171248.9	Worker	Scenario 4	4.47E-02	1.06E-03	1.66E-03
9365	640036.2	4171248.9	Worker	Scenario 4	4.49E-02	1.06E-03	1.58E-03
9366	640136.2	4171248.9	Worker	Scenario 4	4.52E-02	1.05E-03	1.73E-03
9367	640236.2	4171248.9	Worker	Scenario 4	4.55E-02	1.05E-03	1.72E-03
9368	640336.2	4171248.9	Worker	Scenario 4	4.57E-02	1.05E-03	1.76E-03
9369	640436.2	4171248.9	Worker	Scenario 4	4.59E-02	1.05E-03	1.79E-03
9370	640536.2	4171248.9	Worker	Scenario 4	4.60E-02	1.04E-03	1.82E-03
9371	640636.2	4171248.9	Worker	Scenario 4	4.61E-02	1.04E-03	1.79E-03
9372	640736.2	4171248.9	Worker	Scenario 4	4.61E-02	1.03E-03	1.79E-03
9373	640836.2	4171248.9	Worker	Scenario 4	4.60E-02	1.02E-03	1.80E-03
9374	640936.2	4171248.9	Worker	Scenario 4	4.59E-02	1.00E-03	1.89E-03
9375	641036.2	4171248.9	Worker	Scenario 4	4.56E-02	9.90E-04	1.90E-03
9376	641136.2	4171248.9	Worker	Scenario 4	4.52E-02	9.74E-04	1.82E-03
9377	641236.2	4171248.9	Worker	Scenario 4	4.49E-02	9.61E-04	1.78E-03
9378	641336.2	4171248.9	Worker	Scenario 4	4.45E-02	9.49E-04	1.82E-03
9379	641436.2	4171248.9	Worker	Scenario 4	4.42E-02	9.37E-04	1.85E-03
9380	641536.2	4171248.9	Worker	Scenario 4	4.37E-02	9.20E-04	1.86E-03
9381	641636.2	4171248.9	Worker	Scenario 4	4.34E-02	9.07E-04	1.84E-03
9382	641736.2	4171248.9	Worker	Scenario 4	4.31E-02	8.93E-04	1.85E-03
9383	641836.2	4171248.9	Worker	Scenario 4	4.28E-02	8.80E-04	1.83E-03
9384	641936.2	4171248.9	Worker	Scenario 4	4.24E-02	8.67E-04	1.83E-03
9385	642036.2	4171248.9	Worker	Scenario 4	4.21E-02	8.54E-04	1.66E-03
9386	642136.2	4171248.9	Worker	Scenario 4	4.17E-02	8.42E-04	1.80E-03
9387	642236.2	4171248.9	Worker	Scenario 4	4.12E-02	8.29E-04	1.82E-03
9388	642336.2	4171248.9	Worker	Scenario 4	4.06E-02	8.17E-04	2.46E-03
9389	642436.2	4171248.9	Worker	Scenario 4	4.00E-02	8.04E-04	3.58E-03
9390	642536.2	4171248.9	Worker	Scenario 4	3.94E-02	7.91E-04	4.35E-03
9391	642636.2	4171248.9	Worker	Scenario 4	3.87E-02	7.76E-04	4.37E-03
9392	642736.2	4171248.9	Worker	Scenario 4	3.81E-02	7.61E-04	3.66E-03
9393	642836.2	4171248.9	Worker	Scenario 4	3.75E-02	7.46E-04	2.61E-03
9394	642936.2	4171248.9	Worker	Scenario 4	3.69E-02	7.29E-04	1.90E-03
9395	636736.2	4171348.9	Worker	Scenario 4	1.96E-02	5.06E-04	8.45E-04
9396	636836.2	4171348.9	Worker	Scenario 4	2.11E-02	5.42E-04	8.56E-04
9397	636936.2	4171348.9	Worker	Scenario 4	2.16E-02	5.60E-04	8.56E-04
9398	637036.2	4171348.9	Worker	Scenario 4	2.24E-02	5.82E-04	8.81E-04
9399	637136.2	4171348.9	Worker	Scenario 4	2.33E-02	6.08E-04	8.61E-04
9400	637236.2	4171348.9	Worker	Scenario 4	2.42E-02	6.32E-04	8.95E-04
9401	637336.2	4171348.9	Worker	Scenario 4	2.45E-02	6.43E-04	9.03E-04
9402	637436.2	4171348.9	Worker	Scenario 4	2.54E-02	6.68E-04	9.20E-04
9403	637536.2	4171348.9	Worker	Scenario 4	2.72E-02	7.11E-04	9.65E-04
9404	637636.2	4171348.9	Worker	Scenario 4	2.85E-02	7.40E-04	1.15E-03
9405	637736.2	4171348.9	Worker	Scenario 4	2.96E-02	7.68E-04	1.16E-03
9406	637836.2	4171348.9	Worker	Scenario 4	3.05E-02	7.93E-04	1.10E-03
9407	638136.2	4171348.9	Worker	Scenario 4	3.35E-02	8.65E-04	1.26E-03
9408	638236.2	4171348.9	Worker	Scenario 4	3.44E-02	8.85E-04	1.55E-03
9409	638336.2	4171348.9	Worker	Scenario 4	3.53E-02	9.05E-04	1.65E-03
9410	638436.2	4171348.9	Worker	Scenario 4	3.60E-02	9.23E-04	1.54E-03
9411	638536.2	4171348.9	Worker	Scenario 4	3.68E-02	9.38E-04	1.29E-03
9412	638636.2	4171348.9	Worker	Scenario 4	3.75E-02	9.51E-04	1.20E-03
9413	638736.2	4171348.9	Worker	Scenario 4	3.79E-02	9.57E-04	1.17E-03
9414	638836.2	4171348.9	Worker	Scenario 4	3.86E-02	9.69E-04	1.23E-03
9415	638936.2	4171348.9	Worker	Scenario 4	3.84E-02	9.64E-04	1.21E-03
9416	639036.2	4171348.9	Worker	Scenario 4	3.75E-02	9.39E-04	1.15E-03
9417	639136.2	4171348.9	Worker	Scenario 4	3.78E-02	9.42E-04	1.28E-03
9418	639236.2	4171348.9	Worker	Scenario 4	3.84E-02	9.52E-04	1.44E-03
9419	639336.2	4171348.9	Worker	Scenario 4	4.09E-02	1.00E-03	1.55E-03
9420	639436.2	4171348.9	Worker	Scenario 4	3.98E-02	9.71E-04	1.43E-03
9421	639536.2	4171348.9	Worker	Scenario 4	4.03E-02	9.75E-04	1.52E-03
9422	639636.2	4171348.9	Worker	Scenario 4	4.17E-02	9.99E-04	1.57E-03
9423	639736.2	4171348.9	Worker	Scenario 4	4.21E-02	1.00E-03	1.61E-03
9424	639836.2	4171348.9	Worker	Scenario 4	4.24E-02	1.00E-03	1.63E-03
9425	639936.2	4171348.9	Worker	Scenario 4	4.27E-02	1.00E-03	1.53E-03
9426	640036.2	4171348.9	Worker	Scenario 4	4.29E-02	1.00E-03	1.62E-03
9427	640136.2	4171348.9	Worker	Scenario 4	4.32E-02	1.00E-03	1.64E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9428	640236.2	4171348.9	Worker	Scenario 4	4.35E-02	1.00E-03	1.69E-03
9429	640336.2	4171348.9	Worker	Scenario 4	4.36E-02	9.98E-04	1.70E-03
9430	640436.2	4171348.9	Worker	Scenario 4	4.38E-02	9.95E-04	1.76E-03
9431	640536.2	4171348.9	Worker	Scenario 4	4.39E-02	9.90E-04	1.73E-03
9432	640636.2	4171348.9	Worker	Scenario 4	4.40E-02	9.84E-04	1.73E-03
9433	640736.2	4171348.9	Worker	Scenario 4	4.40E-02	9.75E-04	1.70E-03
9434	640836.2	4171348.9	Worker	Scenario 4	4.39E-02	9.65E-04	1.75E-03
9435	640936.2	4171348.9	Worker	Scenario 4	4.37E-02	9.53E-04	1.87E-03
9436	641036.2	4171348.9	Worker	Scenario 4	4.34E-02	9.39E-04	1.85E-03
9437	641136.2	4171348.9	Worker	Scenario 4	4.31E-02	9.25E-04	1.75E-03
9438	641236.2	4171348.9	Worker	Scenario 4	4.28E-02	9.14E-04	1.71E-03
9439	641336.2	4171348.9	Worker	Scenario 4	4.25E-02	9.04E-04	1.76E-03
9440	641436.2	4171348.9	Worker	Scenario 4	4.22E-02	8.93E-04	1.79E-03
9441	641536.2	4171348.9	Worker	Scenario 4	4.18E-02	8.79E-04	1.81E-03
9442	641636.2	4171348.9	Worker	Scenario 4	4.16E-02	8.67E-04	1.79E-03
9443	641736.2	4171348.9	Worker	Scenario 4	4.13E-02	8.55E-04	1.79E-03
9444	641836.2	4171348.9	Worker	Scenario 4	4.10E-02	8.43E-04	1.78E-03
9445	641936.2	4171348.9	Worker	Scenario 4	4.07E-02	8.30E-04	1.76E-03
9446	642036.2	4171348.9	Worker	Scenario 4	4.04E-02	8.18E-04	1.65E-03
9447	642136.2	4171348.9	Worker	Scenario 4	3.99E-02	8.04E-04	1.71E-03
9448	642236.2	4171348.9	Worker	Scenario 4	3.94E-02	7.93E-04	1.74E-03
9449	642336.2	4171348.9	Worker	Scenario 4	3.89E-02	7.82E-04	2.15E-03
9450	642436.2	4171348.9	Worker	Scenario 4	3.84E-02	7.71E-04	3.24E-03
9451	642536.2	4171348.9	Worker	Scenario 4	3.78E-02	7.59E-04	4.11E-03
9452	642636.2	4171348.9	Worker	Scenario 4	3.72E-02	7.46E-04	4.35E-03
9453	642736.2	4171348.9	Worker	Scenario 4	3.66E-02	7.33E-04	3.85E-03
9454	642836.2	4171348.9	Worker	Scenario 4	3.60E-02	7.19E-04	2.88E-03
9455	636236.2	4171448.9	Worker	Scenario 4	1.58E-02	4.04E-04	7.80E-04
9456	636636.2	4171448.9	Worker	Scenario 4	1.92E-02	4.92E-04	8.09E-04
9457	636736.2	4171448.9	Worker	Scenario 4	2.01E-02	5.15E-04	8.31E-04
9458	636836.2	4171448.9	Worker	Scenario 4	2.06E-02	5.32E-04	8.35E-04
9459	636936.2	4171448.9	Worker	Scenario 4	2.14E-02	5.54E-04	8.57E-04
9460	637036.2	4171448.9	Worker	Scenario 4	2.20E-02	5.71E-04	8.22E-04
9461	637136.2	4171448.9	Worker	Scenario 4	2.30E-02	5.98E-04	8.72E-04
9462	637236.2	4171448.9	Worker	Scenario 4	2.42E-02	6.28E-04	9.21E-04
9463	637336.2	4171448.9	Worker	Scenario 4	2.50E-02	6.49E-04	9.43E-04
9464	638036.2	4171448.9	Worker	Scenario 4	3.14E-02	8.09E-04	1.18E-03
9465	638136.2	4171448.9	Worker	Scenario 4	3.22E-02	8.27E-04	1.48E-03
9466	638236.2	4171448.9	Worker	Scenario 4	3.31E-02	8.45E-04	1.61E-03
9467	638336.2	4171448.9	Worker	Scenario 4	3.39E-02	8.63E-04	1.57E-03
9468	638436.2	4171448.9	Worker	Scenario 4	3.46E-02	8.79E-04	1.32E-03
9469	638536.2	4171448.9	Worker	Scenario 4	3.53E-02	8.91E-04	1.14E-03
9470	638636.2	4171448.9	Worker	Scenario 4	3.59E-02	9.03E-04	1.16E-03
9471	638736.2	4171448.9	Worker	Scenario 4	3.64E-02	9.11E-04	1.16E-03
9472	638836.2	4171448.9	Worker	Scenario 4	3.71E-02	9.22E-04	1.20E-03
9473	638936.2	4171448.9	Worker	Scenario 4	3.74E-02	9.27E-04	1.20E-03
9474	639036.2	4171448.9	Worker	Scenario 4	3.78E-02	9.31E-04	1.21E-03
9475	639136.2	4171448.9	Worker	Scenario 4	3.81E-02	9.36E-04	1.43E-03
9476	639236.2	4171448.9	Worker	Scenario 4	3.86E-02	9.43E-04	1.46E-03
9477	639336.2	4171448.9	Worker	Scenario 4	3.92E-02	9.49E-04	1.47E-03
9478	639436.2	4171448.9	Worker	Scenario 4	3.94E-02	9.48E-04	1.51E-03
9479	639536.2	4171448.9	Worker	Scenario 4	3.95E-02	9.46E-04	1.53E-03
9480	639636.2	4171448.9	Worker	Scenario 4	4.02E-02	9.54E-04	1.47E-03
9481	639736.2	4171448.9	Worker	Scenario 4	4.03E-02	9.54E-04	1.57E-03
9482	639836.2	4171448.9	Worker	Scenario 4	4.06E-02	9.54E-04	1.57E-03
9483	639936.2	4171448.9	Worker	Scenario 4	4.08E-02	9.54E-04	1.40E-03
9484	640036.2	4171448.9	Worker	Scenario 4	4.11E-02	9.54E-04	1.61E-03
9485	640136.2	4171448.9	Worker	Scenario 4	4.14E-02	9.53E-04	1.53E-03
9486	640236.2	4171448.9	Worker	Scenario 4	4.16E-02	9.53E-04	1.63E-03
9487	640336.2	4171448.9	Worker	Scenario 4	4.18E-02	9.51E-04	1.64E-03
9488	640436.2	4171448.9	Worker	Scenario 4	4.19E-02	9.48E-04	1.72E-03
9489	640536.2	4171448.9	Worker	Scenario 4	4.20E-02	9.43E-04	1.67E-03
9490	640636.2	4171448.9	Worker	Scenario 4	4.21E-02	9.37E-04	1.66E-03
9491	640736.2	4171448.9	Worker	Scenario 4	4.20E-02	9.28E-04	1.61E-03
9492	640836.2	4171448.9	Worker	Scenario 4	4.19E-02	9.18E-04	1.69E-03
9493	640936.2	4171448.9	Worker	Scenario 4	4.17E-02	9.07E-04	1.84E-03
9494	641036.2	4171448.9	Worker	Scenario 4	4.14E-02	8.93E-04	1.79E-03
9495	641136.2	4171448.9	Worker	Scenario 4	4.11E-02	8.80E-04	1.69E-03
9496	641236.2	4171448.9	Worker	Scenario 4	4.08E-02	8.71E-04	1.65E-03
9497	641336.2	4171448.9	Worker	Scenario 4	4.05E-02	8.62E-04	1.70E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9498	641436.2	4171448.9	Worker	Scenario 4	4.03E-02	8.53E-04	1.73E-03
9499	641536.2	4171448.9	Worker	Scenario 4	4.00E-02	8.41E-04	1.75E-03
9500	641636.2	4171448.9	Worker	Scenario 4	3.98E-02	8.30E-04	1.73E-03
9501	641736.2	4171448.9	Worker	Scenario 4	3.95E-02	8.19E-04	1.73E-03
9502	641836.2	4171448.9	Worker	Scenario 4	3.93E-02	8.07E-04	1.73E-03
9503	641936.2	4171448.9	Worker	Scenario 4	3.90E-02	7.96E-04	1.70E-03
9504	642036.2	4171448.9	Worker	Scenario 4	3.87E-02	7.84E-04	1.64E-03
9505	642136.2	4171448.9	Worker	Scenario 4	3.84E-02	7.73E-04	1.63E-03
9506	642236.2	4171448.9	Worker	Scenario 4	3.79E-02	7.62E-04	1.69E-03
9507	642336.2	4171448.9	Worker	Scenario 4	3.74E-02	7.51E-04	1.96E-03
9508	642436.2	4171448.9	Worker	Scenario 4	3.68E-02	7.39E-04	2.90E-03
9509	642536.2	4171448.9	Worker	Scenario 4	3.63E-02	7.29E-04	3.84E-03
9510	642636.2	4171448.9	Worker	Scenario 4	3.57E-02	7.18E-04	4.27E-03
9511	636536.2	4171548.9	Worker	Scenario 4	1.85E-02	4.72E-04	7.77E-04
9512	636636.2	4171548.9	Worker	Scenario 4	1.92E-02	4.91E-04	8.04E-04
9513	636736.2	4171548.9	Worker	Scenario 4	1.99E-02	5.11E-04	8.23E-04
9514	636836.2	4171548.9	Worker	Scenario 4	2.06E-02	5.31E-04	8.38E-04
9515	636936.2	4171548.9	Worker	Scenario 4	2.12E-02	5.48E-04	8.02E-04
9516	637036.2	4171548.9	Worker	Scenario 4	2.21E-02	5.71E-04	8.56E-04
9517	637136.2	4171548.9	Worker	Scenario 4	2.26E-02	5.86E-04	8.69E-04
9518	637236.2	4171548.9	Worker	Scenario 4	2.36E-02	6.12E-04	9.10E-04
9519	637936.2	4171548.9	Worker	Scenario 4	2.96E-02	7.59E-04	1.11E-03
9520	638036.2	4171548.9	Worker	Scenario 4	3.04E-02	7.77E-04	1.40E-03
9521	638136.2	4171548.9	Worker	Scenario 4	3.02E-02	7.73E-04	1.46E-03
9522	638236.2	4171548.9	Worker	Scenario 4	3.19E-02	8.08E-04	1.57E-03
9523	638336.2	4171548.9	Worker	Scenario 4	3.26E-02	8.24E-04	1.37E-03
9524	638436.2	4171548.9	Worker	Scenario 4	3.33E-02	8.38E-04	1.14E-03
9525	638536.2	4171548.9	Worker	Scenario 4	3.20E-02	8.10E-04	1.06E-03
9526	638636.2	4171548.9	Worker	Scenario 4	3.42E-02	8.55E-04	1.07E-03
9527	638736.2	4171548.9	Worker	Scenario 4	3.50E-02	8.69E-04	1.16E-03
9528	638836.2	4171548.9	Worker	Scenario 4	3.54E-02	8.75E-04	1.16E-03
9529	638936.2	4171548.9	Worker	Scenario 4	3.59E-02	8.81E-04	1.12E-03
9530	639036.2	4171548.9	Worker	Scenario 4	3.61E-02	8.84E-04	1.31E-03
9531	639136.2	4171548.9	Worker	Scenario 4	3.66E-02	8.91E-04	1.43E-03
9532	639236.2	4171548.9	Worker	Scenario 4	3.68E-02	8.92E-04	1.43E-03
9533	639336.2	4171548.9	Worker	Scenario 4	3.75E-02	9.01E-04	1.39E-03
9534	639436.2	4171548.9	Worker	Scenario 4	3.78E-02	9.02E-04	1.48E-03
9535	639536.2	4171548.9	Worker	Scenario 4	3.81E-02	9.02E-04	1.49E-03
9536	639636.2	4171548.9	Worker	Scenario 4	3.84E-02	9.05E-04	1.49E-03
9537	639736.2	4171548.9	Worker	Scenario 4	3.86E-02	9.07E-04	1.51E-03
9538	639836.2	4171548.9	Worker	Scenario 4	3.89E-02	9.08E-04	1.48E-03
9539	639936.2	4171548.9	Worker	Scenario 4	3.91E-02	9.08E-04	1.46E-03
9540	640036.2	4171548.9	Worker	Scenario 4	3.94E-02	9.08E-04	1.57E-03
9541	640136.2	4171548.9	Worker	Scenario 4	3.96E-02	9.09E-04	1.55E-03
9542	640236.2	4171548.9	Worker	Scenario 4	3.98E-02	9.09E-04	1.58E-03
9543	640336.2	4171548.9	Worker	Scenario 4	4.00E-02	9.07E-04	1.61E-03
9544	640436.2	4171548.9	Worker	Scenario 4	4.02E-02	9.05E-04	1.67E-03
9545	640536.2	4171548.9	Worker	Scenario 4	4.03E-02	9.00E-04	1.60E-03
9546	640636.2	4171548.9	Worker	Scenario 4	4.03E-02	8.94E-04	1.63E-03
9547	640736.2	4171548.9	Worker	Scenario 4	4.03E-02	8.86E-04	1.55E-03
9548	640836.2	4171548.9	Worker	Scenario 4	4.01E-02	8.76E-04	1.66E-03
9549	640936.2	4171548.9	Worker	Scenario 4	3.99E-02	8.64E-04	1.82E-03
9550	641036.2	4171548.9	Worker	Scenario 4	3.96E-02	8.51E-04	1.74E-03
9551	641136.2	4171548.9	Worker	Scenario 4	3.93E-02	8.40E-04	1.63E-03
9552	641236.2	4171548.9	Worker	Scenario 4	3.91E-02	8.32E-04	1.58E-03
9553	641336.2	4171548.9	Worker	Scenario 4	3.88E-02	8.24E-04	1.65E-03
9554	641436.2	4171548.9	Worker	Scenario 4	3.86E-02	8.16E-04	1.68E-03
9555	641536.2	4171548.9	Worker	Scenario 4	3.83E-02	8.05E-04	1.69E-03
9556	641636.2	4171548.9	Worker	Scenario 4	3.81E-02	7.95E-04	1.68E-03
9557	641736.2	4171548.9	Worker	Scenario 4	3.79E-02	7.85E-04	1.67E-03
9558	641836.2	4171548.9	Worker	Scenario 4	3.77E-02	7.74E-04	1.68E-03
9559	641936.2	4171548.9	Worker	Scenario 4	3.74E-02	7.63E-04	1.66E-03
9560	642036.2	4171548.9	Worker	Scenario 4	3.72E-02	7.52E-04	1.62E-03
9561	642136.2	4171548.9	Worker	Scenario 4	3.68E-02	7.41E-04	1.54E-03
9562	642236.2	4171548.9	Worker	Scenario 4	3.64E-02	7.31E-04	1.63E-03
9563	642336.2	4171548.9	Worker	Scenario 4	3.60E-02	7.22E-04	1.79E-03
9564	642436.2	4171548.9	Worker	Scenario 4	3.55E-02	7.12E-04	2.60E-03
9565	642536.2	4171548.9	Worker	Scenario 4	3.50E-02	7.03E-04	3.57E-03
9566	636336.2	4171648.9	Worker	Scenario 4	1.66E-02	4.24E-04	7.59E-04
9567	636536.2	4171648.9	Worker	Scenario 4	1.83E-02	4.69E-04	7.75E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9568	636636.2	4171648.9	Worker	Scenario 4	1.90E-02	4.87E-04	7.98E-04
9569	636736.2	4171648.9	Worker	Scenario 4	1.96E-02	5.05E-04	8.07E-04
9570	636836.2	4171648.9	Worker	Scenario 4	2.04E-02	5.24E-04	7.78E-04
9571	636936.2	4171648.9	Worker	Scenario 4	2.10E-02	5.42E-04	8.30E-04
9572	637036.2	4171648.9	Worker	Scenario 4	2.15E-02	5.56E-04	8.42E-04
9573	637136.2	4171648.9	Worker	Scenario 4	2.22E-02	5.75E-04	8.58E-04
9574	637236.2	4171648.9	Worker	Scenario 4	2.31E-02	5.97E-04	9.48E-04
9575	637536.2	4171648.9	Worker	Scenario 4	2.54E-02	6.51E-04	1.11E-03
9576	637636.2	4171648.9	Worker	Scenario 4	2.62E-02	6.72E-04	9.97E-04
9577	637736.2	4171648.9	Worker	Scenario 4	2.70E-02	6.93E-04	9.26E-04
9578	637836.2	4171648.9	Worker	Scenario 4	2.79E-02	7.13E-04	1.05E-03
9579	637936.2	4171648.9	Worker	Scenario 4	2.87E-02	7.31E-04	1.32E-03
9580	638036.2	4171648.9	Worker	Scenario 4	2.94E-02	7.47E-04	1.52E-03
9581	638136.2	4171648.9	Worker	Scenario 4	2.89E-02	7.35E-04	1.43E-03
9582	638236.2	4171648.9	Worker	Scenario 4	2.95E-02	7.49E-04	1.30E-03
9583	638336.2	4171648.9	Worker	Scenario 4	3.13E-02	7.86E-04	1.13E-03
9584	638436.2	4171648.9	Worker	Scenario 4	3.19E-02	7.97E-04	1.08E-03
9585	638536.2	4171648.9	Worker	Scenario 4	3.09E-02	7.76E-04	1.00E-03
9586	638636.2	4171648.9	Worker	Scenario 4	3.18E-02	7.93E-04	1.06E-03
9587	638736.2	4171648.9	Worker	Scenario 4	3.20E-02	7.96E-04	1.06E-03
9588	638836.2	4171648.9	Worker	Scenario 4	3.39E-02	8.33E-04	1.11E-03
9589	638936.2	4171648.9	Worker	Scenario 4	3.43E-02	8.38E-04	1.17E-03
9590	639036.2	4171648.9	Worker	Scenario 4	3.48E-02	8.46E-04	1.36E-03
9591	639136.2	4171648.9	Worker	Scenario 4	3.53E-02	8.53E-04	1.38E-03
9592	639236.2	4171648.9	Worker	Scenario 4	3.57E-02	8.57E-04	1.38E-03
9593	639336.2	4171648.9	Worker	Scenario 4	3.59E-02	8.57E-04	1.42E-03
9594	639436.2	4171648.9	Worker	Scenario 4	3.62E-02	8.58E-04	1.44E-03
9595	639536.2	4171648.9	Worker	Scenario 4	3.65E-02	8.59E-04	1.39E-03
9596	639636.2	4171648.9	Worker	Scenario 4	3.68E-02	8.62E-04	1.48E-03
9597	639736.2	4171648.9	Worker	Scenario 4	3.71E-02	8.64E-04	1.48E-03
9598	639836.2	4171648.9	Worker	Scenario 4	3.72E-02	8.64E-04	1.35E-03
9599	639936.2	4171648.9	Worker	Scenario 4	3.75E-02	8.66E-04	1.48E-03
9600	640036.2	4171648.9	Worker	Scenario 4	3.78E-02	8.67E-04	1.49E-03
9601	640136.2	4171648.9	Worker	Scenario 4	3.80E-02	8.68E-04	1.53E-03
9602	640236.2	4171648.9	Worker	Scenario 4	3.82E-02	8.68E-04	1.55E-03
9603	640336.2	4171648.9	Worker	Scenario 4	3.84E-02	8.67E-04	1.57E-03
9604	640436.2	4171648.9	Worker	Scenario 4	3.85E-02	8.64E-04	1.60E-03
9605	640536.2	4171648.9	Worker	Scenario 4	3.86E-02	8.60E-04	1.57E-03
9606	640636.2	4171648.9	Worker	Scenario 4	3.86E-02	8.54E-04	1.58E-03
9607	640736.2	4171648.9	Worker	Scenario 4	3.86E-02	8.46E-04	1.54E-03
9608	640836.2	4171648.9	Worker	Scenario 4	3.84E-02	8.36E-04	1.66E-03
9609	640936.2	4171648.9	Worker	Scenario 4	3.82E-02	8.25E-04	1.79E-03
9610	641036.2	4171648.9	Worker	Scenario 4	3.79E-02	8.13E-04	1.68E-03
9611	641136.2	4171648.9	Worker	Scenario 4	3.77E-02	8.03E-04	1.58E-03
9612	641236.2	4171648.9	Worker	Scenario 4	3.74E-02	7.96E-04	1.52E-03
9613	641336.2	4171648.9	Worker	Scenario 4	3.72E-02	7.89E-04	1.59E-03
9614	641436.2	4171648.9	Worker	Scenario 4	3.70E-02	7.82E-04	1.63E-03
9615	641536.2	4171648.9	Worker	Scenario 4	3.68E-02	7.72E-04	1.64E-03
9616	641636.2	4171648.9	Worker	Scenario 4	3.66E-02	7.62E-04	1.63E-03
9617	641736.2	4171648.9	Worker	Scenario 4	3.64E-02	7.53E-04	1.61E-03
9618	641836.2	4171648.9	Worker	Scenario 4	3.62E-02	7.44E-04	1.62E-03
9619	641936.2	4171648.9	Worker	Scenario 4	3.60E-02	7.33E-04	1.61E-03
9620	642036.2	4171648.9	Worker	Scenario 4	3.57E-02	7.23E-04	1.59E-03
9621	642136.2	4171648.9	Worker	Scenario 4	3.54E-02	7.12E-04	1.46E-03
9622	642236.2	4171648.9	Worker	Scenario 4	3.50E-02	7.02E-04	1.59E-03
9623	642336.2	4171648.9	Worker	Scenario 4	3.46E-02	6.94E-04	1.68E-03
9624	636336.2	4171748.9	Worker	Scenario 4	1.66E-02	4.25E-04	7.45E-04
9625	636536.2	4171748.9	Worker	Scenario 4	1.81E-02	4.65E-04	7.73E-04
9626	636636.2	4171748.9	Worker	Scenario 4	1.87E-02	4.82E-04	7.79E-04
9627	636736.2	4171748.9	Worker	Scenario 4	1.94E-02	4.98E-04	7.45E-04
9628	636836.2	4171748.9	Worker	Scenario 4	2.00E-02	5.16E-04	8.05E-04
9629	636936.2	4171748.9	Worker	Scenario 4	2.07E-02	5.32E-04	8.23E-04
9630	637036.2	4171748.9	Worker	Scenario 4	2.13E-02	5.48E-04	8.36E-04
9631	637136.2	4171748.9	Worker	Scenario 4	2.21E-02	5.67E-04	9.15E-04
9632	637336.2	4171748.9	Worker	Scenario 4	2.34E-02	6.00E-04	1.10E-03
9633	637436.2	4171748.9	Worker	Scenario 4	2.40E-02	6.16E-04	1.09E-03
9634	637536.2	4171748.9	Worker	Scenario 4	2.48E-02	6.34E-04	9.91E-04
9635	637636.2	4171748.9	Worker	Scenario 4	2.55E-02	6.52E-04	8.84E-04
9636	637736.2	4171748.9	Worker	Scenario 4	2.63E-02	6.71E-04	9.99E-04
9637	637836.2	4171748.9	Worker	Scenario 4	2.71E-02	6.89E-04	1.25E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9638	637936.2	4171748.9	Worker	Scenario 4	2.78E-02	7.05E-04	1.46E-03
9639	638036.2	4171748.9	Worker	Scenario 4	2.85E-02	7.18E-04	1.54E-03
9640	638136.2	4171748.9	Worker	Scenario 4	2.79E-02	7.06E-04	1.31E-03
9641	638236.2	4171748.9	Worker	Scenario 4	2.85E-02	7.19E-04	1.09E-03
9642	638336.2	4171748.9	Worker	Scenario 4	2.91E-02	7.31E-04	9.90E-04
9643	638436.2	4171748.9	Worker	Scenario 4	3.07E-02	7.63E-04	1.04E-03
9644	638536.2	4171748.9	Worker	Scenario 4	3.06E-02	7.61E-04	1.02E-03
9645	638636.2	4171748.9	Worker	Scenario 4	3.06E-02	7.58E-04	1.04E-03
9646	638736.2	4171748.9	Worker	Scenario 4	3.09E-02	7.62E-04	1.04E-03
9647	638836.2	4171748.9	Worker	Scenario 4	3.27E-02	7.97E-04	1.04E-03
9648	638936.2	4171748.9	Worker	Scenario 4	3.26E-02	7.93E-04	1.23E-03
9649	639036.2	4171748.9	Worker	Scenario 4	3.26E-02	7.90E-04	1.30E-03
9650	639136.2	4171748.9	Worker	Scenario 4	3.32E-02	8.00E-04	1.32E-03
9651	639236.2	4171748.9	Worker	Scenario 4	3.30E-02	7.92E-04	1.25E-03
9652	639336.2	4171748.9	Worker	Scenario 4	3.44E-02	8.16E-04	1.38E-03
9653	639436.2	4171748.9	Worker	Scenario 4	3.46E-02	8.14E-04	1.39E-03
9654	639536.2	4171748.9	Worker	Scenario 4	3.48E-02	8.15E-04	1.37E-03
9655	639636.2	4171748.9	Worker	Scenario 4	3.52E-02	8.21E-04	1.42E-03
9656	639736.2	4171748.9	Worker	Scenario 4	3.55E-02	8.23E-04	1.41E-03
9657	639836.2	4171748.9	Worker	Scenario 4	3.55E-02	8.21E-04	1.28E-03
9658	639936.2	4171748.9	Worker	Scenario 4	3.58E-02	8.24E-04	1.46E-03
9659	640036.2	4171748.9	Worker	Scenario 4	3.60E-02	8.24E-04	1.37E-03
9660	640136.2	4171748.9	Worker	Scenario 4	3.61E-02	8.23E-04	1.47E-03
9661	640236.2	4171748.9	Worker	Scenario 4	3.61E-02	8.20E-04	1.46E-03
9662	640336.2	4171748.9	Worker	Scenario 4	3.63E-02	8.19E-04	1.52E-03
9663	640436.2	4171748.9	Worker	Scenario 4	3.70E-02	8.28E-04	1.53E-03
9664	640536.2	4171748.9	Worker	Scenario 4	3.70E-02	8.22E-04	1.53E-03
9665	640636.2	4171748.9	Worker	Scenario 4	3.71E-02	8.16E-04	1.52E-03
9666	640736.2	4171748.9	Worker	Scenario 4	3.70E-02	8.09E-04	1.52E-03
9667	640836.2	4171748.9	Worker	Scenario 4	3.69E-02	7.99E-04	1.66E-03
9668	640936.2	4171748.9	Worker	Scenario 4	3.66E-02	7.88E-04	1.75E-03
9669	641036.2	4171748.9	Worker	Scenario 4	3.63E-02	7.77E-04	1.63E-03
9670	641136.2	4171748.9	Worker	Scenario 4	3.61E-02	7.68E-04	1.54E-03
9671	641236.2	4171748.9	Worker	Scenario 4	3.59E-02	7.63E-04	1.46E-03
9672	641336.2	4171748.9	Worker	Scenario 4	3.57E-02	7.57E-04	1.54E-03
9673	641436.2	4171748.9	Worker	Scenario 4	3.55E-02	7.50E-04	1.58E-03
9674	641536.2	4171748.9	Worker	Scenario 4	3.54E-02	7.42E-04	1.59E-03
9675	641636.2	4171748.9	Worker	Scenario 4	3.52E-02	7.33E-04	1.59E-03
9676	641736.2	4171748.9	Worker	Scenario 4	3.50E-02	7.24E-04	1.56E-03
9677	641836.2	4171748.9	Worker	Scenario 4	3.49E-02	7.15E-04	1.57E-03
9678	641936.2	4171748.9	Worker	Scenario 4	3.46E-02	7.06E-04	1.57E-03
9679	642036.2	4171748.9	Worker	Scenario 4	3.44E-02	6.95E-04	1.55E-03
9680	636536.2	4171848.9	Worker	Scenario 4	1.80E-02	4.61E-04	7.53E-04
9681	636636.2	4171848.9	Worker	Scenario 4	1.86E-02	4.76E-04	7.24E-04
9682	636736.2	4171848.9	Worker	Scenario 4	1.90E-02	4.90E-04	7.76E-04
9683	636836.2	4171848.9	Worker	Scenario 4	1.97E-02	5.06E-04	7.94E-04
9684	636936.2	4171848.9	Worker	Scenario 4	2.04E-02	5.24E-04	8.15E-04
9685	637036.2	4171848.9	Worker	Scenario 4	2.09E-02	5.38E-04	9.04E-04
9686	637236.2	4171848.9	Worker	Scenario 4	2.22E-02	5.69E-04	1.08E-03
9687	637336.2	4171848.9	Worker	Scenario 4	2.29E-02	5.85E-04	1.07E-03
9688	637436.2	4171848.9	Worker	Scenario 4	2.36E-02	6.00E-04	9.81E-04
9689	637536.2	4171848.9	Worker	Scenario 4	2.42E-02	6.16E-04	8.53E-04
9690	637636.2	4171848.9	Worker	Scenario 4	2.49E-02	6.33E-04	9.51E-04
9691	637736.2	4171848.9	Worker	Scenario 4	2.56E-02	6.51E-04	1.17E-03
9692	637836.2	4171848.9	Worker	Scenario 4	2.64E-02	6.67E-04	1.40E-03
9693	637936.2	4171848.9	Worker	Scenario 4	2.70E-02	6.80E-04	1.50E-03
9694	638036.2	4171848.9	Worker	Scenario 4	2.76E-02	6.92E-04	1.44E-03
9695	638136.2	4171848.9	Worker	Scenario 4	2.70E-02	6.79E-04	1.13E-03
9696	638236.2	4171848.9	Worker	Scenario 4	2.77E-02	6.92E-04	9.76E-04
9697	638336.2	4171848.9	Worker	Scenario 4	2.83E-02	7.06E-04	9.83E-04
9698	638436.2	4171848.9	Worker	Scenario 4	2.88E-02	7.14E-04	9.45E-04
9699	638536.2	4171848.9	Worker	Scenario 4	3.00E-02	7.38E-04	1.04E-03
9700	638636.2	4171848.9	Worker	Scenario 4	3.00E-02	7.36E-04	1.03E-03
9701	638736.2	4171848.9	Worker	Scenario 4	3.01E-02	7.36E-04	9.89E-04
9702	638836.2	4171848.9	Worker	Scenario 4	3.16E-02	7.63E-04	1.14E-03
9703	638936.2	4171848.9	Worker	Scenario 4	3.16E-02	7.64E-04	1.27E-03
9704	639036.2	4171848.9	Worker	Scenario 4	3.18E-02	7.65E-04	1.27E-03
9705	639136.2	4171848.9	Worker	Scenario 4	3.19E-02	7.65E-04	1.25E-03
9706	639236.2	4171848.9	Worker	Scenario 4	3.19E-02	7.61E-04	1.28E-03
9707	639336.2	4171848.9	Worker	Scenario 4	3.28E-02	7.74E-04	1.33E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9708	639436.2	4171848.9	Worker	Scenario 4	3.31E-02	7.74E-04	1.30E-03
9709	639536.2	4171848.9	Worker	Scenario 4	3.34E-02	7.76E-04	1.37E-03
9710	639636.2	4171848.9	Worker	Scenario 4	3.39E-02	7.84E-04	1.39E-03
9711	639736.2	4171848.9	Worker	Scenario 4	3.41E-02	7.86E-04	1.31E-03
9712	639836.2	4171848.9	Worker	Scenario 4	3.33E-02	7.67E-04	1.29E-03
9713	639936.2	4171848.9	Worker	Scenario 4	3.35E-02	7.70E-04	1.37E-03
9714	640036.2	4171848.9	Worker	Scenario 4	3.38E-02	7.72E-04	1.35E-03
9715	640136.2	4171848.9	Worker	Scenario 4	3.40E-02	7.75E-04	1.38E-03
9716	640236.2	4171848.9	Worker	Scenario 4	3.43E-02	7.76E-04	1.40E-03
9717	640336.2	4171848.9	Worker	Scenario 4	3.45E-02	7.76E-04	1.47E-03
9718	640436.2	4171848.9	Worker	Scenario 4	3.56E-02	7.93E-04	1.48E-03
9719	640536.2	4171848.9	Worker	Scenario 4	3.56E-02	7.88E-04	1.47E-03
9720	640636.2	4171848.9	Worker	Scenario 4	3.56E-02	7.82E-04	1.46E-03
9721	640736.2	4171848.9	Worker	Scenario 4	3.55E-02	7.75E-04	1.49E-03
9722	640836.2	4171848.9	Worker	Scenario 4	3.54E-02	7.65E-04	1.66E-03
9723	640936.2	4171848.9	Worker	Scenario 4	3.51E-02	7.55E-04	1.72E-03
9724	641036.2	4171848.9	Worker	Scenario 4	3.49E-02	7.45E-04	1.58E-03
9725	641136.2	4171848.9	Worker	Scenario 4	3.46E-02	7.37E-04	1.50E-03
9726	641236.2	4171848.9	Worker	Scenario 4	3.45E-02	7.32E-04	1.41E-03
9727	641336.2	4171848.9	Worker	Scenario 4	3.43E-02	7.27E-04	1.49E-03
9728	641436.2	4171848.9	Worker	Scenario 4	3.41E-02	7.20E-04	1.53E-03
9729	641536.2	4171848.9	Worker	Scenario 4	3.40E-02	7.13E-04	1.54E-03
9730	641636.2	4171848.9	Worker	Scenario 4	3.39E-02	7.05E-04	1.54E-03
9731	636536.2	4171948.9	Worker	Scenario 4	1.78E-02	4.56E-04	7.05E-04
9732	636636.2	4171948.9	Worker	Scenario 4	1.82E-02	4.68E-04	7.54E-04
9733	636736.2	4171948.9	Worker	Scenario 4	1.88E-02	4.82E-04	7.66E-04
9734	636836.2	4171948.9	Worker	Scenario 4	1.94E-02	4.98E-04	7.86E-04
9735	636936.2	4171948.9	Worker	Scenario 4	2.00E-02	5.12E-04	8.84E-04
9736	637236.2	4171948.9	Worker	Scenario 4	2.18E-02	5.56E-04	1.05E-03
9737	637336.2	4171948.9	Worker	Scenario 4	2.24E-02	5.70E-04	9.74E-04
9738	637436.2	4171948.9	Worker	Scenario 4	2.30E-02	5.85E-04	8.42E-04
9739	637536.2	4171948.9	Worker	Scenario 4	2.37E-02	6.00E-04	9.09E-04
9740	637636.2	4171948.9	Worker	Scenario 4	2.43E-02	6.16E-04	1.10E-03
9741	637736.2	4171948.9	Worker	Scenario 4	2.50E-02	6.31E-04	1.34E-03
9742	637836.2	4171948.9	Worker	Scenario 4	2.56E-02	6.45E-04	1.47E-03
9743	637936.2	4171948.9	Worker	Scenario 4	2.62E-02	6.56E-04	1.45E-03
9744	638136.2	4171948.9	Worker	Scenario 4	2.62E-02	6.54E-04	9.61E-04
9745	638236.2	4171948.9	Worker	Scenario 4	2.68E-02	6.66E-04	9.46E-04
9746	638336.2	4171948.9	Worker	Scenario 4	2.74E-02	6.79E-04	9.26E-04
9747	638436.2	4171948.9	Worker	Scenario 4	2.80E-02	6.89E-04	9.76E-04
9748	638536.2	4171948.9	Worker	Scenario 4	2.83E-02	6.93E-04	9.71E-04
9749	638636.2	4171948.9	Worker	Scenario 4	2.91E-02	7.08E-04	9.96E-04
9750	638736.2	4171948.9	Worker	Scenario 4	2.96E-02	7.16E-04	9.89E-04
9751	638836.2	4171948.9	Worker	Scenario 4	3.04E-02	7.31E-04	1.20E-03
9752	638936.2	4171948.9	Worker	Scenario 4	3.00E-02	7.23E-04	1.22E-03
9753	639036.2	4171948.9	Worker	Scenario 4	2.98E-02	7.17E-04	1.21E-03
9754	639136.2	4171948.9	Worker	Scenario 4	3.01E-02	7.19E-04	1.16E-03
9755	639236.2	4171948.9	Worker	Scenario 4	3.08E-02	7.30E-04	1.26E-03
9756	639336.2	4171948.9	Worker	Scenario 4	3.15E-02	7.40E-04	1.30E-03
9757	639436.2	4171948.9	Worker	Scenario 4	3.18E-02	7.39E-04	1.26E-03
9758	639536.2	4171948.9	Worker	Scenario 4	3.20E-02	7.42E-04	1.33E-03
9759	639636.2	4171948.9	Worker	Scenario 4	3.26E-02	7.50E-04	1.35E-03
9760	639736.2	4171948.9	Worker	Scenario 4	3.28E-02	7.52E-04	1.19E-03
9761	639836.2	4171948.9	Worker	Scenario 4	3.21E-02	7.36E-04	1.31E-03
9762	639936.2	4171948.9	Worker	Scenario 4	3.23E-02	7.39E-04	1.31E-03
9763	640036.2	4171948.9	Worker	Scenario 4	3.26E-02	7.41E-04	1.35E-03
9764	640136.2	4171948.9	Worker	Scenario 4	3.28E-02	7.44E-04	1.36E-03
9765	640236.2	4171948.9	Worker	Scenario 4	3.30E-02	7.45E-04	1.38E-03
9766	640336.2	4171948.9	Worker	Scenario 4	3.32E-02	7.45E-04	1.42E-03
9767	636736.2	4172048.9	Worker	Scenario 4	1.86E-02	4.76E-04	7.80E-04
9768	636836.2	4172048.9	Worker	Scenario 4	1.93E-02	4.91E-04	8.41E-04
9769	637236.2	4172048.9	Worker	Scenario 4	2.14E-02	5.44E-04	9.62E-04
9770	637336.2	4172048.9	Worker	Scenario 4	2.20E-02	5.56E-04	8.40E-04
9771	637436.2	4172048.9	Worker	Scenario 4	2.25E-02	5.70E-04	8.68E-04
9772	637536.2	4172048.9	Worker	Scenario 4	2.31E-02	5.84E-04	1.03E-03
9773	637636.2	4172048.9	Worker	Scenario 4	2.38E-02	5.98E-04	1.28E-03
9774	637736.2	4172048.9	Worker	Scenario 4	2.44E-02	6.12E-04	1.43E-03
9775	637836.2	4172048.9	Worker	Scenario 4	2.49E-02	6.24E-04	1.44E-03
9776	637936.2	4172048.9	Worker	Scenario 4	2.54E-02	6.33E-04	1.30E-03
9777	638136.2	4172048.9	Worker	Scenario 4	2.54E-02	6.31E-04	9.05E-04

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9778	638236.2	4172048.9	Worker	Scenario 4	2.60E-02	6.41E-04	9.09E-04
9779	638336.2	4172048.9	Worker	Scenario 4	2.66E-02	6.53E-04	9.21E-04
9780	638436.2	4172048.9	Worker	Scenario 4	2.71E-02	6.62E-04	9.57E-04
9781	638536.2	4172048.9	Worker	Scenario 4	2.74E-02	6.68E-04	9.63E-04
9782	638636.2	4172048.9	Worker	Scenario 4	2.78E-02	6.74E-04	9.22E-04
9783	638736.2	4172048.9	Worker	Scenario 4	2.83E-02	6.82E-04	1.07E-03
9784	638836.2	4172048.9	Worker	Scenario 4	2.93E-02	7.02E-04	1.22E-03
9785	638936.2	4172048.9	Worker	Scenario 4	2.82E-02	6.78E-04	1.15E-03
9786	639036.2	4172048.9	Worker	Scenario 4	2.94E-02	7.02E-04	1.17E-03
9787	639136.2	4172048.9	Worker	Scenario 4	2.90E-02	6.90E-04	1.19E-03
9788	639236.2	4172048.9	Worker	Scenario 4	3.06E-02	7.17E-04	1.26E-03
9789	639336.2	4172048.9	Worker	Scenario 4	3.04E-02	7.08E-04	1.23E-03
9790	639436.2	4172048.9	Worker	Scenario 4	3.05E-02	7.07E-04	1.27E-03
9791	639536.2	4172048.9	Worker	Scenario 4	3.08E-02	7.09E-04	1.28E-03
9792	639636.2	4172048.9	Worker	Scenario 4	3.14E-02	7.19E-04	1.27E-03
9793	639736.2	4172048.9	Worker	Scenario 4	3.16E-02	7.21E-04	1.20E-03
9794	639836.2	4172048.9	Worker	Scenario 4	3.09E-02	7.06E-04	1.29E-03
9795	639936.2	4172048.9	Worker	Scenario 4	3.12E-02	7.09E-04	1.22E-03
9796	640036.2	4172048.9	Worker	Scenario 4	3.14E-02	7.12E-04	1.32E-03
9797	640136.2	4172048.9	Worker	Scenario 4	3.16E-02	7.15E-04	1.32E-03
9798	637136.2	4172148.9	Worker	Scenario 4	2.05E-02	5.19E-04	9.50E-04
9799	637236.2	4172148.9	Worker	Scenario 4	2.10E-02	5.31E-04	8.35E-04
9800	637336.2	4172148.9	Worker	Scenario 4	2.15E-02	5.43E-04	8.30E-04
9801	637436.2	4172148.9	Worker	Scenario 4	2.21E-02	5.55E-04	9.65E-04
9802	637536.2	4172148.9	Worker	Scenario 4	2.26E-02	5.68E-04	1.21E-03
9803	637636.2	4172148.9	Worker	Scenario 4	2.32E-02	5.81E-04	1.39E-03
9804	637736.2	4172148.9	Worker	Scenario 4	2.37E-02	5.93E-04	1.43E-03
9805	637836.2	4172148.9	Worker	Scenario 4	2.42E-02	6.02E-04	1.32E-03
9806	637936.2	4172148.9	Worker	Scenario 4	2.47E-02	6.11E-04	1.10E-03
9807	638136.2	4172148.9	Worker	Scenario 4	2.46E-02	6.07E-04	8.85E-04
9808	638236.2	4172148.9	Worker	Scenario 4	2.51E-02	6.17E-04	8.57E-04
9809	638336.2	4172148.9	Worker	Scenario 4	2.57E-02	6.28E-04	9.23E-04
9810	638436.2	4172148.9	Worker	Scenario 4	2.62E-02	6.37E-04	9.29E-04
9811	638536.2	4172148.9	Worker	Scenario 4	2.67E-02	6.45E-04	9.22E-04
9812	638636.2	4172148.9	Worker	Scenario 4	2.71E-02	6.51E-04	9.58E-04
9813	638736.2	4172148.9	Worker	Scenario 4	2.76E-02	6.60E-04	1.12E-03
9814	638836.2	4172148.9	Worker	Scenario 4	2.82E-02	6.72E-04	1.17E-03
9815	638936.2	4172148.9	Worker	Scenario 4	2.87E-02	6.81E-04	1.20E-03
9816	639036.2	4172148.9	Worker	Scenario 4	2.79E-02	6.63E-04	1.10E-03
9817	639136.2	4172148.9	Worker	Scenario 4	2.90E-02	6.82E-04	1.21E-03
9818	639236.2	4172148.9	Worker	Scenario 4	2.91E-02	6.80E-04	1.22E-03
9819	639336.2	4172148.9	Worker	Scenario 4	2.92E-02	6.79E-04	1.16E-03
9820	639436.2	4172148.9	Worker	Scenario 4	2.94E-02	6.78E-04	1.25E-03
9821	639536.2	4172148.9	Worker	Scenario 4	2.96E-02	6.80E-04	1.25E-03
9822	639636.2	4172148.9	Worker	Scenario 4	3.03E-02	6.90E-04	1.17E-03
9823	639736.2	4172148.9	Worker	Scenario 4	3.04E-02	6.92E-04	1.24E-03
9824	639836.2	4172148.9	Worker	Scenario 4	2.98E-02	6.79E-04	1.26E-03
9825	639936.2	4172148.9	Worker	Scenario 4	3.01E-02	6.82E-04	1.23E-03
9826	640036.2	4172148.9	Worker	Scenario 4	3.03E-02	6.85E-04	1.27E-03
9827	637036.2	4172248.9	Worker	Scenario 4	1.96E-02	4.96E-04	9.46E-04
9828	637136.2	4172248.9	Worker	Scenario 4	2.01E-02	5.07E-04	8.34E-04
9829	637236.2	4172248.9	Worker	Scenario 4	2.06E-02	5.18E-04	7.88E-04
9830	637336.2	4172248.9	Worker	Scenario 4	2.11E-02	5.29E-04	9.02E-04
9831	637436.2	4172248.9	Worker	Scenario 4	2.16E-02	5.40E-04	1.14E-03
9832	637536.2	4172248.9	Worker	Scenario 4	2.21E-02	5.53E-04	1.34E-03
9833	637636.2	4172248.9	Worker	Scenario 4	2.26E-02	5.64E-04	1.41E-03
9834	637736.2	4172248.9	Worker	Scenario 4	2.31E-02	5.74E-04	1.34E-03
9835	637836.2	4172248.9	Worker	Scenario 4	2.36E-02	5.83E-04	1.14E-03
9836	637936.2	4172248.9	Worker	Scenario 4	2.40E-02	5.90E-04	9.22E-04
9837	638136.2	4172248.9	Worker	Scenario 4	2.39E-02	5.86E-04	8.31E-04
9838	638236.2	4172248.9	Worker	Scenario 4	2.44E-02	5.96E-04	8.81E-04
9839	638336.2	4172248.9	Worker	Scenario 4	2.49E-02	6.05E-04	8.91E-04
9840	638436.2	4172248.9	Worker	Scenario 4	2.54E-02	6.14E-04	9.07E-04
9841	638536.2	4172248.9	Worker	Scenario 4	2.59E-02	6.22E-04	8.65E-04
9842	638636.2	4172248.9	Worker	Scenario 4	2.66E-02	6.36E-04	1.05E-03
9843	638736.2	4172248.9	Worker	Scenario 4	2.65E-02	6.33E-04	1.12E-03
9844	638836.2	4172248.9	Worker	Scenario 4	2.69E-02	6.40E-04	1.13E-03
9845	638936.2	4172248.9	Worker	Scenario 4	2.74E-02	6.50E-04	1.11E-03
9846	639036.2	4172248.9	Worker	Scenario 4	2.81E-02	6.60E-04	1.18E-03
9847	639136.2	4172248.9	Worker	Scenario 4	2.82E-02	6.61E-04	1.18E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9848	639236.2	4172248.9	Worker	Scenario 4	2.84E-02	6.60E-04	1.18E-03
9849	639336.2	4172248.9	Worker	Scenario 4	2.85E-02	6.58E-04	1.20E-03
9850	639436.2	4172248.9	Worker	Scenario 4	2.87E-02	6.56E-04	1.21E-03
9851	639536.2	4172248.9	Worker	Scenario 4	2.88E-02	6.57E-04	1.21E-03
9852	639736.2	4172248.9	Worker	Scenario 4	2.93E-02	6.64E-04	1.24E-03
9853	639836.2	4172248.9	Worker	Scenario 4	2.88E-02	6.54E-04	1.20E-03
9854	637236.2	4172348.9	Worker	Scenario 4	2.01E-02	5.05E-04	8.56E-04
9855	637336.2	4172348.9	Worker	Scenario 4	2.06E-02	5.15E-04	1.08E-03
9856	637436.2	4172348.9	Worker	Scenario 4	2.11E-02	5.26E-04	1.28E-03
9857	637536.2	4172348.9	Worker	Scenario 4	2.16E-02	5.37E-04	1.38E-03
9858	637636.2	4172348.9	Worker	Scenario 4	2.21E-02	5.47E-04	1.34E-03
9859	637736.2	4172348.9	Worker	Scenario 4	2.25E-02	5.56E-04	1.18E-03
9860	637836.2	4172348.9	Worker	Scenario 4	2.29E-02	5.64E-04	9.40E-04
9861	637936.2	4172348.9	Worker	Scenario 4	2.33E-02	5.71E-04	8.69E-04
9862	638136.2	4172348.9	Worker	Scenario 4	2.30E-02	5.61E-04	8.20E-04
9863	638236.2	4172348.9	Worker	Scenario 4	2.38E-02	5.78E-04	8.72E-04
9864	638336.2	4172348.9	Worker	Scenario 4	2.42E-02	5.84E-04	8.78E-04
9865	638436.2	4172348.9	Worker	Scenario 4	2.44E-02	5.87E-04	8.45E-04
9866	638536.2	4172348.9	Worker	Scenario 4	2.55E-02	6.07E-04	9.52E-04
9867	638636.2	4172348.9	Worker	Scenario 4	2.54E-02	6.04E-04	1.06E-03
9868	638736.2	4172348.9	Worker	Scenario 4	2.57E-02	6.10E-04	1.08E-03
9869	638836.2	4172348.9	Worker	Scenario 4	2.60E-02	6.16E-04	1.10E-03
9870	638936.2	4172348.9	Worker	Scenario 4	2.66E-02	6.27E-04	1.08E-03
9871	639036.2	4172348.9	Worker	Scenario 4	2.71E-02	6.34E-04	1.16E-03
9872	639136.2	4172348.9	Worker	Scenario 4	2.74E-02	6.37E-04	1.17E-03
9873	639236.2	4172348.9	Worker	Scenario 4	2.76E-02	6.37E-04	1.11E-03
9874	639336.2	4172348.9	Worker	Scenario 4	2.75E-02	6.31E-04	1.19E-03
9875	639436.2	4172348.9	Worker	Scenario 4	2.75E-02	6.28E-04	1.18E-03
9876	639536.2	4172348.9	Worker	Scenario 4	2.77E-02	6.30E-04	1.13E-03
9877	637636.2	4172448.9	Worker	Scenario 4	2.15E-02	5.31E-04	1.20E-03
9878	637736.2	4172448.9	Worker	Scenario 4	2.19E-02	5.39E-04	9.81E-04
9879	637836.2	4172448.9	Worker	Scenario 4	2.23E-02	5.46E-04	8.51E-04
9880	637936.2	4172448.9	Worker	Scenario 4	2.27E-02	5.52E-04	8.42E-04
9881	638136.2	4172448.9	Worker	Scenario 4	2.21E-02	5.38E-04	8.17E-04
9882	638236.2	4172448.9	Worker	Scenario 4	2.25E-02	5.45E-04	8.18E-04
9883	638336.2	4172448.9	Worker	Scenario 4	2.31E-02	5.56E-04	8.30E-04
9884	638436.2	4172448.9	Worker	Scenario 4	2.44E-02	5.81E-04	8.48E-04
9885	638536.2	4172448.9	Worker	Scenario 4	2.43E-02	5.78E-04	9.91E-04
9886	638636.2	4172448.9	Worker	Scenario 4	2.46E-02	5.84E-04	1.06E-03
9887	638736.2	4172448.9	Worker	Scenario 4	2.50E-02	5.91E-04	1.07E-03
9888	638836.2	4172448.9	Worker	Scenario 4	2.53E-02	5.97E-04	1.04E-03
9889	638936.2	4172448.9	Worker	Scenario 4	2.57E-02	6.03E-04	1.10E-03
9890	639036.2	4172448.9	Worker	Scenario 4	2.61E-02	6.09E-04	1.11E-03
9891	639136.2	4172448.9	Worker	Scenario 4	2.64E-02	6.12E-04	1.13E-03
9892	639236.2	4172448.9	Worker	Scenario 4	2.66E-02	6.12E-04	1.13E-03
9893	639336.2	4172448.9	Worker	Scenario 4	2.67E-02	6.11E-04	1.16E-03
9894	639657.4	4168449.3	Resident	Scenario 4	3.50E+00	1.48E-02	3.92E-03
9895	639682.4	4168449.8	Resident	Scenario 4	4.11E+00	1.70E-02	3.89E-03
9896	639707.4	4168450.2	Resident	Scenario 4	5.75E+00	2.34E-02	3.82E-03
9897	639719.4	4168437.2	Resident	Scenario 4	5.35E+00	2.14E-02	3.92E-03
9898	639719.8	4168412.2	Resident	Scenario 4	5.03E+00	1.99E-02	4.11E-03
9899	639720.3	4168387.2	Resident	Scenario 4	4.85E+00	1.89E-02	4.20E-03
9900	639720.7	4168362.2	Resident	Scenario 4	5.12E+00	1.98E-02	4.19E-03
9901	639721.2	4168337.2	Resident	Scenario 4	4.85E+00	1.94E-02	4.07E-03
9902	639721.6	4168312.2	Resident	Scenario 4	3.84E+00	1.54E-02	3.85E-03
9903	639722.1	4168287.2	Resident	Scenario 4	2.88E+00	1.14E-02	3.81E-03
9904	639722.5	4168262.2	Resident	Scenario 4	2.28E+00	9.01E-03	4.06E-03
9905	641271.3	4168602.3	Resident	Scenario 4	5.82E+00	1.55E-02	8.68E-03
9906	641272.0	4168577.4	Resident	Scenario 4	5.82E+00	1.55E-02	8.92E-03
9907	641272.7	4168552.4	Resident	Scenario 4	5.86E+00	1.56E-02	9.16E-03
9908	641273.4	4168527.4	Resident	Scenario 4	5.92E+00	1.57E-02	9.39E-03
9909	641274.1	4168502.4	Resident	Scenario 4	6.00E+00	1.60E-02	9.63E-03
9910	641288.1	4168491.5	Resident	Scenario 4	6.41E+00	1.70E-02	9.88E-03
9911	641313.1	4168492.2	Resident	Scenario 4	7.55E+00	2.02E-02	9.46E-03
9912	641329.9	4168500.8	Resident	Scenario 4	9.15E+00	2.54E-02	9.62E-03
9913	641329.4	4168525.7	Resident	Scenario 4	9.07E+00	2.51E-02	9.39E-03
9914	641328.8	4168550.7	Resident	Scenario 4	8.91E+00	2.47E-02	9.17E-03
9915	641328.3	4168575.7	Resident	Scenario 4	8.70E+00	2.44E-02	8.94E-03
9916	641327.8	4168600.7	Resident	Scenario 4	8.45E+00	2.40E-02	8.73E-03
9917	641327.3	4168625.7	Resident	Scenario 4	8.18E+00	2.37E-02	8.52E-03

Table G-1. Health Risk Assessment Results by Receptors by Scenario
Pacific Gateway
San Joaquin Valley, California

Receptor ID	UTM X	UTM Y	Receptor Type	Scenario	Cancer Risk (in a million)	Chronic Hazard Index	Acute Hazard Index
					Receptor Risk	Receptor Risk	Receptor Risk
9918	644628.2	4167344.9	Resident	Scenario 4	1.66E+00	3.34E-03	2.29E-03
9919	644603.2	4167344.6	Resident	Scenario 4	1.70E+00	3.45E-03	2.32E-03
9920	644595.5	4167361.9	Resident	Scenario 4	1.69E+00	3.39E-03	2.30E-03
9921	644608.1	4167373.7	Resident	Scenario 4	1.66E+00	3.29E-03	2.26E-03
9922	644633.0	4167372.9	Resident	Scenario 4	1.63E+00	3.21E-03	2.23E-03
9923	644644.0	4167386.8	Resident	Scenario 4	1.60E+00	3.13E-03	2.18E-03
9924	644641.0	4167411.5	Resident	Scenario 4	1.59E+00	3.07E-03	2.10E-03
9925	644572.2	4167547.1	Resident	Scenario 4	1.60E+00	2.98E-03	2.32E-03
9926	644564.9	4167529.8	Resident	Scenario 4	1.62E+00	3.03E-03	2.24E-03
9927	644585.7	4167544.7	Resident	Scenario 4	1.59E+00	2.95E-03	2.29E-03
9928	644607.0	4167541.3	Resident	Scenario 4	1.56E+00	2.90E-03	2.24E-03
9929	644631.9	4167541.8	Resident	Scenario 4	1.53E+00	2.85E-03	2.21E-03
9930	644656.9	4167542.4	Resident	Scenario 4	1.50E+00	2.80E-03	2.18E-03
9931	644681.9	4167543.0	Resident	Scenario 4	1.48E+00	2.74E-03	2.15E-03
9932	643875.3	4167591.4	Resident	Scenario 4	2.97E+00	5.10E-03	3.40E-03
9933	643900.3	4167591.5	Resident	Scenario 4	2.88E+00	4.98E-03	3.36E-03
9934	643925.3	4167591.5	Resident	Scenario 4	2.80E+00	4.86E-03	3.31E-03
9935	640593.1	4166856.1	Resident	Scenario 4	5.20E-01	1.67E-03	1.49E-02
9936	640618.1	4166856.5	Resident	Scenario 4	5.34E-01	1.71E-03	1.66E-02
9937	640643.1	4166856.9	Resident	Scenario 4	5.49E-01	1.76E-03	1.78E-02
9938	640668.1	4166857.3	Resident	Scenario 4	5.67E-01	1.81E-03	1.84E-02
9939	640693.1	4166857.7	Resident	Scenario 4	5.82E-01	1.86E-03	1.90E-02
9940	640718.1	4166858.1	Resident	Scenario 4	6.01E-01	1.91E-03	1.92E-02
9941	640743.1	4166858.4	Resident	Scenario 4	6.14E-01	1.96E-03	1.93E-02
9942	640768.1	4166858.8	Resident	Scenario 4	6.24E-01	1.99E-03	1.97E-02
9943	640793.1	4166859.2	Resident	Scenario 4	6.37E-01	2.04E-03	1.90E-02
9944	640818.1	4166859.6	Resident	Scenario 4	6.54E-01	2.09E-03	1.74E-02
9945	640843.1	4166860.0	Resident	Scenario 4	6.71E-01	2.15E-03	1.69E-02
9946	640868.1	4166860.3	Resident	Scenario 4	6.91E-01	2.21E-03	1.98E-02
9947	640893.1	4166860.7	Resident	Scenario 4	7.09E-01	2.27E-03	2.32E-02
9948	640918.1	4166861.1	Resident	Scenario 4	7.31E-01	2.35E-03	2.53E-02
9949	640943.1	4166861.5	Resident	Scenario 4	7.51E-01	2.42E-03	2.59E-02
9950	640968.0	4166861.4	Resident	Scenario 4	7.75E-01	2.50E-03	2.41E-02
9951	640992.8	4166858.1	Resident	Scenario 4	7.94E-01	2.56E-03	2.12E-02
9952	641015.9	4166849.2	Resident	Scenario 4	8.10E-01	2.62E-03	2.46E-02
9953	641038.0	4166837.5	Resident	Scenario 4	8.20E-01	2.67E-03	2.58E-02
9954	641058.4	4166823.1	Resident	Scenario 4	8.27E-01	2.70E-03	2.61E-02
9955	641078.8	4166808.7	Resident	Scenario 4	8.35E-01	2.74E-03	2.95E-02
9956	641099.0	4166793.9	Resident	Scenario 4	8.41E-01	2.77E-03	3.13E-02
9957	641117.9	4166777.7	Resident	Scenario 4	8.47E-01	2.80E-03	3.24E-02
9958	641136.9	4166761.4	Resident	Scenario 4	8.51E-01	2.83E-03	3.17E-02
9959	641155.9	4166745.1	Resident	Scenario 4	8.54E-01	2.85E-03	3.59E-02
9960	641174.9	4166728.9	Resident	Scenario 4	8.59E-01	2.88E-03	3.14E-02
9961	641193.9	4166712.6	Resident	Scenario 4	8.64E-01	2.92E-03	3.04E-02
9962	641210.2	4166693.8	Resident	Scenario 4	8.61E-01	2.92E-03	2.65E-02
9963	641225.7	4166674.2	Resident	Scenario 4	8.61E-01	2.93E-03	2.66E-02
9964	641241.2	4166654.5	Resident	Scenario 4	8.63E-01	2.95E-03	2.65E-02
9965	641256.7	4166634.9	Resident	Scenario 4	8.58E-01	2.95E-03	2.49E-02
9966	641272.2	4166615.3	Resident	Scenario 4	8.68E-01	2.99E-03	2.53E-02
9967	641287.7	4166595.7	Resident	Scenario 4	8.68E-01	3.00E-03	2.69E-02
9968	641302.9	4166575.9	Resident	Scenario 4	8.64E-01	3.00E-03	2.64E-02
9969	641317.9	4166555.9	Resident	Scenario 4	8.51E-01	2.97E-03	2.35E-02
9970	641330.9	4166534.8	Resident	Scenario 4	8.19E-01	2.85E-03	2.46E-02
9971	641338.1	4166510.9	Resident	Scenario 4	7.58E-01	2.61E-03	2.43E-02

Note:

[1] The blue highlighted receptors represent significant residential receptor locations considered for the application of a potential high efficiency particulate air (HEPA) filter mitigation. The risk in this table represents the calculated risk pre-mitigation, the MEIR risk following the application of the HEPA filter mitigation is shown in Table 5-5.

Abbreviations:
HEPA - high efficiency particulate air
MEIR - maximum exposed individual resident
UTM - Universal Transverse Mercator

Appendix E

Prepared for
Ridgeline Property Group
San Joaquin County, California

Prepared by
Ramboll Americas Engineering Solutions, Inc.
Irvine, California

Project Number
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PACIFIC GATEWAY PROJECT GREENHOUSE GAS EMISSIONS TECHNICAL REPORT

SAN JOAQUIN COUNTY, CALIFORNIA

RAMBOLL

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APPENDICES

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AB	Assembly Bill
ACC	Advanced Clean Cars
ACF	Advanced Clean Fleets
AEP	Association of Environmental Professionals
AP-42	United States Environmental Protection Agency's Compilation of Air Pollutant Emission Factors
APCD	Air Pollution Control District
APR	Application Review
AQMD	Air Quality Management District
AR5	Fifth Assessment Report
AR6	Sixth Assessment Report
AvgHP	Maximum rated average horsepower
BAU	Business-As-Usual
BPS	Best Performance Standards
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CalEEMod®	California Emission Estimator Model®
CalEPA	California Environmental Protection Agency
CalRecycle	California Department of Resources Recycling and Recovery
CAMX	California and Mexico
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CAT	Climate Action Team
CCCC	California Climate Change Center
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CFCs	Chlorofluorocarbons
CFR	Code of Federal Regulations
CH_4	Methane

Acronym	Definition
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COG	Council of Governments
CPUC	California Public Utilities Commission
CY	cubic yard
DOE	Department of Energy
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
EF	emission factor
EISA	Energy Independence and Security Act
EMFAC	EMission FACtors model
EO	Executive Order
EPA	Environmental Protection Agency
EVs	Electric vehicles
GAMAQI	Guidance for Assessing and Mitigating Air Quality Impacts
GHG	greenhouse gas
GW	Gigawatt
GWP	global warming potential
HDV	heavy-duty vehicle
HFCs	hydrofluorocarbons
IPCC	Intergovernmental Panel on Climate Change
lbs	Pounds
LCFS	Low Carbon Fuel Standard
LDV	light-duty vehicle
MDV	medium-duty vehicle
MSW	Municipal solid waste
MT	metric tons
N_2O	nitrogen dioxide
NHTSA	National Highway Traffic Safety Administration
OFFROAD	Off-road Emissions Inventory Program model
OPR	Office of Planning and Research
PFCs	perfluorocarbons

Acronym	Definition
PG&E	Pacific Gas and Electric
ppm	parts per million
PUP	Power/Utility Protocol
RCP	Representative Concentration Pathways
RPS	Renewables Portfolio Standards
RTP	Regional Transportation Plan
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas & Electric
SF_6	Sulfur hexafluoride
SJCOG	San Joaquin Council of Governments
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLCPs	short-lived climate pollutants
SUV	sports utility vehicle
TRU	transportation refrigeration unit
USDOT	the Department of Transportation
USEPA	United States Environmental Protection Agency
VFW	Veterans of Foreign Wars
VMT	vehicle miles travelled
VW	Volkswagen
ZEVs	Zero emission vehicles

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1. INTRODUCTION

Ramboll Americas Engineering Solutions, Inc. (Ramboll) was asked to prepare a Greenhouse Gas (GHG) Emissions Technical Report for the proposed Pacific Gateway development in San Joaquin County, California (Project).

This GHG Emissions Technical Report analyzes the Project's impacts on GHGs from construction and operations. In particular, this report describes the existing setting of the Project site, describes the relevant regulatory setting, discusses the methodology used to evaluate GHG emissions related to the Project, and evaluates potential impacts related to GHGs that would result with implementation of the Project.

1.1 Existing Conditions

The existing 1,576.7-acre site is currently developed with active agricultural uses, which include commercial scale almond and cherry orchards, as well as an agricultural processing and manufacturing facility operated by A.B. FAB, Inc. This area is designated by both the General Plan and zoning as Agricultural. The site is located in southwest San Joaquin County, northeast of the Interstate 580 (I-580) and north of State Route 132 (SR 132). The Site is approximately one mile from the southern boundary of the City of Tracy (**Figure 1**).

1.2 Project Analysis

The Project will include a variety of uses within the Specific Plan Area, including modern Class "A" industrial warehouse and distribution facilities, a university campus, commercial retail uses, business park, and a Veteran of Foreign Wars (VFW) facility. Open spaces and public facilities such as parks and pedestrian and bike facilities will also be incorporated to provide accessibility and recreational spaces for the workforce and community.

The Project includes Specific Plan zoning designations for Limited Industrial (I-L), General Commercial (C-G), Public (P-F), and Business Park (B-P) use types. The Proposed Plan will allow nonconforming existing agricultural uses to continue to operate at the adoption of the Pacific Gateway Specific Plan and until development in conformance with this Specific Plan occurs.

1.3 Mitigation Measures

The Project will include a number of mitigation measures that would help reduce GHG emissions associated with project operation. Those which are expected to result in a quantified GHG impact are summarized below:

MM-GHG-1 (Solar Photovoltaic (PV))
The proposed project is incorporating solar PV panels sized to accommodate "Base Building" energy needs for limited industrial zoned buildings[1].

MM-GHG-2 (Zero-Emission (ZE) Equipment)
The project will utilize various zero emission equipment. This includes forklift equipment and yard mules used at all industrial warehouse buildings greater than 300,000 square feet

[1] "Base Building" shall be defined as energy to power LED warehouse lights, site lighting, no less than 3,000 SF of office, or more than 10,000 SF of office, up to 1 electric forklift charging station for every 40,000 SF of warehouse area, electricity to power one (1) quad outlet and dock equipment for any dock position utilized in tenant's business, warehouse air circulation at the rate of one (1) air change per hour, and all Title 24 requirements, including EV charging stations pursuant to Title 24.

(22,993,500 square feet total). Additionally, all landscape equipment used to maintain individual building projects (24,675,000 square feet total) and Pacific Gateway master landscaping, parks and open space will be required to be zero emission.

2. SCIENTIFIC AND REGULATORY BACKGROUNDS

2.1 Scientific Background

2.1.1 Science of Global Climate Change

There is a general scientific consensus that global climate change is occurring, caused in whole or in part by increased emissions of GHGs that keep the Earth's surface warm by trapping heat in the Earth's atmosphere, in much the same way as glass traps heat in a greenhouse. The Earth's climate is changing because human activities, primarily the combustion of fossil fuels, are altering the chemical composition of the atmosphere through the buildup of GHGs. GHGs allow the sun's radiation to penetrate the atmosphere and warm the Earth's surface, but do not let the infrared radiation emitted from the Earth escape back into outer space. As a result, global temperatures are predicted to increase over the century. In particular, if climate change remains unabated, surface temperatures in California are expected to increase anywhere from 4.1 to 8.6 degrees Fahrenheit by the end of the century. Not only would higher temperatures directly affect the health of individuals through greater risk of dehydration, heat stroke, and respiratory distress, the higher temperatures may increase ozone formation, thereby worsening air quality. Rising temperatures could also reduce the snowpack, which would increase the risk of water shortages. Higher temperatures along with reduced water supplies could reduce the quantity and quality of agricultural products. In addition, there could be an increase in wildfires and a shift in distribution of natural vegetation throughout the State. Global warming could also increase sea levels and coastal storms resulting in greater risk of flooding.

Emissions of carbon dioxide (CO_2) are the leading cause of global warming, with other pollutants such as methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons, and sulfur hexafluoride also contributing. The magnitude of the impact on global warming differs among the GHGs. For example, HFCs, perfluorocarbons, and sulfur hexafluoride have a greater "global warming potential" than CO_2. In other words, these other GHGs have a greater contribution to global warming than CO_2 on a per mass basis. The effect each GHG has on climate change is measured as a combination of the volume of its emissions and its global warming potential (GWP), and is expressed as a function of how much warming would be caused by the same mass of CO_2. Thus, GHG emissions are typically measured in terms of megagrams or metric tons (MT) of carbon dioxide equivalent (CO_2e). CO_2 has the greatest impact on global warming because of the relatively large quantities of CO_2 emitted into the atmosphere.

Globally, CO_2 concentrations, which ranged from 265 parts per million (ppm) to 280 ppm over the last 10,000 years, only began rising in the last 200 years. In 2019, the Intergovernmental Panel on Climate Change (IPCC) reported annual average CO_2 levels of 410 ppm,[2] a 46 percent increase. In an annual report from NOAA's Global Monitoring Lab, the 2024 annual average CO_2 levels were reported to have increased further to approximately 425 ppm.[3]

[2] IPCC. Climate Change 2023, Synthesis Report. 2023. Available at: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf. Accessed: January 2025.

[3] Climate.gov. Climate Change: Atmospheric Carbon Dioxide. 2023. Available at: https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide. Accessed: January 2025.

In 2022, the United States emitted about 6.34 billion MT of CO_2e or about 19 MT/person/year, calculated by dividing the emissions total by the U.S. Census Bureau 2022 population estimate.[4, 5] Of the five major sectors nationwide -- residential, commercial, industrial, electric power generation, and transportation - transportation accounts for the highest fraction of GHG emissions (approximately 37.4 percent of emissions from these five sectors). These emissions are entirely generated from direct fossil fuel combustion. Approximately 57.4 percent of these transportation emissions resulted from passenger car and light-duty truck use. The remaining emissions came from other transportation activities, including the combustion of diesel fuel in medium- and heavy-duty vehicles, and jet fuel in aircraft. According to the Inventory of U.S. Greenhouse Gas Emissions and Sinks,[6] from 1990 to 2022 as a whole, transportation emissions from fossil fuel combustion rose, "due, in large part, to increased demand for travel … as a result of a confluence of factors including population growth, economic growth, urban sprawl, and periods of low fuel prices".

In 2022, California emitted approximately 371.1 million metric tons of CO_2e, or about 6 percent of the U.S. emissions.[7] California's percentage contribution is due primarily to the sheer size of California, as compared to other states. For example, in 2022 (the most recent year of state rankings for energy-related CO_2 emissions per capita), California had the third lowest per capita energy-related CO_2 emission rates in the country (including Washington DC),[8] due to the success of its energy efficiency and renewable energy programs and commitments that have lowered the State's GHG emissions rate of emissions growth.[9] California's per capita GHG emissions in 2022 were 8.4 metric tons per person[10], while the U.S. per capita GHG emissions in that same year were 19 metric tons per person.[11, 12]

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4 USEPA. 2024. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022. Available at: https://www.epa.gov/system/files/documents/2024-04/us-ghg-inventory-2024-main-text_04-18-2024.pdf. Accessed: January 2025.

5 U.S. Census Bureau. Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2020 to July 1, 2021. (NST-EST2021_POP). Available at: https://data.census.gov/table/PEPPOP2021.NST_EST2021_POP?q=NST-EST2021. Accessed: January 2025.

6 USEPA. 2024. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2022. Available at: https://www.epa.gov/system/files/documents/2024-04/us-ghg-inventory-2024-main-text_04-18-2024.pdf. Accessed: January 2025.

7 CARB. 2024. California Greenhouse Gas Emissions for 2000 to 2022 Trends of Emissions and Other Indicators. Available at: https://ww2.arb.ca.gov/sites/default/files/2024-09/nc-2000_2022_ghg_inventory_trends.pdf. Accessed: January 2024.

8 US EIA. 2022.Table 4: Per capita energy-related carbon dioxide emissions by state. Available at: https://www.eia.gov/environment/emissions/state/. Accessed: January 2025.

9 The Center for Resource Efficient Communities. 2013. Residential Energy Use and GHG Emissions Impact of Compact Land Use Types. Report to ARB, Contract No. 10-323. Available at: http://www.arb.ca.gov/research/apr/past/10-323h.pdf. Accessed: January 2025.

10 US EIA. 2022.Table 4: Per capita energy-related carbon dioxide emissions by state. Available at: https://www.eia.gov/environment/emissions/state/. Accessed: January 2025.

11 USEPA. 2023. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2021. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-12/2000_2021_ghg_inventory_trends.pdf. Accessed: January 2025.

12 U.S. Census Bureau. Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2023. (NST-EST2023). Available at: https://www2.census.gov/programs-surveys/popest/tables/2020-2023/state/totals/NST-EST2023-POP.xlsx. Accessed: January 2025.

Another factor that has reduced California's fuel use and GHG emissions is its mild climate compared to that of many other states.

The California Energy Commission (CEC) found that transportation is the source of approximately 38 percent of the State's GHG emissions, followed by industrial sources at 19 percent, and electricity generation (both in-state and out-of-state) at 16 percent. Residential and commercial activities comprised approximately 10 percent of the inventory. Agriculture and forestry is the source of approximately 8 percent of the State's GHG emissions. The remainder of the State's GHG emissions are accounted for by high-GWP gases or recycling and waste.[13]

2.1.2 Potential Effects of Human Activity on Global Climate Change

Globally, climate change has the potential to impact numerous environmental resources through anticipated, though uncertain, impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. At the end of the 21st century, global surface temperature change is likely to exceed 1.5°C (relative to 1850-1900 levels) in all four assessed climate model projections but one.[14]

The understanding of GHG emissions, particulate matter, and aerosols on global climate trends is complex and involves varying uncertainties and a balance of different effects. In addition to uncertainties about the extent to which human activity rather than solar or volcanic activity is responsible for increasing warming, there is also evidence that some human activity has cooling, rather than warming, effects, as discussed in detail in numerous publications by the Intergovernmental Panel on Climate Change (IPCC), such as the Sixth Assessment Report (AR5) Synthesis Report.[15, 16] Nonetheless, when all effects and uncertainties are considered together, there is a strong scientific consensus that human activity has contributed significantly to global warming. As stated in Section A, Current Status and Trends of the Synthesis Report, the concluding report for the Sixth Assessment Report, "Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850–1900 in 2011–2020."[17]

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[13] CARB. 2023. California Greenhouse Gas Emissions for 2000 to 2021 Trends of Emissions and Other Indicators. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-12/2000_2021_ghg_inventory_trends.pdf. Accessed: January 2025.

[14] IPCC. Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report. Climate Change 2014: Synthesis Report. 2014. SPM.2.2. Available at: https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf. Accessed: January 2025.

[15] The IPCC was established in 1988 by the World Meteorological Organization and the United Nations Environment Programme to assess scientific, technical, and socio-economic information relevant for the understanding of climate change, its potential impacts, and options for adaptation and mitigation. The IPCC has produced a series of Assessment Reports comprised of full scientific and technical assessments of climate change. The first assessment report was developed in 1990. The Sixth Assessment Report was completed in March 2023 with the Synthesis Report.

[16] Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report. Climate Change 2023: Synthesis Report. 2023. Available at: https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf. Accessed: January 2025.

[17] Ibid.

Acknowledging uncertainties regarding the rate at which anthropogenic GHG emissions would continue to increase (based upon various factors under human control, such as future population growth and the locations of that growth; the amount, type, and locations of economic development; the amount, type, and locations of technological advancement; adoption of alternative energy sources; legislative and public initiatives to curb emissions; and public awareness and acceptance of methods for reducing emissions), and the impact of such emissions on climate change, the IPCC devises emission scenarios which utilize various assumptions about the rates of economic development, population growth, and technological advancement over the course of the next century. For the AR6, Shared Socio-economic Pathways (SSPs) were assessed to cover the range of possible future development of drivers of climate change, including a range of very low to very high GHG emissions scenarios. Additionally, Representative Concentration Pathways (RCPs) were used to assess regional climate changes, impacts, and risks. Some findings from AR6 are shown below:[18]

- The projected effects of global warming are assessed under each of the scenarios.
- Global warming will continue to increase in the near term (2021–2040) mainly due to increased cumulative CO_2 emissions in nearly all considered scenarios and modelled pathways. In the considered scenarios and modelled pathways, the best estimates of the time when the level of global warming of 1.5°C is reached lie in the near term.
- The assessed climate response to GHG emissions scenarios results in a best estimate of warming for 2081–2100 that spans a range from 1.4°C for a very low GHG emissions scenario to 4.4°C for a very high GHG emissions scenario.

Potential secondary effects from global warming include impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity.

2.1.3 Potential Effects of Climate Change on the State of California

According to the California Air Resources Board (CARB), some of the potential impacts in California of global warming may include loss in snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years.[19] The California Climate Change Center (CCCC) has released four assessment reports on climate change in California, the most recent in 2018. California's Fourth Climate Change Assessment projects an increase by 5.6-8.8°F from 2070 to 2100 depending on greenhouse gas emission reductions (at a moderate rate or continuing at current rates).[20] California's Fifth Climate Change Assessment is currently in development.

Below is a summary of some of the potential effects reported in an array of studies that could be experienced in California as a result of global warming and climate change.

2.1.3.1 Air Quality

Higher temperatures, conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the

[18] Ibid.

[19] California Air Resources Board (CARB). Public Workshop to Discuss Establishing the 1990 Emissions Level and the California 2020 Limit and Developing Regulations to Require Reporting of Greenhouse Gas Emissions, Sacramento, CA. 2006. Available at: https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch3.1.3/2014-12-19_CARB2006.pdf. Accessed: January 2025.

[20] California Climate Change Center, 2018. California's Changing Climate 2018. A Summary of Key Findings from California's Fourth Climate Change Assessment.

magnitude of the effect, and therefore its indirect effects, are uncertain. For other pollutants, the effects of climate change and/or weather are less well studied, and even less well understood.

If higher temperatures are accompanied by drier conditions, the potential for large wildfires could increase, which, in turn, would further worsen air quality. Studies have been conducted to evaluate the potential impacts of climate change on wildfire frequency based on lower and higher emissions scenarios. Per California's Fourth Climate Change Assessment, under a higher emissions scenario, the average area burned statewide could increase by 77 percent above historic levels by 2100.[21] Per California's Third Climate Change Assessment, the estimated burned area is projected to increase between 57 and 169 percent, depending on location.[22] However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thus ameliorating the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the State.[23]

It is estimated that over the next decade, higher temperatures could increase the demand for electricity by 1 Gigawatt (GW) during summer months, which would require purchase of costly peak power from external sources or the construction of one new large power plant in California.[24] During periods of extreme heat, efficiency of electricity generation is reduced at natural gas plants; hydropower generation is reduced; and increased losses occur at substations; all while electricity demands are increased. These factors are projected to result in the need for more than 17 GW, or 38 percent of additional capacity, needed by 2100. Additionally, transmission lines lose 7 to 8 percent of transmitting capacity in higher temperatures, which also results in a need for increased power generation.[25]

2.1.3.2 Water Supply

Uncertainty remains with respect to the overall impact of global climate change on future water supplies in California. For example, models that predict drier conditions suggest decreased reservoir inflows and storage, and decreased river flows, relative to current conditions. By comparison, models that predict wetter conditions project increased reservoir inflows and storage, and increased river flows.[26]

A July 2006 technical report prepared by the California Department of Water Resources (DWR) addresses the State Water Project, the Central Valley Project, and the Sacramento-

[21] Ibid.

[22] California Climate Change Center, 2012. Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California. CEC-500-2012-007. July, 2012.

[23] California Climate Change Center (CCCC), 2006. Our Changing Climate: Assessing the Risks to California, CEC500-2006-077, Sacramento, CA. July. Available at: https://www.engr.scu.edu/~emaurer/papers/CEC-500-2006-077.pdf. Accessed: January 2025.

[24] California Climate Change Center, 2012. Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California. CEC-500-2012-007. July, 2012.

[25] Ibid.

[26] Brekke, L.D., et al, 2004. —Climate Change Impacts Uncertainty for Water Resources in the San Joaquin River Basin, California. Journal of the American Water Resources Association. 40(2): 149–164. Malden, MA, Blackwell Synergy for AWRA.

San Joaquin Delta. Although the report projects that, "[c]limate change will likely have a significant effect on California's future water resources … [and] future water demand," it also reports that, "there is much uncertainty about future water demand, especially those aspects of future demand that will be directly affected by climate change and warming. While climate change is expected to continue through at least the end of this century, the magnitude and, in some cases, the nature of future changes is uncertain. This uncertainty serves to complicate the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood,"[27] DWR adds that "[i]t is unlikely that this level of uncertainty will diminish significantly in the foreseeable future."[28] Still, changes in water supply are expected to occur, and many regional studies have shown that large changes in the reliability of water yields from reservoirs could result from only small changes in inflows.[29]

California's Third Climate Change Assessment outlines the State's urgent water management challenges brought on as a result of climate change. These include increasing demand from a growing population as temperatures rise, earlier snowmelt and runoff, and faster-than-historical sea-level rise threatening aging coastal water infrastructure and levees in the Sacramento-San Joaquin Delta.[30] Additionally, they predict that competition between urban and agriculture water users and environmental needs will increase due to effects on water supply and stream flows. The Fourth Climate Change Assessment concludes that by 2100, water supply from snowpack is projected to decline by two-thirds, and that by 2050, California's agricultural production could face climate-related water shortages of up to 16 percent in certain regions.[31]

2.1.3.3 Hydrology

As discussed above, climate change could potentially affect the following: the amount of snowfall, rainfall, and snowpack; the intensity and frequency of storms; flood hydrographs (flash floods, rain or snow events, coincidental high tide, and high runoff events); sea level rise and coastal flooding; coastal erosion; and the potential for saltwater intrusion. Sea level rise can be a product of global warming through two main processes -- expansion of sea water as the oceans warm and melting of ice over land. A rise in sea levels could result in coastal flooding and erosion and could also jeopardize California's water supply. In particular, saltwater intrusion would threaten the quality and reliability of the State's major fresh water supply that is pumped from the southern portion of the Sacramento/San Joaquin River Delta. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events. Assuming the rate of sea level rise continues to follow global trends, sea level along California's coastline in 2050 could be 10-18 inches

[27] California Department of Water Resources (DWR), 2006. Progress on Incorporating Climate Change into Management of California Water Resources, Sacramento, CA. July.

[28] California Department of Water Resources (DWR), 2006. Progress on Incorporating Climate Change into Management of California Water Resources, Sacramento, CA. July.

[29] Kiparsky 2003, op. cit; DWR, 2005, op. cit.; Cayan, D., et al, 2006. Scenarios of Climate Change in California: An Overview (White Paper, CEC-500-2005-203-SF), Sacramento, CA. February.

[30] California Climate Change Center, 2012. Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California. CEC-500-2012-007. July, 2012.

[31] California Climate Change Center, 2018. California's Changing Climate 2018. A Summary of Key Findings from California's Fourth Climate Change Assessment.

higher than in 2000, and 31-55 inches higher by the end of this century.[32] Based on these current projections, the current 100-year storm could occur once every year. California's Fourth Climate Change Assessment projects that without implementation of protective measures, airports in major urban areas will be susceptible to major flooding from a combination of sea-level rise and storm surge by 2040 to 2080 and that the miles of highways susceptible to coastal flooding from a 100-year storm will triple from current levels by 2100.[33]

2.1.3.4 Agriculture

California has a $30 billion agricultural industry that produces half the country's fruits and vegetables. The CCCC notes that higher CO_2 levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, water demand could increase, crop-yield could be threatened by a less reliable water supply, and greater ozone pollution could render plants more susceptible to pest and disease outbreaks. In addition, temperature increases could change the time of year that certain crops, such as wine grapes, bloom or ripen, and thus affect their quality.[34]

2.1.3.5 Ecosystems and Wildfire

Increases in global temperatures and the potential resulting changes in weather patterns could have ecological effects on a global and local scale. In 2004, the Pew Center on Global Climate Change released a report examining the possible impacts of climate change on ecosystems and wildlife.[35] The report outlines four major ways in which it is thought that climate change could affect plants and animals: (1) timing of ecological events, (2) geographic range, (3) species' composition within communities, and (4) ecosystem processes such as carbon cycling and storage.

2.2 Regulatory Background

2.2.1 Federal

2.2.1.1 Clean Air Act

In April 2007, in *Massachusetts v. EPA*, the U.S. Supreme Court directed the Administrator of the U.S. Environmental Protection Agency (USEPA) to determine whether GHG emissions from new motor vehicles cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision.[36] In making these decisions, the USEPA Administrator was directed to follow the language of Section 202(a) of the Clean Air Act (CAA). In December 2009, the Administrator signed a final rule with two distinct findings regarding GHGs under Section 202(a) of the CAA:

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[32] California Climate Change Center, 2012. Our Changing Climate 2012: Vulnerability and Adaptation to the Increasing Risks from Climate Change in California. CEC-500-2012-007. July, 2012.

[33] California Climate Change Center, 2018. California's Changing Climate 2018. A Summary of Key Findings from California's Fourth Climate Change Assessment.

[34] California Climate Change Center (CCCC), 2006, op. cit.

[35] Parmesan, C. and H. Galbraith, Observed Impacts of Global Climate Change in the U.S., Arlington, VA: Pew Center on Global Climate Change, November 2004.

[36] Massachusetts v. Environmental Protection Agency. April 2007. Available at: https://tile.loc.gov/storage-services/service/ll/usrep/usrep549/usrep549497/usrep549497.pdf. Accessed: January 2025.

- Elevated concentrations of GHGs—CO_2, CH_4, N_2O, HFCs, perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations. This is referred to as the "endangerment finding."
- The combined emissions of GHGs—CO_2, CH_4, N_2O, and HFCs—from new motor vehicles and new motor vehicle engines contribute to the GHG air pollution that endangers public health and welfare. This is referred to as the "cause or contribute finding."

These two findings were necessary to establish the foundation for regulation of GHGs from new motor vehicles as air pollutants under the CAA.

2.2.1.2 Executive Order 14008

On January 27, 2021, President Biden issued an Executive Order on Tackling the Climate Crisis at Home and Abroad (Executive Order 14008).[37] Part I of the Order highlights putting the climate crisis at the center of United States foreign policy and national security. Addressing the climate crisis will require significant short-term global reductions in GHG emissions and net-zero global emissions by mid-century or sooner. The United States will pursue green recovery efforts and initiatives to advance the clean energy transition.

Part II of the Order relays the government-wide approach to the climate crisis, which involves reducing climate pollution in every sector of the economy, especially through innovation, commercialization, and deployment of clean energy technologies and infrastructure. A National Climate Task Force is established to focus on addressing the climate crisis through key federal actions to reduce climate change impacts. A 100% carbon pollution-free electricity sector is targeted by no later than 2035 and a net-zero emissions economy is to be achieved by no later than 2050. Offshore wind is aimed to be doubled by 2030. Opportunities for federal funding of clean energy technology and infrastructure shall be identified. Federal permitting decisions need to consider the effects of GHG emissions and climate change.

2.2.1.3 Paris Climate Agreement

On June 1, 2017, President Trump withdrew the United States from the Paris Agreement.[38] The Paris Agreement was negotiated within the United Nations Framework Convention on Climate Change in 2015 to reduce GHG emissions internationally. The goal of the Paris Agreement was to keep the global temperature rise this century to below 2 degrees Celsius above pre-industrial standards, with efforts to limit temperature increase even further to 1.5 degrees Celsius. The Paris Agreement became effective on November 4, 2016. As of October 5, 2016, 155 of 197 parties had ratified the Paris Agreement.[39] On January 20, 2021, President Biden signed an Executive Order formally rejoining the United

[37] White House Briefing Room. 2021. *Executive Order on Tackling the Climate Crisis at Home and Abroad*. January 27. Available at: https://www.federalregister.gov/documents/2021/02/01/2021-02177/tackling-the-climate-crisis-at-home-and-abroad. Accessed: January 2025.

[38] USEPA. 2017. Administrator Scott Pruitt Speech on Paris Accord, As Prepared. June 1. Available at: https://archive.epa.gov/epa/speeches/administrator-scott-pruitt-speech-paris-accord-prepared.html. Accessed: January 2025.

[39] United Nations Framework Convention on Climate Change. 2017. The Paris Agreement. July 27. Available at: http://unfccc.int/paris_agreement/items/9485.php. Accessed: January 2025.

States to the Paris Agreement.[40] However, on January 20, 2025, President Trump had signed an Executive Order to withdraw the United States from the Paris Agreement.[41]

2.2.1.4 Federal Vehicle Standards

In response to the *Massachusetts v. EPA* decision discussed above, in 2007, President Bush directed the USEPA, the Department of Transportation (USDOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Traffic Safety Administration (NHTSA) issued a final rule regulating fuel efficiency for and GHG emissions from cars and light-duty trucks for model year 2011; and in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012–2016.

In 2010, President Obama issued a memorandum directing the same federal agencies to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model year 2017–2025 light-duty vehicles. The proposed standards are projected to achieve 163 grams/mile of CO_2 in model year 2025, on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017–2021.

In August 2017, the USEPA asked for additional information and data relevant to assessing whether the GHG emissions standards for model years 2022-2025 remain appropriate. In early 2018, the USEPA Administrator announced that the midterm evaluation for the GHG emissions standards for cars and light-duty trucks for model years 2022-2025 was completed and stated his determination that the current standards should be revised in light of recent data. Subsequently, in 2018, the USEPA and NHTSA proposed to amend certain existing Corporate Average Fuel Economy (CAFE) standards and tailpipe carbon dioxide emissions standards for passenger cars and light trucks and establish new standards, covering model years 2021-2026. Compared to maintaining the post-2020 standards now in place, the pending proposal would increase U.S. fuel consumption.[42] California and other states have announced their intent to challenge federal actions that would delay or eliminate GHG reductions. In April 2020, NHTSA and EPA amended the CAFE and GHG emissions standards for passenger cars and light trucks and established new less stringent standards, covering model years 2021 through 2026.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles.

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[40] White House Briefing Room. 2021. *Paris Climate Agreement.* January 20. Available at: https://bidenwhitehouse.archives.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/. Accessed: January 2025.

[41] White House Briefing Room. 2025. *Putting America First in International Environmental Agreements*. January 20. Available at: https://www.whitehouse.gov/presidential-actions/2025/01/putting-america-first-in-international-environmental-agreements/. Accessed: January 2025

[42] Federal Register. 2018. *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Final Rule for Model Years 2021-2026 Passenger Cars and Light Trucks*. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/safer-affordable-fuel-efficient-safe-vehicles-final-rule. Accessed: January 2025.

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program will apply to vehicles with model year 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans and all types of sizes of buses and work trucks. The final standards are expected to lower carbon dioxide emissions by approximately 1.1 billion MT and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.[43]

On September 27, 2019, the USEPA and NHTSA published the SAFE Rule (Part One).[44] The SAFE Rule (Part One) went into effect in November 2019, and revoked California's authority to set its own GHGs standards and set zero emission vehicle mandates in California. The SAFE Rule (Part One) freezes new zero emission vehicles (ZEV) sales at model year 2020 levels for year 2021 and beyond and will likely result in a lower number of future ZEVs and a corresponding greater number of future gasoline internal combustion engine vehicles. In response to the USEPA's adoption of the SAFE Rule (Part One), CARB has issued guidance regarding the adjustment of vehicle emissions factors to account for the rule's implications on criteria air pollutant and greenhouse gas emissions.[45,46] The SAFE Rule is subject to ongoing litigation and on February 8, 2021, the D.C. Circuit Court of Appeals granted the Biden Administration's motion to stay litigation over Part 1 of the SAFE Rule. On April 22 and April 28, 2021, respectively, NHTSA and USEPA formally announced their intent to reconsider the Safe Rule (Part One).[47,48] A virtual public hearing for EPA's Notice of Reconsideration of SAFE I was held on June 2, 2021. The NHTSA finalized the Corporate Average Fuel Economy Pre-emption rulemaking to withdraw its portions of the SAFE I Rule on December 21, 2021.[49] On March 9, 2022, USEPA reinstated California's authority under the Clean Air Act to implement its own GHG emission standards and ZEV sales mandate and entirely rescinded the SAFE Rule (Part One).

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[43] USEPA and NHTSA, 2016. Greenhouse Gas Emissions and Fuel Efficiency Standards for Medium and Heavy-Duty Engines and Vehicles – Phase 2. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed: January 2025.

[44] USEPA and NHTSA. 2019. Federal Register, Vol. 84, No. 188, *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program*. September 27. Available at: https://www.govinfo.gov/content/pkg/FR-2019-09-27/pdf/2019-20672.pdf. Accessed: January 2025.

[45] CARB. 2019. EMFAC Off-Model Adjustment Factors to Account for the SAFE Vehicle Rule Part One. November 20. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-02/emfac_off_model_adjustment_factors_final_draft.pdf. Accessed: January 2025.

[46] CARB. 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule. June 26. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-02/emfac_off_model_co2_adjustment_factors_06262020-final.pdf. Accessed: January 2025.

[47] NHTSA. 2021. NHTSA Advances Biden-Harris Administration's Climate & Jobs Goals. April 22. Available at: https://www.nhtsa.gov/press-releases/nhtsa-advances-biden-harris-administrations-climate-jobs-goals. Accessed: January 2025.

[48] USEPA. 2021. Federal Register, Vol. 86, No. 80, *California State Motor Vehicle Pollution Control Standards; Advanced Clean Car Program; Reconsideration of a previous Withdrawal of a Waiver of Preemption; Opportunity for Public Hearing and Public Comment*. April 28. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/notice-reconsideration-previous-withdrawal-waiver. Accessed: January 2025.

[49] NHTSA. Available at: https://www.nhtsa.gov/laws-regulations/corporate-average-fuel-economy. Accessed: January 2025.

In December 2021, the USEPA finalized federal GHG emissions standards for passenger cars and light trucks for Model Years 2023 through 2026. These standards are the strongest vehicle emissions standards ever established for the light-duty vehicle sector and are based on sound science and grounded in a rigorous assessment of current and future technologies. The updated standards will result in avoiding more than 3 billion tons of GHG emissions through 2050.[50]

In April 2023, the EPA proposed a new, more ambitious proposed standards for national greenhouse gas emission standards from light-duty and medium-duty vehicles starting with 2027 model year vehicles.[51] On March 20, 2024, EPA finalized these standards, which will phase in over model years 2027 to 2032. These standards build upon existing rules, and leverage advances in clean car technology to realize benefits to Americans such as the improvement of public health through reduction of criteria air pollutant and greenhouse gas emissions from vehicles.[52]

On August 5, 2021, EPA announced plans to reduce greenhouse gas (GHG) emissions and other harmful air pollutants from heavy-duty trucks through a series of rulemakings over the next three years. The first rulemaking of this Clean Trucks Plan is a final rule signed on December 20, 2022, which focuses on reducing emissions that form smog and soot and will apply to heavy-duty engines and vehicles beginning in model year 2027.[53] Two additional rulemakings, Phase 3 greenhouse gas rule for heavy-duty engines and the multi-pollutant emissions standards for light-duty and medium-duty vehicles were signed in March 2024, and marked the completion of the Clean Trucks Plan.[54]

2.2.1.5 Energy Independence and Security Act

The Energy Independence and Security Act of 2007 (EISA)[55] facilitates the reduction of national GHG emissions by aiming to:

- Move the United States toward greater energy independence and security.
- Increase the production of clean renewable fuels.

[50] USEPA. 2021. Final Rule to Revise Existing National GHG Emissions Standards for Passenger Cars and Light Trucks Through Model Year 2026. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-revise-existing-national-ghg-emissions. Accessed: January 2025.

[51] United States Environmental Protection Agency. 2023. Proposed Rule: Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/proposed-rule-multi-pollutant-emissions-standards-model. Accessed: January 2025.

[52] United States Environmental Protection Agency. 2023. Final Rule: Multi-Pollutant Emissions Standards for Model Years 2027 and Later Light-Duty and Medium-Duty Vehicles. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-multi-pollutant-emissions-standards-model. Accessed: January 2025.

[53] USEPA. Regulations for Emissions from Vehicles and Engines. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks. Accessed: January 2025.

[54] USEPA. Regulations for Emissions from Vehicles and Engines. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-commercial-trucks. Accessed: January 2025.

[55] USEPA. Summary of the Energy Independence and Security Act. June 2024. Available at: https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. Accessed: January 2025.

- Protect consumers.
- Increase the efficiency of products, buildings and vehicles.
- Promote research and deploy GHG capture and storage options.
- Improve the energy performance of the Federal Government.
- Increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy.

EPA has enacted three key provisions (the CAFE Standards, the Renewable Fuel Standard, and the appliance/lighting efficiency standards) to reinforce these energy reduction goals and has committed to develop, implement, and revise regulations and voluntary programs for the following in EISA, among others:

- Increased CAFE Standards
- Federal Vehicle Fleets
- Renewable Fuel Standard
- Biofuels Infrastructure
- Carbon Capture and Sequestration

2.2.2 State

The State of California considers GHG emissions and the impacts of climate change to be a serious threat to the public health, environment, economic well-being, and natural resources of California, and has taken an aggressive stance to mitigate the State's impact on climate change through the adoption of policies and legislation. CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has numerous regulations aimed at reducing the State's GHG emissions. Some of the major initiatives are summarized below.

2.2.2.1 Executive Order S-3-05

In 2005, Governor Schwarzenegger issued EO S-3-05, which identifies Statewide GHG emission reduction targets to achieve long-term climate stabilization as follows.

- Reduce GHG emissions to 1990 levels by 2020; and
- Reduce GHG emissions to 80 percent below 1990 levels by 2050.

In response to EO S-3-05, California Environmental Protection Agency (CalEPA) created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the "2006 CAT Report").[56] The 2006 CAT Report identified a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the State agencies. The strategies include, but are not limited to, the reduction of passenger and light-duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping

[56] California Environmental Protection Agency (CalEPA), March 2006. Climate Action Team Report to Governor Schwarzenegger and the Legislature. Available at: https://planning.lacity.gov/eir/8150Sunset/References/4.E.%20Greenhouse%20Gas%20Emissions/GHG.23_CalEPA%202006%20Report%20to%20Governor.pdf. Accessed: January 2025.

technology/infrastructure, increased use of alternative fuels, increased recycling, and landfill methane capture.

2.2.2.2 Assembly Bill 32

Assembly Bill (AB) 32 (Nunez, 2006), the California Global Warming Solutions Act of 2006, was enacted after considerable study and expert testimony before the Legislature. The heart of AB 32 is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. In order to achieve this reduction mandate, AB 32 requires California Air Resources Board to adopt rules and regulations in an open public process that achieve the maximum technologically feasible and cost-effective GHG reductions.

In 2007, CARB approved a statewide limit on the GHG emissions level for year 2020 consistent with the determined 1990 baseline. CARB's adoption of this limit is in accordance with Health & Safety Code Section 38550, as codified through enactment of AB 32.

Per Health & Safety Code Section 38561(b), CARB also is required to prepare, approve and amend a scoping plan that identifies and makes recommendations on "direct emission reduction measures, alternative compliance mechanisms, market-based compliance mechanisms, and potential monetary and nonmonetary incentives for sources and categories of sources that [CARB] finds are necessary or desirable to facilitate the achievement of the maximum feasible and cost-effective reductions of greenhouse gas emissions by 2020."

In November 2017, CARB published California's 2017 Climate Change Scoping Plan (2017 Scoping Plan), which was subsequently adopted by CARB's Board in December 2017.[57] The 2017 Scoping Plan identifies CARB's strategy for achieving the State's 2030 GHG target as established in Senate Bill (SB) 32 (discussed below). The strategy includes continuation of the Cap-and-Trade Program through 2030, and incorporates a Mobile Source Strategy that includes strategies targeted to increase zero-emission vehicle fleet penetration and a more stringent target for the Low Carbon Fuel Standard by 2030. The 2017 Scoping Plan also incorporates approaches to cutting short-lived climate pollutants (SLCPs) under the Short-Lived Climate Pollutant Reduction Strategy (a planning document that was adopted by CARB in March 2017) and acknowledges the need for reducing emissions in agriculture and highlights the work underway to ensure that California's natural and working lands increasingly sequester carbon.

When discussing Project-level GHG emissions reduction actions and thresholds, the 2017 Scoping Plan states:

"Project-Level Greenhouse Gas Emissions Reduction Actions and Thresholds

Beyond plan-level goals and actions, local governments can also support climate action when considering discretionary approvals and entitlements of individual projects through California Environmental Quality Act (CEQA). Absent conformity with an adequate geographically specific GHG reduction plan, CARB recommends that projects incorporate design features and GHG reduction measures, to the degree feasible, to minimize GHG emissions. Achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development.

[57] CARB. 2017. California's 2017 Climate Change Scoping Plan. November. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf. Accessed: January 2025.

Achieving net-zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net-zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA.

California's future climate strategy will require increased focus on integrated land use planning to support livable, transit-connected communities, and conservation and other lands. Accommodating population and economic growth through travel- and energy-efficient land use provides GHG-efficient growth, reducing GHGs from both transportation and building energy use. GHGs can be further reduced at the Project-level through implementing energy-efficient construction and travel demand management approaches."

2022 Scoping Plan Update

The 2022 Scoping Plan Update assesses progress towards achieving the Senate Bill 32 2030 target and lays out a path to achieve carbon neutrality no later than 2045. This plan update was approved by the Board in December 2022.[58] The 2022 Scoping Plan Update outlines a sector-by-sector roadmap for California to achieve carbon neutrality by 2045 or earlier. It aims to reduce anthropogenic emissions to 85% below 1990 levels by 2045 using technically feasible and cost-effective solutions. The 2022 Scoping Plan Update focuses on electrification of transportation, homes and buildings, and phasing out fossil fuels. In hard-to-electrify sectors, new solutions such as renewable hydrogen and biomethane are leveraged to achieve emissions reductions.

CARB's 2022 Scoping Plan Update outlines a number of actions for the Scoping Plan Scenario in Table 2-1. The list below represents the actions which are most relevant to the Project:

- GHG Emissions Reductions Relative to the SB 32 Target - 40% below 1990 levels by 2030.
- Smart Growth / Vehicle Miles Traveled (VMT) - VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045.
- Light-duty Vehicle (LDV) Zero Emission Vehicles (ZEVs) - 100% of LDV sales are ZEV by 2035.
- Truck ZEVs - 100% of medium-duty (MDV)/HDV sales are ZEV by 2040 (AB 74 University of California Institute of Transportation Studies [ITS] report).
- Freight and Passenger Rail - 100% of passenger and other locomotive sales are ZEV by 2030; 100% of line haul locomotive sales are ZEV by 2035; Line haul and passenger rail rely primarily on hydrogen fuel cell technology, and others primarily utilize electricity.
- New Residential and Commercial Buildings - All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030.

[58] CARB. 2022. Final 2022 Scoping Plan Update and Appendices. December. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: January 2025.

- Construction Equipment - 25% of energy demand electrified by 2030 and 75% electrified by 2045.
- Low Carbon Fuels for Transportation - Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen.
- Low Carbon Fuels for Buildings and Industry - In 2030s biomethane blended in pipeline; Renewable hydrogen blended in fossil gas pipeline at 7% energy (~20% by volume), ramping up between 2030 and 2040.
- Non-combustion Methane Emissions - Moderate adoption of enteric strategies by 2030; Divert 75% of organic waste from landfills by 2025.

In addition to the previous focus areas, the 2022 Scoping Plan Update developed a table of priority GHG reduction strategies that can be utilized by local governments. This is Table 1 in Appendix D of the 2022 Scoping Plan Update.[59] When discussing this table, the 2022 Scoping Plan Update notes:

"To assist local jurisdictions with developing local climate plans, measures, policies, and actions aligned with the State's climate goals, Table 1 presents a non-exhaustive list of impactful GHG reduction strategies that can be implemented by local governments. The strategies in Table 1 are not applicable to all local jurisdictions, nor are they the only strategies that local governments can adopt, but they represent the core strategies that most jurisdictions in California can implement to reduce GHG emissions regardless of whether they have developed a CEQA-qualified CAP. Reaching the outcomes of these priority GHG reduction strategies requires a locally appropriate, comprehensive adoption of policies in support of these objectives. When developing local climate plans, measures, policies, and actions, local jurisdictions should incorporate the recommendations described in Table 1 to the extent appropriate to ensure alignment with State climate goals."

2.2.2.3 SB 605 - Short-lived Climate Pollutants (SLCP)

Short-lived climate pollutants (i.e., black carbon, fluorinated gases, and methane) are powerful climate forcers that remain in the atmosphere for a much shorter period of time than longer-lived climate pollutants. Their relative potency, when measured in terms of how they heat the atmosphere, can be tens, hundreds, or even thousands of times greater than that of CO_2. The impacts of short-lived climate pollutants are especially strong over the short term. Reducing these emissions can make an immediate beneficial impact on climate change.[60] Governor Brown signed SB 605 on September 21, 2014, directing CARB to develop a Short-Lived Climate Pollutant Strategy by January 1, 2016. On May 7, 2015, CARB released a concept paper for reducing emissions of these substances. In September 2015, CARB released a draft of their Short-Lived Climate Pollutant Strategy. Several updates to the draft have been made since September 2015, with the most current version dated March 2017. The Strategy aims for a 40 percent reduction in methane and HFC emissions below

[59] CARB. 2022. Final 2022 Scoping Plan Update and Appendices. December. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: January 2025.

[60] CARB. 2016. Reducing Short-Lived Climate Pollutants in California. Available at: https://www.arb.ca.gov/cc/shortlived/shortlived.htm. Accessed: January 2025.

2013 levels by 2030 and a 50 percent reduction in anthropogenic emissions of black carbon below 2013 levels by 2030.[61]

In September 2016, Governor Brown set methane reduction targets for California through Senate Bill 1383 in an effort to reduce SLCPs.[62] Landfills are the third largest source of methane in California, and so the targets focused on ways in which the State can fight climate change through recycling organic waste. The targets in SB 1383 must:

- Reduce organic waste disposal 75% by 2025
- Send at least 20% of surplus, fresh food to Californians in need by 2025

2.2.2.4 Cap-and-Trade Program

California's Cap-and-Trade Program (Cal. Code Regs., tit. 17, §§ 95800-96022) regulates the emissions of large electric power plants, large industrial plants, and fuel distributors (including transportation fuel and natural gas). These sources are responsible for about 85 percent of the State's total GHG emissions inventory.[63] As described by CARB:

> "The Cap-and-Trade Regulation establishes a declining limit on major sources of GHG emissions throughout California, and it creates a powerful economic incentive for significant investment in cleaner, more efficient technologies… CARB creates allowances equal to the total amount of permissible emissions (i.e., the "cap"). One allowance equals one metric ton of carbon dioxide equivalent emissions (using the 100-year GWP). Each year, fewer allowances are created and the annual cap declines. An increasing annual auction reserve (or floor) price for allowances and the reduction in annual allowances creates a steady and sustained carbon price signal to prompt action to reduce GHG emissions. All covered entities in the Cap-and-Trade Program are still subject to existing air quality permit limits for criteria and toxic air pollutants."[64]

In the Cap-and-Trade Program, the State regulates the quantity of emissions by determining, in advance, how many allowances to issue—i.e., setting the "cap." Each allowance is essentially a permit issued by the State authorizing a certain quantity of GHG emissions. There are only a finite number of allowances, ensuring that covered entities may only lawfully emit a certain quantity of GHGs. If a covered entity wishes to emit carbon, it must obtain allowances to authorize those emissions.

[61] CARB. 2017. Short-Lived Climate Pollutant Reduction Strategy. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-07/final_SLCP_strategy.pdf. Accessed: January 2025.

[62] CalRecycle. California's Short-Lived Climate Pollutant Reduction Strategy. Available at: https://calrecycle.ca.gov/organics/slcp/. Accessed: January 2025.

[63] CARB. 2015. Overview of CARB Emissions Trading Program. February 9. Available at: https://ww2.arb.ca.gov/sites/default/files/cap-and-trade/guidance/cap_trade_overview.pdf. Accessed: January 2025.

[64] Ibid.

Importantly, the Cap-and-Trade Program has been designed to provide a firm cap, ensuring that the 2020 statewide emissions limit identified by CARB in the 2008 Scoping Plan will *not* be exceeded.[65] Thus, for the emission sources covered by the Program, which are nearly all of the sources associated with land use development projects, compliance with AB 32's 2020 mandate is assured by the Cap-and-Trade Program.

AB 398 (2017) extended the statutorily defined horizon year of the Cap-and-Trade Program to December 31, 2030, thereby facilitating continued reliance on the Cap-and-Trade Program for purposes of achieving SB 32's 2030 statewide reduction target.

In June 2023, CARB proposed to amend the Cap-and-Trade regulation and since then has hosted numerous workshops on the potential amendments.[66] In April 2024 CARB published a Standardized Regulatory Impact Assessment of the potential amendments, which outline changes to the regulation such as revision of future allowances, updates to industrial allowance allocations, and other changes that are intended to align the Cap-and-Trade Program with updated statewide GHG reduction targets in the 2022 Scoping Plan Update.[67] These updated statewide targets include a 48% reduction of anthropogenic GHG emissions below 1990 levels by 2030, an 85% reduction of GHG emissions below 1990 levels by 2045, and achieving carbon neutrality by 2045.[68]

2.2.2.5 Executive Order B-30-15

In April 2015, Governor Brown signed EO B-30-15, which established the following GHG emission reduction goal for California: by 2030, reduce GHG emissions to 40 percent below 1990 levels. This EO also directed all state agencies with jurisdiction over GHG-emitting sources to implement measures designed to achieve the new interim 2030 goal, as well as the pre-existing, long-term 2050 goal identified in EO S-3-05 (see discussion above). Additionally, the EO directed CARB to update its Scoping Plan (see discussion above) to address the 2030 goal.

2.2.2.6 Senate Bill 32 and Assembly Bill 197

Enacted in 2016, SB 32 (Pavley, 2016) codifies the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030.

SB 32 was coupled with a companion bill: AB 197 (Garcia, 2016). Designed to improve the transparency of CARB's regulatory and policy-oriented processes, AB 197 created the Joint Legislative Committee on Climate Change Policies, a committee with the responsibility to ascertain facts and make recommendations to the Legislature concerning statewide programs, policies, and investments related to climate change. AB 197 also requires CARB to

[65] CARB. 2008. Climate Change Scoping Plan: A Framework for Change. December. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed: January 2025.

[66] CARB. Cap-and-Trade Meetings & Workshops. Available here: https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/cap-and-trade-meetings-workshops. Accessed: January 2025.

[67] CARB. 2022. Final 2022 Scoping Plan Update and Appendices. December. Available at: https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents. Accessed: January 2025.

[68] CARB. 2024. Regulation for the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms 2024 Amendments Standardized Regulatory Impact Assessment (SRIA). April 9. Available here: https://ww2.arb.ca.gov/sites/default/files/2024-04/nc-Cap-and-Trade_SRIA2024.pdf. Accessed: January 2025.

make certain GHG emissions inventory data publicly available on its web site; consider the social costs of GHG emissions when adopting rules and regulations designed to achieve GHG emission reductions; and include specified information in all Scoping Plan updates for the emission reduction measures contained therein.

2.2.2.7 Executive Order B-55-18

In September 2018, Governor Brown signed EO B-55-18, which established a new statewide goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." This EO directs CARB to "work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal."

In January 2019, CARB kicked off workshops regarding carbon neutrality in California,[69] during which CARB staff explained that the definitional parameters and meaning of the term – carbon neutrality – are still being explored. CARB held additional workshops throughout 2019 and 2020 to explore specific topics related to the pursuit of carbon neutrality, engage with other experts in the field and stakeholders, and conduct research to ensure that any path to carbon neutrality balances scientific, economic and social justice principles.

2.2.2.8 Energy Sources

Renewables Portfolio Standard

As most recently amended by SB 100 (2018), California's Renewables Portfolio Standard requires retail sellers of electric services and local publicly-owned electric utilities to increase procurement from eligible renewable energy resources to 50 percent of total retail sales by 2026, and 60 percent of total retail sales by 2030. SB 100 also established a State policy goal to achieve 100 percent renewables by 2045.

In March 2021, CEC, CPUC, and CARB released a joint-agency report evaluating the current feasibility of achieving the energy resource and GHG reductions goals of SB 100. The report finds that SB 100 is technically feasible when analyzed under scenarios of varying timelines, advancements in energy generation technology, and energy source portfolios. Under the SB 100 Core Scenario, it is anticipated that California will need to triple its current electricity power capacity.[70]

Building Energy Efficiency Standards

Title 24, Part 6 of the California Code of Regulations regulates the design of building shells and building components. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods.

The CEC's 2022 Building Energy Efficiency Standards (2022 Building Standards), which became effective January 1, 2023, are the currently applicable version of these standards. [71]

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[69] CARB. Carbon Neutrality in California Context Webinar. January 2019. Available at: https://www.arb.ca.gov/cc/scopingplan/meetings/012319/cneutrality_ca_script.pdf. Accessed: January 2025.

[70] CEC. 2021. 2021 SB 100 Joint Agency Report, Achieving 100 Percent Clean Electricity in California: An Initial Assessment. Available at: https://www.energy.ca.gov/publications/2021/2021-sb-100-joint-agency-report-achieving-100-percent-clean-electricity. Accessed: January 2025.

[71] CEC. 2022 Building Energy Efficiency Standards. Available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency. Accessed: January 2025.

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CalGreen Building Standard (CalGreen), and establishes voluntary and mandatory standards pertaining to the planning and design of sustainable site development, energy efficiency, water conservation, material conservation, and interior air quality. Like Part 6 of Title 24, the CalGreen standards are periodically updated, with increasing energy savings and efficiencies associated with each code update.

At the time of this writing, the CEC is in the process of developing the 2025 Energy Code.[72]

Appliance Standards

The CEC periodically amends and enforces Appliance Efficiency Regulations contained in Title 20 of the California Code of Regulations. The regulations establish water and energy efficiency standards for both federally-regulated appliances and non-federally regulated appliances. The regulations cover numerous categories of appliances (e.g., refrigerators; plumbing fixtures; dishwashers; clothes washer and dryers; televisions) and apply to appliances offered for sale in California.[73]

2.2.2.9 Mobile Sources

Sustainable Communities Strategy Plans

SB 375 (Steinberg, 2008), the Sustainable Communities and Climate Protection Act, coordinates land use planning, regional transportation plans, and funding priorities to reduce GHG emissions from passenger vehicles through better-integrated regional transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options. SB 375 specifically requires the Metropolitan Planning Organization relevant to the Project area (here, the San Joaquin Council of Governments [SJCOG]) to include a Sustainable Communities Strategy in its Regional Transportation Plan (RTP) that, if implemented, will achieve GHG emission reduction targets set by CARB by reducing vehicle miles traveled from light-duty vehicles through the development of more compact, complete, and efficient communities.

For the area under SJCOG's jurisdiction, including the Project site, CARB originally adopted regional targets for reduction of mobile source-related GHG emissions of 5 percent for 2020 and 10 percent for 2035. The targets are expressed as a percentage change in per capita passenger vehicle GHG emissions relative to 2005 emissions levels. These original targets were in place through September 30, 2018. In March 2018, CARB approved updated regional targets of 12% for 2020 and 16% for 2035 for SJCOG, which apply to future RTP/SCS planning cycles beginning October 1, 2018.[74]

Senate Bill 743

Public Resources Code Section 21099(c)(1), as codified through enactment of SB 743 (Steinberg, 2013), authorized the Governor's Office of Planning and Research (OPR) to

[72] CEC. 2025 Building Energy Efficiency Standards. Available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2025-building-energy-efficiency. Accessed: January 2025.

[73] CEC. Title 20 Appliance Efficiency Program. Available at: https://www.energy.ca.gov/rules-and-regulations/appliance-efficiency-regulations-title-20. Accessed: January 2025.

[74] CARB. Regional Plan Targets. Available at: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plan-targets. Accessed: January 2025.

establish "alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas." SB 743 reflects a legislative policy to balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions. As finalized in December 2018, amendments to the State CEQA Guidelines adopted in furtherance of SB 743 establish vehicle miles traveled (VMT), in lieu of level of service, as the new metric for transportation analysis.

Pavley Regulations

AB 1493 (Pavley, 2002) required CARB to adopt regulations to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks for model years 2009–2016. On July 8, 2009, CARB obtained a waiver from the USEPA that allows for implementation of these regulations.

Low Carbon Fuel Standard

EO S-1-07, as issued by Governor Schwarzenegger, called for a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB by 2020.[75] In response, CARB approved the Low Carbon Fuel Standard (LCFS) regulations in 2009, which became fully effective in April 2010. Thereafter, a lawsuit was filed challenging CARB's adoption of the regulations; and in 2013, a court order was issued compelling CARB to remedy substantive and procedural defects of the LCFS adoption process under CEQA.[76] However, the court allowed implementation of the LCFS to continue pending correction of the identified defects. In September 2015, CARB re-adopted the LCFS regulations. The LCFS would reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10% by 2020 and, as most recently amended in 2018, by at least 20% by 2030 and 90% in 2045, as compared to the 2010 baseline.[77]

Advanced Clean Cars Program and Advanced Clean Fleets Program

In 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for non-commercial passenger vehicles and light-duty truck for model years 2017-2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero emission vehicles. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions. In August 2022, CARB adopted Advanced Clean Cars II (ACC II) regulations which "will seek to reduce criteria and greenhouse gas emissions from new light- and medium-duty vehicles beyond the 2025 model year, and increase the number of zero emission vehicles (ZEVs) for sale".[78]

In October 2022, CARB approved the Advanced Clean Fleets (ACF) regulation, which has requirements for fleets to phase in the use of ZEV from 2024 to 2042 and beyond. The fleets required to comply with the regulation include state and local government agency fleets,

[75] Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the "lifecycle" of a transportation fuel.

[76] *POET, LLC v. CARB* (2013) 217 Cal.App.4th 1214.

[77] CARB. 2024. Low Carbon Fuel Standard Amendments SCH# 2023020330. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2024/lcfs2024/nod.pdf. Accessed: January 2025.

[78] Advanced Clean Cars II Program. Available at: https://ww2.arb.ca.gov/advanced-clean-cars-ii-meetings-workshops. Accessed: January 2025.

high priority and federal fleets, and drayage fleets. The regulation also includes a requirement for manufacturers to only sell zero-emission trucks starting in 2036. The ACF regulation is meant to complement the ACT regulation and will contribute to meeting the goals set out in Governor Newsom's EO N-79-20. In July 2024, CARB requested a waiver of pre-emption from EPA, but withdrew the waiver request on January 13, 2025.

Commercial Motor Vehicle Idling Regulation

In July 2004, CARB initially adopted an Airborne Toxic Control Measure (ATCM) to limit idling of diesel-fueled commercial motor vehicles (idling ATCM) and subsequently amended it in October 2005, October 2009, and December 2013. This ATCM is set forth in Title 13, California Code of Regulations, Section 2485, and requires, among other things, that drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and sleeper berth equipped trucks, not idle the vehicle's primary diesel engine longer than five minutes at any location. This anti-idling regulation helps to reduce fuel consumption by reducing engine usage. The ATCM also requires owners and motor carriers that own or dispatch these vehicles to ensure compliance with the ATCM requirements. The regulation consists of new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. Under the new engine requirements, 2008 and newer model year heavy-duty diesel engines need to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling or optionally meet a stringent oxides of nitrogen idling emission standard.

In-Use Off-Road Diesel-Fueled Fleets Regulation

In May 2008, CARB approved the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation), which was later amended in December 2009, July 2010, December 2011, and November 2022. The 2022 amendments were authorized by EPA on January 10, 2025. The overall purpose of the Off-Road Regulation is to reduce emissions of oxides of nitrogen and particulate matter from off-road diesel vehicles operating within California. The regulation applies to all self-propelled off-road diesel vehicles 25 horsepower or greater used in California and most two-engine vehicles. The Off Road Regulation:

- Imposes limits on idling (i.e., fleets must limit unnecessary idling to 5 minutes), requires a written idling policy, and requires a disclosure when selling vehicles;
- Requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System, DOORS) and labeled;
- Restricts the adding of older vehicles into fleets starting on January 1, 2014; and
- Requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (i.e., exhaust retrofits).

The anti-idling component of this Off-Road Regulation helps to reduce fuel consumption by reducing engine usage.

The latest amendments include the following changes:[79]

[79] CARB. 2022. Rulemaking Documents for the In-Use Off-Road Diesel-Fueled Fleets Regulation. Available at: https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/rulemaking-documents. Accessed: January 2025.

- Phase out of the oldest and highest-emitting off-road engines from operation;
- Restrict the addition of vehicles with Tier 3 and Tier 4 Interim engines;
- Require contracting entities to obtain and retain a fleet's valid Certificate of Reported Compliance prior to awarding a contract or hiring a fleet;
- Mandate the use of R99 or R100 Renewable Diesel for all fleets;
- Provide voluntary compliance flexibility options for fleets that adopt zero-emission technology; and
- Provide additional flexibility for permanent low-use vehicles.

Tractor-Trailer Greenhous Gas Regulation

CARB's Tractor-Trailer Greenhouse Gas regulation reduces the energy consumption of large trucks. CARB developed this regulation to make heavy-duty tractors more fuel-efficient. Fuel efficiency is improved by requiring the use of aerodynamic tractors and trailers that are also equipped with low rolling resistance tires. The tractors and trailers subject to this regulation must either use EPA's SmartWay (SmartWay) certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The SmartWay certification process is part of their broader voluntary program called the SmartWay Transport Partnership Program. The regulation applies primarily to owners of 53-foot or longer box-type trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. All owners regardless of where their vehicle is registered must comply with the regulation when they operate their affected vehicles on California highways. Besides the owners of these vehicles, drivers, motor carriers, California-based brokers and California-based shippers that operate or use them also share in the responsibility for compliance with the regulation.

Zero Emission Vehicles

ZEVs include hydrogen fuel cell electric vehicles and plug-in electric vehicles, such as battery electric vehicles and plug-in hybrid electric vehicles.

In 2012, Governor Brown issued EO B-16-2012, which calls for the increased penetration of ZEVs into California's vehicle fleet in order to help California achieve a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. In furtherance of that statewide target for the transportation sector, the EO also calls upon CARB, the CEC, and the California Public Utilities Commission to establish benchmarks that will: (1) allow over 1.5 million ZEVs to be on California roadways by 2025, and (2) provide the State's residents with easy access to ZEV infrastructure. EO B-16-2012 specifically directed California to "encourage the development and success of zero-emission vehicles to protect the environment, stimulate economic growth, and improve the quality of life in the State."[80]

In 2018, Governor Brown also issued EO B-48-18, which launched an eight-year initiative to accelerate the sales of ZEVs through a mix of rebate programs and infrastructure improvements. The EO also sets a new target of five million ZEVs in California by 2030, and

[80] Executive Order B-16-2012. Available at: https://www.ca.gov/archive/gov39/2012/03/23/news17472/. Accessed: January 2025.

includes funding for multiple state agencies to increase electric vehicle (EV) charging infrastructure and provide purchase rebates/incentives.

In furtherance of the State's ZEV penetration goals, in February 2013, the Governor's Interagency Working Group on Zero-emission Vehicles issued the *2013 ZEV Action Plan: A roadmap toward 1.5 million zero-emission vehicles on California* roadways *by 2025*.[81] The 2013 ZEV Action Plan identifies four broad goals for State government to advance ZEVs: 1) Complete needed infrastructure and planning; 2) Expand consumer awareness and demand; 3) Transform fleets; and 4) Grow jobs and investment in the private sector. As part of these goals, some highlighted strategies and actions include: i) supporting ZEV infrastructure planning and investment by private entities; ii) enabling universal access to ZEV infrastructure for California drivers; iii) reducing upfront purchase costs for ZEVs; iv) promoting consumer awareness of ZEVs; and v) helping to expand ZEVs in bus fleets. The Action Plan discusses the challenges of ZEV expansion, which include the need to enable electric vehicle chargers in homes, increase consumer awareness, address up-front costs and operational limitations, and address that ZEVs are not commercially available for all categories of vehicles.

In October 2016, the Governor's Interagency Working Group on Zero-emission Vehicles issued the *2016 ZEV Action Plan: A roadmap toward 1.5 million zero-emission vehicles on California* roadways *by 2025*.[82] This report provides an update on progress toward achieving the 2013 goals and highlights the following four top priorities for the upcoming years: 1) Raise consumer awareness and education about ZEVs; 2) Ensure ZEVs are accessible to a broad range of Californians; 3) Make ZEV technologies commercially viable in targeted applications in the medium-duty, heavy-duty, and freight sectors; and 4) Aid ZEV market growth beyond California. The broad goals to advance ZEV adoption are: i) achieve mainstream consumer awareness of ZEV options and benefits; ii) make ZEVs an affordable and attractive option for drivers; iii) ensure convenient charging and fueling infrastructure for greatly expanded use of ZEVs; iv) maximize economic and job opportunities from ZEV technologies; v) bolster ZEV market growth outside of California; and vi) lead by example by integrating ZEVs into State government. The goals and strategies proposed in the 2013 Action Plan will continue to be implemented; however, additional strategies are proposed to help achieve the new goals, including setting targets to increase home charging stations in multiunit dwellings and disadvantaged communities and for public transit and school bus electrification. The 2016 Action Plan describes challenges toward achieving the 2025 goal of 1.5 million ZEVs in California, such as that most consumers are still not aware of the benefits of passenger ZEVs and that over 1,000,000 charge points will be needed at homes, workplaces, and public locations but only 11,000 non-home charge points are installed as stated in the 2016 ZEV Action Plan.

[81] Governor's Interagency Working Group on Zero-emission Vehicles. 2013. Available at: http://opr.ca.gov/docs/Governors_Office_ZEV_Action_Plan_(02-13).pdf. Accessed: January 2025.

[82] Governor's Interagency Working Group on Zero-emission Vehicles. 2016. Available at: https://www.ca.gov/archive/gov39/wp-content/uploads/2018/01/2016_ZEV_Action_Plan-1.pdf. Accessed: January 2025.

In September 2018, the Governor's Interagency Working Group on Zero-Emission Vehicles published the 2018 ZEV Action Plan Priorities Update.[83] This update is the result of Governor Brown's directive to update the 2016 Zero-Emission Vehicle Action Plan to help expand private investment in zero-emission vehicle infrastructure, particularly in low income and disadvantaged communities. The 2018 Priorities Update serves three fundamental purposes: 1) Provide direction to state agencies on the most important actions to be executed in 2018 to enable progress toward the 2025 targets and 2030 Vision; 2) Give stakeholders transparency into the actions state agencies plan to take (or are taking) this year to further the ZEV market; and 3) Create a platform for stakeholder engagement, feedback, and collaboration. As of July 2018, over 410,000 ZEVs have been sold in California, which is approximately 150,000 ZEVs since the publication of the 2016 Action Plan in October 2016.

In June 2020, CARB approved the Advanced Clean Trucks regulation, which has requirements for manufacturer ZEV sales and a one-time reporting requirement for large entities and fleets.[84] The Advanced Clean Truck Regulation is part of a holistic approach to accelerate a large-scale transition of zero-emission medium-and heavy-duty vehicles from Class 2b to Class 8. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. Large employers including retailers, manufacturers, brokers, and others are required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, are required to report about their existing fleet operations. This information helps to identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

California is incentivizing the purchase of ZEVs through implementation of the Clean Vehicle Rebate Project, which is administered by a non-profit organization (The Center for Sustainable Energy) for CARB and currently subsidizes the purchase of passenger near-zero and zero emission vehicles as follows:

- Hydrogen Fuel Cell Electric Vehicles: $5,000;
- Battery Electric Vehicles: $2,500;
- Plug-In Hybrid Electric Vehicles: $1,500; and
- Neighborhood Electric Vehicles and Zero Emission Motorcycles: $900.

In March 2017, CARB received Volkswagen's (VW) first 30-month ZEV Investment Plan (Plan).[85] This Plan is required by California's partial settlement with VW resulting from VW's use of illegal devices in its 2.0-liter (2.0L) diesel cars sold in the State from model years 2009 to 2015. The Plan describes how VW is proposing to spend the first $200 million in

[83] Governor's Interagency Working Group on Zero-emission Vehicles. 2018. Available at: https://static.business.ca.gov/wp-content/uploads/2019/12/2018-ZEV-Action-Plan-Priorities-Update.pdf. Accessed: January 2025.

[84] CARB. 2020. Advanced Clean Trucks. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed: January 2025.

[85] VOLKSWAGEN, Group of America. 2017. California ZEV Investment Plan: Cycle 1, March 8, 2017. Available at: https://www.electrifyamerica.com/assets/pdf/California%20ZEV%20Investment%20Plan%20Cycle%201.3bc672a3.pdf. Accessed: January 2025.

California on ZEV charging infrastructure (including the development and maintenance of ZEV charging stations), public awareness, increasing ZEV access, and a green city demonstration. In June 2017, Electrify America (a subsidiary of VW) provided CARB with additional information on the Plan.[86] CARB approved the first of the four plans in July 2017.[87]

In its 2014 First Update, CARB recognized that the light-duty vehicle fleet "will need to become largely electrified by 2050 in order to meet California's emission reduction goals."[88] Accordingly, CARB's ACC program – summarized above – requires about 15 percent of new cars sold in California in 2025 to be a plug-in hybrid, battery electric or fuel cell vehicle.[89]

Other statewide and regional initiatives that spur ZEV uptake include the following:

- CARB currently subsidizes the purchase of passenger near-zero and zero emission vehicles, and provides access to high-occupancy vehicle lanes to ZEV drivers.
- The VW settlement will result in $800 million in ZEV projects in California over the next ten years, with a focus on increasing public awareness and infrastructure in the first funding cycle.[90]
- The CalGreen standards require new residential and non-residential construction to be pre-wired to facilitate the future installation and use of electric vehicle chargers (see Section 4.106.4 and Section 5.106.5.3 of 2016 CalGreen standards for the residential and nonresidential pre-wiring requirements, respectively).

In January 2017, three of California's largest utilities submitted proposals to the CPUC to electrify the State's transportation sector through more than $1 billion in investments:

- Southern California Edison (SCE) filed an application to expand electric transportation in its service area. Some of SCE's proposals include monetary rewards to rideshare drivers who use an electric vehicle, additional fast charge infrastructure at targeted locations within the region, and rates that are designed to incentivize electric vehicle adoption.[91]
- Pacific Gas and Electric (PG&E) submitted an application that aims to expand the electrification of medium- and heavy-duty vehicle fleets, expand fast-charging

[86] Electrify America. 2017. Supplement to the California ZEV Investment Plan, Cycle 1, June 29, 2017. Available at: https://www.electrifyamerica.com/assets/pdf/Cycle%201%20CA%20ZEV%20Invest%20Plan%20Supplement.a92e7705.pdf. Accessed: January 2025.

[87] CARB, 2017. CARB Approves $200 Million VW Zero-Emission Vehicle Investment in California, July, 27. Available at: https://ww2.arb.ca.gov/news/carb-approves-200-million-vw-zero-emission-vehicle-investment-california. Accessed: January 2025.

[88] CARB, First Update to the Climate Change Scoping Plan: Building on the Framework (May 2014), p. 48.

[89] Id. at p. 47.

[90] CARB, Volkswagen Settlement – California ZEV Investments webpage, available at: https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/vw-zevinvest.htm. Accessed: January 2025.

[91] SCE, Application of Southern California Edison Company (U 338-E) for Approval of Its 2017 Transportation Electrification Proposals (January 20, 2017).

stations that can refuel EVs in 20-30 minutes, and explore new uses for vehicle electrification.[92]

- San Diego Gas & Electric (SDG&E) submitted an application to install tens of thousands of charging stations in its service area to boost the transition to zero-emission vehicles, trucks, shuttles and delivery fleets.[93]

Executive Order N-79-20

On September 23, 2020, California Governor Gavin Newsom issued Executive Order N-79-20, which entails the following actions:

- All new passenger vehicles sold in California be zero-emission by 2035
- All medium- and heavy-duty vehicles be zero-emission where feasible by 2045
- All off-road vehicles and equipment be zero-emission where feasible by 2035

Governor Newsom ordered extensive inter-agency efforts to support the Executive Order, including evaluations of technological feasibility and cost effectiveness, expansion of EV charging options and affordable fueling, as well as identification of near-term strategies to increase zero-emission public transportation options.

The Executive Order was generally aimed at transitioning away from fossil fuel dependence in the State, with emphasis on transportation initiatives. However, Governor Newsom addressed efforts to repurpose oil production facilities and extraction sites while continuing the State's existing goals to reduce the carbon intensity of fuels.[94]

2.2.2.10 Water

In January 2014, Governor Brown signed EO B-29-15, which directed the State Water Resources Control Board to impose restrictions to reduce residential potable urban water usage; to implement water efficiency measures at commercial, industrial, and institutional properties; and to prohibit irrigation with potable water for certain uses. In addition, this directed the California Department of Water Resources to lead a statewide initiative to replace laws and ornamental turfs with drought tolerant landscapes.

Pursuant to the EO B-29-15, water-related standards were adopted as amendments to the 2013 CalGreen Code and carried over into the 2016 code.

Following EO-B-29-2015, Governor Brown signed EO-B-37-16 in May 2016 to promote more conscious consumer water use and to improve agricultural water use efficiency and drought planning.

2.2.2.11 Solid Waste Diversion

The California Integrated Waste Management Act of 1989, as modified by AB 341 (Chesbro, 2011), requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by

[92] PG&E, In the Matter of the Application of Pacific Gas and Electric Company for Approval of its Senate Bill 350 Transportation Electrification Program (January 20, 2017).

[93] SDG&E, Application of San Diego Gas & Electric Company (U902E) for Approval of SB 350 Transportation Electrification Proposals (January 20, 2017).

[94] State of California. 2020. Executive Order N-79-20. Available at: https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf. Accessed: January 2025.

January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50 percent of all solid waste on and after January 1, 2000; and (3) source reduction, recycling and composting of 75 percent of all solid waste on or after 2020, and annually thereafter. CalRecycle is required to develop strategies, including source reduction, recycling, and composting activities, to achieve the 2020 goal.

CalRecycle published a discussion document, entitled *California's New Goal: 75 Percent Recycling,* which identified concepts that would assist the State in reaching the 75 percent goal by 2020. Subsequently, in August 2015, CalRecycle released the *AB 341 Report to the Legislature*, which identifies five priority strategies for achievement of the 75 percent goal: (1) moving organics out of landfills; (2) expanding recycling/ manufacturing infrastructure; (3) exploring new approaches for State and local funding of sustainable waste management programs; (4) promoting State procurement of post-consumer recycled content products; and (5) promoting extended producer responsibility.

As discussed above, SB 1383 has launched a statewide effort to reduce organic waste disposal by 75% by 2025 and divert 20% of currently disposed surplus food to Californians in need by 2025.[95]

2.2.2.12 Draft Climate Adaptation Strategy

The 2022 California Climate Adaptation Strategy Implementation Report outlines the State's key climate resilience priorities, includes specific and measurable steps, and serves as a framework for action across sectors and regions in California.[96] The priorities outlined in the Strategy's website are as follows: 1) Strengthen Protections for Climate Vulnerable Communities, 2) Bolster Public Health and Safety to Protect Against Increasing Climate Risks, 3) Build a Climate Resilient Economy, 4) Accelerate Nature-Based Climate Solutions and Strengthen Climate Resilience of Natural Systems, 5) Make Decisions based on the Best Available Climate Science, and 6) Partner and Collaborate to Leverage Resources.

The next iteration of the California Climate Adaptation Strategy is already underway, with a draft available for review (the period for public comments closed on July 12, 2024).[97]

2.2.3 Regional

2.2.3.1 SJCOG Regional Transportation Plan and Sustainable Communities Strategy

As previously discussed, SB 375 requires SJCOG to incorporate a Sustainable Communities Strategy into its RTP that achieves the GHG emission reduction targets set by CARB. SJCOG's Sustainable Communities Strategy was first included in the 2014 Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS), which was adopted by SJCOG in June 2014. The original plan has since been superseded by the RTP/SCS adopted by SJCOG in March 2018, and more recently in August 2022.

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[95] CalRecycle. California's Short-Lived Climate Pollutant Reduction Strategy. Available at: https://calrecycle.ca.gov/organics/slcp/. Accessed: January 2025.

[96] California Natural Resources Agency. 2022. California Climate Adaptation Strategy: 2022 Implementation Report. Available at: https://climateresilience.ca.gov/overview/docs/20240405-Climate_Adpatation_Strategy_Report_2023.pdf. Accessed: January 2025.

[97] California Natural Resources Agency. 2024. Draft California Climate Adaptation Strategy. May. Available at: https://climateresilience.ca.gov/overview/docs/20240514-Draft_CA_Climate_Adaptation_Strategy_2024.pdf. Accessed: January 2025.

In general, the goals and policies of the Sustainable Communities Strategy are to improve mobility, accessibility, reliability, efficiency, liveability, sustainability, and equity. The Sustainable Communities Strategy adopted by SJCOG is expected to reduce per capita transportation emissions by 12% by 2020 and by 16% by 2035, as compared to 2005 baseline levels.

In September 2020, CARB accepted SJCOG's determination that the 2018 Sustainable Communities Strategy would meet the region's GHG reduction targets per Government Code Section 65080(b)(2)(J)(ii), as memorialized in CARB's Resolution 2018-26.[98] As of January 2024, CARB has not yet performed this review of the 2022 SJCOG RTP/SCS.

Pursuant to Government Code Section 65080(b)(2)(K), a Sustainable Communities Strategy does not: (i) regulate the use of land; (ii) supersede the land use authority of cities and counties; or (iii) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with it.

2.2.3.2 San Joaquin Valley Air Pollution Control District

While CARB is responsible for the regulation of mobile emission sources within the State, local air quality management districts (AQMDs) and air pollution control districts (APCDs) are responsible for enforcing standards and regulating stationary sources. The Project area is located within the San Joaquin Valley Air Basin and is subject to the San Joaquin Valley Air Pollution Control District (SJVAPCD) guidelines and regulations.

In December 2009, SJVACPD issued its *Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA* (Guidance). In its Guidance, the District recommends determining the significance of project-specific GHG emissions by using Best Performance Standards (BPS). Under the Guidance, a project's impacts on global climate change would be less than significant if the project implements BPS, or if the project reduces or mitigates its GHG emissions by 29 percent, consistent with the statewide GHG emission reduction targets established in the 2008 Scoping Plan. The District also adopted the *District Policy: Addressing GHG Emission Impacts for Stationary Source Projects Under CEQA When Serving as the Lead Agency*. This policy aligns with the Guidance process for evaluating GHG significance, specific to stationary source projects.

Also, in June 2014, the District released *APR – 2025, CEQA Determinations of Significance for Projects Subject to [CARB]'s GHG Cap-and-Trade Regulation* (APR – 2025). In APR - 2025, the District concluded that GHG emissions increases that are otherwise covered under CARB's Cap-and-Trade Program cannot constitute significant increases in emissions under CEQA for two separate reasons: (1) the Cap-and-Trade Program is an adopted statewide regulation for reducing GHG emissions from targeted industries/sources; and (2) GHG emissions addressed by the Cap-and-Trade Program are subject to an industry-wide, decreasing emissions cap. More specifically, the District concluded that "all GHG emission increases resulting from the combustion of any fuel produced, imported, and/or delivered in California are mitigated under Cap-and-Trade. Therefore, GHG emission

[98] CARB. Executive Order G-19-092. San Joaquin Council of Governments (SJCOG) 2018 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination. Available at: https://ww2.arb.ca.gov/sites/default/files/2021-02/SJCOG%202018%20SCS%20CARB%20Acceptance%20of%20GHG%20Quantification%20Determination%20Executive%20Order_0.pdf. Accessed: January 2025.

increases caused by fuel use (other than jet fuels) are determined to have a less than significant impact on global climate change under CEQA."

In March 2015, the District issued its *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI), which provides technical guidance for the review of air quality impacts from proposed projects within the boundaries of the District.[99] This guidance recommends an approach for evaluating the significance of a proposed project's GHG emissions; specifically, whether a proposed project would have reduced or mitigated GHG emissions by 29%, consistent with GHG emission reduction targets established in the CARB's Scoping Plan. The guidance recommends the following hierarchy for evaluating a proposed project's impact with respect to its GHG emissions:

- Projects complying with an approved GHG emission reduction plan or GHG mitigation program which avoids or substantially reduces GHG emissions within the geographic area in which the project is located would be determined to have a less-than-significant individual and cumulative impact for GHG emissions. Such plans or programs must be specified in law or approved by the lead agency with jurisdiction over the affected resource and supported by a CEQA-compliant environmental review document adopted by the lead agency. Projects complying with an approved GHG emission reduction plan or GHG mitigation program would not be required to implement Best Performance Standards.
- Projects implementing Best Performance Standards would not require quantification of project-specific GHG emissions. Consistent with the CEQA Guidelines, such projects would be determined to have a less-than-significant individual and cumulative impact for GHG emissions.

While the GAMAQI discussions include a comparison to a BAU approach, the *Center for Biological Diversity v. California Department of Fish and Wildlife* Court Decision established additional standards for such an approach. Due to that court decision, the comparison to BAU approach will not be relied upon in this analysis.

2.2.3.3 San Joaquin County General Plan

The San Joaquin County General Plan is intended to serve as a comprehensive and long-term blueprint for future land use, development, preservation, and resource conservation decisions. The most recent General Plan was published in December 2016 with a time horizon of 2035. The General Plan was developed in consideration of State, local, and regional plans that may include land use and policy decision, including AB 32 as discussed in **Section 2.2.2.2** and the RTP/SCS available at time of publication (2014 SJCOG RTP/SCS) as discussed in **Section 2.2.3.1**. The goals, policies, and programs detailed in the General Plan are divided into sections including the Community Development Element, Public Facilities and Services Element, Public Health and Safety Element, and Resources Element. Further, Appendix A of the General Plan details the Sustainability Policies and Programs within each element intended to reduce GHG emissions and contribute to State GHG objectives.

[99] San Joaquin Valley Unified Air Pollution Control District. 2015. Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI). Available at: http://www.valleyair.org/transportation/GAMAQI.pdf. Accessed: January 2025.

2.2.4 Other CEQA Guidance

2.2.4.1 CAPCOA

CAPCOA 2008 CEQA & Climate Change White Paper

In January 2008, the California Air Pollution Control Officers Association (CAPCOA) published its *CEQA & Climate Change* white paper.[100] In the white paper, CAPCOA surveyed three options available to CEQA lead agencies for purposes of evaluating the significance of a project's GHG emissions, including identifying no significance thresholds for GHG emissions, setting a zero emissions threshold, or setting a non-zero emissions threshold. As to the non-zero thresholds, CAPCOA's white paper considered two approaches, one grounded in statute and executive order with four possible options, and one grounded in a tiered framework. As for the approach grounded in statute and executive order, CAPCOA identified four threshold concepts:

- Threshold 1.1: AB 32/S-3-05 Derived Uniform Percentage-Based Reduction;
- Threshold 1.2: Uniform Percentage-Based (e.g., 50 percent) Reduction for New Development;
- Threshold 1.3: Uniform Percentage-Based Reduction by Economic Sector; and
- Threshold 1.4: Uniform Percentage-Based Reduction by Region.

For purposes of the tiered framework approach, a project's GHG emissions would result in a less-than-significant impact provided one of the following criteria were achieved: (1) compliance with a general or regional plan in alignment with AB 32; (2) application of a CEQA exemption; (3) inclusion on the "green list;" (4) consistency with a qualified GHG reduction strategy; or (5) demonstration that quantified GHG emissions are less than significant. Tables 4 and 5 of the white paper identified advantages and disadvantages associated with all of the options presented for consideration.

CAPCOA 2010 Quantifying Greenhouse Gas Mitigation Measures

In August 2010, CAPCOA published its *Quantifying Greenhouse Gas Mitigation Measures* report, which presents information and analysis regarding the quantification of project-level mitigation of GHG emissions associated with land use, transportation, energy use, and other related project areas. CAPCOA and its contractors conducted an extensive literature review in order to provide reliable and substantiated evidentiary bases for the quantification protocols presented in the report; as such, individual GHG reduction measures are accompanied by "fact sheets" that set forth the relevant parameters for the quantification calculations.

CAPCOA 2021 Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity

In December 2021, CAPCOA published the final draft of the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* report, which builds upon CAPCOA's previous efforts to provide accurate

[100] CAPCOA is a non-profit association of the air pollution control officers from all 35 local air quality agencies throughout California.

and reliable quantification measures.[101] This Handbook identifies and evaluates new and emerging GHG reduction measures and removed outdated measures from the 2010 Handbook. The purpose of the Handbook is to provide local governments with accurate, reliable, and standardized emission reduction quantification methods for land use, climate action, and long-term planning. It also aims to support and enhance the consideration of climate vulnerabilities, health, and equity during the planning process.

2.2.4.2 Association of Environmental Professionals

AEP Beyond 2020 White Paper

In March 2015, the Association of Environmental Professionals (AEP) released its draft *Beyond 2020: The Challenge of Greenhouse Gas Reduction Planning by Local Governments in California* (Beyond 2020) white paper.[102] In the white paper, AEP presented evidence showing that it is infeasible for a local jurisdiction to achieve EO S-3-05's 2050 reduction target (i.e., 80 percent below 1990 levels) absent a real post-2020 State plan of action. As such, AEP recommended assessing project significance in relation to the 2050 reduction target by asking whether a project would "impede substantial progress in local, regional, and State GHG emissions reductions over time toward long-term GHG reduction targets."

AEP Beyond 2020 and Newhall White Paper

In April 2016, AEP released its draft *Beyond 2020 and Newhall: A Field Guide to New CEQA Greenhouse Gas Thresholds and Climate Action Plan Targets for California* (Beyond 2020 and Newhall) white paper. In the white paper, AEP surveyed the following significance threshold concepts for utilization in CEQA-oriented GHG emissions analysis: consistency with qualified GHG reduction plans; bright line values; efficiency metrics; hybrid metrics that separate transportation and non-transportation emissions; best management practices; regulatory compliance; and percent reductions from business as usual. In doing so, AEP identified the present circumstances as a "transitional period" due to the absence of comprehensive State planning for post-2020, non-legislatively adopted, statewide targets.

[101] CAPCOA. 2021. Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Available at: http://www.airquality.org/ClimateChange/Documents/Final%20Handbook_AB434.pdf. Accessed: January 2025.

[102] AEP is a non-profit association of public and private sector professionals with a common interest in serving the principles underlying CEQA.

3. SIGNIFICANCE THRESHOLDS

3.1 CEQA Guidelines on GHG Emissions

In 2007, SB 97 was enacted and directed OPR and the California Natural Resources Agency to prepare amendments to the CEQA Guidelines addressing the analysis of GHG emissions under CEQA. Following formal rulemaking, a series of amendments to the CEQA Guidelines were adopted to provide the general framework for the analysis of GHG emissions, and became effective in 2010. The amendments do not provide a mandatory, quantitative rubric for GHG emissions analysis, but instead provide general guidance and recognize long-standing CEQA principles regarding the discretion afforded to lead agencies where supported by substantial evidence. More specifically, CEQA Guidelines Section 15064.4(a) recognizes that the "determination of the significance" of GHG emissions "calls for careful judgment by the lead agency" in accordance with the more general provisions of CEQA Guidelines Section 15064; each agency "shall have discretion to determine" whether to conduct quantitative or qualitative analysis, provided its determination is supported by substantial evidence. Section 15064.4 was most recently amended by OPR and the California Natural Resources Agency in December 2018.

The analysis provided in this report evaluates the significance of the Project's GHG emissions by reference to the following questions from Section VIII, Greenhouse Gases, of Appendix G of the CEQA Guidelines:

Threshold 1. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Threshold 2. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

3.2 Other Guidance

SJVAPCD has adopted guidance documents for assessing and mitigating GHG impacts on global climate change. Rather than establishing specific numeric thresholds of significance (as in the case of criteria pollutant emissions), the SJVAPCD guidance utilizes a tiered approach to assess cumulative impacts on global climate change. Notably, the SJVAPCD establishes that a project can demonstrate compliance with an approved GHG emissions reduction program (such as CARB's statewide GHG Cap-and-Trade Program). Furthermore, SJVAPCD's December 2009 CEQA GHG policies and its 2015 GAMAQI states that a project whose emissions have been reduced or mitigated consistent with the California Global Warming Solutions Act of 2006 (AB 32) should be considered to have a less than significant impact on global climate change.[103] SJVAPCD has not adopted a numerical GHG threshold.

3.3 Project Approach to Significance

This report, relative to Threshold 1, quantifies the Project's GHG emissions during operation and construction for disclosure and in the absence of a numerical GHG significance threshold will evaluate consistency with the SJCOG RTP/SCS, 2022 CARB Scoping Plan, and San Joaquin Valley General Plan to determine significance of the Project's GHG emissions. This report, relative to Threshold 2, evaluates the Project for consistency with applicable plans related to GHG emissions at the state and regional levels.

[103] SJVAPCD. 2015. Final Draft Guidance for Assessing and Mitigating Air Quality Impacts. Available at: http://www.valleyair.org/transportation/GAMAQI.pdf. Accessed: January 2024.

4. PROJECT GHG EMISSIONS INVENTORY

This section describes the methodology that Ramboll used to develop the GHG emission inventories associated with the Project, which include one-time emissions (construction emissions and emissions due to vegetation changes), and operational emissions. Sub-categories of GHG operational emissions include: **area sources, energy use**, **water supply and wastewater**, **solid waste, refrigerants,** and **mobile sources**.

4.1 Measurement, Resources and Baseline Condition

4.1.1 Units of Measurement: Tonnes of CO_2 and CO_2e

In this report, the term "GHGs" includes gases that contribute to the natural greenhouse effect, such as CO_2, CH_4, N_2O, and water, as well as gases that are only man-made and that are emitted through the use of modern industrial products, such as HFCs and chlorofluorocarbons (CFCs). GHG emissions are typically measured in terms of mass of CO_2e. CO_2e are calculated as the product of the mass of a given GHG and its specific GWP, as described in **Section 2.1**. GWPs of 25 and 298 were used for CH_4 and N_2O, respectively, for this analysis. In many sections of this report, including the final summary sections, emissions are presented in units of CO_2e either because the GWPs of CH_4 and N_2O were accounted for explicitly, or the CH_4 and N_2O are assumed to contribute a negligible amount of GWP when compared to the CO_2 emissions from that particular emissions category.

In this report, a tonne refers to MT (1,000 kilograms). Additionally, exact totals presented in all tables and report sections may not equal the sum of components due to independent rounding of numbers.

4.1.2 Resources

4.1.2.1 CalEEMod® Methodology

Ramboll primarily utilized the California Emissions Estimator Model (CalEEMod®) version 2022.1.1[104] methodology to assist in quantifying the GHG emissions in the inventories presented in this report for the Project. CalEEMod® provides methodology to calculate both construction emissions and operational emissions from a land use development project, and can be used to calculate total or annual GHG emissions. Specifically, the model methodology aids the user in the following calculations:

- One-time short-term construction emissions associated with demolition, site preparation, grading, building construction, paving, and architectural coating phases from off-road construction equipment, and on-road mobile equipment associated with workers, vendors, and hauling.
- One-time vegetation sequestration changes, such as permanent vegetation land use changes and new tree plantings.
- Operational emissions associated with the fully built out land use development, such as on-road mobile vehicle traffic generated by the land uses, off-road emissions from landscaping equipment, natural gas usage in the buildings, electricity usage in the buildings, water usage by the land uses, refrigeration usage in the buildings, and solid waste disposal by the land uses.

[104] SCAQMD. 2022. California Emissions Estimator Model®. Available at: https://www.caleemod.com/. Accessed: January 2025.

CalEEMod® is a statewide program designed to calculate both criteria pollutant and GHG emissions from development projects in California developed under the auspices of the South Coast Air Quality Management District (SCAQMD), with input from other California air districts, and is currently supported by numerous lead agencies for use in quantifying the emissions associated with development projects undergoing environmental review. CalEEMod® utilizes widely accepted models for emission estimates combined with appropriate default data that can be used if site-specific information is not available. These models and default estimates use sources such as the USEPA AP-42 emission factors,[105] CARB's on-road and off-road equipment emission models such as the EMission FACtor model (EMFAC) and the Emissions Inventory Program model (OFFROAD), and studies commissioned by California agencies such as the CEC and CalRecycle.

As mentioned above, CalEEMod® is based upon the CARB-approved OFFROAD and EMFAC models. OFFROAD[106] is an emission factor model used to calculate emission rates from off-road mobile sources (e.g., construction equipment, agricultural equipment). The off-road diesel emission factors used by CalEEMod® are based on the CARB OFFROAD2017-ORION program. EMFAC is an emission factor model used to calculate emissions rates from on-road vehicles (e.g., passenger vehicles). CalEEMod® 2022.1.1 contains EMFAC2021 emission factors. The latest version of EMFAC is the CARB EMFAC2021 program.[107]

In addition, CalEEMod® contains default values and existing regulation methodologies to use in each specific local air district region. Appropriate statewide default values can be utilized if regional default values are not defined. Ramboll used default factors for the San Joaquin County area (within the SJVAPCD's jurisdiction) for the emissions inventory, unless otherwise noted in the methodology descriptions below.

Details regarding the specific methodologies used by CalEEMod® can be found in the CalEEMod® User's Guide and associated appendices.[108]

4.1.2.2 Other Resources

Ramboll directly or indirectly relied on emissions estimation guidance from government-sponsored organizations, government-commissioned studies of energy use patterns, Project-specific studies (e.g., Fehr & Peer's CEQA Transportation Impact Analysis Report[109]), and emission estimation software as described above. In cases noted below, third-party studies were also relied upon to support analyses and assumptions made outside of the approach described above.

[105] The USEPA maintains a compilation of Air Pollutant Emission Factors and process information for several air pollution source categories. The data is based on source test data, material balance studies, and engineering estimates. Available at: https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emissions-factors. Accessed: January 2025.

[106] CARB. 2011. Off Road Mobile Source Emission factors. Available at: https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory. Accessed: January 2025.

[107] CARB. 2021. EMFAC2021. Available at: https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-modeling-tools-emfac-software-and. Accessed: January 2025.

[108] SCAQMD. 2022. California Emissions Estimator Model®. Available at: https://www.caleemod.com/. Accessed: January 2025.

[109] Fehr & Peers. 2024. Draft CEQA Transportation Impact Analysis Report For Pacific Gateway. 2024.

4.1.3 Indirect GHG Emissions from Electricity Use

Project-related electricity use results in indirect emissions, due to electricity generation activities occurring at off-site power plant locations. For the Project, electrical power will be supplied by PG&E. The indirect GHG emissions created as a result of Project-related electricity use are calculated through application of the following methodology.

For purposes of electricity use, intensity factors are GHG emission rates from a given source relative to the energy generation activities, and are expressed in terms of the amount of GHG released per megawatt of energy produced. The default electricity intensity factors for PG&E in CalEEMod® for CO_2, CH_4, and N_2O are 203.983, 0.033, and 0.004 pounds (lbs) of GHG per megawatt-hour, respectively. The CalEEMod® CO_2 default factor is based on the emission factor provided to Sacramento Metro Air Quality Management District by PG&E. The CH_4 and N_2O default factors are based on E-Grid values for the Western Electricity Coordinating Council California and Mexico (CAMX) region. PG&E's Power/Utility Protocol (PUP) reports show that renewable energy sources do not result in any new CO_2 emissions.

While CalEEMod®'s emission factors for CH_4 and N_2O conservatively were used for this project, CalEEMod®'s CO_2 intensity factor was modified based on PG&E's 2023 and 2024 Corporate Sustainability Reports, to account for the Renewables Portfolio Standard's (RPS) requirement for 2030 (i.e., 60 percent RPS). The 2022 and 2023 mix of renewable and non-renewable energy sources in PG&E's energy supply were both used to calculate the intensity factors for PG&E's non-renewable energy. (For disclosure purposes, PG&E's current RPS is 33 percent.)[110] The PG&E data provides the basis for the estimate of the intensity factors for the non-renewable energy; and this data is used to project what the intensity factors will be when the Project reaches build-out. The intensity factor for CO_2 is calculated by multiplying the percentage of energy delivered by PG&E from non-renewable energy resources with the intensity factor for non-renewable energy, and modified as discussed in **Section 4.3.4** below.

4.2 One-Time Emissions

One-time emissions are those emissions that are not reoccurring over the life of the Project. This includes emissions associated with construction and emissions associated with land use changes.

4.2.1 Construction Emissions

This section describes the estimation of GHG emissions from construction activities at the Project site. While the exact construction schedule and equipment mix may vary from the current analysis, the GHG emissions are not expected to be higher than that calculated given the conservative assumptions included in this analysis.

The major construction phases included in this analysis are:

- Demolition: involves removing buildings or structures.
- Site Preparation: involves clearing vegetation (grubbing and tree/stump removal) and removing stones and other unwanted material or debris prior to grading.

[110] PG&E. 2024 Corporate Responsibility and Sustainability Report. Available at: https://www.pgecorp.com/assets/pgecorp/csr/csr_2024/assets/pge-csr-2024.pdf. Accessed: January 2025.

- Grading: involves the cut and fill of land to ensure the proper base and slope for the construction foundation.
- Building Construction: involves the construction of structures and buildings.
- Paving: involves the laying of concrete or asphalt such as in parking lots or roads.
- Architectural Coating: involves the application of coatings to both the interior and exterior of buildings or structures, the painting of parking lot or parking garage striping, associated signage and curbs, and the painting of the walls or other components such as stair railings inside parking structures.

GHG emissions from these construction phases are attributable to fuel use from construction equipment usage onsite and from on-road worker, vendor, and hauling trips.

Ramboll primarily used CalEEMod® to quantify the construction emissions. The modeled construction schedule is shown in **Table 4-1**. Construction of the Project is expected to occur over several phases, with the construction of each Industrial Development Area (Initial, East, West, and Central) being completed prior to the commencement of the following Development Area. The construction of the University Center and Gateway Center Development Areas are expected to occur on an independent schedule, concurrently with construction of the industrial development areas. This schedule serves as a reasonably representative estimate of the phasing anticipated for this project at this time, however ultimately construction scheduling will be dependent on market demand.

The construction off-road equipment list and off-road equipment specifications are based on CalEEMod® model defaults. Project-specific demolition assumptions were based on an assessment of existing structures present within each development area as shown in **Table 4-2**. Land use information associated with the construction of each development area can be found in CalEEMod® outputs as included in **Appendix A**.

4.2.1.1 Emissions from On-Road Construction Trips

Construction generates on-road vehicle GHG emissions from personal vehicles for worker and vendor commuting, and trucks for soil and material hauling. These emissions are based on the number of trips and VMT, along with emission factors from EMFAC. Default model trip rates were used for construction. The emissions from mobile sources were calculated in CalEEMod® with the trip rates, trip lengths, and emission factors for running exhaust from EMFAC as follows:[111]

$$Emissions_{pollutant} = VMT * EF_{running,\ pollutant}$$

Where:

$Emissions_{pollutant}$ = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

$EF_{running,\ pollutant}$ = emission factor for running emissions

On-road construction trip emissions are presented in the CalEEMod® output in **Appendix A**.

[111] SCAQMD. 2022. California Emissions Estimator Model®. Available at: https://www.caleemod.com/. Accessed: January 2025.

4.2.1.2 Emissions from Construction Equipment

The emissions associated with construction equipment are from off-road equipment engine use based on the equipment list and construction phase length, and on-road vehicle trips and phase length.

Since the majority of the off-road construction equipment used for construction projects are diesel fueled, CalEEMod® assumes all of the equipment operates on diesel fuel. The calculations include the running exhaust emissions from off-road equipment. Since the equipment is assumed to be diesel, there are no starting emissions associated with the equipment, as these are *de minimis* for diesel-fueled equipment. The exhaust emissions are calculated based on CARB's OFFROAD2011 methodology using the equation presented below.[112]

$$\text{Emissions}_{\text{Diesel}} = \sum_{i} \left(\text{EF}_i \times \text{Pop}_i \times \text{AvgHP}_i \times \text{Load}_i \times \text{Activity}_i \right)$$

Where:

EF	=	Emission factor in grams per horsepower-hour (g/bhp-hr) as processed from OFFROAD2011
Pop	=	Population, or the number of pieces of equipment
AvgHp	=	Maximum rated average horsepower
Load	=	Load factor
Activity	=	Hours of operation
i	=	equipment type

Emissions for off-road construction equipment for each phase of construction are detailed in **Appendix A**.

4.2.1.3 Total Construction Emissions

The Project construction emissions were run within CalEEMod® to generate the annual emissions. The total emissions from construction from all phases for off-road and on-road emissions are shown in **Table 4-3**. Please note that CalEEMod® only allows for constructions emissions estimation up until 2050, so additional phases in CalEEMod® were run using calendar year 2050 to calculate emissions for construction activities occurring in year 2051 and beyond. This is assumed to be a conservative approach since it is expected that emission factors would decrease over time due to regulations likely becoming more stringent in the future.

4.2.2 Vegetation Changes

Vegetation changes that occur as a result of land use development constitute a one-time change in the carbon sequestration capacity of a project site. Vegetation changes from existing conditions were assessed using CalEEMod® based on the transition from Cropland to the Urban vegetation land use type and the average of the site as shown in **Table 4-4**.

[112] SCAQMD. 2022. California Emissions Estimator Model®. Available at: https://www.caleemod.com/. Accessed: January 2025.

4.3 Annual Operational Emissions

This section describes the estimation of GHG emissions from operational activities at the Project site. The operational emissions were calculated with CalEEMod® and separately for miscellaneous sources including the operation of operational off-road combustion equipment, stationary sources, and transport refrigeration units (TRUs). Operational GHG emissions are calculated for landscaping, natural gas and electricity usage, on-road mobile trips, water usage, solid waste generated, and refrigeration usage. Operational emissions are evaluated for the first year of Project Initial Phase Operation in 2032 and first year of Project Operation in 2057. Where emission factors or other inputs were not available for 2057 due to model constraints, the latest year with available data (i.e., 2050) was used as substitute. Land use information for the initial phase and project buildout can be found in CalEEMod® outputs as included in **Appendix A**.

4.3.1 Area Sources

Area sources are direct sources of GHG emissions, such as emissions from landscaping activities. The area source GHG emissions included in this analysis are landscaping-related fuel combustion sources, such as lawn mowers.

4.3.2 Mobile Sources

The GHG emissions associated with on-road mobile sources are generated from workers, vendors, and haul trucks travelling to and from the Project site. The GHG emissions associated with on-road mobile sources include running and starting exhaust emissions. Running emissions are dependent on VMT. Starting emissions are associated with the number of starts or time between vehicle uses and the assumptions used in determining these values are described below. Ramboll calculated Project-specific mobile source CalEEMod® inputs using trip rates and trip length information based on analyses conducted by Fehr & Peers.

Mobile emissions estimated using CalEEMod® includes the benefit of reductions from some adopted regulatory programs, which are accounted within EMFAC2021 as follows:

- AB 1493 ("the Pavley Standard") required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 and thereafter. EMFAC2021 includes emission reductions for non-commercial passenger vehicles and light-duty trucks of model year 2017 – 2025.
- The ACC program adopted by CARB, introduced in 2012, combines the control of smog, soot causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2015 through 2025. EMFAC2021 includes reductions associated with this regulation that are represented in this analysis.
- The USEPA/NHTSA advanced fuel economy and GHG standards (Phase 1) were adopted in 2011 for medium and heavy-duty trucks for model years 2014-2018.[113] This Heavy-Duty National Program is intended to reduce fuel use and GHG emissions from medium- and heavy-duty vehicles, semi-trucks, pickup trucks and vans, and all types

[113] USEPA, Office of Transportation and Air Quality. 2011. Available at: https://www.gpo.gov/fdsys/pkg/FR-2011-09-15/pdf/2011-20740.pdf. Accessed: January 2025.

and sizes of work trucks and buses in between. EMFAC2021 includes reductions associated with this regulation that are represented in this analysis.

- The USEPA/NHTSA advanced fuel economy and GHG standards (Phase 2) were adopted in 2016 for medium- and heavy-duty trucks for model years 2018 and beyond.[114] The Phase 2 program includes technology-advancing standards that substantially reduce GHG emissions and fuel consumption resulting in an ambitious, yet achievable, program that will allow manufacturers to meet the applicable standards over time, at reasonable cost, through a mix of different technologies. The Phase 2 program's standards will be phased in, beginning with model year 2021 and culminating with model year 2027.[115]

In June 2020, CARB released EMFAC off-model adjustment factors to account for the Final Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule.[116] The SAFE Rule has been incorporated into this analysis as it is incorporated in EMFAC2021.

CalEEMod® does not include the benefit of reductions not accounted for within EMFAC2021, including:

- The Advanced Clean Cars II (ACC II) was adopted in 2022 for light-duty passenger car, pickup truck, and SUV emissions starting in 2026 through 2035. The regulation would require an increasing number of zero-emission vehicles and amends the low-emission vehicle regulations to increase stringency of emission standards for light-duty vehicles. EMFAC2021 does not include reductions associated with this regulation and thus reductions are not incorporated into this analysis.
- The Heavy-Duty Inspection and Maintenance (HD I/M) Program, also known as Clean Truck Check, was adopted in 2021. This regulation includes roadside emissions monitoring to screen for high-emitting vehicles, improved emissions testing procedures, periodic emissions data reporting, and compliance verification for freight contractors, seaports, and railyards. EMFAC2021 does not include reductions associated with this regulation and thus reductions are not incorporated into this analysis.
- The Advanced Clean Fleets (ACF) regulation was adopted in 2023. The regulation requires qualifying fleets to reduce emissions through the phase-in of zero-emission vehicles and a requirement for truck manufacturers to only manufacture zero-emission trucks starting in 2036. EMFAC2021 does not include reductions associated with this regulation and thus reductions are not incorporated into this analysis.

Inclusion of these additional regulation-driven reductions would reduce mobile impacts beyond what is presented in this analysis, thus mobile-related emissions presented in this report represent a conservative estimate of Project impacts.

[114] USEPA, Office of Transportation and Air Quality. 2016. Available at: https://www.gpo.gov/fdsys/pkg/FR-2016-10-25/pdf/2016-21203.pdf. Accessed: January 2024.

[115] The emission reductions attributable to Phase 2 of the regulations for medium- and heavy-duty trucks were not included in the Project's emissions inventory due to the difficulty in quantifying the reductions. Excluding these reductions results in a more conservative (i.e., higher) estimate of emissions for the Project.

[116] CARB. 2020. EMFAC Off-Model Adjustment Factors for Carbon Dioxide (CO_2) Emissions to Account for the SAFE Vehicles Rule Part One and the Final SAFE Rule. Available at: https://ww2.arb.ca.gov/sites/default/files/2023-02/emfac_off_model_co2_adjustment_factors_06262020-final.pdf. Accessed: January 2025.

4.3.2.1 Estimating Mobile Source Emissions

Mobile source emissions calculation requires trip rates and trip lengths for each different trip type in the Project (e.g., employee, vendor, and haul truck).

The following sections describe the methodology to derive the necessary inputs.

Trip Generation Rates

The trip generation rates for the Project were based on Fehr & Peers data. The trip rates for the operational mobile trips are shown in **Table 4-5** and **Table 4-6**, respectively.

Trip Lengths

The Project trip lengths were primarily based on Fehr & Peers analysis and CalEEMod® defaults. The trip lengths for the operational mobile trips are shown in **Table 4-5, Table 4-6, Table B-2,** and **Table C-2**.

Fleet Mix

The fleet mixes derived based on CalEEMod® and EMFAC2021 were used to determine the mix of light-duty vehicles used for auto vehicles. The heavy-duty trucks were assumed to be heavy-heavy-duty trucks. The fleet mixes for the operational mobile trips are shown in **Table B-1** and **Table C-1** of **Appendix B** and **Appendix C**, respectively.

Transport Refrigeration Units

The Project includes TRUs, which are refrigeration systems powered by diesel internal combustion engines designed to refrigerate or heat perishable products that are transported in various containers, including truck vans, semi-truck trailers, shipping containers, and railcars. These TRUs were assumed to account for approximately 5% of the warehouse delivery trucks, based on a Project-specific assumption that 5% of warehouse land use would be comprised of refrigerated warehouse. OFFROAD2021 has emission factors for TRUs, which were obtained for San Joaquin County in 2032 for the Initial Phase and 2050 for Buildout. Emissions of CO_2 from TRUs were estimated, as shown in **Table 4-7** and **Table 4-8**.

4.3.3 Water Supply, Treatment and Distribution

Indirect GHG emissions result from the production of electricity used to convey, treat, and distribute the Project's water and wastewater. The amount of electricity required to convey, treat, and distribute water depends on the volume of water as well as the sources of the water. Additionally, direct CH_4 and N_2O emissions result from the treatment of wastewater. Water demand and wastewater generation values were based on CalEEMod® defaults.

The water usage and associated GHG emissions are shown in **Appendix A**.

4.3.4 Energy Use

Energy usage within buildings (e.g., electricity and natural gas fuelled equipment) contribute to the Project’s GHG inventory. Combustion of any type of fuel emits CO_2 and other GHGs directly into the atmosphere; these emissions are considered direct emissions associated with a building. GHGs are also emitted during the generation of electricity from fossil fuels; these emissions are considered to be indirect emissions.

To estimate GHG emissions from the natural gas and electricity usage for the Project, Ramboll utilized CalEEMod® default assumptions, which incorporate Title 24 2019 Standards. **Table 4-7** identifies the emission factors for electricity (i.e., pounds of CO_2 per megawatt-hour delivered) used in this analysis. As illustrated in **Table 4-9**, a PG&E -specific emission

factor that accounts for interpolation between the 60 percent RPS required by 2030 and the 100 percent RPS required by 2045 was calculated as discussed in **Section 4.1.3**. GHG emissions from electricity in 2057 was assumed to be zero based on a requirement that all the state's electricity come from carbon-free resources by 2045.

To estimate GHG emissions from the combustion of fuel from warehouse offroad equipment and the wastewater treatment facility diesel generator, Ramboll utilized emission factors from OFFROAD2021 and AP-42, respectively. **Tables 4-10** and **Table 4-11** identifies the emission factors and emissions used in this analysis. Warehouse offroad equipment estimates were based on studies conducted by South Coast Air Quality Management District (South Coast AQMD). Specifications for the wastewater treatment facility diesel generator were based on generators present at similar facilities.

The annual natural gas and electricity use and corresponding GHG emissions for the Project are shown in CalEEMod® outputs provided in **Appendix A**. The calculations for the GHG emissions associated with the additional electricity consumption from electric forklift chargers is shown in **Table 4-12**.

4.3.5 Solid Waste

Municipal solid waste (MSW) is the amount of material that is disposed of by landfilling, recycling, or composting. CalEEMod® calculates the indirect GHG emissions associated with waste that is disposed of at a landfill. The program uses annual waste disposal rates from the CalRecycle data for individual land uses. CalEEMod® uses the overall California Waste Stream composition to generate the necessary types of different waste disposed into landfills. The program quantifies the GHG emissions associated with the decomposition of the waste, which generates methane based on the total amount of degradable organic carbon. The program quantifies the CO_2 emissions associated with the combustion of methane, if applicable. Default landfill gas concentrations were used as reported in Section 2.4 of AP-42. The IPCC has a similar method to calculate GHG emissions from MSW in its 2006 Guidelines for National Greenhouse Gas Inventories.

Solid waste generation associated with the Project is based on default values for waste generation in CalEEMod®. The Project's solid waste generation and GHG emissions associated with solid waste are shown in CalEEMod® outputs provided in **Appendix A.**

4.3.6 Refrigerants

A portion of the Project's industrial land uses are expected to utilize cold storage operations. CalEEMod® calculates the fugitive GHG emissions associated with the leakage or servicing of refrigerant in various equipment. **Table 4-13** identifies the rate of refrigerant usage associated with the operation of cold storage equipment anticipated for industrial land uses within the Project.

The annual refrigerant use and corresponding GHG emissions for the Project are shown in CalEEMod® outputs provided in **Appendix A**.

4.4 Total Annual Operational Emissions

As shown in **Table 4-14**, prior to the application of mitigation measures, the initial phase emissions are 85,119 MT CO_2e per year and the emissions from vegetation changes are 22 MT CO_2e/yr. The total GHG emissions from initial phase construction are 23,892 MT CO_2e and are summarized in **Appendix A** for construction off-road equipment and mobile trips. When amortized over a period of 30 years, the emission estimates for the initial phase

construction become 796 MT CO_2e/yr.[117] The total GHG emissions include the amortized construction emissions and amortized vegetation emissions.

Similarly shown in **Table 4-14**, prior to the application of mitigation measures, the Project buildout emissions are 475,540 MT CO_2e per year and the emissions from vegetation changes are 158 MT CO_2e/yr. The total GHG emissions from Project buildout construction are 226,691 MT CO_2e and are summarized in **Appendix A** for construction off-road equipment and mobile trips. When amortized over a period of 30 years, the emission estimates for the Project buildout construction become 7,556 MT CO_2e/yr.[118] The total GHG emissions include the amortized construction emissions and amortized vegetation emissions.

[117] This approach to one-time construction and vegetation change GHG emissions is based on the GHG Threshold Working Group Meeting #13 Minutes from August 26, 2009. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-13/ghg-meeting-13-minutes.pdf. Accessed: January 2025.

[118] This approach to one-time construction and vegetation change GHG emissions is based on the GHG Threshold Working Group Meeting #13 Minutes from August 26, 2009. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-13/ghg-meeting-13-minutes.pdf. Accessed: January 2025.

5. MITIGATION MEASURES

The following mitigation measures would reduce emissions associated with the proposed project.

5.1 Description of Mitigation Measures

As described in **Section 1.3** of this report, the Project will include a number of mitigation measures intended to reduce project impacts. Quantification of GHG reductions associated with these measures are described as follows.

5.1.1 MM-GHG-1 (Solar PV)

The proposed project is incorporating solar PV panels for "Base Building" energy needs for limited industrial zoned buildings. As shown in **Tables 4-12 and 6-1**, GHG emissions reductions associated with this measure was assessed based on the amount of electricity required to cover warehouse-related Title 24 electricity consumption and an estimate of forklift charging.

5.1.2 MM-GHG-2 (ZE Equipment)

The project will utilize various zero emission equipment. This includes forklift equipment and yard mules used at all industrial warehouse buildings greater than 300,000 square feet (22,993,500 square feet total). As described in **Table 4-10**, GHG emission reductions associated with this measure were assessed based on the difference in emissions when comparing forklift and yard mule combustion emissions at warehouses less than 300,000 square feet and similar emissions at all warehouse land uses.

Additionally, all landscape equipment used to maintain individual building projects (24,675,000 square feet total) and Pacific Gateway master landscaping, parks and open space will be required to be zero emission. This aligns with mitigation measure LL-1 in CalEEMod.

6. PROJECT INVENTORY IN CONTEXT

This section assesses the significance of the Project's emissions for purposes of CEQA.

6.1 Project Emissions Inventory

This section evaluates the significance of the Project's GHG emissions by reference to Threshold 1 from Section VIII, Greenhouse Gases, of Appendix G of the CEQA Guidelines:

Threshold 1. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

6.1.1 Mitigated GHG Inventory

The implementation of project mitigation measures are anticipated to result in a reduction of GHGs. With these PDFs as shown in **Table 6-1**, the initial phase GHG emissions were calculated to be 70,099 MT CO_2e per year and the buildout GHG emissions were calculated to be 392,443 MT CO_2e per year. In the absence of a numerical GHG threshold, the significance of these emissions will be based on consistency with the SJCOG RTP/SCS, 2022 CARB Scoping Plan, and San Joaquin Valley General Plan as discussed below.

6.2 Consistency Analysis

This section evaluates the significance of the Project's GHG emissions by reference to Threshold 2 from Section VIII, Greenhouse Gases, of Appendix G of the CEQA Guidelines:

Threshold 2. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

6.2.1 Statewide Emissions Reduction Targets

A recent study[119] shows that the existing and proposed regulatory framework will allow the State to reduce GHG emissions to 40 percent below 1990 levels by 2030, and to 60 percent below 1990 by 2050. Even though this study did not provide a regulatory and technology roadmap to achieve the 2050 target of 80 percent below 1990 levels by 2050, it demonstrated that various combinations of policies could allow statewide emissions to remain very low through 2050, suggesting that the combination of new technologies and other regulations not analyzed in the study could allow the State to meet the 2050 target.

Statewide efforts are underway to facilitate the State's achievement of its 2050 target and it is reasonable to expect the Project's emissions to decline as the regulatory initiatives identified by CARB in its 2017 Scoping Plan are implemented, new regulatory programs or incentives are implemented to reduce GHG emissions, and other technological innovations occur. Many of these initiatives include reducing the carbon content of motor fuels and fuels

[119] Jeffery Greenblatt. 2015. Modeling California Impacts on Greenhouse Gas Emissions. Energy Policy. Volume 78, May 2015, pages 158-172. Abstract available at: https://escholarship.org/uc/item/9n62b5xv. Accessed: January 2025.

for electricity generation.[120] Reducing the carbon content of motor fuels and fuels for electricity generation will reduce CO_2e emissions from this Project over time.

The Project will be consistent with the state's GHG reduction goals as discussed in the 2022 CARB Scoping Plan. The Project's emissions sources are regulated (and are foreseeably expected to continue to be regulated in the future) in furtherance of the State's environmental policy objectives and the Project will continue to meet those regulations to continually improve and reduce GHG emissions. Updates to regulation and improvements to technology will be incorporated into future construction as available, resulting in a reduction of GHG emissions beyond what is presented in this analysis.

As demonstrated in **Table D-1** in **Appendix D**, the Project would be consistent with applicable 2022 California Scoping Plan strategies for the reduction of GHG emissions.

6.2.2 San Joaquin Council of Governments (SJCOG)

The Project will be consistent with the state's GHG reduction goals and strategies as discussed in the SJCOG's 2022 Regional Transportation Plan/Sustainable Communities Strategy[121] (the current RTP/SCS for the region), which contains four key elements:

1. Policy Element– Sets forth SJCOG's transportation goals, objectives, and policies for each transportation mode.
2. Sustainable Communities Strategy – Integrates land use and transportation planning efforts to meet San Joaquin County's greenhouse gas emission reduction targets, improve accessibility to major employment and other regional activity centers.
3. Action Element – Describes the existing transportation system, discusses recent accomplishments, provides a transportation needs assessment, and proposes short-term and long-term actions for both transportation planning and actual transportation project improvements.
4. Financial Element – Identifies both existing and anticipated revenue sources as well as the financing techniques available for the region's planned transportation investments, ongoing operations, and maintenance.

The RTP/SCS is based on an analysis that considers the entire County, and includes all projects involving changes in regional growth and land use in San Joaquin County, as well as the countywide vehicle traffic projections. Cumulative GHG emissions analyzed in the RTP were compared to regional GHG thresholds and analyzed under statewide plans and regulations. This analysis concluded that there would be a decrease in GHG emissions from existing conditions to 2046, which are primarily be due to focusing growth in developed areas, moderately increasing residential densities, encouraging infill development, protecting

[120] The extent to which GHG emissions from traffic at the project will change in the future depends on the quantity (e.g., number of vehicles, average daily mileage) and quality (i.e., carbon content) of fuel that will be available and required to meet both regulatory standards and residents' needs. In addition, renewable power requirements, low carbon fuel standards, and vehicle emissions standards discussed above will all decrease GHG emissions per unit of energy delivered or per vehicle mile travelled.

California Energy Commission. 2007. State Alternative Fuels Plan. December. CEC-600-2007-011-CMF. Available at: https://web.archive.org/web/20190225162513/https://www.energy.ca.gov/2007publications/CEC-600-2007-011/CEC-600-2007-011-CMF.PDF. Accessed: January 2025.

[121] SJCOG. 2022 Regional Transportation Plan and Sustainable Communities Strategy. Available at: https://www.sjcog.org/608/Adopted-2022-RTPSCS-Plan. Accessed: January 2025.

open space and agricultural land, and providing alternatives to single-occupancy vehicle trips.

As shown in **Table D-2** in **Appendix D**, the Project would be consistent with applicable SJCOG strategies for the reduction of GHG emissions.

6.2.3 San Joaquin County General Plan

The Project will be consistent with the policies and programs established in the 2035 San Joaquin County General Plan.

The General Plan was developed in consideration of other state, local, and regional plans and guidance, including AB 32 and the SJCOG RTP/SCS. Thus, a demonstration of consistency with the measures established in the General Plan would indicate consistency with the County's vision for aligning with state objectives to meet GHG goals and standards.

As shown in **Table D-3** in **Appendix D**, the Project would be consistent with applicable General Plan strategies for the reduction of GHG emissions.

6.3 Impact Determination

While the Project would represent an increase in GHG emissions when compared to the existing conditions on the vacant site, the Project would not conflict with the SJCOG's RTP/SCS, statewide emission reduction targets in the 2022 CARB Scoping Plan Update, or the policies detailed in the San Joaquin County General Plan. Therefore, the Project's GHG emissions will be less than significant in the context of Threshold 1 and Threshold 2, as discussed in **Section 3.3**.

Further, the SJVAPCD's GAMAQI observes that: "It is widely recognized that no single project could generate sufficient GHG emissions to noticeably change global climate temperature. However, the combination of GHG emissions from past, present, and future projects could contribute substantially to global climate change. Thus, project specific GHG emissions should be evaluated in terms of whether or not they would result in a cumulatively significant impact on global climate change."[122] In this context, and based on the analysis above which includes several mitigation measures, the Project's GHG emissions are not cumulatively considerable and thus can be considered **less than significant**.

[122] SJVAPCD. 2015. Final Draft Guidance for Assessing and Mitigating Air Quality Impacts. Available at: http://www.valleyair.org/transportation/GAMAQI.pdf. Accessed: January 2025.

TABLES

Table 4-1. Construction Schedule
Pacific Gateway
San Joaquin County, California

Development Area	CalEEMod® Phase Type[1]	Start Date[1]	End Date[1]	Phase Duration[2] (days)
Initial Phase	Site Preparation	1/1/2026	3/8/2026	57
	Grading	3/9/2026	8/25/2026	146
	Building Construction	8/26/2026	4/27/2031	1,462
	Paving	4/28/2031	8/26/2031	104
	Architectural Coating	8/27/2031	12/25/2031	104
Pacific Gateway East	Site Preparation	1/1/2032	3/28/2032	75
	Grading	3/29/2032	11/10/2032	195
	Building Construction	11/11/2032	2/1/2039	1,949
	Paving	2/2/2039	7/12/2039	138
	Architectural Coating	7/13/2039	12/20/2039	138
Pacific Gateway Central	Demolition	1/1/2038	1/5/2038	4
	Site Preparation	1/6/2038	4/25/2038	94
	Grading	4/26/2038	2/2/2039	243
	Building Construction	2/3/2039	11/11/2046	2,433
	Paving	11/12/2046	5/31/2047	173
	Architectural Coating	6/1/2047	12/19/2047	173
Pacific Gateway West[3]	Site Preparation	1/1/2047	4/19/2047	94
	Grading	4/20/2047	1/29/2048	244
	Building Construction	1/30/2048	11/10/2055	2,436
	Paving	11/11/2055	5/30/2056	173
	Architectural Coating	5/31/2056	12/18/2056	173
University Center	Demolition	1/1/2032	3/4/2032	55
	Site Preparation	3/5/2032	9/13/2032	165
	Grading	9/14/2032	1/6/2034	412
	Building Construction	1/7/2034	1/3/2047	4,067
	Paving	1/4/2047	12/22/2047	302
	Architectural Coating	12/23/2047	12/8/2048	302
Gateway Center	Site Preparation	1/1/2032	6/20/2032	147
	Grading	6/21/2032	8/23/2033	368
	Building Construction	8/24/2033	3/23/2045	3,626
	Paving	3/24/2045	2/1/2046	270
	Architectural Coating	2/2/2046	12/13/2046	270

Notes:

[1] Construction phases and duration are based on Project-specific estimates.

[2] The construction work week was assumed to be 6 days per week.

[3] Due to limitations in CalEEMod®, construction mobile and offroad equipment emission factors are not available in calendar year 2051 and beyond. Thus, calendar year 2050 was used in CalEEMod® to estimate emissions for construction activities occurring in these years.

Abbreviations:

CalEEMod® - California Emissions Estimator Model

Table 4-2. Construction Demolition Assumptions
Pacific Gateway
San Joaquin County, California

Phase Name	Size Metric	Unit Amount[1]
Phase 1 (Initial Phase)	Building sqft	0
Phase 2 (East)	Building sqft	0
Phase 3 (Central)	Building sqft	12,336
Phase 4 (West)	Building sqft	0
Phase 5 (University Center)	Building sqft	41,713
Phase 6 (Gateway Center)	Building sqft	0

Notes:

[1] Square-footage quantity based on a review of GoogleEarth.

Abbreviations:

sqft - square foot

Table 4-3. Summary of Construction GHG Emissions
Pacific Gateway
San Joaquin County, California

Scenario	Year	Construction GHG Emissions Estimates[1,2] (MT CO_2e/yr)
Initial Phase	2026	2413.0
	2027	5108.0
	2028	5011.0
	2029	4893.0
	2030	4782.0
	2031	1685.0
Buildout	2032	3531.0
	2033	9493.0
	2034	12306.0
	2035	12114.0
	2036	11942.0
	2037	11729.0
	2038	12435.0
	2039	11582.0
	2040	11021.0
	2041	10882.0
	2042	10771.0
	2043	10686.0
	2044	10643.0
	2045	9964.0
	2046	8803.2
	2047	1578.0
	2048	5480.0
	2049	5429.0
	2050	5413.0
	2051	5413.0
	2052	5413.0
	2053	5413.0
	2054	5413.0
	2055	4686.3
	2056	658.4

Notes:

[1] Total emissions for project construction were estimated using CalEEMod® (see Appendix A).

[2] Emissions are presented as CO_2e, which include CO_2, CH_4, and N_2O emissions, weighted by their respective global warming potentials.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator M
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
MT - metric tonnes
GHG - greenhouse gases
MT - metric tons
N_2O - nitrous oxide
yr - year

Table 4-4. Vegetation Land Use Change Assumptions
Pacific Gateway
San Joaquin County, California

Soil Carbon Accumulation				
Vegetation Land Use Type[1]	**Vegetation Soil Type[2]**	**CO_2 Accumulation[3] (MT CO_2e/yr)**	**Initial Acres[1]**	**Final Acres[1]**
Initial Phase				
Cropland	Inceptisols	0.82	226	0
Urban	Inceptisols	0	0	226
Buildout				
Cropland	Inceptisols	0.82	1,577	0
Urban	Inceptisols	0	0	1,577

Above and Belowground Biomass Carbon Accumulation			
Cover Type[1]	**CO_2 Accumulation[3] (MT CO_2e/yr)**	**Initial Acres[1]**	**Final Acres[1]**
Initial Phase			
Broadleaf Forest	2.23	226	0
Grassland	0.44	0	34
Urban	0	0	192
Buildout			
Broadleaf Forest	2.23	1,577	0
Grassland	0.44	0	173
Urban	0	0	1,404

Notes:

[1] Vegetation Land Use Type, Cover Type, Initial Acres and Final Acres are based on Project-specific data.

[2] Vegetation Soil Type at the Project location was determined using UC Davis' SoilWeb online geospatial tool. Inceptisols and vertisols are present at the Project location and have the same CO_2 Accumulation value of 0.82 MT CO_2e/yr. Inceptisols was chosen to represent the Project Vegetation Soil Type.

[3] CO_2 Accumulation is based on CalEEMod® default values.

Abbreviations:

CalEEMod® - California Emissions Estimator Model
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalent
MT - metric ton
UC Davis - University of California, Davis
yr - year

Table 4-5. Trip Rates, Trip Type Percentages, Trip Lengths, and Vehicle Miles Traveled by Operational Mobile Sources (Autos)
Pacific Gateway
San Joaquin County, California

Phase	Fehr & Peers Land Use Type	Land Use Type[1]	CalEEMod®		Land Use Size[1]		Daily Trips[2,3,4,5,6] (trips/day)	Daily VMT[2,4] (miles/day)	Fleet Mix[7]					
			Land Use Category[1]	Proposed Land Use Subtype[1]	Quantity	Size Metric			LDA	LDT1	LDT2	MDV	LHDT1	LHDT2
Initial	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	Commercial	General Office Building	11.5	ksf	330	3,696	52%	3%	24%	17%	3%	1%
	--	Other Surfaces	Parking	Other Non-Asphalt Surfaces	1,070.6	ksf	0	0	52%	3%	24%	17%	3%	1%
	--	VFW Parking	Parking	Parking Lot	1,038.7	ksf	0	0	52%	3%	24%	17%	3%	1%
	University (University Campus)	University	Educational	University/College (4Yr)	400.0	students	622	9,765	52%	3%	24%	17%	3%	1%
	Limited Industrial (Warehouse)[11]	General Industrial (Initial Phase)	Industrial	Industrial Park	3,962.0	ksf	4,240	167,772	52%	3%	24%	17%	3%	1%
	--	Public Facilities (Fire Station)	Commercial	Government Office Building	113.1	ksf	0	0	52%	3%	24%	17%	3%	1%
	--	Roadway	Parking	Other Asphalt Surfaces	2,917.4	ksf	0	0	52%	3%	24%	17%	3%	1%
	--	Open Space	Recreational	City Park	885.9	ksf	0	0	52%	3%	24%	17%	3%	1%
Buildout	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	Commercial	General Office Building	11.5	ksf	331	4,158	52%	3%	26%	16%	2%	1%
	--	Public Facilities (Fire Station)	Commercial	Government Office Building	113.1	ksf	0	0	52%	3%	26%	16%	2%	1%
	University (University Campus)	University	Educational	University/College (4Yr)	5,000	students	7,272	115,625	52%	3%	26%	16%	2%	1%
	Limited Industrial (Warehouse)[11]	General Industrial	Industrial	Industrial Park	24,675.0	ksf	26,402	808,575	52%	3%	26%	16%	2%	1%
	EV Charging Lot	Industrial Parking/ Non-Industrial Parking	Parking	Parking Lot	6,685.1	ksf	77	16	52%	3%	26%	16%	2%	1%
	--	Other Surfaces	Parking	Other Non-Asphalt Surfaces	4,958.8	ksf	0	0	52%	3%	26%	16%	2%	1%
	--	Open Space	Recreational	City Park	8,565.3	ksf	0	0	52%	3%	26%	16%	2%	1%
	Convenience Store/Gas Station	Retail	Retail	Gasoline/Service Station	20.0	ksf	0	0	52%	3%	26%	16%	2%	1%
	Shopping Plaza	Retail	Retail	Strip Mall	43.9	ksf	1,526	11,603	52%	3%	26%	16%	2%	1%
	Business Professional (Office)[11]	Business Park	Commercial	Office Park	93.0	ksf	1,017	29,307	52%	3%	26%	16%	2%	1%
	--	Industrial Parking/Other Surfaces/Roadway	Parking	Other Asphalt Surfaces	15,154.5	ksf	0	0	52%	3%	26%	16%	2%	1%
	Business Hotel	Commercial Retail/ Service	Recreational	Hotel	60.0	ksf	480	3,298	52%	3%	26%	16%	2%	1%
	Fast-Food Restaurant with Drive-Through Window	Recreational	Recreational	Fast Food Restaurant with Drive Thru	13.6	ksf	6,348	43,597	52%	3%	26%	16%	2%	1%
	Sit-Down Restaurant	Recreational	Recreational	High Turnover (Sit Down Restaurant)	14.0	ksf	856	5,886	52%	3%	26%	16%	2%	1%
	Fast Casual Restaurant	Recreational	Recreational	Fast Food Restaurant w/o Drive Thru	4.0	ksf	389	2,676	52%	3%	26%	16%	2%	1%
	--	Parking	Parking	Unenclosed parking with elevator	874	spaces	0	0	52%	3%	26%	16%	2%	1%
	Convenience Store/Gas Station	Retail	Retail	Convenience Market (24 hour)	8.0	ksf	2,762	18,976	52%	3%	26%	16%	2%	1%
	Bank with Drive-Through Window	Commercial	Commercial	Bank (with Drive-Through)	5.0	ksf	502	3,450	52%	3%	26%	16%	2%	1%
	--	University	Residential	Apartments (Mid Rise)	1,600	dwelling un	0	0	52%	3%	26%	16%	2%	1%

Table 4-5. Trip Rates, Trip Type Percentages, Trip Lengths, and Vehicle Miles Traveled by Operational Mobile Sources (Autos)
Pacific Gateway
San Joaquin County, California

Phase	Fehr & Peers Land Use Type	Land Use Type[1]	Project Trip Rates[8] (trips/size metric/day)			% Trip Type[9]			Average Non-Residential Trip Lengths[10] (miles/trip)		
			Weekday	Saturday	Sunday	Primary %	Diverted %	Pass-By %	H-W	W-O	O-O
Initial	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	28.69565	28.69565	28.69565	100%	0%	0%	11.2	11.2	11.2
	--	Other Surfaces	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	--	VFW Parking	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	University (University Campus)	University	1.55500	1.55500	1.55500	100%	0%	0%	15.7	15.7	15.7
	Limited Industrial (Warehouse)[11]	General Industrial (Initial Phase)	1.07017	1.07017	1.07017	100%	0%	0%	39.6	39.6	39.6
	--	Public Facilities (Fire Station)	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	--	Roadway	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	--	Open Space	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
Buildout	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	28.8	28.8	28.8	100%	0%	0%	12.6	12.6	12.6
	--	Public Facilities (Fire Station)	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	University (University Campus)	University	1.5	1.5	1.5	100%	0%	0%	15.9	15.9	15.9
	Limited Industrial (Warehouse)[11]	General Industrial	1.1	1.1	1.1	100%	0%	0%	30.6	30.6	30.6
	EV Charging Lot	Industrial Parking/ Non-Industrial Parking	0.0	0.0	0.0	100%	0%	0%	0.2	0.2	0.2
	--	Other Surfaces	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	--	Open Space	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	Convenience Store/Gas Station	Retail	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	Shopping Plaza	Retail	34.8	34.8	34.8	100%	0%	0%	7.6	7.6	7.6
	Business Professional (Office)[11]	Business Park	10.9	10.9	10.9	100%	0%	0%	28.8	28.8	28.8
	--	Industrial Parking/Other Surfaces/Roadway	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	Business Hotel	Commercial Retail/ Service	8.0	8.0	8.0	100%	0%	0%	6.9	6.9	6.9
	Fast-Food Restaurant with Drive-Through Window	Recreational	466.8	466.8	466.8	100%	0%	0%	6.9	6.9	6.9
	Sit-Down Restaurant	Recreational	61.1	61.1	61.1	100%	0%	0%	6.9	6.9	6.9
	Fast Casual Restaurant	Recreational	97.3	97.3	97.3	100%	0%	0%	6.9	6.9	6.9
	--	Parking	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0
	Convenience Store/Gas Station	Retail	345.3	345.3	345.3	100%	0%	0%	6.9	6.9	6.9
	Bank with Drive-Through Window	Commercial	100.4	100.4	100.4	100%	0%	0%	6.9	6.9	6.9
	--	University	0.0	0.0	0.0	100%	0%	0%	0.0	0.0	0.0

Notes:

[1] Land uses are based on Project-specific information.

[2] Daily trips and VMT are based on data provided by Fehr & Peers.

[3] Internal trips within the Gateway Center and University Center were not included in the total daily trips for autos because these trips are assumed to be non-auto trips (i.e., walk or bike), based on information from Fehr & Peers.

[4] Land uses with zero trips are not expected to generate any new trips, based on data provided by Fehr & Peers.

[5] Total pass-by trips provided by Fehr & Peers within the Gateway Center development area were distributed to each land use based on the ratio of gross trips.

[6] Total University trips, including trips from the University and University apartments, provided by Fehr & Peers were assigned to the University/College (4Yr) CalEEMod Land Use Subtype.

[7] Fleet mix is based on auto-specific vehicle types. See Tables B-1 and C-1 for fleet mix calculations.

[8] Project trip rates are based on total daily trips divided by land use size. Project trip rates were conservatively assumed to apply to both weekday and weekend travel.

[9] The trip type was set to 100% primary to align with the VMT and trip data from Fehr & Peers.

[10] Average non-residential trip Lengths were calculated based on total daily VMT divided by total daily trips.

[11] Total primary auto trips for Limited Industrial (Warehouse) and Office autos were provided by Fehr & Peers. Total Daily VMT was calculated based on home-based work VMT provided by Fehr & Peers. W-O and O-O VMT were calculated based on CalEEMod defaults. See Tables B-2 and C-2 for detailed calculations.

Abbreviations

CalEEMod® - California Emissions Estimator Model
H-W - home-work
ksf - thousand square feet
LDA - Light-Duty Automobile
LDT - Light-Duty Truck
LHDT - Light Heavy-Duty Truck
MDV - Medium-Duty Vehicle
O-O - other-other
VFW - Veterans of Foreign Wars
VMT - vehicle miles travelled
W-O - work-other
Yr - year

Table 4-7. Trip Rates, Trip Type Percentages, Trip Lengths, and Vehicle Miles Traveled by Operational Mobile Sources (Trucks)
Pacific Gateway
San Joaquin County, California

Phase	Fehr & Peers Land Use Type	Land Use Type[1]	CalEEMod®		Land Use Size[1]		Daily Trips[2,3,4,5] (trips/day)	Daily VMT[2] (miles/day)	Fleet Mix[6]	Project Trip Rates[7] (trips/size metric/day)		
			Land Use Category[1]	Proposed Land Use Subtype[1]	Quantity	Size Metric			HHDT	Weekday	Saturday	Sunday
Initial	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	Commercial	General Office Building	11.5	ksf	0	0	100%	0.0	0.0	0.0
	--	Industrial Parking/Other Surfaces	Parking	Other Non-Asphalt Surfaces	1,070.6	ksf	0	0	100%	0.0	0.0	0.0
	--	VFW Parking	Parking	Parking Lot	1,038.7	ksf	0	0	100%	0.0	0.0	0.0
	University (University Campus)	University	Educational	University/College (4Yr)	400.0	students	2	86	100%	0.00500	0.00500	0.00500
	Limited Industrial (Warehouse)	General Industrial (Initial Phase)	Industrial	Industrial Park	3,962.0	ksf	1,782	76,448	100%	0.44977	0.44977	0.44977
	--	Public Facilities (Fire Station)	Commercial	Government Office Building	113.1	ksf	0	0	100%	0.0	0.0	0.0
	--	Roadway	Parking	Other Asphalt Surfaces	2,917.4	ksf	0	0	100%	0.0	0.0	0.0
	--	Open Space	Recreational	City Park	885.9	ksf	0	0	100%	0.0	0.0	0.0
Buildout	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	Commercial	General Office Building	11.5	ksf	0	0	100%	0.0	0.0	0.0
	--	Public Facilities (Fire Station)	Commercial	Government Office Building	113.1	ksf	0	0	100%	0.0	0.0	0.0
	University (University Campus)	University	Educational	University/College (4Yr)	5,000	students	20	880	100%	0.004	0.004	0.004
	Limited Industrial (Warehouse)	General Industrial	Industrial	Industrial Park	24,675.0	ksf	11,103	488,532	100%	0.45	0.45	0.45
	EV Charging Lot	Industrial Parking/Non-Industrial Parking	Parking	Parking Lot	6,685.1	ksf	288	58	100%	0.04	0.04	0.04
	--	Other Surfaces	Parking	Other Non-Asphalt Surfaces	4,958.8	ksf	0	0	100%	0.00	0.00	0.00
	--	Open Space	Recreational	City Park	8,565.3	ksf	0	0	100%	0.00	0.00	0.00
	Convenience Store/Gas Station	Retail	Retail	Gasoline/Service Station	20.0	ksf	720	144	100%	36.00	36.00	36.00
	Shopping Plaza	Retail	Retail	Strip Mall	43.9	ksf	20	880	100%	0.46	0.46	0.46
	Business Professional (Office)	Business Park	Commercial	Office Park	93.0	ksf	8	352	100%	0.09	0.09	0.09
	--	Industrial Parking/Other Surfaces/Roadway	Parking	Other Asphalt Surfaces	15,154.5	ksf	0	0	100%	0.00	0.00	0.00
	Business Hotel	Commercial Retail/ Service	Recreational	Hotel	60.0	ksf	2	88	100%	0.03	0.03	0.03
	Fast-Food Restaurant with Drive-Through Windo	Recreational	Recreational	Fast Food Restaurant with Drive Thru	13.6	ksf	10	440	100%	0.74	0.74	0.74
	Sit-Down Restaurant	Recreational	Recreational	High Turnover (Sit Down Restaurant)	14.0	ksf	2	88	100%	0.14	0.14	0.14
	Fast Casual Restaurant	Recreational	Recreational	Fast Food Restaurant w/o Drive Thru	4.0	ksf	2	88	100%	0.50	0.50	0.50
	--	Parking	Parking	Unenclosed parking with elevator	874	spaces	0	0	100%	0.00	0.00	0.00
	Convenience Store/Gas Station	Retail	Retail	Convenience Market (24 hour)	8.0	ksf	4	176	100%	0.50	0.50	0.50
	Bank with Drive-Through Window	Commercial	Commercial	Bank (with Drive-Through)	5.0	ksf	0	0	100%	0.00	0.00	0.00
	--	University	Residential	Apartments (Mid Rise)	1,600	dwelling units	0	0	100%	0.00	0.00	0.00

Table 4-6. Trip Rates, Trip Type Percentages, Trip Lengths, and Vehicle Miles Traveled by Operational Mobile Sources (Trucks)
Pacific Gateway
San Joaquin County, California

Phase	Fehr & Peers Land Use Type	Land Use Type[1]	% Trip Type[8]			Average Non-Residential Trip Lengths[9] (miles/trip)		
			Primary %	Diverted %	Pass-By %	H-W	W-O	O-O
Initial	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	100%	0%	0%	0.0	0.0	0.0
	--	Industrial Parking/Other Surfaces	100%	0%	0%	0.0	0.0	0.0
	--	VFW Parking	100%	0%	0%	0.0	0.0	0.0
	University (University Campus)	University	100%	0%	0%	42.9	42.9	42.9
	Limited Industrial (Warehouse)	General Industrial (Initial Phase)	100%	0%	0%	42.9	42.9	42.9
	--	Public Facilities (Fire Station)	100%	0%	0%	0.0	0.0	0.0
	--	Roadway	100%	0%	0%	0.0	0.0	0.0
	--	Open Space	100%	0%	0%	0.0	0.0	0.0
Buildout	VFW Tracy Post (VFW Building)	Community Center (VFW Hall)	100%	0%	0%	0.0	0.0	0.0
	--	Public Facilities (Fire Station)	100%	0%	0%	0.0	0.0	0.0
	University (University Campus)	University	100%	0%	0%	44.0	44.0	44.0
	Limited Industrial (Warehouse)	General Industrial	100%	0%	0%	44.0	44.0	44.0
	EV Charging Lot	Industrial Parking/Non-Industrial Parking	100%	0%	0%	0.2	0.2	0.2
	--	Other Surfaces	100%	0%	0%	0.0	0.0	0.0
	--	Open Space	100%	0%	0%	0.0	0.0	0.0
	Convenience Store/Gas Station	Retail	100%	0%	0%	0.2	0.2	0.2
	Shopping Plaza	Retail	100%	0%	0%	44.0	44.0	44.0
	Business Professional (Office)	Business Park	100%	0%	0%	44.0	44.0	44.0
	--	Industrial Parking/Other Surfaces/Roadway	100%	0%	0%	0.0	0.0	0.0
	Business Hotel	Commercial Retail/ Service	100%	0%	0%	44.0	44.0	44.0
	Fast-Food Restaurant with Drive-Through Windo	Recreational	100%	0%	0%	44.0	44.0	44.0
	Sit-Down Restaurant	Recreational	100%	0%	0%	44.0	44.0	44.0
	Fast Casual Restaurant	Recreational	100%	0%	0%	44.0	44.0	44.0
	--	Parking	100%	0%	0%	0.0	0.0	0.0
	Convenience Store/Gas Station	Retail	100%	0%	0%	44.0	44.0	44.0
	Bank with Drive-Through Window	Commercial	100%	0%	0%	0.0	0.0	0.0
	--	University	100%	0%	0%	0.0	0.0	0.0

Notes:

[1] Land uses are based on Project-specific information.

[2] Daily Trips and VMT are based on data provided by Fehr & Peers.

[3] Land uses with zero trips are not expected to generate any new trips, based on data provided by Fehr & Peers.

[4] Total pass-by trips provided by Fehr & Peers within the Gateway Center development area were distributed to each land use based on the ratio of gross trips.

[5] Total University trips, including trips from the University and University apartments, provided by Fehr & Peers were assigned to the University/College (4Yr) CalEEMod Land Use Subtype.

[6] Fleet mix is based on truck-specific vehicle types. See Tables B-1 and C-1 for fleet mix calculations.

[7] Project trip rates are based on total daily trips divided by land use size. Project trip rates were conservatively assumed to apply to both weekday and weekend travel.

[8] The trip type was set to 100% primary to align with the VMT and trip data from Fehr & Peers.

[9] Average Non-Residential Trip Lengths were calculated based on total daily VMT divided by total daily trips.

Abbreviations

CalEEMod® - California Emissions Estimator Model
HHDT - Heavy Heavy-Duty Truck
H-W - home-work
ksf - thousand square feet
MHDT - Medium Heavy-Duty Truck
O-O - other-other
VFW - Veterans of Foreign Wars
VMT - vehicle miles travelled
W-O - work-other
Yr - year

Table 4-7. TRU Greenhouse Gas Emission Calculations at Initial Phase Buildout
Pacific Gateway
San Joaquin County, California

CO_2 Emission Factor[1] (g/bhp-hr)	Annual Number of Round Trips with TRUs[2]	Annual Average CO_2 Emissions (MT/year)
395.7	16,261	851

Notes:

[1] Emission factors obtained from OFFROAD2021 emissions output for Calendar Year 2032, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin Valley (SJV).

[2] Approximately 5% of trucks for the Land Use, General Industry are assumed to be equipped with TRUs. The number of trucks equipped with TRUs for the Land Use type, University are assumed to be insignificant and are therefore not included in the estimation of TRU round trips.

[3] Horsepower is based on SJVAPCD Guidance for Air Dispersion Modeling, Appendix A, Section 2.3.1 Transportation Refrigeration unit (TRU), Modeling Parameters. Available at: http://valleyair.org/busind/pto/tox_resources/modeling%20guidance%20w_o%20pic.pdf. Accessed: January 2025.

[4] Load factor obtained from CARB 2021 Update to Emissions Inventory for Transport Refrigeration Units. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/apph.pdf. Accessed: January 2025.

[5] TRU Cycle Duration is based on 2 hours of off-site loading time, 2 hours of on-site unloading time, plus the duration of the on-site and off-site transit. Assumptions based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

Abbreviations:

bhp-hr - brake horsepower hour
CARB - California Air Resources Board
CO_2 - Carbon Dioxide equivalents
g - gram
MT - metric tonnes
SJVAPCD - San Joaquin Valley Air Pollution Control District
TRU - Transportation Refrigeration unit

Constants:

Horsepower [3]	50	bhp
Load Factor [4]	0.38	
TRU Cycle Duration [5]	417	minutes
Density of Diesel	3,221	g/gal

Conversion Factors:

453.592	g/lb
1,000,000	g/MT
60	min/hr
365	day/year
2000	lb/ton

Table 4-8. TRU Criteria Air Pollutant On-Site Emission Calculations at Full Buildout
Pacific Gateway
San Joaquin County, California

CO_2 Emission Factor[1] (g/bhp-hr)	Annual Number of Round Trips with TRUs[2]	Annual Average CO_2 Emissions (MT/year)
395.6	101,315	5,353

Notes:

[1] Emission factors obtained from OFFROAD2021 emissions output for Calendar Year 2050, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin Valley. Emission factors are not available after calendar year 2050. Therefore, calendar year 2050 emission factors were used to represent emission factors for calendar year 2057.

[2] Approximately 5% of trucks for the Land Use, General Industrial are assumed to be equipped with TRUs. The number of trucks equipped with TRUs for the Land Use type, University are assumed to be insignificant and are therefore not included in the estimation of TRU round trips.

[3] Horsepower is based on SJVAPCD Guidance for Air Dispersion Modeling, Appendix A, Section 2.3.1 Transportation Refrigeration unit (TRU), Modeling Parameters. Available at: http://valleyair.org/busind/pto/tox_resources/modeling%20guidance%20w_o%20pic.pdf. Accessed: January 2025.

[4] Load factor obtained from CARB 2021 Update to Emissions Inventory for Transport Refrigeration Units. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/apph.pdf. Accessed: January 2025.

[5] TRU Cycle Duration is based on 2 hours of off-site loading time, 2 hours of on-site unloading time, plus the duration of the on-site and off-site transit. Assumptions based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: January 2025.

Abbreviations:

bhp-hr - brake horsepower hour
CARB - California Air Resources Board
CO_2 - Carbon Dioxide equivalents
g - gram
MT - metric tonnes
SJVAPCD - San Joaquin Valley Air Pollution Control District
TRU - Transportation Refrigeration unit

Constants:

Horsepower [3]	50	bhp
Load Factor [4]	0.38	
TRU Cycle Duration [5]	422	minutes
Density of Diesel	3,221	g/gal

Conversion Factors:

453.592	g/lb
1000000	g/MT
60	min/hr
365	day/year
2000	lb/ton

Table 4-9. Utility GHG Emission Factor Associated with Renewable Portfolio Standard
Pacific Gateway
San Joaquin County, California

Energy Delivered [MWh]				
	2022	**2023**	**Average**	**Units**
CO_2 Intensity Factor per Total Energy Delivered[1]	56	12	34	lbs CO_2/MWh delivered
% of Total Energy From Renewables[2,3]	38.5%	33.0%	35.8%	
CO_2 Intensity Factor per Total Non-Renewable Energy[4]	91	18	53	lbs CO_2/MWh delivered

Calculated Intensity Factors for Total Energy Delivered[5]				
2027 RPS (52%)	43.7	8.6	25.4	lbs CO_2/MWh delivered
2030 RPS (60%)	36.4	7.2	21.2	lbs CO_2/MWh delivered
2045 RPS (100%)	0.0	0.0	0.0	lbs CO_2/MWh delivered
2032 RPS[6]	31.6	6.2	18.3	lbs CO_2/MWh delivered
2057 RPS[7]	0.0	0.0	0.0	lbs CO_2/MWh delivered

Year	**Emission Factors (lb/MWh)**			
	CO_2	**CH_4**	**N_2O**	**CO_2e**
2032	18.3	0.033	0.004	20.4
2057	0.00	0.000	0.000	0.0

Notes:

[1]2022 and 2023 intensity factors per total energy delivered available at: https://www.pgecorp.com/assets/pgecorp/csr/csr_2024/assets/pge-csr-2024.pdf. Accessed: January 2025.

[2]2022 percent of total energy from RPS-eligible renewables available at: https://www.pgecorp.com/assets/pgecorp/localized/en/sustainability/corporate-responsibility-sustainability/reports/2023/downloads/PGE_CSR_2023.pdf. Accessed: January 2025.

[3]2023 percent of total energy from RPS-eligible renewables available at: https://www.pgecorp.com/assets/pgecorp/csr/csr_2024/assets/pge-csr-2024.pdf. Accessed: January 2025.

[4] The emissions metric presented here is calculated based on the total CO_2 emissions divided by the energy delivered from non-renewable sources.

[5] The intensity factors for default RPS assumption are calculated by multiplying the percentage of energy delivered from non-renewable energy by the CO_2 emissions per total non-renewable energy metric calculated above. The emission factors presented here are 52% RPS for 2027, 60% RPS for 2030, and 100% RPS for 2045. The estimate provided here and the PUP reports issued by PG&E assume that renewable energy sources do not result in any CO_2 emissions.

[6] The RPS percentage for the 2032 future year is interpolated from the goals of 60% RPS in 2030 and 100% RPS in 2045.

[7] The carbon intensity in 2057 future year will be 0 lbs CO_2/MWh delivered as the goal in 2045 and onward is 100% renewables, per the RPS.

[8] The most recent emission factor available is for 2022 and 2023, which is why these values are being used to interpolate 2032 emission factors even though more recent sustainability reports by PG&E are available.

Abbreviations:

CO_2 - carbon dioxide
GHG - greenhouse gases
lbs - pounds
MT - metric tonnes
MWh - megawatt-hour
PG&E - Pacific Gas and Electric
PUP - Power/Utility Protocol
RPS - Renewable Portfolio Standards

GWP	
CH_4	**N_2O**
25	298

Table 4-10. Offroad Equipment Greenhouse Gas Emission Calculations
Pacific Gateway
San Joaquin County, California

OFFROAD Equipment	Fuel Type	Project Phase Details			Average Combustion Equipment Usage[1,2]		Mitigated Average Combustion Equipment Usage[1,2,3]		OFFROAD2021 EFs[3,4] (lbs/hr)	Unmitigated Emissions[5] (MT/yr)	Mitigated Emissions[3,5] (MT/yr)
		Project Phase	Operation Year	Project Land Use	Equipment Population	Annual Hours of Use	Equipment Population	Annual Hours of Use	CO_2	CO_2	CO_2
Yard Truck	Diesel	Initial Phase	2032	General Industrial (Initial Phase)	15	21,450	1	1,430	76.99	749	50
		Pacific Gateway East	2057	General Industrial	26	37,180	2	2,860	78.02	1,316	101
		Pacific Gateway West	2057	General Industrial	23	32,890	0	0	78.02	1,164	0
		Pacific Gateway Central	2057	General Industrial	25	35,750	2	2,860	78.02	1,265	101
		Gateway Center	2057	General Industrial	2	2,860	2	2,860	78.02	101	101
Forklift	Diesel	Initial Phase	2032	General Industrial (Initial Phase)	475	1,388,285	19	55,217	24.11	15,180	604
		Pacific Gateway East	2057	General Industrial	859	2,509,661	56	162,525	23.47	26,718	1,730
		Pacific Gateway West	2057	General Industrial	740	2,161,576	0	0	23.47	23,012	0
		Pacific Gateway Central	2057	General Industrial	823	2,402,508	64	185,815	23.47	25,577	1,978
		Gateway Center	2057	General Industrial	63	184,090	64	185,641	23.47	1,960	1,976
									Total Offroad Emissions (Initial Phase)	15,929	654
									Total Offroad Emissions (Buildout)	97,042	6,642

Notes:

[1] SCAQMD Rule 2305 Second Draft Staff Report, Chapter 3. Warehouses greater than 200,000 sqft operate an average of 3.6 yard trucks per million square feet of warehouse space, and the off-road yard trucks are estimated to operate for 1,430 hours per year. Available at: http://www.aqmd.gov/docs/default-source/planning/fbmsm-docs/pr-2305_sr_2nd-draft_4-7-21_clean.pdf. Accessed: January 2025.

[2] LBA Logistics EIR 2021. Appendix B. Based on a 2014 SCAQMD Survey, an average of 0.12 forklifts per 1,000 square feet. Forklifts are assumed to operate 8 hours per day, 365 days per yet. Available at: https://files.ceqanet.opr.ca.gov/266135-4/attachment/ZZ4NAT7Mt9jFgb_-p1Zq8FKUksmhz0jHLSja_j4XbcjAR_uh1pdylTl-isnTBffLgeF50tlWW5ZWRdMW0. Accessed: January 2025.

[3] To represent the project mitigation measure regarding zero-emission forklift and yard truck equipment, the following assumptions were made. A total of 157,583 square feet of industrial warehouse was assumed to utilize combustion-based equipment in the Initial Phase and a total of 1,681,500 square feet of industrial warehouse was assumed to utilize combustion-based equipment in Project Buildout based on Project-specific information for buildings under this threshold. The remainder of these equipment were assumed to be zero-emission equipment.

[4] Emission factors obtained from OFFROAD2021 emissions output for Calendar Years 2032 and 2050, Yard Goats and Forklifts in San Joaquin Valley. Emission factors are not available after calendar year 2050. Therefore, calendar year 2050 emission factors were used to represent emission factors for calendar year 2057.

[5] Emissions estimated using OFFROAD2021 emission factors and annual hours of use for each equipment.

Abbreviations:

CO_2 - carbon dioxide
hr(s) - hour(s)
MSF - million square feet
sqft - square feet
tsf - thousand square feet
yr - year

Constants:

3.6	yard trucks/MSF[1]
1,430	hrs/yr[1]
0.12	forklifts/tsf[2]
2920	hrs/yr[2]
1,000	sqft/tsf
1,000,000	sqft/MSF

Table 4-11. Wastewater Treatment Plant Emergency Diesel Generator Greenhouse Gas Emissions
Pacific Gateway
San Joaquin County, California

Equipment Name	Generator Parameters			Annual Emissions, EPA GHG Inventory (lb/year)			
	Hours per year[1]	Diesel Consumption Rate (gal/hr)[2]	Annual Diesel Throughput (gal)	CO_2	CH_4	N_2O	CO_2e
Emergency Diesel Generator	200	39.9	7,973	179,452	7.2	1.4	180,051

EPA GHG Emission Factors

Emission Factors for Greenhouse Gas Inventories	Provided EF (kg/gal)[3]	Fuel EF (lb/gal)
CO_2	10.21	22.51
CH_4	4.10E-04	9.04E-04
N_2O	8.00E-05	1.76E-04

Conversion Factors:

5.11E-05	Mgal/bhp-hr, liquid fuel consumption factor[4]
0.001	Mgal/gal
0.986	hp/bhp
0.4536	kg/lb
1,000	g/kg
1	GWP of CO_2[5]
25	GWP of CH_4[5]
298	GWP of N_2O[5]

Notes:

[1]Emergency generator hours per year taken from SJVAPCD Rule 4701 Section 3.22, which states that "Any internal combustion engine used exclusively for non-utility electric power generation or any other emergency engine, approved by the APCO, and limited by permit condition to operate no more than 200 hours per calendar year for non-emergency purposes and not used in conjunction with any voluntary utility demand reduction program." Available at: https://ww2.valleyair.org/media/1danj2d0/rule-4701.pdf. Accessed: January 2025.

[2]Expected diesel consumption rate taken as an average of similar units.

[3]Emission factors represent "Distillate Fuel Oil No. 2" from Table 1 of the EPA Emission Factors for Greenhouse Gas Inventories. Available at: https://www.epa.gov/system/files/documents/2023-03/ghg_emission_factors_hub.pdf. Accessed: January 2025.

[4]Liquid fuel consumption factor from Table 1 in AQMD Guidelines for Calculating Emissions form Internal Combustion Engines. Available at: https://www.aqmd.gov/docs/default-source/planning/annual-emission-reporting/guidelines-for-calculating-emissions-from-internal-combustion-engines.pdf?sfvrsn=6. Accessed: January 2025.

[5]GWP values are from Table 11 of the EPA Emission Factors for Greenhouse Gas Inventories. Available at: https://www.epa.gov/system/files/documents/2023-03/ghg_emission_factors_hub.pdf. Accessed: January 2025.

Abbreviations:

APCO - Air Pollution Control Officer
bhp - brake horsepower
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
EF - emission factor
EPA - Environmental Protection Agency
gal - gallon
GHG - greenhouse gas
GWP - global warming potential
hp - horsepower
hr - hour
kg - kilogram
lb - pound
Mgal - 1,000 gallons
N_2O - nitrous oxide
SJVAPCD - San Joaquin Valley Air Pollution Control District

Table 4-12. Forklift Electricity Consumption
Pacific Gateway
San Joaquin County, California

Forklift Charging Parameters		Unit
Solar Forklift Mitigation Measure[1]	40,000	sqft per forklift charging station
Average Typical Electric Forklift Input Demand[2]	18.8	kW

Building Parameters	Initial Phase	Buildout	Unit
Warehouse Building Area[3]	3,962,000	24,675,000	sqft
Number of Forklift Chargers	100	617	Chargers
Daily Usage per Charger	24	24	hr/day
Energy Consumption Associated with Solar Powered Forklift Charging			
Reductions	**Initial Phase**	**Buildout**	**Unit**
Energy Usage	16,468,800	101,612,496	kWh/yr
	16,469	101,612	MWh/yr
Calculated GHG Emission Reduction from Solar Powered Forklift Charging[4]			
Annual GHG Emissions Reduction	137	0	MT CO2/yr

Notes

[1] To represent the project mitigation measure regarding solar energy for forklift charging, the following assumptions were made. GHG emission reductions associated with solar-powered electric forklift chargers are calculated above.

[2] Maximum Typical Energy Demand and Usage is based on Electric Power Research Institute Document which was published by CARB. Available at: https://ww2.arb.ca.gov/sites/default/files/classic/fuels/lcfs/electricity/epri_2015.pdf. Accessed January 2025.

[3] Warehouse Building Area was based on Project-specific land use information.

[4] Annual GHG emissions reductions were calculated based on the forklift charger electricity consumption, and the carbon intensity as shown in Table 4-9.

Abbreviations:

CO2 - carbon dioxide
kW - kilowatt
kWh - kilowatt-hour
sqft - square foot
hr - hour
lb - pound
MWh - megawatt-hour

Conversion Factors:

1000 kWh/MWh

Table 4-13. Operational Refrigerant Assumptions
Pacific Gateway
San Joaquin County, California

Development Area	CalEEMod® Land Use Subtype	Refrigerant Type[1]	Quantity Installed per Land Use Area (kg/KSF)[1,2]
Initial Phase	Industrial Park	R-404a	0.375
Pacific Gateway East			
Pacific Gateway Central			
Pacific Gateway West			
University Center			
Gateway Center			

Constants:

7.500 kg/KSF[1]

5% of Industrial Park area will be used for Cold Storage[2]

Notes:

[1] Refrigerant Type and Quantity Installed per Land Use Area are based on Table G-38, Appendix G in the CalEEMod2022 User Guide for the Land Use Subtype - Refrigerated Warehouse - No Rail, and Refrigeration Equipment - Cold Storage. Available at: https://caleemod.com/documents/user-guide/08_Appendix%20G_v2022.1.1.3.xlsx. Accessed: January 2025.

[2] The project assumes that 5% of the area of the Industrial Park will be used for Cold Storage.

Abbreviations:
kg - kilogram
KSF - thousand square feet

Table 4-14. Unmitigated Summary of GHG Emissions
Pacific Gateway
San Joaquin County, California

Emissions Category[1]	GHG Emissions[2] (MT CO_2e/yr)	
	Initial Phase	Buildout
Area Sources	60	1,401
Energy Usage	7,122	42,380
Mobile	58,002	309,482
TRU[3]	851	5,353
Offroad Equipment[4]	15,929	97,042
Wastewater Facility[5]	82	82
Refrigerants	171	1,419
Water	1,310	7,947
Waste Disposed	1,593	10,435
Operational Sub-Total	***85,119***	***475,540***
Construction Amortized[6]	796	7,556
Vegetation Amortized[6]	22	158
Total[7]	**85,938**	**483,254**

Notes:

[1] One-time emissions (i.e., construction) and operational emissions were calculated using CalEEMod®. See Appendix A for details

[2] Emissions are presented as CO_2e, which include CO_2, CH_4, and N_2O emissions, weighted by their

[3] TRU emissions were estimated using OFFROAD2021 emission factors, see Tables 4-7 and Table 4-8 for detailed calculations.

[4] Offroad equipment emissions include emissions from on-site yard trucks and forklifts, see Table 4-10 for detailed calculations.

[5] Wastewater facility emissions include emissions from an on-site emergency diesel generator, see Table 4-11 for detailed calculations.

[6] One-time emissions from construction and vegetation were amortized over a 30-year period.

[7] Sum of annualized one-time emissions and operational emissions.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
EMFAC - EMission FACtors model
GHG - greenhouse gases
MT - metric tonnes
MT - metric tons
N_2O - nitrous oxide
TRU - Transportation Refrigeration unit
yr - year

Conversion Factor
1000000 grams/MT

Table 6-1. Mitigated Summary of GHG Emissions
Pacific Gateway
San Joaquin County, California

Emissions Category[1]	GHG Emissions[2] (MT CO_2e/yr)	
	Initial Phase	Buildout
Area Sources	60	1,401
Zero-Emission Landscaping Equipment[3]	*-60*	*-412*
Energy Usage[4]	7,259	42,380
Solar PV[4]	-640	0
Mobile	58,002	309,482
TRU[5]	851	5,353
Offroad Equipment[6]	15,929	97,042
Zero-Emission Operational Offroad Equipment[6]	*-15,275*	*-90,400*
Wastewater Facility[7]	82	82
Refrigerants	171	1,419
Water	1,310	7,947
Waste Disposed	1,593	10,435
Operational Sub-Total	***69,281***	***384,729***
Construction Amortized[8]	796	7,556
Vegetation Amortized[8]	22	158
Total[9]	**70,099**	**392,443**

Notes:

[1] One-time emissions (i.e., construction) and operational emissions were calculated using CalEEMod®. See Appendix A for details.

[2] Emissions are presented as CO_2e, which include CO_2, CH_4, and N_2O emissions, weighted by their respective global warming potentials.

[3] GHG emission reductions associated with a zero-emission landscaping equipment mitigation measure were assumed to be equivalent to the total landscaping CO2e emissions estimated in CalEEMod®. See Appendix A for details.

[4] GHG emission reductions associated with the solar PV installation mitigation measure were estimated based on the Title 24-related electricity consumption at industrial land uses from CalEEMod®, and forklift charger usage as estimated in Table 4-12. Emissions associated with forklift charger usage was added to the total initial phase and buildout energy usage. The portion of GHG reductions associated with base building electricity use was assumed to be equivalent to the default Title 24-related electricity consumption calculated by CalEEMod®.

[5] TRU emissions were calculated as shown in Table 4-7 and Table 4-8 for detailed calculations.

[6] Offroad equipment emissions include emissions from on-site yard trucks and forklifts. GHG emission reductions associated with the use of zero-emission operational offroad equipment were estimated in Table 4-10.

[7] Wastewater facility emissions include emissions from an on-site emergency diesel generator, see Table 4-11 for detailed calculations.

[8] One-time emissions from construction and vegetation were amortized over a 30-year period.

[9] Sum of annualized one-time emissions and operational emissions.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CH_4 - methane
CO_2 - carbon dioxide
CO_2e - carbon dioxide equivalents
EMFAC - EMission FACtors model
GHG - greenhouse gases
MT - metric tonnes
N_2O - nitrous oxide
PV - photovoltaic
TRU - Transportation Refrigeration unit
yr - year

APPENDIX A
CALEEMOD® OUTPUT

Pacific Gateway (Initial Phase Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Construction)
Construction Start Date	1/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	198	198	36.9	103	0.16	1.12	19.5	20.2	1.03	4.80	5.42	—	36,659	36,659	0.76	3.41	99.3	37,792
Mit.	73.4	73.2	30.1	105	0.16	0.38	19.5	19.9	0.37	4.80	5.17	—	36,659	36,659	0.76	3.41	99.3	37,792
% Reduced	63%	63%	18%	-2%	—	66%	—	1%	64%	—	5%	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	198	198	39.4	86.2	0.16	1.24	19.8	21.0	1.14	10.1	11.3	—	35,182	35,182	0.83	3.44	2.58	36,232
Mit.	73.2	73.2	32.7	88.2	0.16	0.38	19.8	19.9	0.37	10.1	10.3	—	35,182	35,182	0.83	3.44	2.58	36,232
% Reduced	63%	63%	17%	-2%	—	70%	—	5%	68%	—	9%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	59.0	58.8	31.2	70.8	0.14	0.84	16.7	17.2	0.78	4.50	5.27	—	29,922	29,922	0.65	2.95	32.7	30,850
Mit.	23.2	23.0	25.8	72.5	0.14	0.32	16.7	17.0	0.31	4.50	4.69	—	29,922	29,922	0.65	2.95	32.7	30,850
% Reduced	61%	61%	17%	-2%	—	62%	—	1%	60%	—	11%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.8	10.7	5.69	12.9	0.02	0.15	3.05	3.14	0.14	0.82	0.96	—	4,954	4,954	0.11	0.49	5.41	5,108
Mit.	4.23	4.20	4.71	13.2	0.02	0.06	3.05	3.11	0.06	0.82	0.86	—	4,954	4,954	0.11	0.49	5.41	5,108
% Reduced	61%	61%	17%	-2%	—	62%	—	1%	60%	—	11%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.55	8.39	36.9	103	0.16	1.12	19.5	20.2	1.03	4.80	5.42	—	36,659	36,659	0.76	3.41	99.3	37,792
2027	9.16	7.99	34.8	97.0	0.16	0.61	19.5	20.2	0.58	4.80	5.38	—	36,022	36,022	0.72	3.41	88.3	37,143
2028	8.21	7.65	33.5	91.4	0.16	0.57	19.5	20.1	0.55	4.80	5.34	—	35,282	35,282	0.72	3.25	78.1	36,348
2029	7.83	6.68	31.8	86.4	0.16	0.55	19.5	20.1	0.52	4.80	5.32	—	34,526	34,526	0.68	2.81	68.7	35,448
2030	7.49	6.40	30.3	82.0	0.16	0.53	19.5	20.1	0.51	4.80	5.31	—	33,774	33,774	0.55	2.67	60.7	34,644

2031	198	198	29.3	78.0	0.16	0.51	19.5	20.1	0.36	4.80	5.16	—	32,987	32,987	0.51	2.54	53.0	33,808
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.10	7.87	39.4	86.2	0.16	1.24	19.8	21.0	1.14	10.1	11.3	—	35,182	35,182	0.83	3.44	2.58	36,232
2027	8.23	7.49	37.4	80.9	0.16	0.61	19.5	20.2	0.58	4.80	5.38	—	34,573	34,573	0.83	3.44	2.29	35,623
2028	7.74	6.68	35.5	76.7	0.16	0.57	19.5	20.1	0.55	4.80	5.34	—	33,865	33,865	0.80	3.31	2.02	34,873
2029	7.44	6.28	34.2	72.6	0.16	0.55	19.5	20.1	0.52	4.80	5.32	—	33,139	33,139	0.76	3.29	1.78	34,141
2030	7.07	5.95	32.7	69.2	0.16	0.53	19.5	20.1	0.51	4.80	5.31	—	32,414	32,414	0.62	3.12	1.57	33,360
2031	198	198	31.2	65.6	0.16	0.51	19.5	20.1	0.36	4.80	5.16	—	31,651	31,651	0.59	2.98	1.37	32,556
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.81	4.12	27.0	42.3	0.08	0.84	12.7	13.5	0.78	4.50	5.27	—	14,235	14,235	0.38	1.07	13.0	14,575
2027	7.06	6.42	31.2	70.8	0.14	0.52	16.7	17.2	0.50	4.09	4.59	—	29,922	29,922	0.65	2.95	32.7	30,850
2028	6.67	5.77	30.0	66.7	0.14	0.49	16.7	17.2	0.47	4.11	4.58	—	29,388	29,388	0.65	2.80	28.9	30,267
2029	6.34	5.36	28.4	63.3	0.14	0.47	16.7	17.2	0.45	4.09	4.54	—	28,680	28,680	0.62	2.79	25.4	29,552
2030	6.12	5.11	27.1	60.1	0.14	0.45	16.7	17.1	0.44	4.09	4.53	—	28,052	28,052	0.50	2.67	22.4	28,884
2031	59.0	58.8	10.5	24.1	0.05	0.20	6.16	6.36	0.16	1.50	1.66	—	9,958	9,958	0.18	0.70	7.00	10,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.88	0.75	4.93	7.72	0.01	0.15	2.32	2.47	0.14	0.82	0.96	—	2,357	2,357	0.06	0.18	2.16	2,413
2027	1.29	1.17	5.69	12.9	0.02	0.09	3.05	3.14	0.09	0.75	0.84	—	4,954	4,954	0.11	0.49	5.41	5,108
2028	1.22	1.05	5.48	12.2	0.02	0.09	3.05	3.14	0.09	0.75	0.84	—	4,866	4,866	0.11	0.46	4.79	5,011
2029	1.16	0.98	5.18	11.5	0.02	0.09	3.05	3.13	0.08	0.75	0.83	—	4,748	4,748	0.10	0.46	4.21	4,893
2030	1.12	0.93	4.95	11.0	0.02	0.08	3.05	3.13	0.08	0.75	0.83	—	4,644	4,644	0.08	0.44	3.72	4,782
2031	10.8	10.7	1.91	4.40	0.01	0.04	1.12	1.16	0.03	0.27	0.30	—	1,649	1,649	0.03	0.12	1.16	1,685

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.79	7.78	30.1	105	0.16	0.38	19.5	19.9	0.37	4.80	5.17	—	36,659	36,659	0.76	3.41	99.3	37,792
2027	8.44	7.42	28.5	99.0	0.16	0.37	19.5	19.9	0.37	4.80	5.16	—	36,022	36,022	0.72	3.41	88.3	37,143
2028	7.52	7.10	27.6	93.4	0.16	0.36	19.5	19.9	0.36	4.80	5.16	—	35,282	35,282	0.72	3.25	78.1	36,348
2029	7.16	6.16	26.2	88.4	0.16	0.36	19.5	19.9	0.36	4.80	5.15	—	34,526	34,526	0.68	2.81	68.7	35,448
2030	6.85	5.89	24.9	84.0	0.16	0.36	19.5	19.9	0.35	4.80	5.15	—	33,774	33,774	0.55	2.67	60.7	34,644
2031	73.4	73.2	24.2	80.1	0.16	0.35	19.5	19.9	0.22	4.80	5.01	—	32,987	32,987	0.51	2.54	53.0	33,808
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.35	7.26	32.7	88.2	0.16	0.38	19.8	19.9	0.37	10.1	10.3	—	35,182	35,182	0.83	3.44	2.58	36,232
2027	7.50	6.91	31.1	83.0	0.16	0.37	19.5	19.9	0.37	4.80	5.16	—	34,573	34,573	0.83	3.44	2.29	35,623
2028	7.06	6.13	29.6	78.7	0.16	0.36	19.5	19.9	0.36	4.80	5.16	—	33,865	33,865	0.80	3.31	2.02	34,873
2029	6.77	5.75	28.6	74.7	0.16	0.36	19.5	19.9	0.36	4.80	5.15	—	33,139	33,139	0.76	3.29	1.78	34,141
2030	6.43	5.44	27.3	71.2	0.16	0.36	19.5	19.9	0.35	4.80	5.15	—	32,414	32,414	0.62	3.12	1.57	33,360
2031	73.2	73.2	26.0	67.7	0.16	0.35	19.5	19.9	0.22	4.80	5.01	—	31,651	31,651	0.59	2.98	1.37	32,556
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.97	2.63	12.0	45.9	0.08	0.20	12.7	12.9	0.20	4.50	4.69	—	14,235	14,235	0.38	1.07	13.0	14,575
2027	6.44	5.92	25.8	72.5	0.14	0.32	16.7	17.0	0.31	4.09	4.41	—	29,922	29,922	0.65	2.95	32.7	30,850
2028	6.08	5.30	25.0	68.4	0.14	0.31	16.7	17.0	0.31	4.11	4.42	—	29,388	29,388	0.65	2.80	28.9	30,267
2029	5.77	4.91	23.6	65.0	0.14	0.31	16.7	17.0	0.31	4.09	4.40	—	28,680	28,680	0.62	2.79	25.4	29,552
2030	5.57	4.68	22.5	61.8	0.14	0.31	16.7	17.0	0.30	4.09	4.40	—	28,052	28,052	0.50	2.67	22.4	28,884
2031	23.2	23.0	7.98	24.9	0.05	0.12	6.16	6.28	0.08	1.50	1.58	—	9,958	9,958	0.18	0.70	7.00	10,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.54	0.48	2.19	8.38	0.01	0.04	2.32	2.35	0.04	0.82	0.86	—	2,357	2,357	0.06	0.18	2.16	2,413
2027	1.18	1.08	4.71	13.2	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,954	4,954	0.11	0.49	5.41	5,108
2028	1.11	0.97	4.56	12.5	0.02	0.06	3.05	3.11	0.06	0.75	0.81	—	4,866	4,866	0.11	0.46	4.79	5,011

2029	1.05	0.90	4.31	11.9	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,748	4,748	0.10	0.46	4.21	4,893
2030	1.02	0.85	4.11	11.3	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,644	4,644	0.08	0.44	3.72	4,782
2031	4.23	4.20	1.46	4.54	0.01	0.02	1.12	1.15	0.01	0.27	0.29	—	1,649	1,649	0.03	0.12	1.16	1,685

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	4.55	4.50	0.01	0.19	—	0.19	0.18	—	0.18	—	827	827	0.03	0.01	—	830

Dust From Material Movement	—	—	—	—	—	—	3.07	3.07	—	1.58	1.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.83	0.82	< 0.005	0.04	—	0.04	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Dust From Material Movement	—	—	—	—	—	—	0.56	0.56	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.04	23.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80	3.80	< 0.005	< 0.005	0.01	3.85

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.57	3.48	28.2	0.05	0.13	—	0.13	0.13	—	0.13	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.54	4.40	0.01	0.02	—	0.02	0.02	—	0.02	—	827	827	0.03	0.01	—	830
Dust From Material Movement	—	—	—	—	—	—	3.07	3.07	—	1.58	1.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	137	137	0.01	< 0.005	—	137
Dust From Material Movement	—	—	—	—	—	—	0.56	0.56	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.04	23.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80	3.80	< 0.005	< 0.005	0.01	3.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	10.9	11.0	0.02	0.45	—	0.45	0.41	—	0.41	—	2,639	2,639	0.11	0.02	—	2,648

Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.46	1.46	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.99	2.01	< 0.005	0.08	—	0.08	0.08	—	0.08	—	437	437	0.02	< 0.005	—	438
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.1	67.1	< 0.005	< 0.005	0.11	68.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.79	4.74	35.4	0.06	0.17	—	0.17	0.16	—	0.16	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.79	4.74	35.4	0.06	0.17	—	0.17	0.16	—	0.16	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.31	1.90	14.2	0.02	0.07	—	0.07	0.07	—	0.07	—	2,639	2,639	0.11	0.02	—	2,648
Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.46	1.46	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.35	2.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	437	437	0.02	< 0.005	—	438
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.1	67.1	< 0.005	< 0.005	0.11	68.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.96	3.90	0.01	0.11	—	0.11	0.10	—	0.10	—	721	721	0.03	0.01	—	723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	119	119	< 0.005	< 0.005	—	120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.28	6.72	4.32	82.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,527	15,527	0.30	0.56	53.3	15,755
Vendor	0.99	0.60	22.7	7.62	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,735	18,735	0.36	2.82	46.0	19,631
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.87	6.23	5.44	65.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,034	14,034	0.38	0.60	1.38	14,224
Vendor	0.96	0.57	24.1	7.89	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,751	18,751	0.36	2.82	1.20	19,602
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.05	1.87	1.47	20.1	0.00	0.00	4.31	4.31	0.00	1.01	1.01	—	4,324	4,324	0.10	0.18	6.92	4,387
Vendor	0.29	0.18	7.11	2.33	0.04	0.08	1.54	1.62	0.08	0.43	0.51	—	5,633	5,633	0.11	0.85	5.99	5,895

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.27	3.67	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	716	716	0.02	0.03	1.14	726
Vendor	0.05	0.03	1.30	0.42	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	933	933	0.02	0.14	0.99	976
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.47	3.12	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.47	3.12	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	0.94	4.50	0.01	0.03	—	0.03	0.03	—	0.03	—	721	721	0.03	0.01	—	723

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	0.82	< 0.005	0.01	—	0.01	0.01	—	0.01	—	119	119	< 0.005	< 0.005	—	120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.28	6.72	4.32	82.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,527	15,527	0.30	0.56	53.3	15,755
Vendor	0.99	0.60	22.7	7.62	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,735	18,735	0.36	2.82	46.0	19,631
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.87	6.23	5.44	65.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,034	14,034	0.38	0.60	1.38	14,224
Vendor	0.96	0.57	24.1	7.89	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,751	18,751	0.36	2.82	1.20	19,602
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.05	1.87	1.47	20.1	0.00	0.00	4.31	4.31	0.00	1.01	1.01	—	4,324	4,324	0.10	0.18	6.92	4,387
Vendor	0.29	0.18	7.11	2.33	0.04	0.08	1.54	1.62	0.08	0.43	0.51	—	5,633	5,633	0.11	0.85	5.99	5,895
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.27	3.67	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	716	716	0.02	0.03	1.14	726
Vendor	0.05	0.03	1.30	0.42	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	933	933	0.02	0.14	0.99	976
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	8.05	11.1	0.02	0.29	—	0.29	0.27	—	0.27	—	2,055	2,055	0.08	0.02	—	2,062
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.47	2.02	< 0.005	0.05	—	0.05	0.05	—	0.05	—	340	340	0.01	< 0.005	—	341

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.94	6.38	3.79	76.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,281	15,281	0.26	0.56	47.9	15,504
Vendor	0.99	0.58	21.7	7.31	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,343	18,343	0.36	2.82	40.4	19,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.04	5.89	4.92	60.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,817	13,817	0.38	0.60	1.24	14,006
Vendor	0.96	0.57	23.1	7.58	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,360	18,360	0.36	2.82	1.05	19,211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.18	5.05	3.73	53.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	12,138	12,138	0.26	0.51	17.7	12,316
Vendor	0.83	0.49	19.4	6.37	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	15,729	15,729	0.31	2.42	14.9	16,472
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.92	0.68	9.73	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	2,010	2,010	0.04	0.09	2.94	2,039
Vendor	0.15	0.09	3.54	1.16	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,604	2,604	0.05	0.40	2.47	2,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.45	3.08	15.0	0.02	0.10	—	0.10	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.45	3.08	15.0	0.02	0.10	—	0.10	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.39	2.64	12.8	0.02	0.09	—	0.09	0.08	—	0.08	—	2,055	2,055	0.08	0.02	—	2,062
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.48	2.34	< 0.005	0.02	—	0.02	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.94	6.38	3.79	76.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,281	15,281	0.26	0.56	47.9	15,504
Vendor	0.99	0.58	21.7	7.31	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,343	18,343	0.36	2.82	40.4	19,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.04	5.89	4.92	60.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,817	13,817	0.38	0.60	1.24	14,006
Vendor	0.96	0.57	23.1	7.58	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,360	18,360	0.36	2.82	1.05	19,211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.18	5.05	3.73	53.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	12,138	12,138	0.26	0.51	17.7	12,316
Vendor	0.83	0.49	19.4	6.37	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	15,729	15,729	0.31	2.42	14.9	16,472
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.92	0.68	9.73	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	2,010	2,010	0.04	0.09	2.94	2,039
Vendor	0.15	0.09	3.54	1.16	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,604	2,604	0.05	0.40	2.47	2,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.85	7.67	11.1	0.02	0.26	—	0.26	0.24	—	0.24	—	2,061	2,061	0.08	0.02	—	2,068
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.40	2.03	< 0.005	0.05	—	0.05	0.04	—	0.04	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.19	6.08	3.72	71.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,985	14,985	0.26	0.56	42.9	15,202
Vendor	0.84	0.58	20.9	6.99	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,900	17,900	0.36	2.67	35.2	18,740
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.74	5.14	4.39	56.5	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,551	13,551	0.34	0.60	1.11	13,740
Vendor	0.82	0.55	22.2	7.25	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,916	17,916	0.36	2.69	0.91	18,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.96	4.45	3.68	49.5	0.00	0.00	12.3	12.3	0.00	2.89	2.89	—	11,937	11,937	0.26	0.48	15.9	12,104
Vendor	0.69	0.48	18.7	6.11	0.12	0.23	4.41	4.64	0.23	1.22	1.45	—	15,391	15,391	0.31	2.30	13.0	16,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.81	0.67	9.03	0.00	0.00	2.25	2.25	0.00	0.53	0.53	—	1,976	1,976	0.04	0.08	2.63	2,004
Vendor	0.13	0.09	3.41	1.12	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,548	2,548	0.05	0.38	2.16	2,665
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.44	3.04	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.50	0.44	3.04	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.38	2.61	12.8	0.02	0.08	—	0.08	0.08	—	0.08	—	2,061	2,061	0.08	0.02	—	2,068
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.48	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.19	6.08	3.72	71.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,985	14,985	0.26	0.56	42.9	15,202
Vendor	0.84	0.58	20.9	6.99	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,900	17,900	0.36	2.67	35.2	18,740
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.14	4.39	56.5	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,551	13,551	0.34	0.60	1.11	13,740
Vendor	0.82	0.55	22.2	7.25	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,916	17,916	0.36	2.69	0.91	18,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.96	4.45	3.68	49.5	0.00	0.00	12.3	12.3	0.00	2.89	2.89	—	11,937	11,937	0.26	0.48	15.9	12,104
Vendor	0.69	0.48	18.7	6.11	0.12	0.23	4.41	4.64	0.23	1.22	1.45	—	15,391	15,391	0.31	2.30	13.0	16,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.81	0.67	9.03	0.00	0.00	2.25	2.25	0.00	0.53	0.53	—	1,976	1,976	0.04	0.08	2.63	2,004
Vendor	0.13	0.09	3.41	1.12	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,548	2,548	0.05	0.38	2.16	2,665
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.36	11.1	0.02	0.24	—	0.24	0.22	—	0.22	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.34	2.02	< 0.005	0.04	—	0.04	0.04	—	0.04	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.85	5.29	3.23	66.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,708	14,708	0.23	0.11	38.2	14,786
Vendor	0.82	0.43	20.0	6.83	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,421	17,421	0.36	2.67	30.5	18,257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.51	4.91	4.32	52.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,304	13,304	0.30	0.60	0.99	13,491
Vendor	0.78	0.40	21.3	7.07	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,438	17,438	0.36	2.67	0.79	18,244
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.66	4.18	3.22	46.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,687	11,687	0.23	0.48	14.1	11,850
Vendor	0.69	0.36	17.8	5.94	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,939	14,939	0.31	2.29	11.3	15,640
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.85	0.76	0.59	8.44	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,935	1,935	0.04	0.08	2.33	1,962
Vendor	0.13	0.07	3.25	1.08	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,473	2,473	0.05	0.38	1.88	2,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.44	3.02	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.44	3.02	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.37	2.59	12.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.85	5.29	3.23	66.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,708	14,708	0.23	0.11	38.2	14,786
Vendor	0.82	0.43	20.0	6.83	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,421	17,421	0.36	2.67	30.5	18,257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.51	4.91	4.32	52.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,304	13,304	0.30	0.60	0.99	13,491
Vendor	0.78	0.40	21.3	7.07	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,438	17,438	0.36	2.67	0.79	18,244
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.66	4.18	3.22	46.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,687	11,687	0.23	0.48	14.1	11,850
Vendor	0.69	0.36	17.8	5.94	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,939	14,939	0.31	2.29	11.3	15,640
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.76	0.59	8.44	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,935	1,935	0.04	0.08	2.33	1,962
Vendor	0.13	0.07	3.25	1.08	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,473	2,473	0.05	0.38	1.88	2,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.81	7.19	11.0	0.02	0.22	—	0.22	0.21	—	0.21	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.31	2.02	< 0.005	0.04	—	0.04	0.04	—	0.04	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.55	5.02	2.74	62.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,463	14,463	0.23	0.11	33.8	14,537
Vendor	0.82	0.43	19.2	6.68	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,914	16,914	0.22	2.54	26.9	17,702
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.17	4.61	3.83	49.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,086	13,086	0.30	0.56	0.87	13,262
Vendor	0.78	0.40	20.5	6.90	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,931	16,931	0.22	2.54	0.70	17,693
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	3.95	2.80	43.2	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,494	11,494	0.23	0.48	12.5	11,656
Vendor	0.69	0.36	17.2	5.81	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,504	14,504	0.19	2.18	9.94	15,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.72	0.51	7.89	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,903	1,903	0.04	0.08	2.07	1,930
Vendor	0.13	0.07	3.13	1.06	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,401	2,401	0.03	0.36	1.65	2,511
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.48	0.43	3.00	14.9	0.02	0.09	—	0.09	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.43	3.00	14.9	0.02	0.09	—	0.09	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.37	2.57	12.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.55	5.02	2.74	62.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,463	14,463	0.23	0.11	33.8	14,537
Vendor	0.82	0.43	19.2	6.68	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,914	16,914	0.22	2.54	26.9	17,702
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.17	4.61	3.83	49.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,086	13,086	0.30	0.56	0.87	13,262
Vendor	0.78	0.40	20.5	6.90	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,931	16,931	0.22	2.54	0.70	17,693
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	3.95	2.80	43.2	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,494	11,494	0.23	0.48	12.5	11,656
Vendor	0.69	0.36	17.2	5.81	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,504	14,504	0.19	2.18	9.94	15,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.72	0.51	7.89	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,903	1,903	0.04	0.08	2.07	1,930
Vendor	0.13	0.07	3.13	1.06	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,401	2,401	0.03	0.36	1.65	2,511
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.30	0.25	2.21	3.50	0.01	0.07	—	0.07	0.06	—	0.06	—	653	653	0.03	0.01	—	655
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.05	0.05	0.40	0.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	108	108	< 0.005	< 0.005	—	108
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.25	4.72	2.67	58.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,207	14,207	0.19	0.11	29.8	14,276
Vendor	0.82	0.43	18.5	6.51	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,383	16,383	0.22	2.40	23.2	17,127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.34	3.31	46.2	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	12,854	12,854	0.26	0.56	0.77	13,029
Vendor	0.78	0.40	19.7	6.59	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,400	16,400	0.22	2.40	0.60	17,122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.22	1.19	0.87	12.9	0.00	0.00	3.91	3.91	0.00	0.92	0.92	—	3,588	3,588	0.06	0.03	3.50	3,603
Vendor	0.22	0.11	5.24	1.76	0.04	0.07	1.40	1.47	0.04	0.39	0.42	—	4,465	4,465	0.06	0.65	2.73	4,664
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.16	2.35	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	594	594	0.01	0.01	0.58	596
Vendor	0.04	0.02	0.96	0.32	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	739	739	0.01	0.11	0.45	772
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.43	2.99	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.43	2.99	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.13	0.12	0.81	4.06	0.01	0.02	—	0.02	0.02	—	0.02	—	653	653	0.03	0.01	—	655
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.74	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.25	4.72	2.67	58.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,207	14,207	0.19	0.11	29.8	14,276
Vendor	0.82	0.43	18.5	6.51	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,383	16,383	0.22	2.40	23.2	17,127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.34	3.31	46.2	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	12,854	12,854	0.26	0.56	0.77	13,029
Vendor	0.78	0.40	19.7	6.59	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,400	16,400	0.22	2.40	0.60	17,122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.22	1.19	0.87	12.9	0.00	0.00	3.91	3.91	0.00	0.92	0.92	—	3,588	3,588	0.06	0.03	3.50	3,603
Vendor	0.22	0.11	5.24	1.76	0.04	0.07	1.40	1.47	0.04	0.39	0.42	—	4,465	4,465	0.06	0.65	2.73	4,664
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.16	2.35	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	594	594	0.01	0.01	0.58	596
Vendor	0.04	0.02	0.96	0.32	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	739	739	0.01	0.11	0.45	772

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	6.13	9.88	0.01	0.21	—	0.21	0.19	—	0.19	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.75	2.82	< 0.005	0.06	—	0.06	0.05	—	0.05	—	430	430	0.02	< 0.005	—	432
Paving	0.66	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.32	0.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	71.3	71.3	< 0.005	< 0.005	—	71.5
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.26	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.03	33.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	0.01	5.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Paving (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.37	0.33	2.27	10.6	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.65	3.01	< 0.005	0.02	—	0.02	0.02	—	0.02	—	430	430	0.02	< 0.005	—	432
Paving	0.66	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	71.3	71.3	< 0.005	< 0.005	—	71.5
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.26	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.03	33.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	0.01	5.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	197	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	197	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.0	38.0	< 0.005	< 0.005	—	38.2
Architectural Coatings	56.1	56.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.30	6.30	< 0.005	< 0.005	—	6.32
Architectural Coatings	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	0.94	0.53	11.7	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,841	2,841	0.04	0.02	5.95	2,855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.66	9.23	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,571	2,571	0.05	0.11	0.15	2,606
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.18	2.70	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	751	751	0.01	0.01	0.73	754
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.49	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.12	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	72.2	72.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	72.2	72.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.0	38.0	< 0.005	< 0.005	—	38.2
Architectural Coatings	20.6	20.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.30	6.30	< 0.005	< 0.005	—	6.32
Architectural Coatings	3.75	3.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	0.94	0.53	11.7	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,841	2,841	0.04	0.02	5.95	2,855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.66	9.23	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,571	2,571	0.05	0.11	0.15	2,606
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.18	2.70	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	751	751	0.01	0.01	0.73	754
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.49	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.12	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2026	3/7/2026	6.00	57.0	—
Grading	Grading	3/9/2026	8/25/2026	6.00	146	—
Building Construction	Building Construction	8/26/2026	4/26/2031	6.00	1,462	—
Paving	Paving	4/28/2031	8/26/2031	6.00	104	—
Architectural Coating	Architectural Coating	8/27/2031	12/25/2031	6.00	104	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,714	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	674	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	343	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,714	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	674	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	343	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	6,167,400	2,055,800	303,575

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	85.5	0.00	—
Grading	—	—	438	0.00	—
Paving	0.00	0.00	0.00	0.00	116

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

General Office Building	0.00	0%
Other Non-Asphalt Surfaces	24.6	0%
Parking Lot	24.6	100%
University/College (4yr)	0.00	0%
Industrial Park	0.00	0%
Government Office Building	0.00	0%
Other Asphalt Surfaces	67.0	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2

Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954

Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4

Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

Pacific Gateway (Remaining East Development Area Construction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Remaining East Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	7,162	1000sqft	235	7,162,300	1,362,000	—	—	—
Parking Lot	1,649	1000sqft	37.8	0.00	0.00	—	—	—

Other Non-Asphalt Surfaces	1,104	1000sqft	25.3	0.00	0.00	—	—	—
City Park	36.4	Acre	36.4	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	3,554	1000sqft	81.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	255	254	41.5	117	0.26	0.79	34.2	34.7	0.73	8.40	8.82	—	53,440	53,440	0.82	4.17	68.8	54,772
Mit.	86.2	86.0	36.8	119	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	53,440	53,440	0.82	4.17	68.8	54,772
% Reduced	66%	66%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	255	254	46.7	101	0.26	0.93	34.2	34.7	0.85	10.1	11.0	—	52,333	52,333	0.95	4.40	2.08	53,671
Mit.	86.2	86.0	41.8	103	0.26	0.32	34.2	34.5	0.31	10.1	10.2	—	52,333	52,333	0.95	4.40	2.08	53,671
% Reduced	66%	66%	10%	-2%	—	66%	—	< 0.5%	63%	—	7%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	97.9	97.7	37.4	84.9	0.22	0.67	29.3	29.6	0.62	7.19	7.53	—	44,307	44,307	0.76	3.57	25.5	45,416
Mit.	34.1	33.9	33.4	86.7	0.22	0.27	29.3	29.6	0.27	7.19	7.45	—	44,307	44,307	0.76	3.57	25.5	45,416
% Reduced	65%	65%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.9	17.8	6.83	15.5	0.04	0.12	5.35	5.41	0.11	1.31	1.37	—	7,335	7,335	0.13	0.59	4.21	7,519
Mit.	6.22	6.19	6.09	15.8	0.04	0.05	5.35	5.40	0.05	1.31	1.36	—	7,335	7,335	0.13	0.59	4.21	7,519
% Reduced	65%	65%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.10	2.61	19.4	26.4	0.06	0.79	9.37	10.2	0.73	3.69	4.42	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	9.86	9.12	41.5	117	0.26	0.44	34.2	34.7	0.42	8.40	8.82	—	53,440	53,440	0.82	4.17	68.8	54,772
2034	9.38	8.64	40.2	113	0.26	0.43	34.2	34.7	0.41	8.40	8.81	—	52,318	52,318	0.75	4.17	58.6	53,637
2035	9.23	8.56	39.2	108	0.26	0.42	34.2	34.6	0.40	8.40	8.80	—	51,282	51,282	0.75	3.93	49.6	52,522
2036	8.99	8.25	38.3	104	0.26	0.40	34.2	34.6	0.39	8.40	8.79	—	50,350	50,350	0.75	3.93	41.6	51,582
2037	8.64	7.91	36.8	102	0.26	0.39	34.2	34.6	0.38	8.40	8.78	—	49,524	49,524	0.75	3.93	34.5	50,750
2038	8.43	7.70	36.0	99.9	0.26	0.39	34.2	34.6	0.38	8.40	8.77	—	48,697	48,697	0.75	3.70	28.6	49,846
2039	255	254	5.32	16.1	0.01	0.11	5.05	5.06	0.10	1.18	1.19	—	4,696	4,696	0.06	0.04	2.98	4,712
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2032	9.88	8.86	46.7	101	0.26	0.93	34.2	34.7	0.85	10.1	11.0	—	52,333	52,333	0.95	4.40	2.08	53,671
2033	9.30	8.51	44.5	96.6	0.26	0.44	34.2	34.7	0.42	8.40	8.82	—	51,165	51,165	0.89	4.17	1.78	52,430
2034	8.95	8.23	43.4	92.7	0.26	0.43	34.2	34.7	0.41	8.40	8.81	—	50,073	50,073	0.89	4.17	1.52	51,339
2035	8.80	8.08	42.1	89.7	0.26	0.42	34.2	34.6	0.40	8.40	8.80	—	49,064	49,064	0.89	3.93	1.29	50,259
2036	8.64	7.93	40.4	87.0	0.26	0.40	34.2	34.6	0.39	8.40	8.79	—	48,155	48,155	0.82	3.93	1.08	49,349
2037	8.36	7.65	39.4	84.2	0.26	0.39	34.2	34.6	0.38	8.40	8.78	—	47,351	47,351	0.82	3.93	0.89	48,544
2038	8.02	6.53	38.8	81.9	0.26	0.39	34.2	34.6	0.38	8.40	8.77	—	46,546	46,546	0.79	3.70	0.74	47,668
2039	255	254	38.2	80.2	0.26	0.38	34.2	34.6	0.37	8.40	8.77	—	45,908	45,908	0.79	3.70	0.61	47,031
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.51	3.03	20.4	31.7	0.07	0.67	13.2	13.8	0.62	5.06	5.67	—	11,052	11,052	0.30	0.57	4.25	11,232
2033	7.96	7.32	37.4	84.9	0.22	0.38	29.2	29.6	0.36	7.17	7.53	—	44,307	44,307	0.76	3.57	25.5	45,416
2034	7.60	6.96	35.6	81.1	0.22	0.37	29.2	29.6	0.35	7.17	7.52	—	43,365	43,365	0.70	3.57	21.7	44,468
2035	7.58	6.89	34.7	78.7	0.22	0.36	29.2	29.6	0.34	7.17	7.51	—	42,494	42,494	0.70	3.37	18.3	43,534
2036	7.47	6.84	33.9	76.1	0.22	0.35	29.3	29.6	0.34	7.19	7.52	—	41,825	41,825	0.70	3.38	15.4	42,866
2037	7.16	6.53	33.1	73.6	0.22	0.34	29.2	29.6	0.33	7.17	7.50	—	41,017	41,017	0.70	3.37	12.8	42,052
2038	6.92	6.29	32.5	72.4	0.22	0.33	29.2	29.6	0.32	7.17	7.49	—	40,323	40,323	0.65	3.17	10.6	41,294
2039	97.9	97.7	5.36	14.9	0.03	0.07	4.51	4.58	0.07	1.09	1.15	—	5,748	5,748	0.10	0.30	1.26	5,841
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.64	0.55	3.72	5.79	0.01	0.12	2.40	2.52	0.11	0.92	1.04	—	1,830	1,830	0.05	0.09	0.70	1,860
2033	1.45	1.34	6.83	15.5	0.04	0.07	5.33	5.40	0.07	1.31	1.37	—	7,335	7,335	0.13	0.59	4.21	7,519
2034	1.39	1.27	6.50	14.8	0.04	0.07	5.33	5.40	0.06	1.31	1.37	—	7,179	7,179	0.12	0.59	3.59	7,362
2035	1.38	1.26	6.34	14.4	0.04	0.06	5.33	5.40	0.06	1.31	1.37	—	7,035	7,035	0.12	0.56	3.03	7,208
2036	1.36	1.25	6.19	13.9	0.04	0.06	5.35	5.41	0.06	1.31	1.37	—	6,925	6,925	0.12	0.56	2.55	7,097
2037	1.31	1.19	6.04	13.4	0.04	0.06	5.33	5.39	0.06	1.31	1.37	—	6,791	6,791	0.12	0.56	2.12	6,962
2038	1.26	1.15	5.94	13.2	0.04	0.06	5.33	5.39	0.06	1.31	1.37	—	6,676	6,676	0.11	0.52	1.75	6,837
2039	17.9	17.8	0.98	2.72	< 0.005	0.01	0.82	0.84	0.01	0.20	0.21	—	952	952	0.02	0.05	0.21	967

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	9.28	8.66	36.8	119	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	53,440	53,440	0.82	4.17	68.8	54,772
2034	8.82	8.19	35.6	115	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	52,318	52,318	0.75	4.17	58.6	53,637
2035	8.68	8.13	34.8	111	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	51,282	51,282	0.75	3.93	49.6	52,522
2036	8.46	7.83	34.1	107	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	50,350	50,350	0.75	3.93	41.6	51,582
2037	8.12	7.50	32.7	104	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	49,524	49,524	0.75	3.93	34.5	50,750
2038	7.92	7.30	32.1	102	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	48,697	48,697	0.75	3.70	28.6	49,846
2039	86.2	86.0	2.16	16.1	0.01	0.05	5.05	5.06	0.05	1.18	1.19	—	4,696	4,696	0.06	0.04	2.98	4,712
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	9.28	8.39	41.8	103	0.26	0.32	34.2	34.5	0.31	10.1	10.2	—	52,333	52,333	0.95	4.40	2.08	53,671
2033	8.71	8.05	39.8	98.7	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	51,165	51,165	0.89	4.17	1.78	52,430
2034	8.38	7.78	38.9	94.8	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	50,073	50,073	0.89	4.17	1.52	51,339
2035	8.25	7.65	37.7	91.9	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	49,064	49,064	0.89	3.93	1.29	50,259
2036	8.11	7.52	36.3	89.3	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	48,155	48,155	0.82	3.93	1.08	49,349
2037	7.85	7.25	35.4	86.6	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	47,351	47,351	0.82	3.93	0.89	48,544
2038	7.51	6.13	34.8	84.3	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	46,546	46,546	0.79	3.70	0.74	47,668
2039	86.2	86.0	34.4	82.7	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	45,908	45,908	0.79	3.70	0.61	47,031
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	1.66	1.54	7.86	37.6	0.07	0.13	13.2	13.3	0.13	5.06	5.19	—	11,052	11,052	0.30	0.57	4.25	11,232
2033	7.46	6.92	33.4	86.7	0.22	0.27	29.2	29.5	0.27	7.17	7.44	—	44,307	44,307	0.76	3.57	25.5	45,416
2034	7.11	6.58	31.7	82.9	0.22	0.27	29.2	29.5	0.27	7.17	7.44	—	43,365	43,365	0.70	3.57	21.7	44,468

2035	7.11	6.52	31.0	80.6	0.22	0.27	29.2	29.5	0.27	7.17	7.43	—	42,494	42,494	0.70	3.37	18.3	43,534
2036	7.02	6.48	30.3	78.0	0.22	0.27	29.3	29.6	0.27	7.19	7.45	—	41,825	41,825	0.70	3.38	15.4	42,866
2037	6.71	6.18	29.7	75.7	0.22	0.27	29.2	29.5	0.26	7.17	7.43	—	41,017	41,017	0.70	3.37	12.8	42,052
2038	6.49	5.95	29.2	74.5	0.22	0.27	29.2	29.5	0.26	7.17	7.43	—	40,323	40,323	0.65	3.17	10.6	41,294
2039	34.1	33.9	3.88	15.4	0.03	0.04	4.51	4.56	0.04	1.09	1.13	—	5,748	5,748	0.10	0.30	1.26	5,841
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.30	0.28	1.43	6.87	0.01	0.02	2.40	2.43	0.02	0.92	0.95	—	1,830	1,830	0.05	0.09	0.70	1,860
2033	1.36	1.26	6.09	15.8	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,335	7,335	0.13	0.59	4.21	7,519
2034	1.30	1.20	5.79	15.1	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,179	7,179	0.12	0.59	3.59	7,362
2035	1.30	1.19	5.65	14.7	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,035	7,035	0.12	0.56	3.03	7,208
2036	1.28	1.18	5.53	14.2	0.04	0.05	5.35	5.40	0.05	1.31	1.36	—	6,925	6,925	0.12	0.56	2.55	7,097
2037	1.23	1.13	5.41	13.8	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	6,791	6,791	0.12	0.56	2.12	6,962
2038	1.18	1.09	5.32	13.6	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	6,676	6,676	0.11	0.52	1.75	6,837
2039	6.22	6.19	0.71	2.80	< 0.005	0.01	0.82	0.83	0.01	0.20	0.21	—	952	952	0.02	0.05	0.21	967

3. Construction Emissions Details

3.1. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.56	4.58	5.29	0.01	0.19	—	0.19	0.17	—	0.17	—	1,088	1,088	0.04	0.01	—	1,092
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	2.08	2.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.84	0.97	< 0.005	0.03	—	0.03	0.03	—	0.03	—	180	180	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	—	0.74	0.74	—	0.38	0.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.02	27.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.52	4.52	< 0.005	< 0.005	< 0.005	4.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.53	5.82	0.01	0.02	—	0.02	0.02	—	0.02	—	1,088	1,088	0.04	0.01	—	1,092
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	2.08	2.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	1.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	180	180	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	—	0.74	0.74	—	0.38	0.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.02	27.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.52	4.52	< 0.005	< 0.005	< 0.005	4.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	10.4	13.8	0.03	0.42	—	0.42	0.39	—	0.39	—	3,524	3,524	0.14	0.03	—	3,536
Dust From Material Movement	—	—	—	—	—	—	4.92	4.92	—	1.95	1.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.89	2.51	0.01	0.08	—	0.08	0.07	—	0.07	—	583	583	0.02	< 0.005	—	585
Dust From Material Movement	—	—	—	—	—	—	0.90	0.90	—	0.36	0.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.07	81.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	13.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.39	2.50	18.9	0.03	0.08	—	0.08	0.08	—	0.08	—	3,524	3,524	0.14	0.03	—	3,536
Dust From Material Movement	—	—	—	—	—	—	4.92	4.92	—	1.95	1.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	3.45	0.01	0.01	—	0.01	0.01	—	0.01	—	583	583	0.02	< 0.005	—	585
Dust From Material Movement	—	—	—	—	—	—	0.90	0.90	—	0.36	0.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.07	81.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	13.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.94	1.53	< 0.005	0.03	—	0.03	0.02	—	0.02	—	287	287	0.01	< 0.005	—	288
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.49	7.29	5.73	77.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,273	22,273	0.46	0.20	1.18	22,345
Vendor	1.33	0.68	33.1	11.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	27,663	27,663	0.39	4.18	0.90	28,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.89	0.87	0.57	9.43	0.00	0.00	3.01	3.01	0.00	0.71	0.71	—	2,734	2,734	0.05	0.02	2.36	2,744
Vendor	0.17	0.09	3.88	1.35	0.03	0.03	1.07	1.10	0.03	0.30	0.32	—	3,311	3,311	0.05	0.50	1.79	3,463
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.10	1.72	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	453	453	0.01	< 0.005	0.39	454
Vendor	0.03	0.02	0.71	0.25	0.01	0.01	0.20	0.20	0.01	0.05	0.06	—	548	548	0.01	0.08	0.30	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.98	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.36	1.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.07	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.49	7.29	5.73	77.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,273	22,273	0.46	0.20	1.18	22,345
Vendor	1.33	0.68	33.1	11.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	27,663	27,663	0.39	4.18	0.90	28,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.57	9.43	0.00	0.00	3.01	3.01	0.00	0.71	0.71	—	2,734	2,734	0.05	0.02	2.36	2,744
Vendor	0.17	0.09	3.88	1.35	0.03	0.03	1.07	1.10	0.03	0.30	0.32	—	3,311	3,311	0.05	0.50	1.79	3,463
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.10	1.72	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	453	453	0.01	< 0.005	0.39	454
Vendor	0.03	0.02	0.71	0.25	0.01	0.01	0.20	0.20	0.01	0.05	0.06	—	548	548	0.01	0.08	0.30	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.90	0.75	6.57	11.0	0.02	0.17	—	0.17	0.16	—	0.16	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.16	0.14	1.20	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.62	7.49	3.76	93.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	24,276	24,276	0.33	0.20	39.7	24,383
Vendor	1.20	0.75	30.1	10.9	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,767	26,767	0.39	3.95	29.1	27,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	6.96	4.88	72.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,969	21,969	0.40	0.20	1.03	22,040
Vendor	1.09	0.68	32.0	11.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,798	26,798	0.39	3.95	0.75	27,986
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.08	5.96	4.01	64.5	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,298	19,298	0.34	0.17	14.7	19,372
Vendor	0.98	0.60	26.8	9.43	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,955	22,955	0.33	3.39	10.8	23,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.09	0.73	11.8	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,195	3,195	0.06	0.03	2.43	3,207
Vendor	0.18	0.11	4.90	1.72	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,800	3,800	0.06	0.56	1.78	3,971
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.62	7.49	3.76	93.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	24,276	24,276	0.33	0.20	39.7	24,383
Vendor	1.20	0.75	30.1	10.9	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,767	26,767	0.39	3.95	29.1	27,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	6.96	4.88	72.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,969	21,969	0.40	0.20	1.03	22,040
Vendor	1.09	0.68	32.0	11.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,798	26,798	0.39	3.95	0.75	27,986
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.08	5.96	4.01	64.5	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,298	19,298	0.34	0.17	14.7	19,372
Vendor	0.98	0.60	26.8	9.43	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,955	22,955	0.33	3.39	10.8	23,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.09	0.73	11.8	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,195	3,195	0.06	0.03	2.43	3,207
Vendor	0.18	0.11	4.90	1.72	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,800	3,800	0.06	0.56	1.78	3,971
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.88	0.74	6.45	10.9	0.02	0.16	—	0.16	0.15	—	0.15	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.18	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	7.02	3.69	89.2	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,972	23,972	0.27	0.20	34.2	24,072
Vendor	1.20	0.75	29.0	10.6	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,949	25,949	0.39	3.95	24.5	27,160
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	4.81	69.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,696	21,696	0.40	0.20	0.89	21,766
Vendor	1.09	0.68	31.1	11.0	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,980	25,980	0.39	3.95	0.63	27,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.62	3.28	60.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,057	19,057	0.28	0.17	12.7	19,128
Vendor	0.98	0.60	25.9	9.23	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,253	22,253	0.33	3.39	9.04	23,279
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.03	0.60	11.1	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,155	3,155	0.05	0.03	2.10	3,167
Vendor	0.18	0.11	4.73	1.68	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,684	3,684	0.06	0.56	1.50	3,854

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	7.02	3.69	89.2	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,972	23,972	0.27	0.20	34.2	24,072
Vendor	1.20	0.75	29.0	10.6	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,949	25,949	0.39	3.95	24.5	27,160
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	4.81	69.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,696	21,696	0.40	0.20	0.89	21,766
Vendor	1.09	0.68	31.1	11.0	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,980	25,980	0.39	3.95	0.63	27,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.62	3.28	60.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,057	19,057	0.28	0.17	12.7	19,128
Vendor	0.98	0.60	25.9	9.23	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,253	22,253	0.33	3.39	9.04	23,279
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.03	0.60	11.1	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,155	3,155	0.05	0.03	2.10	3,167
Vendor	0.18	0.11	4.73	1.68	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,684	3,684	0.06	0.56	1.50	3,854
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.02	6.96	3.69	85.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,702	23,702	0.27	0.20	29.3	23,797
Vendor	1.20	0.75	28.1	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,184	25,184	0.39	3.71	20.3	26,320
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.69	6.56	4.75	66.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,452	21,452	0.40	0.20	0.76	21,522
Vendor	1.09	0.68	30.0	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,215	25,215	0.39	3.71	0.53	26,332
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.56	3.28	58.8	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,842	18,842	0.28	0.17	10.8	18,911
Vendor	0.98	0.60	25.2	9.01	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	21,597	21,597	0.33	3.18	7.51	22,562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.02	0.60	10.7	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,120	3,120	0.05	0.03	1.79	3,131
Vendor	0.18	0.11	4.59	1.64	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,576	3,576	0.06	0.53	1.24	3,735
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.02	6.96	3.69	85.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,702	23,702	0.27	0.20	29.3	23,797
Vendor	1.20	0.75	28.1	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,184	25,184	0.39	3.71	20.3	26,320
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.69	6.56	4.75	66.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,452	21,452	0.40	0.20	0.76	21,522
Vendor	1.09	0.68	30.0	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,215	25,215	0.39	3.71	0.53	26,332
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.56	3.28	58.8	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,842	18,842	0.28	0.17	10.8	18,911
Vendor	0.98	0.60	25.2	9.01	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	21,597	21,597	0.33	3.18	7.51	22,562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.02	0.60	10.7	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,120	3,120	0.05	0.03	1.79	3,131
Vendor	0.18	0.11	4.59	1.64	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,576	3,576	0.06	0.53	1.24	3,735
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	3.63	81.5	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,459	23,459	0.27	0.20	24.9	23,550
Vendor	1.17	0.73	27.5	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,494	24,494	0.39	3.71	16.6	25,627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.56	6.43	3.89	63.7	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,233	21,233	0.33	0.20	0.65	21,301
Vendor	1.09	0.68	29.4	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,526	24,526	0.39	3.71	0.43	25,643
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.64	5.52	3.23	56.2	0.00	0.00	21.6	21.6	0.00	5.07	5.07	—	18,701	18,701	0.29	0.17	9.27	18,769
Vendor	0.98	0.60	24.5	9.03	0.20	0.20	7.67	7.88	0.20	2.12	2.32	—	21,064	21,064	0.34	3.19	6.17	22,030
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.03	1.01	0.59	10.3	0.00	0.00	3.95	3.95	0.00	0.92	0.92	—	3,096	3,096	0.05	0.03	1.53	3,107
Vendor	0.18	0.11	4.48	1.65	0.04	0.04	1.40	1.44	0.04	0.39	0.42	—	3,487	3,487	0.06	0.53	1.02	3,647
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	3.63	81.5	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,459	23,459	0.27	0.20	24.9	23,550
Vendor	1.17	0.73	27.5	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,494	24,494	0.39	3.71	16.6	25,627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.56	6.43	3.89	63.7	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,233	21,233	0.33	0.20	0.65	21,301
Vendor	1.09	0.68	29.4	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,526	24,526	0.39	3.71	0.43	25,643
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.64	5.52	3.23	56.2	0.00	0.00	21.6	21.6	0.00	5.07	5.07	—	18,701	18,701	0.29	0.17	9.27	18,769
Vendor	0.98	0.60	24.5	9.03	0.20	0.20	7.67	7.88	0.20	2.12	2.32	—	21,064	21,064	0.34	3.19	6.17	22,030
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.03	1.01	0.59	10.3	0.00	0.00	3.95	3.95	0.00	0.92	0.92	—	3,096	3,096	0.05	0.03	1.53	3,107
Vendor	0.18	0.11	4.48	1.65	0.04	0.04	1.40	1.44	0.04	0.39	0.42	—	3,487	3,487	0.06	0.53	1.02	3,647

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.49	6.36	2.84	79.4	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,247	23,247	0.27	0.20	21.1	23,334
Vendor	1.17	0.73	26.9	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,880	23,880	0.39	3.71	13.4	25,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	3.82	61.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,042	21,042	0.33	0.20	0.55	21,110
Vendor	1.09	0.68	28.6	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,912	23,912	0.39	3.71	0.35	25,029
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.34	5.22	3.16	54.1	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,482	18,482	0.28	0.17	7.82	18,548
Vendor	0.98	0.60	24.0	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,480	20,480	0.33	3.18	4.97	21,442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.95	0.58	9.88	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,060	3,060	0.05	0.03	1.29	3,071
Vendor	0.18	0.11	4.37	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,391	3,391	0.06	0.53	0.82	3,550
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.49	6.36	2.84	79.4	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,247	23,247	0.27	0.20	21.1	23,334
Vendor	1.17	0.73	26.9	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,880	23,880	0.39	3.71	13.4	25,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	3.82	61.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,042	21,042	0.33	0.20	0.55	21,110
Vendor	1.09	0.68	28.6	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,912	23,912	0.39	3.71	0.35	25,029
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.34	5.22	3.16	54.1	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,482	18,482	0.28	0.17	7.82	18,548
Vendor	0.98	0.60	24.0	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,480	20,480	0.33	3.18	4.97	21,442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.95	0.58	9.88	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,060	3,060	0.05	0.03	1.29	3,071
Vendor	0.18	0.11	4.37	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,391	3,391	0.06	0.53	0.82	3,550
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	2.77	77.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,972	22,972	0.27	0.20	17.8	23,056
Vendor	1.17	0.73	26.4	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,328	23,328	0.39	3.48	10.7	24,385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.96	5.04	3.82	59.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,790	20,790	0.33	0.20	0.46	20,858
Vendor	1.09	0.68	28.0	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,360	23,360	0.36	3.48	0.28	24,406
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.11	5.00	3.16	52.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,261	18,261	0.23	0.17	6.59	18,325
Vendor	0.98	0.60	23.5	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,007	20,007	0.33	2.98	3.98	20,908
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.93	0.91	0.58	9.66	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,023	3,023	0.04	0.03	1.09	3,034
Vendor	0.18	0.11	4.28	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,312	3,312	0.06	0.49	0.66	3,461
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	2.77	77.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,972	22,972	0.27	0.20	17.8	23,056
Vendor	1.17	0.73	26.4	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,328	23,328	0.39	3.48	10.7	24,385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.96	5.04	3.82	59.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,790	20,790	0.33	0.20	0.46	20,858
Vendor	1.09	0.68	28.0	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,360	23,360	0.36	3.48	0.28	24,406
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.11	5.00	3.16	52.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,261	18,261	0.23	0.17	6.59	18,325
Vendor	0.98	0.60	23.5	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,007	20,007	0.33	2.98	3.98	20,908
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.93	0.91	0.58	9.66	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,023	3,023	0.04	0.03	1.09	3,034
Vendor	0.18	0.11	4.28	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,312	3,312	0.06	0.49	0.66	3,461
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.51	0.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	180	180	0.01	< 0.005	—	181
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.09	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.8	29.8	< 0.005	< 0.005	—	29.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.83	4.91	3.76	57.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,644	20,644	0.33	0.20	0.39	20,712
Vendor	1.09	0.68	27.7	10.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	22,868	22,868	0.36	3.48	0.22	23,914
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.36	0.27	4.48	0.00	0.00	1.89	1.89	0.00	0.44	0.44	—	1,590	1,590	0.02	0.01	0.48	1,595
Vendor	0.09	0.05	2.01	0.75	0.02	0.02	0.67	0.69	0.02	0.19	0.20	—	1,717	1,717	0.03	0.26	0.28	1,796
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	263	263	< 0.005	< 0.005	0.08	264
Vendor	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.12	0.13	< 0.005	0.03	0.04	—	284	284	< 0.005	0.04	0.05	297
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	1.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	180	180	0.01	< 0.005	—	181
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.8	29.8	< 0.005	< 0.005	—	29.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.83	4.91	3.76	57.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,644	20,644	0.33	0.20	0.39	20,712
Vendor	1.09	0.68	27.7	10.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	22,868	22,868	0.36	3.48	0.22	23,914
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.43	0.36	0.27	4.48	0.00	0.00	1.89	1.89	0.00	0.44	0.44	—	1,590	1,590	0.02	0.01	0.48	1,595
Vendor	0.09	0.05	2.01	0.75	0.02	0.02	0.67	0.69	0.02	0.19	0.20	—	1,717	1,717	0.03	0.26	0.28	1,796
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	263	263	< 0.005	< 0.005	0.08	264
Vendor	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.12	0.13	< 0.005	0.03	0.04	—	284	284	< 0.005	0.04	0.05	297
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Paving (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.31	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.31	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	2.01	3.69	0.01	0.04	—	0.04	0.04	—	0.04	—	571	571	0.02	< 0.005	—	573
Paving	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.37	0.67	< 0.005	0.01	—	0.01	0.01	—	0.01	—	94.6	94.6	< 0.005	< 0.005	—	94.9
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.07	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	< 0.005	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	0.01	40.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.60	6.60	< 0.005	< 0.005	< 0.005	6.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Paving (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.27	2.14	10.5	0.01	0.05	—	0.05	0.05	—	0.05	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.27	2.14	10.5	0.01	0.05	—	0.05	0.05	—	0.05	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.10	0.81	3.96	0.01	0.02	—	0.02	0.02	—	0.02	—	571	571	0.02	< 0.005	—	573
Paving	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.72	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.6	94.6	< 0.005	< 0.005	—	94.9
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.07	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	< 0.005	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	0.01	40.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.60	6.60	< 0.005	< 0.005	< 0.005	6.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Architectural Coating (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	253	253	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	253	253	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.5	50.5	< 0.005	< 0.005	—	50.7
Architectural Coatings	95.8	95.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.36	8.36	< 0.005	< 0.005	—	8.39
Architectural Coatings	17.5	17.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.01	0.55	15.1	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,562	4,562	0.05	0.04	2.98	4,578
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	0.98	0.75	11.5	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,129	4,129	0.07	0.04	0.08	4,142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.37	0.27	4.51	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,600	1,600	0.02	0.02	0.49	1,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	265	265	< 0.005	< 0.005	0.08	266
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Architectural Coating (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	84.9	84.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	84.9	84.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.5	50.5	< 0.005	< 0.005	—	50.7
Architectural Coatings	32.1	32.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.36	8.36	< 0.005	< 0.005	—	8.39
Architectural Coatings	5.86	5.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.01	0.55	15.1	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,562	4,562	0.05	0.04	2.98	4,578

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	0.98	0.75	11.5	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,129	4,129	0.07	0.04	0.08	4,142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.37	0.27	4.51	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,600	1,600	0.02	0.02	0.49	1,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	265	265	< 0.005	< 0.005	0.08	266
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2032	3/28/2032	6.00	75.0	—
Grading	Grading	3/29/2032	11/10/2032	6.00	195	—
Building Construction	Building Construction	11/11/2032	2/1/2039	6.00	1,949	—
Paving	Paving	2/2/2039	7/12/2039	6.00	138	—
Architectural Coating	Architectural Coating	7/13/2039	12/20/2039	6.00	138	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3,008	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,174	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	602	11.9	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3,008	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,174	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	602	11.9	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	10,743,450	3,581,150	378,390

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	113	0.00	—
Grading	—	—	585	0.00	—
Paving	0.00	0.00	0.00	0.00	145

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	37.8	100%

Other Non-Asphalt Surfaces	25.3	0%
City Park	0.00	0%
Other Asphalt Surfaces	81.6	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2

Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708

Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0

Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific construction schedule.

Pacific Gateway (Central Development Area Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Central Development Area Construction)
Construction Start Date	1/1/2038
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	6,857	1000sqft	198	6,856,500	1,786,304	—	—	—
Parking Lot	1,823	1000sqft	41.9	0.00	0.00	—	—	—

Other Asphalt Surfaces	4,015	1000sqft	92.2	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	1,299	1000sqft	29.8	0.00	0.00	—	—	—
City Park	72.4	Acre	72.4	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	196	196	34.1	93.9	0.25	0.61	32.8	33.1	0.56	10.1	10.7	—	46,095	46,095	0.70	3.54	22.4	47,189
Mit.	67.6	67.4	30.3	96.4	0.25	0.30	32.8	33.1	0.30	10.1	10.2	—	46,095	46,095	0.70	3.54	22.4	47,189
% Reduced	66%	66%	11%	-3%	—	51%	—	< 0.5%	47%	—	4%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	196	196	36.9	77.3	0.25	0.61	32.8	33.1	0.56	10.1	10.7	—	44,051	44,051	0.76	3.54	0.58	45,125
Mit.	67.5	67.4	33.0	79.8	0.25	0.30	32.8	33.1	0.30	10.1	10.2	—	44,051	44,051	0.76	3.54	0.58	45,125
% Reduced	66%	66%	10%	-3%	—	51%	—	< 0.5%	47%	—	4%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	93.8	93.8	29.9	67.0	0.21	0.47	28.1	28.4	0.43	6.88	7.19	—	37,798	37,798	0.60	3.04	7.55	38,727
Mit.	32.8	32.8	26.6	69.1	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	37,798	37,798	0.60	3.04	7.55	38,727
% Reduced	65%	65%	11%	-3%	—	45%	—	< 0.5%	41%	—	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.1	17.1	5.45	12.2	0.04	0.09	5.12	5.18	0.08	1.26	1.31	—	6,258	6,258	0.10	0.50	1.25	6,412
Mit.	5.98	5.98	4.86	12.6	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,258	6,258	0.10	0.50	1.25	6,412
% Reduced	65%	65%	11%	-3%	—	45%	—	< 0.5%	41%	—	1%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.69	2.26	16.5	23.7	0.06	0.61	19.8	20.4	0.56	10.1	10.7	—	6,749	6,749	0.27	0.05	0.12	6,772
2039	7.79	6.33	34.1	93.9	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	46,095	46,095	0.70	3.54	22.4	47,189
2040	7.46	6.09	33.7	92.1	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	45,538	45,538	0.64	3.54	18.2	46,627
2041	7.33	5.96	33.1	91.0	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	45,045	45,045	0.64	3.54	14.8	46,131
2042	7.14	5.70	32.8	89.8	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	44,608	44,608	0.64	3.31	12.0	45,624
2043	6.94	5.55	32.4	88.8	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	44,227	44,227	0.64	3.31	9.61	45,240
2044	6.62	5.41	32.0	87.8	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	43,899	43,899	0.64	3.25	7.71	44,892
2045	6.48	5.34	31.7	87.7	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	43,615	43,615	0.64	3.25	6.16	44,606
2046	6.42	5.27	31.6	86.8	0.25	0.34	32.8	33.1	0.33	8.04	8.37	—	43,370	43,370	0.64	3.25	4.90	44,360
2047	196	196	5.02	14.1	0.01	0.07	4.84	4.84	0.07	1.13	1.14	—	4,368	4,368	0.06	0.03	0.61	4,377

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.69	2.26	17.9	23.6	0.07	0.61	19.8	20.4	0.56	10.1	10.7	—	7,866	7,866	0.27	0.71	0.08	8,081
2039	7.59	6.15	36.9	77.3	0.25	0.50	32.8	33.1	0.46	8.04	8.40	—	44,051	44,051	0.76	3.54	0.58	45,125
2040	7.26	5.83	36.3	76.0	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	43,508	43,508	0.76	3.54	0.47	44,582
2041	7.07	5.63	35.9	74.8	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	43,026	43,026	0.70	3.54	0.38	44,099
2042	7.00	5.57	34.6	73.4	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	42,599	42,599	0.70	3.31	0.31	43,604
2043	6.87	5.50	34.2	73.1	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	42,226	42,226	0.70	3.31	0.25	43,232
2044	6.44	5.30	33.8	72.0	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	41,905	41,905	0.70	3.31	0.20	42,911
2045	5.62	5.20	33.7	71.7	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	41,628	41,628	0.70	3.31	0.16	42,633
2046	5.55	5.10	33.4	71.6	0.25	0.34	32.8	33.1	0.33	8.04	8.37	—	41,388	41,388	0.70	3.31	0.13	42,393
2047	196	196	5.02	11.0	0.01	0.07	4.84	4.84	0.07	1.13	1.14	—	3,966	3,966	0.06	0.04	0.02	3,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.25	1.89	12.9	19.3	0.05	0.47	10.7	11.2	0.43	4.80	5.23	—	5,438	5,438	0.22	0.05	0.06	5,458
2039	6.10	4.93	29.1	63.5	0.20	0.33	26.2	26.5	0.32	6.53	6.84	—	35,235	35,235	0.57	2.76	7.55	36,080
2040	6.29	5.10	29.9	67.0	0.21	0.32	28.1	28.4	0.31	6.88	7.19	—	37,798	37,798	0.60	3.04	6.77	38,727
2041	6.05	4.87	29.3	65.8	0.21	0.31	28.0	28.3	0.30	6.86	7.16	—	37,280	37,280	0.60	3.03	5.48	38,204
2042	5.93	4.76	29.0	64.7	0.21	0.31	28.0	28.3	0.30	6.86	7.16	—	36,912	36,912	0.60	2.84	4.42	37,778
2043	5.87	4.64	28.7	64.4	0.21	0.30	28.0	28.3	0.30	6.86	7.16	—	36,591	36,591	0.60	2.84	3.56	37,456
2044	5.58	4.58	28.5	63.7	0.21	0.30	28.1	28.4	0.29	6.88	7.17	—	36,414	36,414	0.60	2.85	2.86	37,280
2045	5.50	4.45	28.0	63.4	0.21	0.30	28.0	28.3	0.29	6.86	7.15	—	36,075	36,075	0.55	2.84	2.27	36,937
2046	4.89	4.03	24.7	55.8	0.19	0.26	24.2	24.4	0.25	5.93	6.18	—	31,144	31,144	0.48	2.45	1.57	31,889
2047	93.8	93.8	2.38	8.92	0.01	0.03	2.33	2.36	0.02	0.55	0.57	—	2,497	2,497	0.04	0.02	0.13	2,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.41	0.35	2.35	3.53	0.01	0.09	1.95	2.04	0.08	0.88	0.95	—	900	900	0.04	0.01	0.01	904
2039	1.11	0.90	5.31	11.6	0.04	0.06	4.78	4.84	0.06	1.19	1.25	—	5,834	5,834	0.09	0.46	1.25	5,973
2040	1.15	0.93	5.45	12.2	0.04	0.06	5.12	5.18	0.06	1.26	1.31	—	6,258	6,258	0.10	0.50	1.12	6,412

2041	1.10	0.89	5.35	12.0	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,172	6,172	0.10	0.50	0.91	6,325
2042	1.08	0.87	5.29	11.8	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,111	6,111	0.10	0.47	0.73	6,255
2043	1.07	0.85	5.24	11.8	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,058	6,058	0.10	0.47	0.59	6,201
2044	1.02	0.83	5.19	11.6	0.04	0.05	5.12	5.17	0.05	1.26	1.31	—	6,029	6,029	0.10	0.47	0.47	6,172
2045	1.00	0.81	5.12	11.6	0.04	0.05	5.11	5.16	0.05	1.25	1.31	—	5,973	5,973	0.09	0.47	0.38	6,115
2046	0.89	0.74	4.51	10.2	0.03	0.05	4.41	4.46	0.05	1.08	1.13	—	5,156	5,156	0.08	0.41	0.26	5,280
2047	17.1	17.1	0.43	1.63	< 0.005	< 0.005	0.42	0.43	< 0.005	0.10	0.10	—	413	413	0.01	< 0.005	0.02	415

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.79	0.77	4.61	35.9	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,749	6,749	0.27	0.05	0.12	6,772
2039	7.29	5.94	30.3	96.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	46,095	46,095	0.70	3.54	22.4	47,189
2040	6.97	5.71	29.9	94.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	45,538	45,538	0.64	3.54	18.2	46,627
2041	6.84	5.58	29.4	93.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	45,045	45,045	0.64	3.54	14.8	46,131
2042	6.65	5.33	29.1	92.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,608	44,608	0.64	3.31	12.0	45,624
2043	6.46	5.18	28.8	91.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,227	44,227	0.64	3.31	9.61	45,240
2044	6.15	5.05	28.5	90.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,899	43,899	0.64	3.25	7.71	44,892
2045	6.02	4.98	28.2	90.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,615	43,615	0.64	3.25	6.16	44,606
2046	5.96	4.92	28.2	89.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,370	43,370	0.64	3.25	4.90	44,360
2047	67.6	67.4	2.09	14.1	0.01	0.04	4.84	4.84	0.04	1.13	1.14	—	4,368	4,368	0.06	0.03	0.61	4,377
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.83	0.76	10.4	35.7	0.07	0.15	19.8	19.9	0.14	10.1	10.2	—	7,866	7,866	0.27	0.71	0.08	8,081
2039	7.09	5.76	33.0	79.8	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,051	44,051	0.76	3.54	0.58	45,125

2040	6.77	5.44	32.5	78.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,508	43,508	0.76	3.54	0.47	44,582
2041	6.58	5.25	32.2	77.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,026	43,026	0.70	3.54	0.38	44,099
2042	6.52	5.19	30.9	76.0	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	42,599	42,599	0.70	3.31	0.31	43,604
2043	6.39	5.13	30.6	75.7	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	42,226	42,226	0.70	3.31	0.25	43,232
2044	5.97	4.94	30.3	74.7	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,905	41,905	0.70	3.31	0.20	42,911
2045	5.15	4.85	30.2	74.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,628	41,628	0.70	3.31	0.16	42,633
2046	5.09	4.74	30.0	74.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,388	41,388	0.70	3.31	0.13	42,393
2047	67.5	67.4	2.09	11.0	0.01	0.04	4.84	4.84	0.04	1.13	1.14	—	3,966	3,966	0.06	0.04	0.02	3,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.61	0.59	3.49	28.6	0.05	0.10	10.7	10.8	0.10	4.80	4.90	—	5,438	5,438	0.22	0.05	0.06	5,458
2039	5.58	4.52	25.4	66.4	0.20	0.24	26.2	26.4	0.24	6.53	6.77	—	35,235	35,235	0.57	2.76	7.55	36,080
2040	5.86	4.78	26.6	69.1	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	37,798	37,798	0.60	3.04	6.77	38,727
2041	5.63	4.54	26.1	68.0	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	37,280	37,280	0.60	3.03	5.48	38,204
2042	5.52	4.44	25.8	66.9	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,912	36,912	0.60	2.84	4.42	37,778
2043	5.46	4.33	25.6	66.7	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,591	36,591	0.60	2.84	3.56	37,456
2044	5.18	4.26	25.4	66.0	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	36,414	36,414	0.60	2.85	2.86	37,280
2045	5.11	4.14	25.0	65.8	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,075	36,075	0.55	2.84	2.27	36,937
2046	4.52	3.75	21.8	57.9	0.19	0.23	24.2	24.4	0.22	5.93	6.15	—	31,144	31,144	0.48	2.45	1.57	31,889
2047	32.8	32.8	1.34	9.19	0.01	0.02	2.33	2.34	0.02	0.55	0.56	—	2,497	2,497	0.04	0.02	0.13	2,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.11	0.11	0.64	5.22	0.01	0.02	1.95	1.97	0.02	0.88	0.89	—	900	900	0.04	0.01	0.01	904
2039	1.02	0.82	4.63	12.1	0.04	0.04	4.78	4.82	0.04	1.19	1.24	—	5,834	5,834	0.09	0.46	1.25	5,973
2040	1.07	0.87	4.86	12.6	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,258	6,258	0.10	0.50	1.12	6,412
2041	1.03	0.83	4.77	12.4	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,172	6,172	0.10	0.50	0.91	6,325
2042	1.01	0.81	4.71	12.2	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,111	6,111	0.10	0.47	0.73	6,255
2043	1.00	0.79	4.67	12.2	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,058	6,058	0.10	0.47	0.59	6,201
2044	0.94	0.78	4.64	12.1	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,029	6,029	0.10	0.47	0.47	6,172
2045	0.93	0.76	4.57	12.0	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	5,973	5,973	0.09	0.47	0.38	6,115

2046	0.83	0.68	3.99	10.6	0.03	0.04	4.41	4.45	0.04	1.08	1.12	—	5,156	5,156	0.08	0.41	0.26	5,280
2047	5.98	5.98	0.24	1.68	< 0.005	< 0.005	0.42	0.43	< 0.005	0.10	0.10	—	413	413	0.01	< 0.005	0.02	415

3. Construction Emissions Details

3.1. Demolition (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.60	12.4	13.2	0.03	0.40	—	0.40	0.37	—	0.37	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	7.35	7.35	—	1.11	1.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.5	37.5	< 0.005	< 0.005	—	37.7
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.22	6.22	< 0.005	< 0.005	—	6.24
Demoliti on	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	< 0.005	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	0.09	5.50	1.38	0.04	0.07	1.53	1.61	0.07	0.42	0.49	—	4,336	4,336	0.05	0.68	0.08	4,539
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	47.5	47.5	< 0.005	0.01	0.01	49.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	< 0.005	8.23

3.2. Demolition (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.58	4.90	18.2	0.03	0.07	—	0.07	0.07	—	0.07	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	7.35	7.35	—	1.11	1.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.5	37.5	< 0.005	< 0.005	—	37.7
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.22	6.22	< 0.005	< 0.005	—	6.24
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	< 0.005	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	0.09	5.50	1.38	0.04	0.07	1.53	1.61	0.07	0.42	0.49	—	4,336	4,336	0.05	0.68	0.08	4,539
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	47.5	47.5	< 0.005	0.01	0.01	49.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	< 0.005	8.23

3.3. Site Preparation (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	16.5	20.3	0.05	0.61	—	0.61	0.56	—	0.56	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	16.5	20.3	0.05	0.61	—	0.61	0.56	—	0.56	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.25	5.23	0.01	0.16	—	0.16	0.15	—	0.15	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	0.10	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.9	31.9	< 0.005	< 0.005	0.01	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.28	5.28	< 0.005	< 0.005	< 0.005	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.67	7.29	0.01	0.03	—	0.03	0.03	—	0.03	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	226	226	0.01	< 0.005	—	227

Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	0.10	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.9	31.9	< 0.005	< 0.005	0.01	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.28	5.28	< 0.005	< 0.005	< 0.005	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.57	2.16	14.3	23.2	0.06	0.52	—	0.52	0.48	—	0.48	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.57	2.16	14.3	23.2	0.06	0.52	—	0.52	0.48	—	0.48	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.51	1.27	8.42	13.6	0.04	0.30	—	0.30	0.28	—	0.28	—	3,872	3,872	0.16	0.03	—	3,886
Dust From Material Movement	—	—	—	—	—	—	5.40	5.40	—	2.15	2.15	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	1.54	2.48	0.01	0.06	—	0.06	0.05	—	0.05	—	641	641	0.03	0.01	—	643
Dust From Material Movement	—	—	—	—	—	—	0.99	0.99	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	< 0.005	0.12	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	138	138	< 0.005	< 0.005	< 0.005	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	83.2	83.2	< 0.005	< 0.005	0.03	83.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	< 0.005	13.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.59	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.59	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.44	0.43	2.69	20.8	0.04	0.08	—	0.08	0.08	—	0.08	—	3,872	3,872	0.16	0.03	—	3,886
Dust From Material Movement	—	—	—	—	—	—	5.40	5.40	—	2.15	2.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.08	0.49	3.79	0.01	0.01	—	0.01	0.01	—	0.01	—	641	641	0.03	0.01	—	643
Dust From Material Movement	—	—	—	—	—	—	0.99	0.99	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	< 0.005	0.12	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	138	138	< 0.005	< 0.005	< 0.005	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	83.2	83.2	< 0.005	< 0.005	0.03	83.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	< 0.005	13.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.52	2.12	13.8	22.7	0.06	0.50	—	0.50	0.46	—	0.46	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.16	1.07	1.76	< 0.005	0.04	—	0.04	0.04	—	0.04	—	511	511	0.02	< 0.005	—	513

Dust From Material Movement	—	—	—	—	—	—	0.71	0.71	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.20	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	84.6	84.6	< 0.005	< 0.005	—	84.9
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.38	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	137	137	< 0.005	< 0.005	< 0.005	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	< 0.005	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.81

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.58	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.36	2.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	511	511	0.02	< 0.005	—	513
Dust From Material Movement	—	—	—	—	—	—	0.71	0.71	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	84.6	84.6	< 0.005	< 0.005	—	84.9
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.38	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	137	137	< 0.005	< 0.005	< 0.005	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	< 0.005	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.28	9.67	0.02	0.11	—	0.11	0.10	—	0.10	—	1,869	1,869	0.08	0.02	—	1,875
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.96	1.77	< 0.005	0.02	—	0.02	0.02	—	0.02	—	309	309	0.01	< 0.005	—	310
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.71	4.83	2.65	72.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,837	21,837	0.25	0.19	14.2	21,914
Vendor	1.12	0.70	24.7	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,861	21,861	0.35	3.33	8.12	22,870
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.58	4.70	3.60	55.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,762	19,762	0.32	0.19	0.37	19,828
Vendor	1.05	0.65	26.5	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,891	21,891	0.35	3.33	0.21	22,893
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.30	3.61	2.71	44.5	0.00	0.00	18.8	18.8	0.00	4.40	4.40	—	15,790	15,790	0.20	0.15	4.81	15,844
Vendor	0.85	0.52	20.0	7.49	0.18	0.18	6.66	6.84	0.18	1.84	2.02	—	17,054	17,054	0.27	2.60	2.74	17,837
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.49	8.13	0.00	0.00	3.43	3.43	0.00	0.80	0.80	—	2,614	2,614	0.03	0.02	0.80	2,623
Vendor	0.16	0.10	3.65	1.37	0.03	0.03	1.22	1.25	0.03	0.34	0.37	—	2,823	2,823	0.05	0.43	0.45	2,953
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.32	2.29	11.6	0.02	0.06	—	0.06	0.06	—	0.06	—	1,869	1,869	0.08	0.02	—	1,875
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.42	2.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	309	309	0.01	< 0.005	—	310
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.71	4.83	2.65	72.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,837	21,837	0.25	0.19	14.2	21,914
Vendor	1.12	0.70	24.7	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,861	21,861	0.35	3.33	8.12	22,870
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.58	4.70	3.60	55.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,762	19,762	0.32	0.19	0.37	19,828
Vendor	1.05	0.65	26.5	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,891	21,891	0.35	3.33	0.21	22,893
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.30	3.61	2.71	44.5	0.00	0.00	18.8	18.8	0.00	4.40	4.40	—	15,790	15,790	0.20	0.15	4.81	15,844
Vendor	0.85	0.52	20.0	7.49	0.18	0.18	6.66	6.84	0.18	1.84	2.02	—	17,054	17,054	0.27	2.60	2.74	17,837
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.49	8.13	0.00	0.00	3.43	3.43	0.00	0.80	0.80	—	2,614	2,614	0.03	0.02	0.80	2,623
Vendor	0.16	0.10	3.65	1.37	0.03	0.03	1.22	1.25	0.03	0.34	0.37	—	2,823	2,823	0.05	0.43	0.45	2,953
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.39	4.57	2.59	70.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,703	21,703	0.19	0.19	11.9	21,777
Vendor	1.12	0.72	24.4	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,438	21,438	0.35	3.33	6.35	22,445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.38	3.60	53.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,642	19,642	0.32	0.19	0.31	19,707
Vendor	1.05	0.65	26.0	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,469	21,469	0.35	3.33	0.16	22,470
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.52	3.82	2.33	48.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,302	17,302	0.22	0.16	4.42	17,360
Vendor	0.94	0.60	21.8	8.26	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	18,437	18,437	0.30	2.86	2.35	19,300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.70	0.43	8.77	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,864	2,864	0.04	0.03	0.73	2,874
Vendor	0.17	0.11	3.98	1.51	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	3,052	3,052	0.05	0.47	0.39	3,195
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.39	4.57	2.59	70.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,703	21,703	0.19	0.19	11.9	21,777
Vendor	1.12	0.72	24.4	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,438	21,438	0.35	3.33	6.35	22,445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.38	3.60	53.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,642	19,642	0.32	0.19	0.31	19,707
Vendor	1.05	0.65	26.0	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,469	21,469	0.35	3.33	0.16	22,470
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.52	3.82	2.33	48.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,302	17,302	0.22	0.16	4.42	17,360
Vendor	0.94	0.60	21.8	8.26	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	18,437	18,437	0.30	2.86	2.35	19,300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.70	0.43	8.77	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,864	2,864	0.04	0.03	0.73	2,874
Vendor	0.17	0.11	3.98	1.51	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	3,052	3,052	0.05	0.47	0.39	3,195

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.44	2.59	69.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,589	21,589	0.19	0.19	9.89	21,660
Vendor	1.12	0.72	23.9	9.49	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,060	21,060	0.35	3.33	4.90	22,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	3.53	52.7	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,538	19,538	0.25	0.19	0.26	19,602
Vendor	1.05	0.65	25.7	9.81	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,091	21,091	0.35	3.33	0.13	22,092
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.29	3.59	2.33	46.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,163	17,163	0.22	0.16	3.66	17,221
Vendor	0.94	0.60	21.3	8.26	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	18,062	18,062	0.30	2.85	1.82	18,922
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.42	8.57	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,842	2,842	0.04	0.03	0.61	2,851
Vendor	0.17	0.11	3.89	1.51	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,990	2,990	0.05	0.47	0.30	3,133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.44	2.59	69.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,589	21,589	0.19	0.19	9.89	21,660
Vendor	1.12	0.72	23.9	9.49	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,060	21,060	0.35	3.33	4.90	22,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	3.53	52.7	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,538	19,538	0.25	0.19	0.26	19,602
Vendor	1.05	0.65	25.7	9.81	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,091	21,091	0.35	3.33	0.13	22,092
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.29	3.59	2.33	46.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,163	17,163	0.22	0.16	3.66	17,221
Vendor	0.94	0.60	21.3	8.26	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	18,062	18,062	0.30	2.85	1.82	18,922
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.42	8.57	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,842	2,842	0.04	0.03	0.61	2,851
Vendor	0.17	0.11	3.89	1.51	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,990	2,990	0.05	0.47	0.30	3,133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	2.59	68.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,488	21,488	0.19	0.19	8.18	21,558
Vendor	1.12	0.72	23.6	9.26	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,723	20,723	0.35	3.10	3.77	21,661
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.01	4.13	2.78	51.5	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,448	19,448	0.25	0.19	0.21	19,511
Vendor	1.05	0.65	25.2	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,754	20,754	0.35	3.10	0.10	21,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.18	3.48	2.27	46.0	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,083	17,083	0.22	0.16	3.03	17,140
Vendor	0.94	0.60	21.0	8.07	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,774	17,774	0.30	2.66	1.40	18,576
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.64	0.41	8.40	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,828	2,828	0.04	0.03	0.50	2,838
Vendor	0.17	0.11	3.84	1.47	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,943	2,943	0.05	0.44	0.23	3,075
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	2.59	68.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,488	21,488	0.19	0.19	8.18	21,558
Vendor	1.12	0.72	23.6	9.26	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,723	20,723	0.35	3.10	3.77	21,661
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.01	4.13	2.78	51.5	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,448	19,448	0.25	0.19	0.21	19,511
Vendor	1.05	0.65	25.2	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,754	20,754	0.35	3.10	0.10	21,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.18	3.48	2.27	46.0	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,083	17,083	0.22	0.16	3.03	17,140
Vendor	0.94	0.60	21.0	8.07	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,774	17,774	0.30	2.66	1.40	18,576
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.64	0.41	8.40	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,828	2,828	0.04	0.03	0.50	2,838
Vendor	0.17	0.11	3.84	1.47	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,943	2,943	0.05	0.44	0.23	3,075
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.53	67.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,401	21,401	0.19	0.19	6.72	21,470
Vendor	1.12	0.70	23.3	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,429	20,429	0.35	3.10	2.88	21,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.78	51.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,370	19,370	0.25	0.19	0.17	19,433
Vendor	1.05	0.65	24.9	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,460	20,460	0.35	3.10	0.07	21,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.13	3.37	2.27	45.8	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,014	17,014	0.22	0.16	2.49	17,071
Vendor	0.94	0.60	20.8	8.09	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,522	17,522	0.30	2.66	1.07	18,323
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.62	0.41	8.36	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,817	2,817	0.04	0.03	0.41	2,826
Vendor	0.17	0.11	3.80	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,901	2,901	0.05	0.44	0.18	3,034

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.53	67.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,401	21,401	0.19	0.19	6.72	21,470
Vendor	1.12	0.70	23.3	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,429	20,429	0.35	3.10	2.88	21,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.78	51.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,370	19,370	0.25	0.19	0.17	19,433
Vendor	1.05	0.65	24.9	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,460	20,460	0.35	3.10	0.07	21,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.13	3.37	2.27	45.8	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,014	17,014	0.22	0.16	2.49	17,071
Vendor	0.94	0.60	20.8	8.09	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,522	17,522	0.30	2.66	1.07	18,323
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.62	0.41	8.36	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,817	2,817	0.04	0.03	0.41	2,826
Vendor	0.17	0.11	3.80	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,901	2,901	0.05	0.44	0.18	3,034
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.82	3.94	2.53	66.3	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,330	21,330	0.19	0.13	5.53	21,378
Vendor	0.87	0.70	23.0	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,173	20,173	0.35	3.10	2.18	21,109
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.72	50.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,305	19,305	0.25	0.19	0.14	19,368
Vendor	0.82	0.65	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,204	20,204	0.35	3.10	0.06	21,138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.03	3.33	2.28	45.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,004	17,004	0.22	0.16	2.05	17,060
Vendor	0.75	0.58	20.6	8.11	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	17,350	17,350	0.30	2.67	0.81	18,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.61	0.42	8.24	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,815	2,815	0.04	0.03	0.34	2,825
Vendor	0.14	0.11	3.76	1.48	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	2,872	2,872	0.05	0.44	0.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.82	3.94	2.53	66.3	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,330	21,330	0.19	0.13	5.53	21,378
Vendor	0.87	0.70	23.0	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,173	20,173	0.35	3.10	2.18	21,109
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.72	50.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,305	19,305	0.25	0.19	0.14	19,368
Vendor	0.82	0.65	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,204	20,204	0.35	3.10	0.06	21,138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.03	3.33	2.28	45.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,004	17,004	0.22	0.16	2.05	17,060
Vendor	0.75	0.58	20.6	8.11	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	17,350	17,350	0.30	2.67	0.81	18,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.61	0.42	8.24	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,815	2,815	0.04	0.03	0.34	2,825
Vendor	0.14	0.11	3.76	1.48	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	2,872	2,872	0.05	0.44	0.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.79	0.66	5.50	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.53	66.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,268	21,268	0.19	0.13	4.53	21,315
Vendor	0.87	0.70	22.7	9.31	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,951	19,951	0.35	3.10	1.62	20,886
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.87	3.81	2.72	50.0	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,248	19,248	0.25	0.19	0.12	19,312
Vendor	0.82	0.62	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,982	19,982	0.35	3.10	0.04	20,916
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.97	3.21	2.22	44.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	16,908	16,908	0.16	0.16	1.67	16,963
Vendor	0.75	0.58	20.3	8.11	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,112	17,112	0.30	2.66	0.60	17,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.59	0.40	8.19	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,799	2,799	0.03	0.03	0.28	2,808
Vendor	0.14	0.11	3.71	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,833	2,833	0.05	0.44	0.10	2,966
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.53	66.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,268	21,268	0.19	0.13	4.53	21,315
Vendor	0.87	0.70	22.7	9.31	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,951	19,951	0.35	3.10	1.62	20,886
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.87	3.81	2.72	50.0	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,248	19,248	0.25	0.19	0.12	19,312
Vendor	0.82	0.62	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,982	19,982	0.35	3.10	0.04	20,916
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.97	3.21	2.22	44.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	16,908	16,908	0.16	0.16	1.67	16,963
Vendor	0.75	0.58	20.3	8.11	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,112	17,112	0.30	2.66	0.60	17,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.59	0.40	8.19	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,799	2,799	0.03	0.03	0.28	2,808
Vendor	0.14	0.11	3.71	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,833	2,833	0.05	0.44	0.10	2,966

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.72	8.96	0.02	0.09	—	0.09	0.08	—	0.08	—	1,773	1,773	0.07	0.01	—	1,779
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.12	0.10	0.86	1.64	< 0.005	0.02	—	0.02	0.01	—	0.01	—	294	294	0.01	< 0.005	—	295
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.63	3.81	2.53	65.4	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,215	21,215	0.19	0.13	3.71	21,261
Vendor	0.87	0.70	22.7	9.34	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,759	19,759	0.35	3.10	1.18	20,694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.81	3.68	2.72	49.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,201	19,201	0.25	0.19	0.10	19,264
Vendor	0.82	0.65	24.3	9.61	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,790	19,790	0.35	3.10	0.03	20,724
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.28	2.68	1.92	38.6	0.00	0.00	17.8	17.8	0.00	4.18	4.18	—	14,556	14,556	0.14	0.14	1.19	14,603
Vendor	0.62	0.50	17.5	6.98	0.17	0.17	6.32	6.49	0.17	1.75	1.91	—	14,626	14,626	0.26	2.30	0.38	15,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.49	0.35	7.05	0.00	0.00	3.25	3.25	0.00	0.76	0.76	—	2,410	2,410	0.02	0.02	0.20	2,418
Vendor	0.11	0.09	3.20	1.27	0.03	0.03	1.15	1.18	0.03	0.32	0.35	—	2,421	2,421	0.04	0.38	0.06	2,536
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.31	2.17	11.0	0.02	0.06	—	0.06	0.05	—	0.05	—	1,773	1,773	0.07	0.01	—	1,779
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.40	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	294	294	0.01	< 0.005	—	295
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.63	3.81	2.53	65.4	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,215	21,215	0.19	0.13	3.71	21,261
Vendor	0.87	0.70	22.7	9.34	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,759	19,759	0.35	3.10	1.18	20,694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.81	3.68	2.72	49.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,201	19,201	0.25	0.19	0.10	19,264
Vendor	0.82	0.65	24.3	9.61	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,790	19,790	0.35	3.10	0.03	20,724
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.28	2.68	1.92	38.6	0.00	0.00	17.8	17.8	0.00	4.18	4.18	—	14,556	14,556	0.14	0.14	1.19	14,603
Vendor	0.62	0.50	17.5	6.98	0.17	0.17	6.32	6.49	0.17	1.75	1.91	—	14,626	14,626	0.26	2.30	0.38	15,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.49	0.35	7.05	0.00	0.00	3.25	3.25	0.00	0.76	0.76	—	2,410	2,410	0.02	0.02	0.20	2,418
Vendor	0.11	0.09	3.20	1.27	0.03	0.03	1.15	1.18	0.03	0.32	0.35	—	2,421	2,421	0.04	0.38	0.06	2,536
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	5.02	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.59	1.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.01	< 0.005	—	178
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Paving (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.03	0.03	0.24	1.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	177	177	0.01	< 0.005	—	178
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Paving (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.77	3.44	< 0.005	0.03	—	0.03	0.02	—	0.02	—	536	536	0.02	< 0.005	—	538
Paving	0.72	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.03	0.32	0.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	< 0.005	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.01	6.01	< 0.005	< 0.005	< 0.005	6.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Paving (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.74	3.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	0.72	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	< 0.005	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.01	6.01	< 0.005	< 0.005	< 0.005	6.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Architectural Coating (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	195	195	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	195	195	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	92.5	92.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	16.9	16.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.75	0.51	13.0	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	4,234	4,234	0.04	0.03	0.61	4,244
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.54	9.95	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	3,832	3,832	0.05	0.04	0.02	3,845
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.25	4.87	0.00	0.00	2.28	2.28	0.00	0.54	0.54	—	1,862	1,862	0.02	0.02	0.12	1,868
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.89	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	308	308	< 0.005	< 0.005	0.02	309
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Architectural Coating (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	66.6	66.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	66.6	66.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5

Architect Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	5.76	5.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.75	0.51	13.0	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	4,234	4,234	0.04	0.03	0.61	4,244
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.54	9.95	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	3,832	3,832	0.05	0.04	0.02	3,845
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.25	4.87	0.00	0.00	2.28	2.28	0.00	0.54	0.54	—	1,862	1,862	0.02	0.02	0.12	1,868
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.04	0.89	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	308	308	< 0.005	< 0.005	0.02	309
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2038	1/5/2038	6.00	4.00	—
Site Preparation	Site Preparation	1/6/2038	4/25/2038	6.00	94.0	—
Grading	Grading	4/26/2038	2/2/2039	6.00	243	—
Building Construction	Building Construction	2/3/2039	11/11/2046	6.00	2,433	—
Paving	Paving	11/12/2046	5/31/2047	6.00	173	—
Architectural Coating	Architectural Coating	6/1/2047	12/19/2047	6.00	173	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—

Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	82.8	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,880	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,124	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	576	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	82.8	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,880	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,124	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	576	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	10,284,750	3,428,250	428,369

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	28,754	—
Site Preparation	—	—	141	0.00	—
Grading	—	—	729	0.00	—
Paving	0.00	0.00	0.00	0.00	164

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	41.9	100%
Other Asphalt Surfaces	92.2	100%
Other Non-Asphalt Surfaces	29.8	0%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005
2047	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1

Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100

Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—

Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific construction schedule.
Construction: Architectural Coatings	—

Pacific Gateway (West Development Area Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (West Development Area Construction)
Construction Start Date	1/1/2047
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	6,169	1000sqft	174	6,168,900	1,386,500	—	—	—
Parking Lot	1,331	1000sqft	30.5	0.00	0.00	—	—	—

Other Non-Asphalt Surfaces	899	1000sqft	20.6	0.00	0.00	—	—	—
City Park	58.5	Acre	58.5	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	3,750	1000sqft	86.1	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	188	185	61.6	182	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
Mit.	71.2	69.1	52.2	188	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
% Reduced	62%	63%	15%	-3%	—	13%	—	< 0.5%	11%	—	< 0.5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	186	185	64.9	149	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
Mit.	69.6	69.0	55.6	155	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
% Reduced	63%	63%	14%	-4%	—	13%	—	< 0.5%	11%	—	< 0.5%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	91.7	90.9	49.8	120	0.37	0.53	51.0	51.5	0.51	12.5	13.0	—	63,623	63,623	0.99	4.47	1.41	64,982
Mit.	36.0	35.5	43.3	125	0.37	0.46	51.0	51.4	0.46	12.5	12.9	—	63,623	63,623	0.99	4.47	1.41	64,982
% Reduced	61%	61%	13%	-4%	—	12%	—	< 0.5%	10%	—	< 0.5%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.7	16.6	9.10	21.8	0.07	0.10	9.30	9.40	0.09	2.27	2.37	—	10,533	10,533	0.16	0.74	0.23	10,758
Mit.	6.57	6.47	7.91	22.8	0.07	0.08	9.30	9.39	0.08	2.27	2.36	—	10,533	10,533	0.16	0.74	0.23	10,758
% Reduced	61%	61%	13%	-4%	—	12%	—	< 0.5%	10%	—	< 0.5%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	2.26	1.90	11.8	21.0	0.06	0.35	19.8	20.2	0.33	10.1	10.5	—	6,743	6,743	0.27	0.05	0.02	6,766
2048	5.80	4.75	28.6	78.8	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	38,913	38,913	0.58	2.93	2.82	39,803
2049	5.74	4.70	28.6	78.8	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	38,778	38,778	0.58	2.72	2.28	39,607
2050	188	185	61.6	182	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	175	175	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	2.25	1.90	11.8	20.9	0.06	0.35	19.8	20.2	0.33	10.1	10.5	—	6,729	6,729	0.27	0.05	< 0.005	6,752
2048	4.99	4.65	30.3	65.0	0.23	0.32	29.5	29.8	0.30	7.23	7.54	—	37,136	37,136	0.64	2.98	0.07	38,041
2049	4.93	4.59	30.3	65.0	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	37,004	37,004	0.64	2.78	0.06	37,849
2050	186	185	64.9	149	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	1.77	1.77	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	175	175	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	1.92	1.61	9.50	17.1	0.05	0.29	10.7	11.0	0.27	4.83	5.10	—	5,442	5,442	0.22	0.04	0.01	5,461
2048	4.09	3.78	24.2	54.0	0.18	0.27	23.9	24.1	0.26	5.95	6.21	—	30,173	30,173	0.48	2.37	0.97	30,890
2049	4.22	3.91	25.2	56.9	0.19	0.27	25.2	25.4	0.26	6.18	6.43	—	32,069	32,069	0.50	2.38	0.84	32,793
2050	91.7	90.9	49.8	120	0.37	0.53	51.0	51.5	0.51	12.5	13.0	—	63,623	63,623	0.99	4.47	1.41	64,982
2051	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	22.7	22.7	—	5.67	5.67	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.21	0.21	—	—	—	—	19.5	19.5	—	4.87	4.87	—	0.00	0.00	0.00	0.00	—	0.00
2056	83.5	83.5	—	—	—	—	3.89	3.89	—	0.97	0.97	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.35	0.29	1.73	3.13	0.01	0.05	1.96	2.01	0.05	0.88	0.93	—	901	901	0.04	0.01	< 0.005	904
2048	0.75	0.69	4.41	9.85	0.03	0.05	4.36	4.41	0.05	1.09	1.13	—	4,995	4,995	0.08	0.39	0.16	5,114
2049	0.77	0.71	4.60	10.4	0.04	0.05	4.59	4.64	0.05	1.13	1.17	—	5,309	5,309	0.08	0.39	0.14	5,429

2050	16.7	16.6	9.10	21.8	0.07	0.10	9.30	9.40	0.09	2.27	2.37	—	10,533	10,533	0.16	0.74	0.23	10,758
2051	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	4.14	4.14	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.04	0.04	—	—	—	—	3.55	3.55	—	0.89	0.89	—	0.00	0.00	0.00	0.00	—	0.00
2056	15.2	15.2	—	—	—	—	0.71	0.71	—	0.18	0.18	—	0.00	0.00	0.00	0.00	—	0.00

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.78	0.75	4.58	35.8	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,743	6,743	0.27	0.05	0.02	6,766
2048	5.35	4.41	25.3	81.8	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	38,913	38,913	0.58	2.93	2.82	39,803
2049	5.29	4.36	25.3	81.8	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	38,778	38,778	0.58	2.72	2.28	39,607
2050	71.2	69.1	52.2	188	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	59.2	59.2	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.77	0.75	4.59	35.7	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,729	6,729	0.27	0.05	< 0.005	6,752
2048	4.55	4.31	27.0	68.0	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	37,136	37,136	0.64	2.98	0.07	38,041

2049	4.49	4.25	27.0	68.0	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	37,004	37,004	0.64	2.78	0.06	37,849
2050	69.6	69.0	55.6	155	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	1.77	1.77	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	59.2	59.2	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.60	0.58	3.43	28.8	0.05	0.10	10.7	10.8	0.10	4.83	4.93	—	5,442	5,442	0.22	0.04	0.01	5,461
2048	3.64	3.43	21.1	57.3	0.18	0.23	23.9	24.1	0.23	5.95	6.18	—	30,173	30,173	0.48	2.37	0.97	30,890
2049	3.84	3.62	22.4	59.4	0.19	0.24	25.2	25.4	0.24	6.18	6.41	—	32,069	32,069	0.50	2.38	0.84	32,793
2050	36.0	35.5	43.3	125	0.37	0.46	51.0	51.4	0.46	12.5	12.9	—	63,623	63,623	0.99	4.47	1.41	64,982
2051	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	22.7	22.7	—	5.67	5.67	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.21	0.21	—	—	—	—	19.5	19.5	—	4.87	4.87	—	0.00	0.00	0.00	0.00	—	0.00
2056	28.7	28.7	—	—	—	—	3.89	3.89	—	0.97	0.97	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.11	0.11	0.63	5.26	0.01	0.02	1.96	1.98	0.02	0.88	0.90	—	901	901	0.04	0.01	< 0.005	904
2048	0.66	0.63	3.85	10.5	0.03	0.04	4.36	4.40	0.04	1.09	1.13	—	4,995	4,995	0.08	0.39	0.16	5,114
2049	0.70	0.66	4.08	10.8	0.04	0.04	4.59	4.64	0.04	1.13	1.17	—	5,309	5,309	0.08	0.39	0.14	5,429
2050	6.57	6.47	7.91	22.8	0.07	0.08	9.30	9.39	0.08	2.27	2.36	—	10,533	10,533	0.16	0.74	0.23	10,758
2051	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	4.14	4.14	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00

2055	0.04	0.04	—	—	—	—	3.55	3.55	—	0.89	0.89	—	0.00	0.00	0.00	0.00	—	0.00
2056	5.24	5.24	—	—	—	—	0.71	0.71	—	0.18	0.18	—	0.00	0.00	0.00	0.00	—	0.00

3. Construction Emissions Details

3.1. Site Preparation (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.16	1.82	11.8	17.4	0.05	0.35	—	0.35	0.33	—	0.33	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.16	1.82	11.8	17.4	0.05	0.35	—	0.35	0.33	—	0.33	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	3.03	4.49	0.01	0.09	—	0.09	0.08	—	0.08	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.55	0.82	< 0.005	0.02	—	0.02	0.02	—	0.02	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.40	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.02	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	< 0.005	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	< 0.005	30.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.09	5.09	< 0.005	< 0.005	< 0.005	5.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.67	7.29	0.01	0.03	—	0.03	0.03	—	0.03	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.40	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.02	129

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	< 0.005	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	< 0.005	30.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.09	5.09	< 0.005	< 0.005	< 0.005	5.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	10.7	20.6	0.06	0.34	—	0.34	0.31	—	0.31	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	10.7	20.6	0.06	0.34	—	0.34	0.31	—	0.31	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.12	6.46	12.4	0.04	0.20	—	0.20	0.19	—	0.19	—	3,965	3,965	0.16	0.03	—	3,979
Dust From Material Movement	—	—	—	—	—	—	5.53	5.53	—	2.20	2.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.21	1.18	2.26	0.01	0.04	—	0.04	0.03	—	0.03	—	657	657	0.03	0.01	—	659

Dust From Material Movement	—	—	—	—	—	—	1.01	1.01	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	147	147	< 0.005	< 0.005	0.02	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.35	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	82.0	82.0	< 0.005	< 0.005	0.01	82.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	< 0.005	13.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.43	2.75	21.3	0.04	0.08	—	0.08	0.08	—	0.08	—	3,965	3,965	0.16	0.03	—	3,979
Dust From Material Movement	—	—	—	—	—	—	5.53	5.53	—	2.20	2.20	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.50	3.88	0.01	0.01	—	0.01	0.01	—	0.01	—	657	657	0.03	0.01	—	659
Dust From Material Movement	—	—	—	—	—	—	1.01	1.01	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	147	147	< 0.005	< 0.005	0.02	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.35	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	82.0	82.0	< 0.005	< 0.005	0.01	82.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	< 0.005	13.6

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.20	1.84	10.5	20.1	0.06	0.32	—	0.32	0.30	—	0.30	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.71	1.37	< 0.005	0.02	—	0.02	0.02	—	0.02	—	449	449	0.02	< 0.005	—	451
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.13	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.4	74.4	< 0.005	< 0.005	—	74.6
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.27	9.27	< 0.005	< 0.005	< 0.005	9.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.31	2.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	449	449	0.02	< 0.005	—	451
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.4	74.4	< 0.005	< 0.005	—	74.6

Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.27	9.27	< 0.005	< 0.005	< 0.005	9.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.26	12.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.26	12.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.60	4.96	9.46	0.02	0.09	—	0.09	0.08	—	0.08	—	1,897	1,897	0.08	0.02	—	1,903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.90	1.73	< 0.005	0.02	—	0.02	0.01	—	0.01	—	314	314	0.01	< 0.005	—	315
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.11	3.37	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	19,017	19,017	0.17	0.11	2.27	19,058
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,499	17,499	0.31	2.79	0.55	18,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.37	3.31	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,212	17,212	0.23	0.17	0.06	17,269
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,527	17,527	0.31	2.79	0.01	18,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.58	1.84	36.5	0.00	0.00	17.2	17.2	0.00	4.02	4.02	—	13,959	13,959	0.14	0.14	0.78	14,004
Vendor	0.60	0.48	16.6	6.57	0.16	0.16	6.09	6.25	0.16	1.68	1.84	—	13,858	13,858	0.25	2.21	0.19	14,523
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.34	6.67	0.00	0.00	3.13	3.13	0.00	0.73	0.73	—	2,311	2,311	0.02	0.02	0.13	2,319
Vendor	0.11	0.09	3.04	1.20	0.03	0.03	1.11	1.14	0.03	0.31	0.34	—	2,294	2,294	0.04	0.37	0.03	2,404
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.33	2.32	11.8	0.02	0.06	—	0.06	0.06	—	0.06	—	1,897	1,897	0.08	0.02	—	1,903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.42	2.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	314	314	0.01	< 0.005	—	315
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.11	3.37	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	19,017	19,017	0.17	0.11	2.27	19,058
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,499	17,499	0.31	2.79	0.55	18,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.37	3.31	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,212	17,212	0.23	0.17	0.06	17,269
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,527	17,527	0.31	2.79	0.01	18,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.58	1.84	36.5	0.00	0.00	17.2	17.2	0.00	4.02	4.02	—	13,959	13,959	0.14	0.14	0.78	14,004
Vendor	0.60	0.48	16.6	6.57	0.16	0.16	6.09	6.25	0.16	1.68	1.84	—	13,858	13,858	0.25	2.21	0.19	14,523
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.34	6.67	0.00	0.00	3.13	3.13	0.00	0.73	0.73	—	2,311	2,311	0.02	0.02	0.13	2,319
Vendor	0.11	0.09	3.04	1.20	0.03	0.03	1.11	1.14	0.03	0.31	0.34	—	2,294	2,294	0.04	0.37	0.03	2,404
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.76	6.22	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.90	0.76	6.22	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.65	5.34	10.2	0.02	0.09	—	0.09	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	0.97	1.87	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.05	3.31	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,992	18,992	0.17	0.11	1.89	19,032
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,390	17,390	0.31	2.59	0.39	18,170
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.26	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,189	17,189	0.23	0.17	0.05	17,246
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,418	17,418	0.31	2.59	0.01	18,198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.74	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,099	15,099	0.15	0.15	0.70	15,147
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,916	14,916	0.27	2.22	0.14	15,584
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.50	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,500	2,500	0.02	0.02	0.12	2,508
Vendor	0.12	0.09	3.26	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,469	2,469	0.04	0.37	0.02	2,580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2049) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.05	3.31	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,992	18,992	0.17	0.11	1.89	19,032
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,390	17,390	0.31	2.59	0.39	18,170
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.26	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,189	17,189	0.23	0.17	0.05	17,246
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,418	17,418	0.31	2.59	0.01	18,198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.74	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,099	15,099	0.15	0.15	0.70	15,147
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,916	14,916	0.27	2.22	0.14	15,584
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.51	0.50	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,500	2,500	0.02	0.02	0.12	2,508
Vendor	0.12	0.09	3.26	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,469	2,469	0.04	0.37	0.02	2,580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.65	5.31	10.2	0.02	0.09	—	0.09	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	0.97	1.87	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.69	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,083	15,083	0.15	0.15	0.59	15,131
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,835	14,835	0.27	2.22	0.10	15,504
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.49	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,497	2,497	0.02	0.02	0.10	2,505
Vendor	0.12	0.09	3.25	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,456	2,456	0.04	0.37	0.02	2,567
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.69	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,083	15,083	0.15	0.15	0.59	15,131
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,835	14,835	0.27	2.22	0.10	15,504
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.49	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,497	2,497	0.02	0.02	0.10	2,505
Vendor	0.12	0.09	3.25	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,456	2,456	0.04	0.37	0.02	2,567
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2051) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.14. Building Construction (2051) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.15. Building Construction (2052) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.5	17.5	—	4.37	4.37	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.21	5.21	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.19	3.19	—	0.80	0.80	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.16. Building Construction (2052) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.5	17.5	—	4.37	4.37	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	5.21	5.21	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.19	3.19	—	0.80	0.80	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.17. Building Construction (2053) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.18. Building Construction (2053) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.19. Building Construction (2054) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—

Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.20. Building Construction (2054) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.21. Building Construction (2055) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	15.0	15.0	—	3.74	3.74	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	4.47	4.47	—	1.12	1.12	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	2.73	2.73	—	0.68	0.68	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.82	0.82	—	0.20	0.20	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.22. Building Construction (2055) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	15.0	15.0	—	3.74	3.74	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	4.47	4.47	—	1.12	1.12	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	2.73	2.73	—	0.68	0.68	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.82	0.82	—	0.20	0.20	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.23. Building Construction_2055 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.66	0.56	4.56	8.80	0.02	0.08	—	0.08	0.07	—	0.07	—	1,766	1,766	0.07	0.01	—	1,772
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.12	0.10	0.83	1.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	292	292	0.01	< 0.005	—	293
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.40	2.32	1.72	34.0	0.00	0.00	16.0	16.0	0.00	3.74	3.74	—	12,969	12,969	0.13	0.13	0.51	13,010
Vendor	0.56	0.45	15.3	6.12	0.15	0.15	5.67	5.82	0.15	1.57	1.72	—	12,756	12,756	0.23	1.91	0.08	13,330
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.42	0.31	6.20	0.00	0.00	2.92	2.92	0.00	0.68	0.68	—	2,147	2,147	0.02	0.02	0.08	2,154
Vendor	0.10	0.08	2.80	1.12	0.03	0.03	1.03	1.06	0.03	0.29	0.31	—	2,112	2,112	0.04	0.32	0.01	2,207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction_2055 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.34	0.31	2.16	11.0	0.02	0.06	—	0.06	0.05	—	0.05	—	1,766	1,766	0.07	0.01	—	1,772
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.39	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	292	292	0.01	< 0.005	—	293
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.40	2.32	1.72	34.0	0.00	0.00	16.0	16.0	0.00	3.74	3.74	—	12,969	12,969	0.13	0.13	0.51	13,010
Vendor	0.56	0.45	15.3	6.12	0.15	0.15	5.67	5.82	0.15	1.57	1.72	—	12,756	12,756	0.23	1.91	0.08	13,330
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.42	0.31	6.20	0.00	0.00	2.92	2.92	0.00	0.68	0.68	—	2,147	2,147	0.02	0.02	0.08	2,154
Vendor	0.10	0.08	2.80	1.12	0.03	0.03	1.03	1.06	0.03	0.29	0.31	—	2,112	2,112	0.04	0.32	0.01	2,207

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2055) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.26. Paving (2055) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.27. Paving (2056) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.63	0.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.28. Paving (2056) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.63	0.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.29. Paving_2055 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.59	1.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	182	182	0.01	< 0.005	—	183
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.1	30.1	< 0.005	< 0.005	—	30.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Paving_2055 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	1.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	182	182	0.01	< 0.005	—	183

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.1	30.1	< 0.005	< 0.005	—	30.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Paving_2056 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.71	3.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	530	530	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.31	0.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	87.7	87.7	< 0.005	< 0.005	—	88.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	< 0.005	35.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.91	5.91	< 0.005	< 0.005	< 0.005	5.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Paving_2056 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.73	3.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	530	530	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	87.7	87.7	< 0.005	< 0.005	—	88.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	< 0.005	35.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.91	5.91	< 0.005	< 0.005	< 0.005	5.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Architectural Coating (2056) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	82.9	82.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	3.85	3.85	—	0.96	0.96	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.70	0.70	—	0.18	0.18	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.34. Architectural Coating (2056) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	28.1	28.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.12	5.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.85	3.85	—	0.96	0.96	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.70	0.70	—	0.18	0.18	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.35. Architectural Coating_2056 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	82.9	82.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.57	1.28	0.89	23.4	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	7,589	7,589	0.07	0.05	0.63	7,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.28	0.98	17.8	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	6,868	6,868	0.09	0.07	0.02	6,891
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.60	0.44	8.74	0.00	0.00	4.11	4.11	0.00	0.96	0.96	—	3,336	3,336	0.03	0.03	0.13	3,347

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.60	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	552	552	0.01	0.01	0.02	554
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Architectural Coating_2056 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	28.1	28.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	5.12	5.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.57	1.28	0.89	23.4	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	7,589	7,589	0.07	0.05	0.63	7,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.28	0.98	17.8	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	6,868	6,868	0.09	0.07	0.02	6,891
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.60	0.44	8.74	0.00	0.00	4.11	4.11	0.00	0.96	0.96	—	3,336	3,336	0.03	0.03	0.13	3,347
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.60	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	552	552	0.01	0.01	0.02	554
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2047	4/19/2047	6.00	94.0	—
Grading	Grading	4/20/2047	1/29/2048	6.00	244	—
Building Construction	Building Construction	1/30/2048	11/10/2055	6.00	2,436	—
Building Construction_2055	Building Construction	1/1/2050	11/10/2050	6.00	269	—
Paving	Paving	11/11/2055	5/30/2056	6.00	173	—
Paving_2055	Paving	11/11/2050	12/31/2050	6.00	44.0	—
Paving_2056	Paving	1/1/2050	5/30/2050	6.00	128	—
Architectural Coating	Architectural Coating	5/31/2056	12/18/2056	6.00	173	—
Architectural Coating_2056	Architectural Coating	5/31/2050	12/18/2050	6.00	173	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction_2055	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction_2055	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction_2055	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction_2055	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction_2055	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2055	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving_2055	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving_2055	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2056	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving_2056	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving_2056	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating_2056	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction_2055	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction_2055	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction_2055	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction_2055	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction_2055	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2055	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving_2055	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving_2055	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Paving_2056	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving_2056	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving_2056	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating_2056	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,011	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT

Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Building Construction_2055	—	—	—	—
Building Construction_2055	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction_2055	Vendor	1,011	9.10	HHDT,MHDT
Building Construction_2055	Hauling	0.00	20.0	HHDT
Building Construction_2055	Onsite truck	—	—	HHDT
Paving_2055	—	—	—	—
Paving_2055	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2055	Vendor	—	9.10	HHDT,MHDT
Paving_2055	Hauling	0.00	20.0	HHDT
Paving_2055	Onsite truck	—	—	HHDT
Paving_2056	—	—	—	—
Paving_2056	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2056	Vendor	—	9.10	HHDT,MHDT
Paving_2056	Hauling	0.00	20.0	HHDT
Paving_2056	Onsite truck	—	—	HHDT
Architectural Coating_2056	—	—	—	—
Architectural Coating_2056	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating_2056	Vendor	—	9.10	HHDT,MHDT
Architectural Coating_2056	Hauling	0.00	20.0	HHDT
Architectural Coating_2056	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,011	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Building Construction_2055	—	—	—	—

Building Construction_2055	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction_2055	Vendor	1,011	9.10	HHDT,MHDT
Building Construction_2055	Hauling	0.00	20.0	HHDT
Building Construction_2055	Onsite truck	—	—	HHDT
Paving_2055	—	—	—	—
Paving_2055	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2055	Vendor	—	9.10	HHDT,MHDT
Paving_2055	Hauling	0.00	20.0	HHDT
Paving_2055	Onsite truck	—	—	HHDT
Paving_2056	—	—	—	—
Paving_2056	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2056	Vendor	—	9.10	HHDT,MHDT
Paving_2056	Hauling	0.00	20.0	HHDT
Paving_2056	Onsite truck	—	—	HHDT
Architectural Coating_2056	—	—	—	—
Architectural Coating_2056	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating_2056	Vendor	—	9.10	HHDT,MHDT
Architectural Coating_2056	Hauling	0.00	20.0	HHDT
Architectural Coating_2056	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	9,253,350	3,084,450	358,586

Architectural Coating_2056	0.00	0.00	9,253,350	3,084,450	358,586

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	141	0.00	—
Grading	—	—	732	0.00	—
Paving	0.00	0.00	0.00	0.00	137
Paving_2055	0.00	0.00	0.00	0.00	137
Paving_2056	0.00	0.00	0.00	0.00	137

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	30.5	100%
Other Non-Asphalt Surfaces	20.6	0%
City Park	0.00	0%
Other Asphalt Surfaces	86.1	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2047	0.00	204	0.03	< 0.005
2048	0.00	204	0.03	< 0.005

2049	0.00	204	0.03	< 0.005
2050	0.00	204	0.03	< 0.005
2051	0.00	204	0.03	< 0.005
2052	0.00	204	0.03	< 0.005
2053	0.00	204	0.03	< 0.005
2054	0.00	204	0.03	< 0.005
2055	0.00	204	0.03	< 0.005
2056	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project-specific schedule.
Land Use	Land uses are based on Project-specific information.
Construction: Architectural Coatings	—

Pacific Gateway (Gateway Center Development Area Construction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Gateway Center Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	525	1000sqft	15.8	525,400	163,561	—	—	—
Parking Lot	510	1000sqft	11.7	0.00	0.00	—	—	—

Other Asphalt Surfaces	583	1000sqft	13.4	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	132	1000sqft	3.00	0.00	0.00	—	—	—
City Park	9.00	Acre	9.00	0.00	0.00	0.00	—	—
Hotel	120	Room	0.60	174,240	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	5.00	1000sqft	0.40	5,000	13,196	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.7	14.6	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	7,848	7,848	0.27	0.46	7.34	7,998
Mit.	8.34	8.30	6.60	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	7,848	7,848	0.27	0.46	7.34	7,998
% Reduced	43%	43%	70%	-36%	—	85%	—	4%	83%	—	7%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.7	14.6	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	7,607	7,607	0.27	0.46	0.19	7,750
Mit.	8.32	8.30	6.92	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	7,607	7,607	0.27	0.46	0.19	7,750
% Reduced	43%	43%	69%	-37%	—	85%	—	4%	83%	—	7%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.9	10.9	17.8	22.5	0.05	0.73	12.2	13.0	0.67	5.76	6.44	—	6,467	6,467	0.21	0.40	2.31	6,592
Mit.	6.21	6.18	5.67	27.9	0.05	0.11	12.2	12.4	0.11	5.76	5.87	—	6,467	6,467	0.21	0.40	2.31	6,592
% Reduced	43%	43%	68%	-24%	—	85%	—	5%	84%	—	9%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	1.99	3.26	4.11	0.01	0.13	2.23	2.37	0.12	1.05	1.18	—	1,071	1,071	0.03	0.07	0.38	1,091
Mit.	1.13	1.13	1.03	5.10	0.01	0.02	2.23	2.25	0.02	1.05	1.07	—	1,071	1,071	0.03	0.07	0.38	1,091
% Reduced	43%	43%	68%	-24%	—	85%	—	5%	84%	—	9%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	3.02	2.55	18.6	25.8	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	7,848	7,848	0.27	0.46	7.34	7,998
2034	1.92	1.69	11.0	23.4	0.05	0.22	3.64	3.86	0.20	0.89	1.10	—	7,728	7,728	0.17	0.46	6.25	7,877
2035	1.89	1.67	10.8	22.9	0.05	0.20	3.64	3.85	0.19	0.89	1.09	—	7,617	7,617	0.17	0.44	5.29	7,758
2036	1.84	1.62	10.5	22.4	0.05	0.19	3.64	3.84	0.18	0.89	1.08	—	7,517	7,517	0.17	0.44	4.43	7,657
2037	1.79	1.57	10.2	22.0	0.05	0.18	3.64	3.83	0.17	0.89	1.06	—	7,429	7,429	0.17	0.44	3.68	7,568
2038	1.76	1.54	10.0	21.8	0.05	0.18	3.64	3.82	0.16	0.89	1.06	—	7,340	7,340	0.17	0.41	3.04	7,471
2039	1.72	1.42	9.84	21.5	0.05	0.17	3.64	3.82	0.16	0.89	1.05	—	7,271	7,271	0.16	0.41	2.49	7,401
2040	1.68	1.39	9.73	21.2	0.05	0.17	3.64	3.81	0.16	0.89	1.05	—	7,208	7,208	0.16	0.41	2.03	7,338
2041	1.66	1.37	9.61	21.1	0.05	0.16	3.64	3.81	0.15	0.89	1.05	—	7,153	7,153	0.16	0.41	1.65	7,282
2042	1.64	1.34	9.53	20.9	0.05	0.16	3.64	3.80	0.15	0.89	1.04	—	7,104	7,104	0.16	0.39	1.33	7,225
2043	1.61	1.31	9.44	20.8	0.05	0.15	3.64	3.80	0.14	0.89	1.04	—	7,062	7,062	0.16	0.39	1.07	7,182
2044	1.56	1.29	9.34	20.6	0.05	0.15	3.64	3.79	0.14	0.89	1.03	—	7,025	7,025	0.16	0.38	0.86	7,143
2045	0.80	0.71	5.08	10.1	0.01	0.08	0.13	0.20	0.07	0.03	0.10	—	1,621	1,621	0.06	0.01	0.02	1,627
2046	14.7	14.6	0.80	2.54	< 0.005	< 0.005	0.54	0.54	< 0.005	0.13	0.13	—	604	604	0.01	< 0.005	0.08	605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,744	6,744	0.27	0.05	0.01	6,767
2033	3.02	2.55	18.6	25.7	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	7,607	7,607	0.27	0.46	0.19	7,750
2034	1.87	1.65	11.4	21.3	0.05	0.22	3.64	3.86	0.20	0.89	1.10	—	7,490	7,490	0.18	0.46	0.16	7,633
2035	1.84	1.62	11.1	20.9	0.05	0.20	3.64	3.85	0.19	0.89	1.09	—	7,382	7,382	0.18	0.44	0.14	7,517
2036	1.81	1.59	10.7	20.5	0.05	0.19	3.64	3.84	0.18	0.89	1.08	—	7,285	7,285	0.17	0.44	0.11	7,420
2037	1.76	1.54	10.5	20.1	0.05	0.18	3.64	3.83	0.17	0.89	1.06	—	7,198	7,198	0.17	0.44	0.10	7,334
2038	1.72	1.42	10.3	19.8	0.05	0.18	3.64	3.82	0.16	0.89	1.06	—	7,112	7,112	0.17	0.41	0.08	7,240
2039	1.70	1.40	10.1	19.6	0.05	0.17	3.64	3.82	0.16	0.89	1.05	—	7,044	7,044	0.17	0.41	0.06	7,172
2040	1.66	1.36	10.0	19.5	0.05	0.17	3.64	3.81	0.16	0.89	1.05	—	6,983	6,983	0.17	0.41	0.05	7,111

2041	1.63	1.33	9.92	19.3	0.05	0.16	3.64	3.81	0.15	0.89	1.05	—	6,929	6,929	0.16	0.41	0.04	7,057
2042	1.62	1.32	9.74	19.1	0.05	0.16	3.64	3.80	0.15	0.89	1.04	—	6,881	6,881	0.16	0.39	0.03	7,002
2043	1.60	1.31	9.65	19.0	0.05	0.15	3.64	3.80	0.14	0.89	1.04	—	6,840	6,840	0.16	0.39	0.03	6,960
2044	1.54	1.28	9.54	18.9	0.05	0.15	3.64	3.79	0.14	0.89	1.03	—	6,804	6,804	0.16	0.39	0.02	6,924
2045	1.44	1.26	9.48	18.8	0.05	0.14	3.64	3.79	0.14	0.89	1.03	—	6,773	6,773	0.16	0.39	0.02	6,893
2046	14.7	14.6	5.04	9.97	0.01	0.07	0.54	0.54	0.07	0.13	0.13	—	1,611	1,611	0.06	0.01	< 0.005	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	2.72	2.30	17.8	22.5	0.05	0.73	12.2	13.0	0.67	5.76	6.44	—	5,261	5,261	0.21	0.04	0.11	5,279
2033	2.25	1.92	13.8	20.9	0.05	0.48	6.28	6.75	0.44	2.31	2.75	—	6,062	6,062	0.20	0.17	1.03	6,119
2034	1.60	1.40	9.57	18.4	0.04	0.19	3.11	3.30	0.17	0.76	0.94	—	6,467	6,467	0.15	0.40	2.31	6,592
2035	1.58	1.38	9.34	18.1	0.04	0.18	3.11	3.29	0.16	0.76	0.93	—	6,374	6,374	0.15	0.38	1.96	6,492
2036	1.56	1.37	9.10	17.8	0.04	0.17	3.12	3.29	0.16	0.77	0.92	—	6,307	6,307	0.15	0.38	1.65	6,425
2037	1.51	1.32	8.90	17.4	0.04	0.16	3.11	3.27	0.15	0.76	0.91	—	6,216	6,216	0.15	0.38	1.36	6,333
2038	1.48	1.29	8.77	17.2	0.04	0.15	3.11	3.26	0.14	0.76	0.90	—	6,141	6,141	0.14	0.35	1.13	6,252
2039	1.45	1.19	8.61	17.0	0.04	0.15	3.11	3.26	0.14	0.76	0.90	—	6,083	6,083	0.14	0.35	0.92	6,193
2040	1.43	1.18	8.47	16.9	0.04	0.14	3.12	3.26	0.13	0.77	0.90	—	6,047	6,047	0.14	0.36	0.75	6,157
2041	1.40	1.15	8.35	16.7	0.04	0.14	3.11	3.25	0.13	0.76	0.89	—	5,984	5,984	0.14	0.35	0.61	6,094
2042	1.38	1.13	8.27	16.6	0.04	0.14	3.11	3.25	0.13	0.76	0.89	—	5,943	5,943	0.14	0.33	0.49	6,046
2043	1.37	1.11	8.20	16.5	0.04	0.13	3.11	3.24	0.12	0.76	0.89	—	5,907	5,907	0.14	0.33	0.40	6,010
2044	1.33	1.10	8.14	16.4	0.04	0.13	3.12	3.25	0.12	0.77	0.89	—	5,892	5,892	0.14	0.33	0.32	5,995
2045	0.83	0.72	5.18	10.3	0.02	0.08	0.78	0.86	0.07	0.19	0.26	—	2,386	2,386	0.07	0.08	0.06	2,413
2046	10.9	10.9	0.97	2.42	< 0.005	0.01	0.40	0.41	0.01	0.09	0.10	—	543	543	0.01	< 0.005	0.03	545
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.50	0.42	3.26	4.11	0.01	0.13	2.23	2.37	0.12	1.05	1.18	—	871	871	0.03	0.01	0.02	874
2033	0.41	0.35	2.51	3.81	0.01	0.09	1.15	1.23	0.08	0.42	0.50	—	1,004	1,004	0.03	0.03	0.17	1,013
2034	0.29	0.26	1.75	3.36	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,071	1,071	0.02	0.07	0.38	1,091
2035	0.29	0.25	1.70	3.30	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,055	1,055	0.02	0.06	0.32	1,075
2036	0.28	0.25	1.66	3.24	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,044	1,044	0.02	0.06	0.27	1,064

2037	0.28	0.24	1.62	3.18	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,029	1,029	0.02	0.06	0.23	1,049
2038	0.27	0.24	1.60	3.15	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,017	1,017	0.02	0.06	0.19	1,035
2039	0.27	0.22	1.57	3.10	0.01	0.03	0.57	0.59	0.02	0.14	0.16	—	1,007	1,007	0.02	0.06	0.15	1,025
2040	0.26	0.21	1.54	3.08	0.01	0.03	0.57	0.60	0.02	0.14	0.16	—	1,001	1,001	0.02	0.06	0.12	1,019
2041	0.25	0.21	1.52	3.05	0.01	0.03	0.57	0.59	0.02	0.14	0.16	—	991	991	0.02	0.06	0.10	1,009
2042	0.25	0.21	1.51	3.02	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	984	984	0.02	0.06	0.08	1,001
2043	0.25	0.20	1.50	3.01	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	978	978	0.02	0.06	0.07	995
2044	0.24	0.20	1.48	3.00	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	975	975	0.02	0.06	0.05	993
2045	0.15	0.13	0.95	1.88	< 0.005	0.01	0.14	0.16	0.01	0.03	0.05	—	395	395	0.01	0.01	0.01	400
2046	1.99	1.99	0.18	0.44	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	89.9	89.9	< 0.005	< 0.005	< 0.005	90.2

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	1.40	1.30	6.60	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	7,848	7,848	0.27	0.46	7.34	7,998
2034	1.35	1.24	6.46	25.5	0.05	0.10	3.64	3.75	0.10	0.89	1.00	—	7,728	7,728	0.17	0.46	6.25	7,877
2035	1.34	1.24	6.37	25.1	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,617	7,617	0.17	0.44	5.29	7,758
2036	1.31	1.20	6.29	24.7	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,517	7,517	0.17	0.44	4.43	7,657
2037	1.28	1.17	6.14	24.4	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,429	7,429	0.17	0.44	3.68	7,568
2038	1.25	1.15	6.06	24.2	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,340	7,340	0.17	0.41	3.04	7,471
2039	1.22	1.03	6.00	24.0	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,271	7,271	0.16	0.41	2.49	7,401
2040	1.18	1.00	5.96	23.8	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,208	7,208	0.16	0.41	2.03	7,338
2041	1.17	0.99	5.90	23.6	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,153	7,153	0.16	0.41	1.65	7,282
2042	1.15	0.96	5.86	23.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,104	7,104	0.16	0.39	1.33	7,225
2043	1.13	0.94	5.83	23.4	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,062	7,062	0.16	0.39	1.07	7,182

2044	1.09	0.93	5.79	23.3	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,025	7,025	0.16	0.38	0.86	7,143
2045	0.54	0.51	2.10	10.8	0.01	0.04	0.13	0.17	0.04	0.03	0.07	—	1,621	1,621	0.06	0.01	0.02	1,627
2046	8.34	8.30	0.80	2.54	< 0.005	< 0.005	0.54	0.54	< 0.005	0.13	0.13	—	604	604	0.01	< 0.005	0.08	605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.81	0.78	4.72	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,744	6,744	0.27	0.05	0.01	6,767
2033	1.34	1.23	6.92	35.8	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	7,607	7,607	0.27	0.46	0.19	7,750
2034	1.31	1.20	6.81	23.4	0.05	0.10	3.64	3.75	0.10	0.89	1.00	—	7,490	7,490	0.18	0.46	0.16	7,633
2035	1.29	1.19	6.68	23.1	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,382	7,382	0.18	0.44	0.14	7,517
2036	1.28	1.17	6.52	22.8	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,285	7,285	0.17	0.44	0.11	7,420
2037	1.25	1.14	6.42	22.5	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,198	7,198	0.17	0.44	0.10	7,334
2038	1.21	1.02	6.35	22.3	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,112	7,112	0.17	0.41	0.08	7,240
2039	1.20	1.01	6.31	22.1	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,044	7,044	0.17	0.41	0.06	7,172
2040	1.16	0.97	6.25	22.0	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,983	6,983	0.17	0.41	0.05	7,111
2041	1.14	0.95	6.21	21.8	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,929	6,929	0.16	0.41	0.04	7,057
2042	1.13	0.95	6.07	21.7	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,881	6,881	0.16	0.39	0.03	7,002
2043	1.12	0.94	6.03	21.7	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,840	6,840	0.16	0.39	0.03	6,960
2044	1.07	0.92	6.00	21.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,804	6,804	0.16	0.39	0.02	6,924
2045	0.98	0.91	5.99	21.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,773	6,773	0.16	0.39	0.02	6,893
2046	8.32	8.30	2.10	10.7	0.01	0.04	0.54	0.54	0.04	0.13	0.13	—	1,611	1,611	0.06	0.01	< 0.005	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.59	0.58	3.20	27.9	0.05	0.11	12.2	12.4	0.10	5.76	5.87	—	5,261	5,261	0.21	0.04	0.11	5,279
2033	0.85	0.81	4.68	27.1	0.05	0.11	6.28	6.39	0.11	2.31	2.42	—	6,062	6,062	0.20	0.17	1.03	6,119
2034	1.11	1.02	5.67	20.2	0.04	0.09	3.11	3.20	0.09	0.76	0.85	—	6,467	6,467	0.15	0.40	2.31	6,592
2035	1.11	1.01	5.58	20.0	0.04	0.09	3.11	3.20	0.09	0.76	0.85	—	6,374	6,374	0.15	0.38	1.96	6,492
2036	1.10	1.01	5.51	19.8	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	6,307	6,307	0.15	0.38	1.65	6,425
2037	1.07	0.98	5.43	19.5	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,216	6,216	0.15	0.38	1.36	6,333

2038	1.04	0.95	5.37	19.3	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,141	6,141	0.14	0.35	1.13	6,252
2039	1.03	0.86	5.31	19.1	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,083	6,083	0.14	0.35	0.92	6,193
2040	1.00	0.85	5.22	19.1	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	6,047	6,047	0.14	0.36	0.75	6,157
2041	0.98	0.82	5.16	18.9	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,984	5,984	0.14	0.35	0.61	6,094
2042	0.97	0.81	5.13	18.8	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,943	5,943	0.14	0.33	0.49	6,046
2043	0.96	0.80	5.10	18.8	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,907	5,907	0.14	0.33	0.40	6,010
2044	0.93	0.79	5.08	18.7	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	5,892	5,892	0.14	0.33	0.32	5,995
2045	0.57	0.51	2.53	11.3	0.02	0.05	0.78	0.83	0.04	0.19	0.24	—	2,386	2,386	0.07	0.08	0.06	2,413
2046	6.21	6.18	0.75	2.47	< 0.005	0.01	0.40	0.41	0.01	0.09	0.10	—	543	543	0.01	< 0.005	0.03	545
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.11	0.10	0.58	5.10	0.01	0.02	2.23	2.25	0.02	1.05	1.07	—	871	871	0.03	0.01	0.02	874
2033	0.16	0.15	0.85	4.95	0.01	0.02	1.15	1.17	0.02	0.42	0.44	—	1,004	1,004	0.03	0.03	0.17	1,013
2034	0.20	0.19	1.03	3.69	0.01	0.02	0.57	0.58	0.02	0.14	0.16	—	1,071	1,071	0.02	0.07	0.38	1,091
2035	0.20	0.18	1.02	3.65	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,055	1,055	0.02	0.06	0.32	1,075
2036	0.20	0.18	1.01	3.60	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	1,044	1,044	0.02	0.06	0.27	1,064
2037	0.19	0.18	0.99	3.55	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,029	1,029	0.02	0.06	0.23	1,049
2038	0.19	0.17	0.98	3.53	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,017	1,017	0.02	0.06	0.19	1,035
2039	0.19	0.16	0.97	3.49	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,007	1,007	0.02	0.06	0.15	1,025
2040	0.18	0.15	0.95	3.48	0.01	0.02	0.57	0.59	0.02	0.14	0.15	—	1,001	1,001	0.02	0.06	0.12	1,019
2041	0.18	0.15	0.94	3.45	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	991	991	0.02	0.06	0.10	1,009
2042	0.18	0.15	0.94	3.43	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	984	984	0.02	0.06	0.08	1,001
2043	0.18	0.15	0.93	3.42	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	978	978	0.02	0.06	0.07	995
2044	0.17	0.14	0.93	3.42	0.01	0.02	0.57	0.59	0.02	0.14	0.15	—	975	975	0.02	0.06	0.05	993
2045	0.10	0.09	0.46	2.07	< 0.005	0.01	0.14	0.15	0.01	0.03	0.04	—	395	395	0.01	0.01	0.01	400
2046	1.13	1.13	0.14	0.45	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	89.9	89.9	< 0.005	< 0.005	< 0.005	90.2

3. Construction Emissions Details

3.1. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.30	1.09	8.97	10.4	0.02	0.37	—	0.37	0.34	—	0.34	—	2,133	2,133	0.09	0.02	—	2,140

Dust From Material Movement	—	—	—	—	—	—	7.92	7.92	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.64	1.89	< 0.005	0.07	—	0.07	0.06	—	0.06	—	353	353	0.01	< 0.005	—	354
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	0.05	53.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.85	8.85	< 0.005	< 0.005	0.01	8.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	1.04	11.4	0.02	0.04	—	0.04	0.04	—	0.04	—	2,133	2,133	0.09	0.02	—	2,140
Dust From Material Movement	—	—	—	—	—	—	7.92	7.92	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.19	2.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	353	353	0.01	< 0.005	—	354
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	0.05	53.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.85	8.85	< 0.005	< 0.005	0.01	8.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.39	1.17	8.84	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	3,005	3,005	0.12	0.02	—	3,015
Dust From Material Movement	—	—	—	—	—	—	4.19	4.19	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.25	0.21	1.61	2.14	0.01	0.07	—	0.07	0.06	—	0.06	—	498	498	0.02	< 0.005	—	499
Dust From Material Movement	—	—	—	—	—	—	0.77	0.77	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	69.1	69.1	< 0.005	< 0.005	0.06	69.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.34	2.13	16.1	0.03	0.07	—	0.07	0.06	—	0.06	—	3,005	3,005	0.12	0.02	—	3,015
Dust From Material Movement	—	—	—	—	—	—	4.19	4.19	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.39	2.94	0.01	0.01	—	0.01	0.01	—	0.01	—	498	498	0.02	< 0.005	—	499
Dust From Material Movement	—	—	—	—	—	—	0.77	0.77	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	69.1	69.1	< 0.005	< 0.005	0.06	69.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.64	1.38	10.2	13.9	0.03	0.41	—	0.41	0.37	—	0.37	—	3,640	3,640	0.15	0.03	—	3,653
Dust From Material Movement	—	—	—	—	—	—	5.08	5.08	—	2.02	2.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.87	2.54	0.01	0.07	—	0.07	0.07	—	0.07	—	603	603	0.02	< 0.005	—	605

Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.6	82.6	< 0.005	< 0.005	0.06	82.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.01	13.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.40	2.58	19.5	0.03	0.08	—	0.08	0.08	—	0.08	—	3,640	3,640	0.15	0.03	—	3,653
Dust From Material Movement	—	—	—	—	—	—	5.08	5.08	—	2.02	2.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	3.56	0.01	0.01	—	0.01	0.01	—	0.01	—	603	603	0.02	< 0.005	—	605
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.6	82.6	< 0.005	< 0.005	0.06	82.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.01	13.7

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.34	3.90	0.01	0.06	—	0.06	0.06	—	0.06	—	732	732	0.03	0.01	—	734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.05	0.43	0.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	< 0.005	< 0.005	—	122
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.79	0.40	9.88	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,577	2,577	0.04	0.02	4.21	2,588
Vendor	0.13	0.08	3.23	1.17	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,875	2,875	0.04	0.42	3.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.74	0.52	7.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,332	2,332	0.04	0.02	0.11	2,339
Vendor	0.12	0.07	3.43	1.20	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,878	2,878	0.04	0.42	0.08	3,006
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.15	2.44	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	729	729	0.01	0.01	0.56	732
Vendor	0.04	0.02	1.03	0.36	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	878	878	0.01	0.13	0.41	917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.09	121
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	145	145	< 0.005	0.02	0.07	152
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.13	0.91	4.55	0.01	0.02	—	0.02	0.02	—	0.02	—	732	732	0.03	0.01	—	734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.17	0.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	121	121	< 0.005	< 0.005	—	122
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.81	0.79	0.40	9.88	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,577	2,577	0.04	0.02	4.21	2,588
Vendor	0.13	0.08	3.23	1.17	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,875	2,875	0.04	0.42	3.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.74	0.52	7.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,332	2,332	0.04	0.02	0.11	2,339
Vendor	0.12	0.07	3.43	1.20	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,878	2,878	0.04	0.42	0.08	3,006
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.15	2.44	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	729	729	0.01	0.01	0.56	732
Vendor	0.04	0.02	1.03	0.36	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	878	878	0.01	0.13	0.41	917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.09	121
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	145	145	< 0.005	0.02	0.07	152
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.45	10.9	0.02	0.16	—	0.16	0.15	—	0.15	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.18	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.75	0.39	9.46	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,544	2,544	0.03	0.02	3.63	2,555
Vendor	0.13	0.08	3.11	1.14	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,787	2,787	0.04	0.42	2.63	2,917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.72	0.71	0.51	7.32	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,303	2,303	0.04	0.02	0.09	2,310
Vendor	0.12	0.07	3.34	1.18	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,790	2,790	0.04	0.42	0.07	2,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.60	0.35	6.46	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,023	2,023	0.03	0.02	1.34	2,030
Vendor	0.11	0.06	2.78	0.99	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,390	2,390	0.04	0.36	0.97	2,500
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.18	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	335	335	< 0.005	< 0.005	0.22	336
Vendor	0.02	0.01	0.51	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	396	396	0.01	0.06	0.16	414
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.75	0.39	9.46	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,544	2,544	0.03	0.02	3.63	2,555
Vendor	0.13	0.08	3.11	1.14	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,787	2,787	0.04	0.42	2.63	2,917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.51	7.32	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,303	2,303	0.04	0.02	0.09	2,310
Vendor	0.12	0.07	3.34	1.18	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,790	2,790	0.04	0.42	0.07	2,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.60	0.35	6.46	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,023	2,023	0.03	0.02	1.34	2,030
Vendor	0.11	0.06	2.78	0.99	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,390	2,390	0.04	0.36	0.97	2,500
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.18	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	335	335	< 0.005	< 0.005	0.22	336
Vendor	0.02	0.01	0.51	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	396	396	0.01	0.06	0.16	414
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.39	9.05	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,516	2,516	0.03	0.02	3.11	2,526
Vendor	0.13	0.08	3.02	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,705	2,705	0.04	0.40	2.18	2,827
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.70	0.50	7.03	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,277	2,277	0.04	0.02	0.08	2,284
Vendor	0.12	0.07	3.22	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,708	2,708	0.04	0.40	0.06	2,828
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.59	0.35	6.24	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,000	2,000	0.03	0.02	1.15	2,007
Vendor	0.11	0.06	2.70	0.97	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,320	2,320	0.04	0.34	0.81	2,423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11	0.11	0.06	1.14	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	331	331	< 0.005	< 0.005	0.19	332
Vendor	0.02	0.01	0.49	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	384	384	0.01	0.06	0.13	401
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.39	9.05	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,516	2,516	0.03	0.02	3.11	2,526
Vendor	0.13	0.08	3.02	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,705	2,705	0.04	0.40	2.18	2,827
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.70	0.50	7.03	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,277	2,277	0.04	0.02	0.08	2,284
Vendor	0.12	0.07	3.22	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,708	2,708	0.04	0.40	0.06	2,828
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.59	0.35	6.24	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,000	2,000	0.03	0.02	1.15	2,007
Vendor	0.11	0.06	2.70	0.97	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,320	2,320	0.04	0.34	0.81	2,423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.14	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	331	331	< 0.005	< 0.005	0.19	332
Vendor	0.02	0.01	0.49	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	384	384	0.01	0.06	0.13	401
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.38	8.65	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,490	2,490	0.03	0.02	2.64	2,500
Vendor	0.13	0.08	2.96	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,631	2,631	0.04	0.40	1.79	2,752
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.68	0.41	6.76	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,254	2,254	0.04	0.02	0.07	2,261
Vendor	0.12	0.07	3.16	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,634	2,634	0.04	0.40	0.05	2,754
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.34	5.96	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,985	1,985	0.03	0.02	0.98	1,992
Vendor	0.11	0.06	2.64	0.97	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,262	2,262	0.04	0.34	0.66	2,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.09	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	329	329	0.01	< 0.005	0.16	330
Vendor	0.02	0.01	0.48	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	375	375	0.01	0.06	0.11	392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.38	8.65	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,490	2,490	0.03	0.02	2.64	2,500
Vendor	0.13	0.08	2.96	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,631	2,631	0.04	0.40	1.79	2,752
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.68	0.41	6.76	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,254	2,254	0.04	0.02	0.07	2,261
Vendor	0.12	0.07	3.16	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,634	2,634	0.04	0.40	0.05	2,754
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.34	5.96	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,985	1,985	0.03	0.02	0.98	1,992
Vendor	0.11	0.06	2.64	0.97	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,262	2,262	0.04	0.34	0.66	2,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.09	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	329	329	0.01	< 0.005	0.16	330
Vendor	0.02	0.01	0.48	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	375	375	0.01	0.06	0.11	392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.67	0.30	8.42	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,467	2,467	0.03	0.02	2.24	2,477
Vendor	0.13	0.08	2.89	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,565	2,565	0.04	0.40	1.44	2,686
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.41	6.50	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,233	2,233	0.04	0.02	0.06	2,241
Vendor	0.12	0.07	3.07	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,568	2,568	0.04	0.40	0.04	2,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.57	0.55	0.34	5.74	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,962	1,962	0.03	0.02	0.83	1,969
Vendor	0.11	0.06	2.57	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,200	2,200	0.04	0.34	0.53	2,303
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.05	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	325	325	< 0.005	< 0.005	0.14	326
Vendor	0.02	0.01	0.47	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	364	364	0.01	0.06	0.09	381
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.67	0.30	8.42	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,467	2,467	0.03	0.02	2.24	2,477
Vendor	0.13	0.08	2.89	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,565	2,565	0.04	0.40	1.44	2,686
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.41	6.50	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,233	2,233	0.04	0.02	0.06	2,241
Vendor	0.12	0.07	3.07	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,568	2,568	0.04	0.40	0.04	2,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.55	0.34	5.74	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,962	1,962	0.03	0.02	0.83	1,969
Vendor	0.11	0.06	2.57	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,200	2,200	0.04	0.34	0.53	2,303
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.05	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	325	325	< 0.005	< 0.005	0.14	326
Vendor	0.02	0.01	0.47	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	364	364	0.01	0.06	0.09	381

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.29	8.21	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,438	2,438	0.03	0.02	1.89	2,447
Vendor	0.13	0.08	2.83	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,505	2,505	0.04	0.37	1.15	2,619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.41	6.26	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,207	2,207	0.04	0.02	0.05	2,214
Vendor	0.12	0.07	3.01	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,509	2,509	0.04	0.37	0.03	2,621
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.34	5.62	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,938	1,938	0.02	0.02	0.70	1,945
Vendor	0.11	0.06	2.52	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,149	2,149	0.04	0.32	0.43	2,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.03	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	321	321	< 0.005	< 0.005	0.12	322
Vendor	0.02	0.01	0.46	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	356	356	0.01	0.05	0.07	372
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.29	8.21	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,438	2,438	0.03	0.02	1.89	2,447
Vendor	0.13	0.08	2.83	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,505	2,505	0.04	0.37	1.15	2,619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.41	6.26	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,207	2,207	0.04	0.02	0.05	2,214
Vendor	0.12	0.07	3.01	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,509	2,509	0.04	0.37	0.03	2,621
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.34	5.62	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,938	1,938	0.02	0.02	0.70	1,945
Vendor	0.11	0.06	2.52	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,149	2,149	0.04	0.32	0.43	2,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.03	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	321	321	< 0.005	< 0.005	0.12	322
Vendor	0.02	0.01	0.46	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	356	356	0.01	0.05	0.07	372
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	5.81	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.06	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.29	7.99	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,421	2,421	0.03	0.02	1.58	2,430
Vendor	0.13	0.08	2.77	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,453	2,453	0.04	0.37	0.91	2,566
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.52	0.40	6.11	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,191	2,191	0.04	0.02	0.04	2,198
Vendor	0.12	0.07	2.97	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,456	2,456	0.04	0.37	0.02	2,568
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.44	0.33	5.43	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,925	1,925	0.02	0.02	0.59	1,931
Vendor	0.11	0.06	2.47	0.92	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,103	2,103	0.03	0.32	0.34	2,200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	0.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	319	319	< 0.005	< 0.005	0.10	320
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	348	348	0.01	0.05	0.06	364
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.29	7.99	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,421	2,421	0.03	0.02	1.58	2,430
Vendor	0.13	0.08	2.77	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,453	2,453	0.04	0.37	0.91	2,566
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.52	0.40	6.11	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,191	2,191	0.04	0.02	0.04	2,198
Vendor	0.12	0.07	2.97	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,456	2,456	0.04	0.37	0.02	2,568
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.52	0.44	0.33	5.43	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,925	1,925	0.02	0.02	0.59	1,931
Vendor	0.11	0.06	2.47	0.92	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,103	2,103	0.03	0.32	0.34	2,200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	0.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	319	319	< 0.005	< 0.005	0.10	320
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	348	348	0.01	0.05	0.06	364
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.51	0.29	7.79	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,406	2,406	0.02	0.02	1.32	2,414
Vendor	0.13	0.08	2.74	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,405	2,405	0.04	0.37	0.71	2,518
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.40	5.97	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,178	2,178	0.04	0.02	0.03	2,185
Vendor	0.12	0.07	2.92	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,409	2,409	0.04	0.37	0.02	2,521
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.26	5.33	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,918	1,918	0.02	0.02	0.49	1,925
Vendor	0.11	0.07	2.44	0.93	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,068	2,068	0.03	0.32	0.26	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.97	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	318	318	< 0.005	< 0.005	0.08	319
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	342	342	0.01	0.05	0.04	358

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.51	0.29	7.79	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,406	2,406	0.02	0.02	1.32	2,414
Vendor	0.13	0.08	2.74	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,405	2,405	0.04	0.37	0.71	2,518
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.40	5.97	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,178	2,178	0.04	0.02	0.03	2,185
Vendor	0.12	0.07	2.92	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,409	2,409	0.04	0.37	0.02	2,521
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.26	5.33	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,918	1,918	0.02	0.02	0.49	1,925
Vendor	0.11	0.07	2.44	0.93	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,068	2,068	0.03	0.32	0.26	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.97	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	318	318	< 0.005	< 0.005	0.08	319
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	342	342	0.01	0.05	0.04	358
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.29	7.67	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,394	2,394	0.02	0.02	1.10	2,401
Vendor	0.13	0.08	2.68	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,363	2,363	0.04	0.37	0.55	2,476
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.39	5.84	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,166	2,166	0.03	0.02	0.03	2,173
Vendor	0.12	0.07	2.88	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,366	2,366	0.04	0.37	0.01	2,479
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.40	0.26	5.21	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,903	1,903	0.02	0.02	0.41	1,909
Vendor	0.11	0.07	2.39	0.93	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,026	2,026	0.03	0.32	0.20	2,123
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	0.95	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	315	315	< 0.005	< 0.005	0.07	316
Vendor	0.02	0.01	0.44	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	335	335	0.01	0.05	0.03	351
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.29	7.67	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,394	2,394	0.02	0.02	1.10	2,401
Vendor	0.13	0.08	2.68	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,363	2,363	0.04	0.37	0.55	2,476
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.39	5.84	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,166	2,166	0.03	0.02	0.03	2,173
Vendor	0.12	0.07	2.88	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,366	2,366	0.04	0.37	0.01	2,479
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.40	0.26	5.21	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,903	1,903	0.02	0.02	0.41	1,909
Vendor	0.11	0.07	2.39	0.93	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,026	2,026	0.03	0.32	0.20	2,123
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	0.95	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	315	315	< 0.005	< 0.005	0.07	316
Vendor	0.02	0.01	0.44	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	335	335	0.01	0.05	0.03	351
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.29	7.56	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,382	2,382	0.02	0.02	0.91	2,390
Vendor	0.13	0.08	2.64	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,325	2,325	0.04	0.35	0.42	2,430
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.31	5.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,156	2,156	0.03	0.02	0.02	2,163
Vendor	0.12	0.07	2.83	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,328	2,328	0.04	0.35	0.01	2,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.46	0.39	0.25	5.10	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,894	1,894	0.02	0.02	0.34	1,900
Vendor	0.11	0.07	2.36	0.90	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,994	1,994	0.03	0.30	0.16	2,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	314	314	< 0.005	< 0.005	0.06	315
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	330	330	0.01	0.05	0.03	345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.29	7.56	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,382	2,382	0.02	0.02	0.91	2,390
Vendor	0.13	0.08	2.64	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,325	2,325	0.04	0.35	0.42	2,430
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.31	5.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,156	2,156	0.03	0.02	0.02	2,163
Vendor	0.12	0.07	2.83	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,328	2,328	0.04	0.35	0.01	2,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.39	0.25	5.10	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,894	1,894	0.02	0.02	0.34	1,900
Vendor	0.11	0.07	2.36	0.90	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,994	1,994	0.03	0.30	0.16	2,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	314	314	< 0.005	< 0.005	0.06	315
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	330	330	0.01	0.05	0.03	345

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.28	7.45	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,373	2,373	0.02	0.02	0.75	2,380
Vendor	0.13	0.08	2.61	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,292	2,292	0.04	0.35	0.32	2,397
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.31	5.68	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,148	2,148	0.03	0.02	0.02	2,155
Vendor	0.12	0.07	2.79	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,295	2,295	0.04	0.35	0.01	2,400
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.37	0.25	5.08	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,886	1,886	0.02	0.02	0.28	1,893
Vendor	0.11	0.07	2.33	0.91	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,966	1,966	0.03	0.30	0.12	2,056
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.05	313
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	325	325	0.01	0.05	0.02	340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.28	7.45	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,373	2,373	0.02	0.02	0.75	2,380
Vendor	0.13	0.08	2.61	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,292	2,292	0.04	0.35	0.32	2,397
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.31	5.68	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,148	2,148	0.03	0.02	0.02	2,155
Vendor	0.12	0.07	2.79	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,295	2,295	0.04	0.35	0.01	2,400
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.37	0.25	5.08	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,886	1,886	0.02	0.02	0.28	1,893
Vendor	0.11	0.07	2.33	0.91	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,966	1,966	0.03	0.30	0.12	2,056
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.05	313
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	325	325	0.01	0.05	0.02	340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.44	0.28	7.35	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,365	2,365	0.02	0.01	0.61	2,370
Vendor	0.10	0.08	2.58	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,263	2,263	0.04	0.35	0.24	2,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.30	5.57	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,140	2,140	0.03	0.02	0.02	2,147
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,267	2,267	0.04	0.35	0.01	2,371
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.37	0.25	5.00	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,885	1,885	0.02	0.02	0.23	1,892
Vendor	0.08	0.06	2.31	0.91	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	1,946	1,946	0.03	0.30	0.09	2,037
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.91	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.04	313
Vendor	0.02	0.01	0.42	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	322	322	0.01	0.05	0.02	337
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.44	0.28	7.35	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,365	2,365	0.02	0.01	0.61	2,370
Vendor	0.10	0.08	2.58	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,263	2,263	0.04	0.35	0.24	2,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.30	5.57	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,140	2,140	0.03	0.02	0.02	2,147
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,267	2,267	0.04	0.35	0.01	2,371
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.45	0.37	0.25	5.00	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,885	1,885	0.02	0.02	0.23	1,892
Vendor	0.08	0.06	2.31	0.91	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	1,946	1,946	0.03	0.30	0.09	2,037
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.91	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.04	313
Vendor	0.02	0.01	0.42	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	322	322	0.01	0.05	0.02	337
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.24	2.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	462	462	0.02	< 0.005	—	463
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.03	0.23	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.4	76.4	< 0.005	< 0.005	—	76.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.30	5.54	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,134	2,134	0.03	0.02	0.01	2,141
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,242	2,242	0.04	0.35	< 0.005	2,347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.12	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	421	421	< 0.005	< 0.005	0.04	423
Vendor	0.02	0.01	0.51	0.20	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	431	431	0.01	0.07	0.02	451
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	69.7	69.7	< 0.005	< 0.005	0.01	70.0
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	71.4	71.4	< 0.005	0.01	< 0.005	74.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.56	2.87	< 0.005	0.01	—	0.01	0.01	—	0.01	—	462	462	0.02	< 0.005	—	463
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.4	76.4	< 0.005	< 0.005	—	76.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.30	5.54	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,134	2,134	0.03	0.02	0.01	2,141
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,242	2,242	0.04	0.35	< 0.005	2,347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.08	0.06	1.12	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	421	421	< 0.005	< 0.005	0.04	423
Vendor	0.02	0.01	0.51	0.20	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	431	431	0.01	0.07	0.02	451
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	69.7	69.7	< 0.005	< 0.005	0.01	70.0
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	71.4	71.4	< 0.005	0.01	< 0.005	74.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Paving (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	3.37	6.45	0.01	0.05	—	0.05	0.05	—	0.05	—	1,004	1,004	0.04	0.01	—	1,007
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.61	1.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	166	166	0.01	< 0.005	—	167
Paving	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	68.3	68.3	< 0.005	< 0.005	0.01	68.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	< 0.005	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.34. Paving (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.09	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.09	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.18	0.16	1.39	6.95	0.01	0.03	—	0.03	0.03	—	0.03	—	1,004	1,004	0.04	0.01	—	1,007
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	1.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	166	166	0.01	< 0.005	—	167
Paving	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	68.3	68.3	< 0.005	< 0.005	0.01	68.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	< 0.005	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Paving (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	5.02	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.38	0.73	< 0.005	0.01	—	0.01	0.01	—	0.01	—	114	114	< 0.005	< 0.005	—	114
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.07	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.9
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.70	7.70	< 0.005	< 0.005	< 0.005	7.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Paving (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	114	114	< 0.005	< 0.005	—	114
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.9
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.70	7.70	< 0.005	< 0.005	< 0.005	7.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Architectural Coating (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	14.5	14.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	14.5	14.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Architectural Coatings	10.7	10.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.4	16.4	< 0.005	< 0.005	—	16.4
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.45	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	470	470	< 0.005	< 0.005	0.08	471
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.11	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	426	426	0.01	< 0.005	< 0.005	427
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.86	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	323	323	< 0.005	< 0.005	0.03	324
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	53.4	53.4	< 0.005	< 0.005	< 0.005	53.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.38. Architectural Coating (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Architectural Coatings	6.01	6.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.4	16.4	< 0.005	< 0.005	—	16.4

Architect Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.45	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	470	470	< 0.005	< 0.005	0.08	471
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.11	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	426	426	0.01	< 0.005	< 0.005	427
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.86	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	323	323	< 0.005	< 0.005	0.03	324
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	53.4	53.4	< 0.005	< 0.005	< 0.005	53.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2032	6/20/2032	6.00	147	—
Grading	Grading	6/21/2032	8/23/2033	6.00	368	—
Building Construction	Building Construction	8/24/2033	3/23/2045	6.00	3,626	—
Paving	Paving	3/24/2045	2/1/2046	6.00	270	—
Architectural Coating	Architectural Coating	2/2/2046	12/13/2046	6.00	270	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29

Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	319	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	126	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2

Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	63.9	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	319	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	126	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2

Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	63.9	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,153,860	384,620	73,487

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	221	0.00	—
Grading	—	—	1,104	0.00	—
Paving	0.00	0.00	0.00	0.00	28.1

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	11.7	100%
Other Asphalt Surfaces	13.4	100%
Other Non-Asphalt Surfaces	3.00	0%
City Park	0.00	0%
Hotel	0.00	0%
Gasoline/Service Station	0.00	0%
Convenience Market (24 hour)	0.00	0%
Fast Food Restaurant with Drive Thru	0.00	0%
High Turnover (Sit Down Restaurant)	0.00	0%
Fast Food Restaurant w/o Drive Thru	0.00	0%
Bank (with Drive-Through)	0.00	0%
Strip Mall	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005

2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3

Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528

Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

Pacific Gateway (University Center Development Area Construction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (University Center Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
Strip Mall	38.9	1000sqft	1.80	38,900	39,795	—	—	—

Parking Lot	334	1000sqft	7.70	0.00	0.00	—	—	—
University/College (4yr)	4,600	Student	35.9	1,354,200	1,126,852	1,126,852	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Other Asphalt Surfaces	335	1000sqft	7.70	0.00	0.00	—	—	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Other Non-Asphalt Surfaces	454	1000sqft	10.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.5	56.4	22.3	73.6	0.12	0.93	19.8	20.7	0.85	10.1	11.0	—	28,048	28,048	0.42	1.73	31.5	28,606
Mit.	56.5	56.4	17.0	75.8	0.12	0.17	19.8	19.9	0.17	10.1	10.2	—	28,048	28,048	0.42	1.73	31.5	28,606
% Reduced	—	—	24%	-3%	—	81%	—	4%	80%	—	7%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	56.4	56.4	23.1	61.0	0.12	0.93	19.8	20.7	0.85	10.1	11.0	—	26,615	26,615	0.51	1.73	0.82	27,145
Mit.	56.4	56.4	18.5	63.1	0.12	0.17	19.8	19.9	0.17	10.1	10.2	—	26,615	26,615	0.51	1.73	0.82	27,145
% Reduced	—	—	20%	-4%	—	81%	—	4%	80%	—	7%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	45.4	45.4	18.9	52.8	0.10	0.72	16.8	17.0	0.66	5.56	6.21	—	22,814	22,814	0.40	1.46	11.5	23,271
Mit.	45.4	45.4	14.8	54.8	0.10	0.15	16.8	17.0	0.15	5.56	5.65	—	22,814	22,814	0.40	1.46	11.5	23,271
% Reduced	—	—	21%	-4%	—	79%	—	< 0.5%	78%	—	9%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.29	8.28	3.44	9.64	0.02	0.13	3.07	3.11	0.12	1.01	1.13	—	3,777	3,777	0.07	0.24	1.90	3,853
Mit.	8.29	8.28	2.71	9.99	0.02	0.03	3.07	3.10	0.03	1.01	1.03	—	3,777	3,777	0.07	0.24	1.90	3,853
% Reduced	—	—	21%	-4%	—	79%	—	< 0.5%	78%	—	9%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	3.02	2.55	18.6	25.8	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	6,758	6,758	0.27	0.05	0.26	6,781
2034	6.05	5.62	21.5	73.6	0.12	0.29	19.6	19.9	0.27	4.76	5.03	—	28,048	28,048	0.42	1.73	31.5	28,606
2035	5.95	5.57	21.0	71.0	0.12	0.27	19.6	19.9	0.26	4.76	5.02	—	27,568	27,568	0.42	1.64	26.8	28,094
2036	5.80	5.37	20.5	68.5	0.12	0.26	19.6	19.9	0.25	4.76	5.01	—	27,137	27,137	0.42	1.64	22.5	27,658
2037	5.57	5.15	19.6	66.9	0.12	0.25	19.6	19.9	0.24	4.76	5.00	—	26,756	26,756	0.42	1.64	18.8	27,274
2038	5.44	5.02	19.3	65.6	0.12	0.25	19.6	19.9	0.23	4.76	4.99	—	26,359	26,359	0.42	1.54	15.6	26,845

2039	5.22	4.30	18.9	64.2	0.12	0.24	19.6	19.9	0.23	4.76	4.98	—	26,059	26,059	0.41	1.54	12.9	26,542
2040	5.00	4.13	18.7	62.9	0.12	0.24	19.6	19.9	0.22	4.76	4.98	—	25,793	25,793	0.37	1.54	10.5	26,273
2041	4.91	4.05	18.4	62.2	0.12	0.23	19.6	19.9	0.22	4.76	4.98	—	25,558	25,558	0.37	1.54	8.62	26,036
2042	4.78	3.87	18.2	61.5	0.12	0.23	19.6	19.9	0.22	4.76	4.97	—	25,350	25,350	0.37	1.45	7.01	25,798
2043	4.65	3.77	18.0	60.7	0.12	0.22	19.6	19.9	0.21	4.76	4.97	—	25,169	25,169	0.37	1.45	5.67	25,616
2044	4.49	3.68	17.8	60.1	0.12	0.22	19.6	19.9	0.21	4.76	4.96	—	25,014	25,014	0.37	1.41	4.58	25,447
2045	4.40	3.63	17.6	60.0	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	24,879	24,879	0.37	1.41	3.69	25,312
2046	4.35	3.59	17.6	59.4	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	24,764	24,764	0.37	1.41	2.96	25,195
2047	0.70	0.61	5.02	10.0	0.01	0.07	0.13	0.20	0.07	0.03	0.09	—	1,621	1,621	0.06	0.01	0.02	1,626
2048	56.5	56.4	1.07	9.74	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,937	2,937	0.03	0.02	0.34	2,944
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,744	6,744	0.27	0.11	0.03	6,767
2033	3.02	2.55	18.6	25.7	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	6,742	6,742	0.27	0.05	0.01	6,765
2034	5.80	5.38	23.1	61.0	0.12	0.68	19.6	19.9	0.62	4.76	5.03	—	26,615	26,615	0.51	1.73	0.82	27,145
2035	5.70	5.28	22.4	59.1	0.12	0.27	19.6	19.9	0.26	4.76	5.02	—	26,152	26,152	0.51	1.64	0.69	26,654
2036	5.60	5.18	21.4	57.3	0.12	0.26	19.6	19.9	0.25	4.76	5.01	—	25,736	25,736	0.46	1.64	0.58	26,237
2037	5.41	5.00	20.9	55.6	0.12	0.25	19.6	19.9	0.24	4.76	5.00	—	25,368	25,368	0.46	1.64	0.49	25,869
2038	5.19	4.28	20.6	54.1	0.12	0.25	19.6	19.9	0.23	4.76	4.99	—	24,986	24,986	0.45	1.54	0.40	25,458
2039	5.10	4.19	20.3	53.1	0.12	0.24	19.6	19.9	0.23	4.76	4.98	—	24,696	24,696	0.45	1.54	0.33	25,168
2040	4.88	3.98	20.0	52.2	0.12	0.24	19.6	19.9	0.22	4.76	4.98	—	24,439	24,439	0.45	1.54	0.27	24,911
2041	4.75	3.85	19.8	51.4	0.12	0.23	19.6	19.9	0.22	4.76	4.98	—	24,211	24,211	0.41	1.54	0.22	24,682
2042	4.71	3.80	19.0	50.5	0.12	0.23	19.6	19.9	0.22	4.76	4.97	—	24,010	24,010	0.41	1.45	0.18	24,452
2043	4.62	3.75	18.8	50.3	0.12	0.22	19.6	19.9	0.21	4.76	4.97	—	23,834	23,834	0.41	1.45	0.15	24,277
2044	4.39	3.62	18.6	49.5	0.12	0.22	19.6	19.9	0.21	4.76	4.96	—	23,684	23,684	0.41	1.45	0.12	24,126
2045	3.84	3.56	18.5	49.3	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,553	23,553	0.41	1.45	0.10	23,996
2046	3.79	3.48	18.4	49.2	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,441	23,441	0.41	1.45	0.08	23,883
2047	56.4	56.4	18.2	49.0	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,345	23,345	0.41	1.45	0.06	23,788

2048	56.4	56.4	1.10	7.68	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,671	2,671	0.04	0.03	0.01	2,680
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	2.62	2.21	17.6	21.2	0.04	0.72	11.5	12.2	0.66	5.56	6.21	—	4,792	4,792	0.19	0.05	0.15	4,812
2033	2.59	2.18	15.9	22.1	0.05	0.63	8.03	8.66	0.58	3.17	3.74	—	5,782	5,782	0.23	0.05	0.10	5,802
2034	4.88	4.51	18.9	52.8	0.10	0.25	16.6	16.9	0.24	4.04	4.28	—	22,814	22,814	0.40	1.46	11.5	23,271
2035	4.90	4.50	18.5	51.8	0.10	0.24	16.8	17.0	0.22	4.06	4.28	—	22,699	22,699	0.40	1.40	9.89	23,138
2036	4.83	4.46	18.0	50.1	0.10	0.23	16.8	17.0	0.21	4.07	4.28	—	22,401	22,401	0.40	1.41	8.36	22,839
2037	4.62	4.26	17.6	48.6	0.10	0.22	16.8	17.0	0.21	4.06	4.26	—	22,021	22,021	0.40	1.40	6.96	22,457
2038	4.47	4.11	17.4	47.8	0.10	0.21	16.8	17.0	0.20	4.06	4.26	—	21,691	21,691	0.36	1.32	5.79	22,100
2039	4.35	3.57	17.0	46.6	0.10	0.21	16.8	17.0	0.20	4.06	4.25	—	21,440	21,440	0.35	1.32	4.77	21,848
2040	4.22	3.47	16.5	46.0	0.10	0.20	16.8	17.0	0.19	4.07	4.26	—	21,276	21,276	0.35	1.33	3.92	21,685
2041	4.06	3.31	16.2	45.2	0.10	0.20	16.8	17.0	0.19	4.06	4.25	—	21,022	21,022	0.35	1.32	3.19	21,428
2042	3.98	3.24	16.0	44.5	0.10	0.20	16.8	17.0	0.19	4.06	4.25	—	20,848	20,848	0.35	1.24	2.59	21,229
2043	3.94	3.16	15.9	44.3	0.10	0.19	16.8	17.0	0.18	4.06	4.24	—	20,696	20,696	0.35	1.24	2.10	21,077
2044	3.79	3.12	15.7	43.8	0.10	0.19	16.8	17.0	0.18	4.07	4.25	—	20,623	20,623	0.35	1.25	1.70	21,004
2045	3.73	3.03	15.5	43.6	0.10	0.18	16.8	17.0	0.18	4.06	4.23	—	20,454	20,454	0.32	1.24	1.36	20,833
2046	3.61	2.96	15.5	43.5	0.10	0.18	16.8	17.0	0.17	4.06	4.23	—	20,357	20,357	0.32	1.24	1.10	20,736
2047	1.79	1.72	4.30	8.77	0.01	0.06	0.31	0.37	0.06	0.07	0.13	—	1,559	1,559	0.05	0.02	0.02	1,567
2048	45.4	45.4	0.87	6.36	< 0.005	< 0.005	2.57	2.58	< 0.005	0.60	0.61	—	2,202	2,202	0.02	0.02	0.12	2,209
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.48	0.40	3.21	3.87	0.01	0.13	2.10	2.23	0.12	1.01	1.13	—	793	793	0.03	0.01	0.03	797
2033	0.47	0.40	2.90	4.02	0.01	0.11	1.47	1.58	0.11	0.58	0.68	—	957	957	0.04	0.01	0.02	961
2034	0.89	0.82	3.44	9.64	0.02	0.05	3.03	3.08	0.04	0.74	0.78	—	3,777	3,777	0.07	0.24	1.90	3,853
2035	0.89	0.82	3.37	9.46	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,758	3,758	0.07	0.23	1.64	3,831
2036	0.88	0.81	3.29	9.15	0.02	0.04	3.07	3.11	0.04	0.74	0.78	—	3,709	3,709	0.07	0.23	1.38	3,781
2037	0.84	0.78	3.22	8.87	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,646	3,646	0.07	0.23	1.15	3,718
2038	0.82	0.75	3.17	8.73	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,591	3,591	0.06	0.22	0.96	3,659
2039	0.79	0.65	3.11	8.50	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,550	3,550	0.06	0.22	0.79	3,617

2040	0.77	0.63	3.00	8.39	0.02	0.04	3.07	3.11	0.04	0.74	0.78	—	3,523	3,523	0.06	0.22	0.65	3,590
2041	0.74	0.60	2.95	8.25	0.02	0.04	3.06	3.10	0.03	0.74	0.78	—	3,480	3,480	0.06	0.22	0.53	3,548
2042	0.73	0.59	2.92	8.12	0.02	0.04	3.06	3.10	0.03	0.74	0.77	—	3,452	3,452	0.06	0.21	0.43	3,515
2043	0.72	0.58	2.89	8.08	0.02	0.04	3.06	3.10	0.03	0.74	0.77	—	3,426	3,426	0.06	0.21	0.35	3,490
2044	0.69	0.57	2.87	8.00	0.02	0.03	3.07	3.10	0.03	0.74	0.78	—	3,414	3,414	0.06	0.21	0.28	3,478
2045	0.68	0.55	2.83	7.96	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,386	3,386	0.05	0.21	0.23	3,449
2046	0.66	0.54	2.82	7.94	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,370	3,370	0.05	0.21	0.18	3,433
2047	0.33	0.31	0.78	1.60	< 0.005	0.01	0.06	0.07	0.01	0.01	0.02	—	258	258	0.01	< 0.005	< 0.005	259
2048	8.29	8.28	0.16	1.16	< 0.005	< 0.005	0.47	0.47	< 0.005	0.11	0.11	—	365	365	< 0.005	< 0.005	0.02	366

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	0.81	0.78	4.70	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,758	6,758	0.27	0.05	0.26	6,781
2034	5.49	5.18	17.0	75.8	0.12	0.17	19.6	19.8	0.17	4.76	4.93	—	28,048	28,048	0.42	1.73	31.5	28,606
2035	5.40	5.14	16.6	73.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	27,568	27,568	0.42	1.64	26.8	28,094
2036	5.27	4.96	16.3	70.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	27,137	27,137	0.42	1.64	22.5	27,658
2037	5.05	4.75	15.6	69.4	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,756	26,756	0.42	1.64	18.8	27,274
2038	4.93	4.62	15.3	68.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,359	26,359	0.42	1.54	15.6	26,845
2039	4.72	3.91	15.1	66.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,059	26,059	0.41	1.54	12.9	26,542
2040	4.51	3.75	14.9	65.5	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,793	25,793	0.37	1.54	10.5	26,273
2041	4.42	3.67	14.7	64.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,558	25,558	0.37	1.54	8.62	26,036
2042	4.30	3.50	14.5	64.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,350	25,350	0.37	1.45	7.01	25,798
2043	4.17	3.40	14.4	63.4	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,169	25,169	0.37	1.45	5.67	25,616
2044	4.02	3.32	14.3	62.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,014	25,014	0.37	1.41	4.58	25,447

2045	3.94	3.28	14.1	62.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,879	24,879	0.37	1.41	3.69	25,312
2046	3.90	3.23	14.1	62.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,764	24,764	0.37	1.41	2.96	25,195
2047	0.44	0.41	2.09	10.8	0.01	0.04	0.13	0.16	0.04	0.03	0.07	—	1,621	1,621	0.06	0.01	0.02	1,626
2048	56.5	56.4	1.07	9.74	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,937	2,937	0.03	0.02	0.34	2,944
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.81	0.78	5.75	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,744	6,744	0.27	0.11	0.03	6,767
2033	0.80	0.78	4.71	35.8	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,742	6,742	0.27	0.05	0.01	6,765
2034	5.24	4.94	18.5	63.1	0.12	0.17	19.6	19.8	0.17	4.76	4.93	—	26,615	26,615	0.51	1.73	0.82	27,145
2035	5.15	4.85	18.0	61.3	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,152	26,152	0.51	1.64	0.69	26,654
2036	5.07	4.77	17.2	59.6	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,736	25,736	0.46	1.64	0.58	26,237
2037	4.90	4.60	16.9	58.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,368	25,368	0.46	1.64	0.49	25,869
2038	4.69	3.89	16.6	56.5	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,986	24,986	0.45	1.54	0.40	25,458
2039	4.60	3.80	16.5	55.6	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,696	24,696	0.45	1.54	0.33	25,168
2040	4.39	3.59	16.2	54.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,439	24,439	0.45	1.54	0.27	24,911
2041	4.26	3.47	16.1	53.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,211	24,211	0.41	1.54	0.22	24,682
2042	4.22	3.42	15.4	53.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,010	24,010	0.41	1.45	0.18	24,452
2043	4.14	3.38	15.2	52.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,834	23,834	0.41	1.45	0.15	24,277
2044	3.92	3.26	15.1	52.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,684	23,684	0.41	1.45	0.12	24,126
2045	3.37	3.20	15.0	52.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,553	23,553	0.41	1.45	0.10	23,996
2046	3.33	3.13	14.9	52.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,441	23,441	0.41	1.45	0.08	23,883
2047	56.4	56.4	14.8	51.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,345	23,345	0.41	1.45	0.06	23,788
2048	56.4	56.4	1.10	7.68	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,671	2,671	0.04	0.03	0.01	2,680
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.56	0.54	3.25	25.0	0.04	0.10	11.5	11.6	0.10	5.56	5.65	—	4,792	4,792	0.19	0.05	0.15	4,812
2033	0.69	0.67	4.03	30.7	0.05	0.12	8.03	8.15	0.12	3.17	3.28	—	5,782	5,782	0.23	0.05	0.10	5,802
2034	4.37	4.11	14.8	54.8	0.10	0.15	16.6	16.8	0.15	4.04	4.19	—	22,814	22,814	0.40	1.46	11.5	23,271

2035	4.43	4.13	14.7	53.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	22,699	22,699	0.40	1.40	9.89	23,138
2036	4.37	4.11	14.5	52.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	22,401	22,401	0.40	1.41	8.36	22,839
2037	4.18	3.91	14.2	50.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	22,021	22,021	0.40	1.40	6.96	22,457
2038	4.03	3.77	14.0	49.9	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,691	21,691	0.36	1.32	5.79	22,100
2039	3.93	3.23	13.7	48.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,440	21,440	0.35	1.32	4.77	21,848
2040	3.79	3.14	13.2	48.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	21,276	21,276	0.35	1.33	3.92	21,685
2041	3.64	2.99	13.0	47.4	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,022	21,022	0.35	1.32	3.19	21,428
2042	3.56	2.92	12.9	46.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,848	20,848	0.35	1.24	2.59	21,229
2043	3.53	2.84	12.8	46.6	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,696	20,696	0.35	1.24	2.10	21,077
2044	3.38	2.81	12.7	46.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	20,623	20,623	0.35	1.25	1.70	21,004
2045	3.34	2.73	12.5	46.0	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,454	20,454	0.32	1.24	1.36	20,833
2046	3.22	2.66	12.5	45.9	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,357	20,357	0.32	1.24	1.10	20,736
2047	1.57	1.55	1.85	9.41	0.01	0.03	0.31	0.34	0.03	0.07	0.11	—	1,559	1,559	0.05	0.02	0.02	1,567
2048	45.4	45.4	0.87	6.36	< 0.005	< 0.005	2.57	2.58	< 0.005	0.60	0.61	—	2,202	2,202	0.02	0.02	0.12	2,209
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.10	0.10	0.59	4.57	0.01	0.02	2.10	2.12	0.02	1.01	1.03	—	793	793	0.03	0.01	0.03	797
2033	0.13	0.12	0.74	5.61	0.01	0.02	1.47	1.49	0.02	0.58	0.60	—	957	957	0.04	0.01	0.02	961
2034	0.80	0.75	2.71	9.99	0.02	0.03	3.03	3.06	0.03	0.74	0.76	—	3,777	3,777	0.07	0.24	1.90	3,853
2035	0.81	0.75	2.69	9.81	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,758	3,758	0.07	0.23	1.64	3,831
2036	0.80	0.75	2.64	9.51	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,709	3,709	0.07	0.23	1.38	3,781
2037	0.76	0.71	2.59	9.25	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,646	3,646	0.07	0.23	1.15	3,718
2038	0.74	0.69	2.55	9.11	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,591	3,591	0.06	0.22	0.96	3,659
2039	0.72	0.59	2.51	8.89	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,550	3,550	0.06	0.22	0.79	3,617
2040	0.69	0.57	2.41	8.79	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,523	3,523	0.06	0.22	0.65	3,590
2041	0.66	0.55	2.37	8.65	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,480	3,480	0.06	0.22	0.53	3,548
2042	0.65	0.53	2.35	8.52	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,452	3,452	0.06	0.21	0.43	3,515
2043	0.64	0.52	2.33	8.50	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,426	3,426	0.06	0.21	0.35	3,490
2044	0.62	0.51	2.31	8.42	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,414	3,414	0.06	0.21	0.28	3,478

2045	0.61	0.50	2.28	8.39	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,386	3,386	0.05	0.21	0.23	3,449
2046	0.59	0.48	2.28	8.37	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,370	3,370	0.05	0.21	0.18	3,433
2047	0.29	0.28	0.34	1.72	< 0.005	0.01	0.06	0.06	0.01	0.01	0.02	—	258	258	0.01	< 0.005	< 0.005	259
2048	8.29	8.28	0.16	1.16	< 0.005	< 0.005	0.47	0.47	< 0.005	0.11	0.11	—	365	365	< 0.005	< 0.005	0.02	366

3. Construction Emissions Details

3.1. Demolition (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	16.2	16.9	0.03	0.62	—	0.62	0.57	—	0.57	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.78	0.78	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.45	2.54	< 0.005	0.09	—	0.09	0.09	—	0.09	—	516	516	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.46	< 0.005	0.02	—	0.02	0.02	—	0.02	—	85.5	85.5	< 0.005	< 0.005	—	85.8
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.01	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.65	0.16	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	512	512	0.01	0.08	0.02	536
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.01	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	77.1	77.1	< 0.005	0.01	0.05	80.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.01	13.4

3.2. Demolition (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.61	5.07	18.3	0.03	0.10	—	0.10	0.10	—	0.10	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.78	0.78	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.76	2.75	< 0.005	0.02	—	0.02	0.01	—	0.01	—	516	516	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	85.5	85.5	< 0.005	< 0.005	—	85.8
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.01	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.65	0.16	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	512	512	0.01	0.08	0.02	536
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.01	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	77.1	77.1	< 0.005	0.01	0.05	80.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.01	13.4

3.3. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	10.1	11.6	0.02	0.42	—	0.42	0.38	—	0.38	—	2,394	2,394	0.10	0.02	—	2,402
Dust From Material Movement	—	—	—	—	—	—	8.89	8.89	—	4.57	4.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	1.84	2.12	< 0.005	0.08	—	0.08	0.07	—	0.07	—	396	396	0.02	< 0.005	—	398

Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.05	60.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.94	9.94	< 0.005	< 0.005	0.01	9.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.17	12.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,394	2,394	0.10	0.02	—	2,402
Dust From Material Movement	—	—	—	—	—	—	8.89	8.89	—	4.57	4.57	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.21	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	396	396	0.02	< 0.005	—	398
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.05	60.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.94	9.94	< 0.005	< 0.005	0.01	9.98

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.78	0.66	4.97	6.60	0.02	0.20	—	0.20	0.19	—	0.19	—	1,688	1,688	0.07	0.01	—	1,694
Dust From Material Movement	—	—	—	—	—	—	2.36	2.36	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	0.91	1.20	< 0.005	0.04	—	0.04	0.03	—	0.03	—	280	280	0.01	< 0.005	—	280
Dust From Material Movement	—	—	—	—	—	—	0.43	0.43	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.8	38.8	< 0.005	< 0.005	0.03	39.0

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.19	1.20	9.05	0.02	0.04	—	0.04	0.04	—	0.04	—	1,688	1,688	0.07	0.01	—	1,694
Dust From Material Movement	—	—	—	—	—	—	2.36	2.36	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.22	1.65	< 0.005	0.01	—	0.01	0.01	—	0.01	—	280	280	0.01	< 0.005	—	280
Dust From Material Movement	—	—	—	—	—	—	0.43	0.43	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.8	38.8	< 0.005	< 0.005	0.03	39.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.14	15.9	21.6	0.05	0.63	—	0.63	0.58	—	0.58	—	5,654	5,654	0.23	0.05	—	5,673
Dust From Material Movement	—	—	—	—	—	—	7.89	7.89	—	3.13	3.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	2.90	3.95	0.01	0.11	—	0.11	0.11	—	0.11	—	936	936	0.04	0.01	—	939
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.57	0.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	128	128	< 0.005	< 0.005	0.10	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.02	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.63	4.01	30.3	0.05	0.12	—	0.12	0.12	—	0.12	—	5,654	5,654	0.23	0.05	—	5,673
Dust From Material Movement	—	—	—	—	—	—	7.89	7.89	—	3.13	3.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.11	0.73	5.53	0.01	0.02	—	0.02	0.02	—	0.02	—	936	936	0.04	0.01	—	939

Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.57	0.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	128	128	< 0.005	< 0.005	0.10	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.02	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.90	2.44	17.8	25.1	0.06	0.68	—	0.68	0.62	—	0.62	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.25	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	92.9	92.9	< 0.005	< 0.005	—	93.3
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.4

Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Grading (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.73	4.66	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	92.9	92.9	< 0.005	< 0.005	—	93.3
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.4
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.34	10.8	0.02	0.16	—	0.16	0.15	—	0.15	—	2,021	2,021	0.08	0.02	—	2,028
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.16	1.96	< 0.005	0.03	—	0.03	0.03	—	0.03	—	335	335	0.01	< 0.005	—	336
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.54	4.46	2.34	56.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,219	15,219	0.17	0.13	21.7	15,283
Vendor	0.48	0.30	11.7	4.26	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,431	10,431	0.16	1.59	9.83	10,918

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	3.06	43.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,774	13,774	0.25	0.13	0.56	13,819
Vendor	0.44	0.27	12.5	4.40	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,444	10,444	0.16	1.59	0.25	10,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	38.0	0.00	0.00	13.5	13.5	0.00	3.16	3.16	—	11,900	11,900	0.18	0.11	7.91	11,944
Vendor	0.39	0.24	10.2	3.65	0.08	0.08	3.03	3.11	0.08	0.84	0.92	—	8,799	8,799	0.13	1.34	3.57	9,204
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.94	0.00	0.00	2.46	2.46	0.00	0.58	0.58	—	1,970	1,970	0.03	0.02	1.31	1,977
Vendor	0.07	0.04	1.87	0.67	0.01	0.01	0.55	0.57	0.01	0.15	0.17	—	1,457	1,457	0.02	0.22	0.59	1,524
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.35	2.49	12.6	0.02	0.07	—	0.07	0.06	—	0.06	—	2,021	2,021	0.08	0.02	—	2,028
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	335	335	0.01	< 0.005	—	336
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.54	4.46	2.34	56.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,219	15,219	0.17	0.13	21.7	15,283
Vendor	0.48	0.30	11.7	4.26	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,431	10,431	0.16	1.59	9.83	10,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	3.06	43.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,774	13,774	0.25	0.13	0.56	13,819

Vendor	0.44	0.27	12.5	4.40	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,444	10,444	0.16	1.59	0.25	10,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	38.0	0.00	0.00	13.5	13.5	0.00	3.16	3.16	—	11,900	11,900	0.18	0.11	7.91	11,944
Vendor	0.39	0.24	10.2	3.65	0.08	0.08	3.03	3.11	0.08	0.84	0.92	—	8,799	8,799	0.13	1.34	3.57	9,204
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.94	0.00	0.00	2.46	2.46	0.00	0.58	0.58	—	1,970	1,970	0.03	0.02	1.31	1,977
Vendor	0.07	0.04	1.87	0.67	0.01	0.01	0.55	0.57	0.01	0.15	0.17	—	1,457	1,457	0.02	0.22	0.59	1,524
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.42	2.34	54.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,048	15,048	0.17	0.13	18.6	15,108
Vendor	0.48	0.30	11.3	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,124	10,124	0.16	1.49	8.15	10,581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.25	4.16	3.01	42.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,619	13,619	0.25	0.13	0.48	13,664
Vendor	0.44	0.27	12.1	4.30	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,136	10,136	0.16	1.49	0.21	10,586
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.64	3.53	2.08	37.3	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,963	11,963	0.18	0.11	6.87	12,006
Vendor	0.39	0.24	10.1	3.62	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,682	8,682	0.13	1.28	3.02	9,070

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.64	0.38	6.81	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,981	1,981	0.03	0.02	1.14	1,988
Vendor	0.07	0.04	1.85	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,437	1,437	0.02	0.21	0.50	1,502
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.42	2.34	54.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,048	15,048	0.17	0.13	18.6	15,108
Vendor	0.48	0.30	11.3	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,124	10,124	0.16	1.49	8.15	10,581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.25	4.16	3.01	42.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,619	13,619	0.25	0.13	0.48	13,664
Vendor	0.44	0.27	12.1	4.30	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,136	10,136	0.16	1.49	0.21	10,586
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.64	3.53	2.08	37.3	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,963	11,963	0.18	0.11	6.87	12,006
Vendor	0.39	0.24	10.1	3.62	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,682	8,682	0.13	1.28	3.02	9,070
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.64	0.38	6.81	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,981	1,981	0.03	0.02	1.14	1,988
Vendor	0.07	0.04	1.85	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,437	1,437	0.02	0.21	0.50	1,502
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	2.30	51.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,894	14,894	0.17	0.13	15.8	14,951
Vendor	0.47	0.29	11.1	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,847	9,847	0.16	1.49	6.69	10,302
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.16	4.08	2.47	40.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,480	13,480	0.21	0.13	0.41	13,523
Vendor	0.44	0.27	11.8	4.29	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,859	9,859	0.16	1.49	0.17	10,308
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	35.7	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,873	11,873	0.18	0.11	5.88	11,916
Vendor	0.40	0.24	9.87	3.63	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	8,468	8,468	0.14	1.28	2.48	8,856
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.51	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,966	1,966	0.03	0.02	0.97	1,973
Vendor	0.07	0.04	1.80	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,402	1,402	0.02	0.21	0.41	1,466
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.33	4.25	2.30	51.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,894	14,894	0.17	0.13	15.8	14,951
Vendor	0.47	0.29	11.1	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,847	9,847	0.16	1.49	6.69	10,302
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.16	4.08	2.47	40.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,480	13,480	0.21	0.13	0.41	13,523
Vendor	0.44	0.27	11.8	4.29	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,859	9,859	0.16	1.49	0.17	10,308
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	35.7	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,873	11,873	0.18	0.11	5.88	11,916
Vendor	0.40	0.24	9.87	3.63	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	8,468	8,468	0.14	1.28	2.48	8,856
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.51	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,966	1,966	0.03	0.02	0.97	1,973
Vendor	0.07	0.04	1.80	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,402	1,402	0.02	0.21	0.41	1,466
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.12	4.04	1.80	50.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,759	14,759	0.17	0.13	13.4	14,814
Vendor	0.47	0.29	10.8	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,600	9,600	0.16	1.49	5.40	10,054
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.00	3.91	2.43	38.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,359	13,359	0.21	0.13	0.35	13,402
Vendor	0.44	0.27	11.5	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,613	9,613	0.16	1.49	0.14	10,062
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.39	3.32	2.01	34.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,734	11,734	0.18	0.11	4.96	11,775
Vendor	0.39	0.24	9.63	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,233	8,233	0.13	1.28	2.00	8,620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.61	0.37	6.27	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,943	1,943	0.03	0.02	0.82	1,950
Vendor	0.07	0.04	1.76	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,363	1,363	0.02	0.21	0.33	1,427
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.12	4.04	1.80	50.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,759	14,759	0.17	0.13	13.4	14,814
Vendor	0.47	0.29	10.8	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,600	9,600	0.16	1.49	5.40	10,054
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	2.43	38.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,359	13,359	0.21	0.13	0.35	13,402
Vendor	0.44	0.27	11.5	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,613	9,613	0.16	1.49	0.14	10,062
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.39	3.32	2.01	34.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,734	11,734	0.18	0.11	4.96	11,775
Vendor	0.39	0.24	9.63	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,233	8,233	0.13	1.28	2.00	8,620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.61	0.37	6.27	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,943	1,943	0.03	0.02	0.82	1,950
Vendor	0.07	0.04	1.76	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,363	1,363	0.02	0.21	0.33	1,427
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	1.76	49.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,584	14,584	0.17	0.13	11.3	14,637
Vendor	0.47	0.29	10.6	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,378	9,378	0.16	1.40	4.32	9,803
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	2.43	37.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,199	13,199	0.21	0.13	0.29	13,242
Vendor	0.44	0.27	11.3	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,391	9,391	0.15	1.40	0.11	9,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	3.17	2.01	33.6	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,594	11,594	0.14	0.11	4.18	11,634
Vendor	0.39	0.24	9.44	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,043	8,043	0.13	1.20	1.60	8,405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.59	0.58	0.37	6.13	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,919	1,919	0.02	0.02	0.69	1,926
Vendor	0.07	0.04	1.72	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,332	1,332	0.02	0.20	0.27	1,392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	1.76	49.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,584	14,584	0.17	0.13	11.3	14,637
Vendor	0.47	0.29	10.6	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,378	9,378	0.16	1.40	4.32	9,803
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	2.43	37.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,199	13,199	0.21	0.13	0.29	13,242
Vendor	0.44	0.27	11.3	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,391	9,391	0.15	1.40	0.11	9,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	3.17	2.01	33.6	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,594	11,594	0.14	0.11	4.18	11,634
Vendor	0.39	0.24	9.44	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,043	8,043	0.13	1.20	1.60	8,405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.58	0.37	6.13	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,919	1,919	0.02	0.02	0.69	1,926
Vendor	0.07	0.04	1.72	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,332	1,332	0.02	0.20	0.27	1,392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	5.81	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.06	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	1.76	47.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,482	14,482	0.17	0.13	9.45	14,533
Vendor	0.47	0.29	10.4	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,180	9,180	0.15	1.40	3.41	9,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.70	3.12	2.39	36.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,106	13,106	0.21	0.13	0.25	13,149
Vendor	0.44	0.27	11.1	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,193	9,193	0.15	1.40	0.09	9,613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.14	2.63	1.97	32.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,513	11,513	0.14	0.11	3.50	11,552
Vendor	0.39	0.24	9.24	3.46	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,873	7,873	0.13	1.20	1.26	8,235
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.48	0.36	5.92	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,906	1,906	0.02	0.02	0.58	1,913
Vendor	0.07	0.04	1.69	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,304	1,304	0.02	0.20	0.21	1,363
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	1.76	47.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,482	14,482	0.17	0.13	9.45	14,533
Vendor	0.47	0.29	10.4	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,180	9,180	0.15	1.40	3.41	9,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.70	3.12	2.39	36.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,106	13,106	0.21	0.13	0.25	13,149
Vendor	0.44	0.27	11.1	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,193	9,193	0.15	1.40	0.09	9,613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.14	2.63	1.97	32.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,513	11,513	0.14	0.11	3.50	11,552
Vendor	0.39	0.24	9.24	3.46	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,873	7,873	0.13	1.20	1.26	8,235
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.48	0.36	5.92	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,906	1,906	0.02	0.02	0.58	1,913
Vendor	0.07	0.04	1.69	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,304	1,304	0.02	0.20	0.21	1,363
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.57	3.03	1.72	46.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,393	14,393	0.13	0.13	7.87	14,442
Vendor	0.47	0.30	10.2	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,003	9,003	0.15	1.40	2.67	9,426
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.91	2.39	35.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,027	13,027	0.21	0.13	0.20	13,070
Vendor	0.44	0.27	10.9	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,015	9,015	0.15	1.40	0.07	9,436
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.00	2.53	1.55	31.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,474	11,474	0.14	0.11	2.93	11,513
Vendor	0.40	0.25	9.15	3.47	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,742	7,742	0.13	1.20	0.99	8,105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.46	0.28	5.82	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,900	1,900	0.02	0.02	0.48	1,906
Vendor	0.07	0.05	1.67	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,282	1,282	0.02	0.20	0.16	1,342
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.57	3.03	1.72	46.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,393	14,393	0.13	0.13	7.87	14,442
Vendor	0.47	0.30	10.2	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,003	9,003	0.15	1.40	2.67	9,426
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.91	2.39	35.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,027	13,027	0.21	0.13	0.20	13,070
Vendor	0.44	0.27	10.9	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,015	9,015	0.15	1.40	0.07	9,436
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.00	2.53	1.55	31.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,474	11,474	0.14	0.11	2.93	11,513
Vendor	0.40	0.25	9.15	3.47	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,742	7,742	0.13	1.20	0.99	8,105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.46	0.28	5.82	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,900	1,900	0.02	0.02	0.48	1,906
Vendor	0.07	0.05	1.67	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,282	1,282	0.02	0.20	0.16	1,342

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.95	1.72	45.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,317	14,317	0.13	0.13	6.56	14,365
Vendor	0.47	0.30	10.0	3.98	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,844	8,844	0.15	1.40	2.06	9,266
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	2.34	34.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,958	12,958	0.17	0.13	0.17	13,000
Vendor	0.44	0.27	10.8	4.12	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,857	8,857	0.15	1.40	0.05	9,277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.85	2.38	1.54	31.1	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,382	11,382	0.14	0.11	2.43	11,420
Vendor	0.39	0.25	8.94	3.47	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,585	7,585	0.13	1.20	0.76	7,946
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.28	5.68	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,884	1,884	0.02	0.02	0.40	1,891
Vendor	0.07	0.05	1.63	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,256	1,256	0.02	0.20	0.13	1,316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.95	1.72	45.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,317	14,317	0.13	0.13	6.56	14,365
Vendor	0.47	0.30	10.0	3.98	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,844	8,844	0.15	1.40	2.06	9,266
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	2.34	34.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,958	12,958	0.17	0.13	0.17	13,000
Vendor	0.44	0.27	10.8	4.12	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,857	8,857	0.15	1.40	0.05	9,277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.85	2.38	1.54	31.1	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,382	11,382	0.14	0.11	2.43	11,420
Vendor	0.39	0.25	8.94	3.47	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,585	7,585	0.13	1.20	0.76	7,946
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.28	5.68	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,884	1,884	0.02	0.02	0.40	1,891
Vendor	0.07	0.05	1.63	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,256	1,256	0.02	0.20	0.13	1,316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	1.72	45.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,251	14,251	0.13	0.13	5.43	14,297
Vendor	0.47	0.30	9.90	3.89	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,702	8,702	0.15	1.30	1.58	9,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.32	2.74	1.84	34.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,898	12,898	0.17	0.13	0.14	12,940
Vendor	0.44	0.27	10.6	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,715	8,715	0.15	1.30	0.04	9,108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.77	2.31	1.51	30.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,329	11,329	0.14	0.11	2.01	11,367
Vendor	0.39	0.25	8.83	3.39	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,464	7,464	0.13	1.12	0.59	7,801
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.42	0.28	5.57	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,876	1,876	0.02	0.02	0.33	1,882
Vendor	0.07	0.05	1.61	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,236	1,236	0.02	0.18	0.10	1,291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	1.72	45.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,251	14,251	0.13	0.13	5.43	14,297
Vendor	0.47	0.30	9.90	3.89	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,702	8,702	0.15	1.30	1.58	9,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.32	2.74	1.84	34.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,898	12,898	0.17	0.13	0.14	12,940
Vendor	0.44	0.27	10.6	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,715	8,715	0.15	1.30	0.04	9,108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.77	2.31	1.51	30.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,329	11,329	0.14	0.11	2.01	11,367
Vendor	0.39	0.25	8.83	3.39	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,464	7,464	0.13	1.12	0.59	7,801
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.42	0.28	5.57	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,876	1,876	0.02	0.02	0.33	1,882
Vendor	0.07	0.05	1.61	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,236	1,236	0.02	0.18	0.10	1,291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.67	44.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,193	14,193	0.13	0.13	4.46	14,238
Vendor	0.47	0.29	9.78	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,579	8,579	0.15	1.30	1.21	8,972
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.84	34.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,846	12,846	0.17	0.13	0.12	12,888
Vendor	0.44	0.27	10.5	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,592	8,592	0.15	1.30	0.03	8,984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.74	2.24	1.51	30.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,284	11,284	0.14	0.11	1.65	11,321
Vendor	0.39	0.25	8.73	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,358	7,358	0.13	1.12	0.45	7,695
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.41	0.28	5.54	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,868	1,868	0.02	0.02	0.27	1,874
Vendor	0.07	0.05	1.59	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,218	1,218	0.02	0.18	0.07	1,274

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.67	44.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,193	14,193	0.13	0.13	4.46	14,238
Vendor	0.47	0.29	9.78	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,579	8,579	0.15	1.30	1.21	8,972
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.84	34.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,846	12,846	0.17	0.13	0.12	12,888
Vendor	0.44	0.27	10.5	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,592	8,592	0.15	1.30	0.03	8,984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.74	2.24	1.51	30.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,284	11,284	0.14	0.11	1.65	11,321
Vendor	0.39	0.25	8.73	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,358	7,358	0.13	1.12	0.45	7,695
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.41	0.28	5.54	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,868	1,868	0.02	0.02	0.27	1,874
Vendor	0.07	0.05	1.59	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,218	1,218	0.02	0.18	0.07	1,274
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.61	1.67	44.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,146	14,146	0.13	0.08	3.67	14,178
Vendor	0.37	0.29	9.66	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,471	8,471	0.15	1.30	0.92	8,864
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.80	33.3	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,803	12,803	0.17	0.13	0.10	12,845
Vendor	0.34	0.27	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,484	8,484	0.15	1.30	0.02	8,876
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.21	1.51	29.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,277	11,277	0.14	0.11	1.36	11,314
Vendor	0.31	0.24	8.65	3.41	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,286	7,286	0.13	1.12	0.34	7,623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.40	0.28	5.46	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,867	1,867	0.02	0.02	0.23	1,873
Vendor	0.06	0.04	1.58	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,206	1,206	0.02	0.19	0.06	1,262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.61	1.67	44.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,146	14,146	0.13	0.08	3.67	14,178
Vendor	0.37	0.29	9.66	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,471	8,471	0.15	1.30	0.92	8,864
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.80	33.3	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,803	12,803	0.17	0.13	0.10	12,845
Vendor	0.34	0.27	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,484	8,484	0.15	1.30	0.02	8,876
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.21	1.51	29.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,277	11,277	0.14	0.11	1.36	11,314
Vendor	0.31	0.24	8.65	3.41	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,286	7,286	0.13	1.12	0.34	7,623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.40	0.28	5.46	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,867	1,867	0.02	0.02	0.23	1,873
Vendor	0.06	0.04	1.58	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,206	1,206	0.02	0.19	0.06	1,262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.79	0.66	5.50	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.67	43.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,104	14,104	0.13	0.08	3.01	14,136
Vendor	0.37	0.29	9.54	3.91	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,378	8,378	0.15	1.30	0.68	8,771
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.57	2.53	1.80	33.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,765	12,765	0.17	0.13	0.08	12,807
Vendor	0.34	0.26	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,391	8,391	0.15	1.30	0.02	8,783
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.63	2.13	1.47	29.8	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,213	11,213	0.11	0.11	1.11	11,249
Vendor	0.31	0.24	8.53	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,186	7,186	0.13	1.12	0.25	7,522
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.39	0.27	5.43	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,856	1,856	0.02	0.02	0.18	1,862
Vendor	0.06	0.04	1.56	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,190	1,190	0.02	0.18	0.04	1,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.34. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.67	43.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,104	14,104	0.13	0.08	3.01	14,136
Vendor	0.37	0.29	9.54	3.91	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,378	8,378	0.15	1.30	0.68	8,771
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.57	2.53	1.80	33.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,765	12,765	0.17	0.13	0.08	12,807
Vendor	0.34	0.26	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,391	8,391	0.15	1.30	0.02	8,783
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.63	2.13	1.47	29.8	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,213	11,213	0.11	0.11	1.11	11,249
Vendor	0.31	0.24	8.53	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,186	7,186	0.13	1.12	0.25	7,522
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.39	0.27	5.43	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,856	1,856	0.02	0.02	0.18	1,862
Vendor	0.06	0.04	1.56	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,190	1,190	0.02	0.18	0.04	1,245

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.66	5.47	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.07	2.53	1.67	43.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,069	14,069	0.13	0.08	2.46	14,100
Vendor	0.37	0.29	9.53	3.92	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,297	8,297	0.15	1.30	0.50	8,690
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.53	2.44	1.80	33.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,734	12,734	0.17	0.13	0.06	12,776
Vendor	0.34	0.27	10.2	4.03	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,310	8,310	0.15	1.30	0.01	8,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.52	2.06	1.47	29.7	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,186	11,186	0.11	0.11	0.91	11,222
Vendor	0.30	0.24	8.52	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,117	7,117	0.13	1.12	0.18	7,453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.38	0.27	5.42	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,852	1,852	0.02	0.02	0.15	1,858
Vendor	0.06	0.04	1.55	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,178	1,178	0.02	0.18	0.03	1,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Building Construction (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.07	2.53	1.67	43.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,069	14,069	0.13	0.08	2.46	14,100
Vendor	0.37	0.29	9.53	3.92	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,297	8,297	0.15	1.30	0.50	8,690
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.53	2.44	1.80	33.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,734	12,734	0.17	0.13	0.06	12,776
Vendor	0.34	0.27	10.2	4.03	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,310	8,310	0.15	1.30	0.01	8,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.52	2.06	1.47	29.7	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,186	11,186	0.11	0.11	0.91	11,222
Vendor	0.30	0.24	8.52	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,117	7,117	0.13	1.12	0.18	7,453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.38	0.27	5.42	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,852	1,852	0.02	0.02	0.15	1,858
Vendor	0.06	0.04	1.55	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,178	1,178	0.02	0.18	0.03	1,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.33	12.1	0.02	0.11	—	0.11	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	16.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.80	2.80	< 0.005	< 0.005	—	2.81
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.44	1.80	33.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,708	12,708	0.17	0.13	0.05	12,750
Vendor	0.33	0.27	10.1	3.95	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,241	8,241	0.15	1.30	0.01	8,633
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	91.8	91.8	< 0.005	< 0.005	0.01	92.0
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	58.0	58.0	< 0.005	0.01	< 0.005	60.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	< 0.005	15.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.60	9.60	< 0.005	< 0.005	< 0.005	10.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.38. Building Construction (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	16.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.80	2.80	< 0.005	< 0.005	—	2.81
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.44	1.80	33.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,708	12,708	0.17	0.13	0.05	12,750
Vendor	0.33	0.27	10.1	3.95	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,241	8,241	0.15	1.30	0.01	8,633
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	91.8	91.8	< 0.005	< 0.005	0.01	92.0
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	58.0	58.0	< 0.005	0.01	< 0.005	60.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	< 0.005	15.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.60	9.60	< 0.005	< 0.005	< 0.005	10.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Paving (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.44	0.37	4.14	8.03	0.01	0.06	—	0.06	0.05	—	0.05	—	1,250	1,250	0.05	0.01	—	1,254
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.07	0.76	1.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	207	207	0.01	< 0.005	—	208
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.6	84.6	< 0.005	< 0.005	0.01	84.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	< 0.005	14.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.40. Paving (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.20	1.72	8.65	0.01	0.03	—	0.03	0.03	—	0.03	—	1,250	1,250	0.05	0.01	—	1,254
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.31	1.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	207	207	0.01	< 0.005	—	208
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.6	84.6	< 0.005	< 0.005	0.01	84.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	< 0.005	14.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Architectural Coating (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.82	2.82	< 0.005	< 0.005	—	2.83
Architectural Coatings	1.18	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.47	0.47	< 0.005	< 0.005	—	0.47
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.60	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,542	2,542	0.03	0.03	0.01	2,550
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	55.1	55.1	< 0.005	< 0.005	< 0.005	55.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	< 0.005	9.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.42. Architectural Coating (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.82	2.82	< 0.005	< 0.005	—	2.83
Architectural Coatings	1.18	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.47	0.47	< 0.005	< 0.005	—	0.47
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.60	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,542	2,542	0.03	0.03	0.01	2,550
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	55.1	55.1	< 0.005	< 0.005	< 0.005	55.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	< 0.005	9.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Architectural Coating (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.60	0.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Architectural Coatings	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.8	17.8	< 0.005	< 0.005	—	17.9
Architectural Coatings	8.20	8.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.50	0.33	8.65	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,804	2,804	0.03	0.02	0.34	2,810
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.58	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,537	2,537	0.03	0.03	0.01	2,546
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.39	0.28	5.48	0.00	0.00	2.57	2.57	0.00	0.60	0.60	—	2,095	2,095	0.02	0.02	0.12	2,101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.00	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.44. Architectural Coating (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.60	0.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Architectural Coatings	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.8	17.8	< 0.005	< 0.005	—	17.9

Architect Coatings	8.20	8.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.50	0.33	8.65	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,804	2,804	0.03	0.02	0.34	2,810
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.58	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,537	2,537	0.03	0.03	0.01	2,546
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.39	0.28	5.48	0.00	0.00	2.57	2.57	0.00	0.60	0.60	—	2,095	2,095	0.02	0.02	0.12	2,101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.00	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2032	3/4/2032	6.00	55.0	—
Site Preparation	Site Preparation	3/5/2032	9/13/2032	6.00	165	—
Grading	Grading	9/14/2032	1/6/2034	6.00	412	—
Building Construction	Building Construction	1/7/2034	1/3/2047	6.00	4,067	—
Paving	Paving	1/4/2047	12/22/2047	6.00	302	—
Architectural Coating	Architectural Coating	12/23/2047	12/8/2048	6.00	302	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Back	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Back	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	8.73	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,910	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	472	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	382	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	8.73	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,910	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	472	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	382	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,110,400	1,036,800	2,232,286	743,398	71,613

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	41,713	—
Site Preparation	—	—	248	0.00	—
Grading	—	—	1,236	0.00	—
Paving	0.00	0.00	0.00	0.00	27.4

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Office Park	0.00	0%
Strip Mall	0.00	0%
Parking Lot	7.70	100%
University/College (4yr)	0.00	0%
Apartments Mid Rise	—	0%
Other Asphalt Surfaces	7.70	100%
Unenclosed Parking with Elevator	1.60	100%
Other Non-Asphalt Surfaces	10.4	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005
2047	0.00	204	0.03	< 0.005
2048	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—

CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—

Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5

Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—

2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

Pacific Gateway (Initial Phase Operation - Auto) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Operation - Auto)
Operational Year	2032
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	116	110	54.2	569	1.44	3.38	128	132	3.26	32.5	35.8	4,555	173,173	177,727	473	7.92	1,273	193,177
Mit.	80.8	77.5	52.7	390	1.43	3.06	128	131	3.02	32.5	35.5	4,555	172,443	176,998	473	7.91	1,273	192,446
% Reduced	30%	30%	3%	31%	1%	9%	—	< 0.5%	7%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	83.7	80.4	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Mit.	80.1	76.9	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
% Reduced	4%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	99.4	94.9	55.8	392	1.36	3.22	128	131	3.14	32.4	35.5	4,555	164,522	169,077	473	8.10	1,136	184,444
Mit.	80.1	76.8	55.0	304	1.35	3.06	128	131	3.02	32.4	35.4	4,555	164,163	168,717	473	8.09	1,136	184,083
% Reduced	19%	19%	1%	23%	< 0.5%	5%	—	< 0.5%	4%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.1	17.3	10.2	71.5	0.25	0.59	23.3	23.9	0.57	5.91	6.48	754	27,239	27,993	78.3	1.34	188	30,537
Mit.	14.6	14.0	10.0	55.4	0.25	0.56	23.3	23.8	0.55	5.91	6.46	754	27,179	27,933	78.3	1.34	188	30,477
% Reduced	19%	19%	1%	23%	< 0.5%	5%	—	< 0.5%	4%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Area	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	116	110	54.2	569	1.44	3.38	128	132	3.26	32.5	35.8	4,555	173,173	177,727	473	7.92	1,273	193,177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Area	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	83.7	80.4	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	23.1	277	1.16	0.64	128	128	0.60	32.4	33.0	—	117,497	117,497	1.31	2.64	104	118,422
Area	82.6	81.4	0.74	88.2	0.01	0.16	—	0.16	0.12	—	0.12	—	363	363	0.02	< 0.005	—	364
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	99.4	94.9	55.8	392	1.36	3.22	128	131	3.14	32.4	35.5	4,555	164,522	169,077	473	8.10	1,136	184,444
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606
Area	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,025	7,025	1.85	0.17	—	7,122

Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	18.1	17.3	10.2	71.5	0.25	0.59	23.3	23.9	0.57	5.91	6.48	754	27,239	27,993	78.3	1.34	188	30,537

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,439	42,439	11.2	1.02	—	43,024
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.8	77.5	52.7	390	1.43	3.06	128	131	3.02	32.5	35.5	4,555	172,443	176,998	473	7.91	1,273	192,446
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.1	76.9	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	23.1	277	1.16	0.64	128	128	0.60	32.4	33.0	—	117,497	117,497	1.31	2.64	104	118,422
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,436	42,436	11.2	1.02	—	43,021
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.1	76.8	55.0	304	1.35	3.06	128	131	3.02	32.4	35.4	4,555	164,163	168,717	473	8.09	1,136	184,083
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606
Area	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,026	7,026	1.86	0.17	—	7,123
Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	14.6	14.0	10.0	55.4	0.25	0.56	23.3	23.8	0.55	5.91	6.46	754	27,179	27,933	78.3	1.34	188	30,477

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.67	0.63	0.52	8.34	0.03	0.01	2.61	2.63	0.01	0.66	0.68	—	2,597	2,597	0.05	0.06	4.93	2,622
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.34	1.25	1.27	21.0	0.07	0.04	6.90	6.94	0.03	1.75	1.79	—	6,826	6,826	0.10	0.15	13.0	6,887
Industrial Park	11.9	10.6	18.9	334	1.15	0.59	119	119	0.55	30.1	30.7	—	116,351	116,351	1.13	2.24	224	117,272
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.64	0.60	0.63	6.62	0.02	0.01	2.61	2.63	0.01	0.66	0.68	—	2,377	2,377	0.06	0.07	0.13	2,400
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.29	1.19	1.53	16.0	0.06	0.04	6.90	6.94	0.03	1.75	1.79	—	6,243	6,243	0.12	0.17	0.34	6,298
Industrial Park	11.4	10.0	22.8	235	1.05	0.59	119	119	0.55	30.1	30.7	—	106,306	106,306	1.19	2.54	5.80	107,099
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.12	0.11	0.11	1.24	< 0.005	< 0.005	0.47	0.48	< 0.005	0.12	0.12	—	402	402	0.01	0.01	0.35	406
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	0.23	0.22	0.26	3.04	0.01	0.01	1.25	1.26	0.01	0.32	0.32	—	1,056	1,056	0.02	0.03	0.93	1,066
Industrial Park	2.07	1.83	3.86	46.2	0.20	0.11	21.6	21.7	0.10	5.47	5.57	—	17,994	17,994	0.19	0.40	16.0	18,134
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.67	0.63	0.52	8.34	0.03	0.01	2.61	2.63	0.01	0.66	0.68	—	2,597	2,597	0.05	0.06	4.93	2,622
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	1.34	1.25	1.27	21.0	0.07	0.04	6.90	6.94	0.03	1.75	1.79	—	6,826	6,826	0.10	0.15	13.0	6,887
Industrial Park	11.9	10.6	18.9	334	1.15	0.59	119	119	0.55	30.1	30.7	—	116,351	116,351	1.13	2.24	224	117,272
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.64	0.60	0.63	6.62	0.02	0.01	2.61	2.63	0.01	0.66	0.68	—	2,377	2,377	0.06	0.07	0.13	2,400
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.29	1.19	1.53	16.0	0.06	0.04	6.90	6.94	0.03	1.75	1.79	—	6,243	6,243	0.12	0.17	0.34	6,298
Industrial Park	11.4	10.0	22.8	235	1.05	0.59	119	119	0.55	30.1	30.7	—	106,306	106,306	1.19	2.54	5.80	107,099

Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.12	0.11	0.11	1.24	< 0.005	< 0.005	0.47	0.48	< 0.005	0.12	0.12	—	402	402	0.01	0.01	0.35	406
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.23	0.22	0.26	3.04	0.01	0.01	1.25	1.26	0.01	0.32	0.32	—	1,056	1,056	0.02	0.03	0.93	1,066
Industrial Park	2.07	1.83	3.86	46.2	0.20	0.11	21.6	21.7	0.10	5.47	5.57	—	17,994	17,994	0.19	0.40	16.0	18,134
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.21	1.21	< 0.005	< 0.005	—	1.35
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	688	688	1.24	0.15	—	764
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.6	19.6	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	798

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.37	7.37	0.01	< 0.005	—	8.18

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	4,163	4,163	7.51	0.91	—	4,622
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,348	4,348	7.84	0.95	—	4,828
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22	< 0.005	< 0.005	—	1.35
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	689	689	1.24	0.15	—	765
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.7	19.7	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	799

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086

Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758

Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	31.8	29.4	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Total	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.02	1.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	2.87	2.65	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Total	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699

Govern Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138

Industrial	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

University/College	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Croplan	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Croplan d	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadlef Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadlef Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Broadleaf	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	330	330	330	120,450	3,696	3,696	3,696	1,349,040
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	622	622	622	227,030	9,765	9,765	9,765	3,564,226
Industrial Park	4,240	4,240	4,240	1,547,605	167,773	167,773	167,773	61,237,072
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	330	330	330	120,450	3,696	3,696	3,696	1,349,040
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	622	622	622	227,030	9,765	9,765	9,765	3,564,226
Industrial Park	4,240	4,240	4,240	1,547,605	167,773	167,773	167,773	61,237,072
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,167,400	2,055,800	303,700

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419
Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419

Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3

Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—

Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8

Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2032 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.

Operations: Fleet Mix	Fleet mix is based on auto-specific vehicle types.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Initial Phase Operation - Truck) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Operation - Truck)
Operational Year	2032
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	109	101	270	251	2.27	7.05	69.9	77.0	6.78	18.8	25.6	4,555	268,626	273,180	475	40.4	1,432	298,525
Mit.	73.6	68.4	269	72.5	2.26	6.73	69.9	76.7	6.54	18.8	25.4	4,555	267,896	272,451	474	40.4	1,432	297,794
% Reduced	32%	33%	1%	71%	< 0.5%	5%	—	< 0.5%	4%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	76.9	71.8	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Mit.	73.4	68.2	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
% Reduced	5%	5%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	92.8	86.4	280	161	2.27	6.89	69.7	76.6	6.66	18.8	25.4	4,555	268,284	272,839	474	40.4	1,234	297,987
Mit.	73.5	68.3	280	72.7	2.26	6.73	69.7	76.4	6.55	18.8	25.3	4,555	267,925	272,479	474	40.4	1,234	297,626
% Reduced	21%	21%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.9	15.8	51.2	29.4	0.41	1.26	12.7	14.0	1.22	3.42	4.64	754	44,418	45,172	78.6	6.70	204	49,335
Mit.	13.4	12.5	51.0	13.3	0.41	1.23	12.7	14.0	1.19	3.42	4.62	754	44,358	45,112	78.6	6.69	204	49,275
% Reduced	21%	21%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Area	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	109	101	270	251	2.27	7.05	69.9	77.0	6.78	18.8	25.6	4,555	268,626	273,180	475	40.4	1,432	298,525
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Area	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	76.9	71.8	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.68	3.28	248	45.9	2.07	4.31	69.7	74.0	4.12	18.8	22.9	—	221,259	221,259	3.09	35.0	150	231,912
Area	82.6	81.4	0.74	88.2	0.01	0.16	—	0.16	0.12	—	0.12	—	363	363	0.02	< 0.005	—	364
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	92.8	86.4	280	161	2.27	6.89	69.7	76.6	6.66	18.8	25.4	4,555	268,284	272,839	474	40.4	1,234	297,987
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396
Area	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,025	7,025	1.85	0.17	—	7,122

Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	16.9	15.8	51.2	29.4	0.41	1.26	12.7	14.0	1.22	3.42	4.64	754	44,418	45,172	78.6	6.70	204	49,335

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,439	42,439	11.2	1.02	—	43,024
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.6	68.4	269	72.5	2.26	6.73	69.9	76.7	6.54	18.8	25.4	4,555	267,896	272,451	474	40.4	1,432	297,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.4	68.2	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.68	3.28	248	45.9	2.07	4.31	69.7	74.0	4.12	18.8	22.9	—	221,259	221,259	3.09	35.0	150	231,912
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,436	42,436	11.2	1.02	—	43,021
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.5	68.3	280	72.7	2.26	6.73	69.7	76.4	6.55	18.8	25.3	4,555	267,925	272,479	474	40.4	1,234	297,626
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396
Area	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,026	7,026	1.86	0.17	—	7,123
Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	13.4	12.5	51.0	13.3	0.41	1.23	12.7	14.0	1.19	3.42	4.62	754	44,358	45,112	78.6	6.69	204	49,275

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.27	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.39	260
Industrial Park	6.76	3.35	237	45.6	2.07	4.30	69.9	74.2	4.11	18.8	22.9	—	220,980	220,980	3.09	34.9	347	231,816
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.28	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.01	260
Industrial Park	6.56	3.17	252	46.2	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,055	221,055	3.08	35.0	8.99	231,557
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	41.1	41.1	< 0.005	0.01	0.03	43.0
Industrial Park	1.22	0.60	45.2	8.37	0.38	0.78	12.7	13.5	0.75	3.42	4.17	—	36,591	36,591	0.51	5.79	24.8	38,353
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	0.01	< 0.005	0.27	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.39	260
Industrial Park	6.76	3.35	237	45.6	2.07	4.30	69.9	74.2	4.11	18.8	22.9	—	220,980	220,980	3.09	34.9	347	231,816
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.28	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.01	260
Industrial Park	6.56	3.17	252	46.2	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,055	221,055	3.08	35.0	8.99	231,557

Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	41.1	41.1	< 0.005	0.01	0.03	43.0
Industrial Park	1.22	0.60	45.2	8.37	0.38	0.78	12.7	13.5	0.75	3.42	4.17	—	36,591	36,591	0.51	5.79	24.8	38,353
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.21	1.21	< 0.005	< 0.005	—	1.35
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	688	688	1.24	0.15	—	764
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.6	19.6	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	798

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.37	7.37	0.01	< 0.005	—	8.18

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	4,163	4,163	7.51	0.91	—	4,622
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,348	4,348	7.84	0.95	—	4,828
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22	< 0.005	< 0.005	—	1.35
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	689	689	1.24	0.15	—	765
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.7	19.7	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	799

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086

Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758

Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	31.8	29.4	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Total	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.02	1.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	2.87	2.65	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Total	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699

Govern Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138

Industrial	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	179	179
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

University/College	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	179	179
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Croplan	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Croplan d	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Broadleaf	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	2.00	2.00	2.00	730	85.8	85.8	85.8	31,317
Industrial Park	1,782	1,782	1,782	650,426	76,447	76,447	76,447	27,903,271
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	2.00	2.00	2.00	730	85.8	85.8	85.8	31,317
Industrial Park	1,782	1,782	1,782	650,426	76,447	76,447	76,447	27,903,271
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,167,400	2,055,800	303,700

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419
Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419

Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00

Urban	Inceptisols	0.00	226

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1

Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689

Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9

Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2032 RPS
Land Use	Land uses are based on Project-specific information.

Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Fleet mix is based on truck-specific vehicle types.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Project Operation - Auto) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Project Operation - Auto)
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Industrial Park	24,675	1000sqft	705	24,675,000	5,994,592	—	—	—
Parking Lot	6,685	1000sqft	154	0.00	34,549	—	—	—
City Park	197	Acre	197	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	15,155	1000sqft	348	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	4,959	1000sqft	114	0.00	0.00	—	—	—
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
University/College (4yr)	5,000	Student	39.8	1,379,200	1,268,091	1,268,091	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Hotel	120	Room	0.60	60,000	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	43.9	1000sqft	2.20	43,900	52,991	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	905	831	302	3,604	8.92	72.6	740	813	70.0	188	258	37,900	943,070	980,971	3,017	38.5	8,628	1,076,520
Mit.	667	609	291	2,348	8.84	70.5	740	811	68.4	188	256	37,900	938,036	975,937	3,017	38.5	8,628	1,071,468
% Reduced	26%	27%	4%	35%	1%	3%	—	< 0.5%	2%	—	1%	—	1%	1%	< 0.5%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	688	630	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Mit.	666	608	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
% Reduced	3%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	731	696	289	2,262	7.47	30.7	737	768	29.9	187	217	31,158	883,599	914,758	2,986	39.4	8,595	1,009,74
Mit.	602	576	284	1,642	7.43	29.7	737	767	29.1	187	216	31,158	881,117	912,275	2,986	39.4	8,595	1,007,25 1
% Reduced	18%	17%	2%	27%	< 0.5%	3%	—	< 0.5%	3%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	133	127	52.8	413	1.36	5.60	134	140	5.46	34.1	39.5	5,159	146,290	151,449	494	6.52	1,423	167,174
Mit.	110	105	51.9	300	1.36	5.41	134	140	5.31	34.1	39.4	5,159	145,879	151,038	494	6.52	1,423	166,762
% Reduced	18%	17%	2%	27%	< 0.5%	3%	—	< 0.5%	3%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Area	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	905	831	302	3,604	8.92	72.6	740	813	70.0	188	258	37,900	943,070	980,971	3,017	38.5	8,628	1,076,52 0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688

Area	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	688	630	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.2	61.1	66.3	1,383	5.86	1.58	737	738	1.47	187	188	—	593,469	593,469	6.07	11.6	24.6	597,112
Area	641	623	9.55	702	0.32	12.9	—	12.9	12.2	—	12.2	1,953	6,267	8,220	9.31	0.03	—	8,461
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	731	696	289	2,262	7.47	30.7	737	768	29.9	187	217	31,158	883,599	914,758	2,986	39.4	8,595	1,009,743
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859
Area	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	133	127	52.8	413	1.36	5.60	134	140	5.46	34.1	39.5	5,159	146,290	151,449	494	6.52	1,423	167,174

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	667	609	291	2,348	8.84	70.5	740	811	68.4	188	256	37,900	938,036	975,937	3,017	38.5	8,628	1,071,468
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	666	608	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	66.2	61.1	66.3	1,383	5.86	1.58	737	738	1.47	187	188	—	593,469	593,469	6.07	11.6	24.6	597,112
Area	512	503	4.30	82.4	0.28	11.8	—	11.8	11.4	—	11.4	1,953	3,784	5,738	9.20	0.01	—	5,970
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	602	576	284	1,642	7.43	29.7	737	767	29.1	187	216	31,158	881,117	912,275	2,986	39.4	8,595	1,007,251
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859
Area	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	110	105	51.9	300	1.36	5.41	134	140	5.31	34.1	39.4	5,159	145,879	151,038	494	6.52	1,423	166,762

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.40	0.28	7.55	0.03	0.01	2.93	2.94	0.01	0.74	0.75	—	2,540	2,540	0.03	0.05	0.23	2,556
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	40.2	36.5	41.2	1,357	4.83	1.20	570	571	1.11	144	145	—	489,192	489,192	3.77	7.69	43.8	491,621
Parking Lot	0.09	0.08	0.03	0.25	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.2	19.2	< 0.005	< 0.005	< 0.005	20.5
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.52	1.39	1.51	49.3	0.18	0.04	20.6	20.7	0.04	5.23	5.27	—	17,738	17,738	0.14	0.28	1.59	17,828
University/College (4yr)	9.65	9.05	7.05	204	0.70	0.18	81.5	81.6	0.16	20.6	20.8	—	70,397	70,397	0.75	1.28	6.27	70,804
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.16	1.11	0.58	13.3	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	4,085	4,085	0.07	0.10	0.36	4,117

Gasolin Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Conveni ence Market (24 hour)	3.33	3.20	1.68	38.1	0.12	0.03	13.4	13.4	0.03	3.39	3.42	—	11,752	11,752	0.22	0.29	1.03	11,846
Fast Food Restaura nt with Drive Thru	7.66	7.36	3.86	87.6	0.27	0.07	30.7	30.8	0.07	7.78	7.85	—	27,001	27,001	0.50	0.67	2.36	27,216
High Turnover (Sit Down Restaura nt)	1.03	0.99	0.52	11.8	0.04	0.01	4.15	4.16	0.01	1.05	1.06	—	3,645	3,645	0.07	0.09	0.32	3,674
Fast Food Restaura nt w/o Drive Thru	0.47	0.45	0.24	5.38	0.02	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,657	1,657	0.03	0.04	0.15	1,671
Bank (with Drive-Through)	0.61	0.58	0.31	6.93	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	2,137	2,137	0.04	0.05	0.19	2,154
Strip Mall	1.86	1.78	0.97	22.8	0.07	0.02	8.17	8.19	0.02	2.07	2.09	—	7,164	7,164	0.12	0.17	0.63	7,218
Total	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.39	0.35	5.73	0.02	0.01	2.93	2.94	0.01	0.74	0.75	—	2,313	2,313	0.04	0.06	0.01	2,331
Govern ment Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	39.3	35.7	52.0	950	4.39	1.20	570	571	1.11	144	145	—	444,911	444,911	4.08	8.89	1.14	447,664
Parking Lot	0.09	0.08	0.03	0.35	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	0.01	< 0.005	< 0.005	20.1
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.49	1.36	1.91	34.7	0.16	0.04	20.6	20.7	0.04	5.23	5.27	—	16,134	16,134	0.15	0.33	0.04	16,235
University/College (4yr)	9.51	8.89	8.84	151	0.63	0.18	81.5	81.6	0.16	20.6	20.8	—	64,074	64,074	0.86	1.48	0.16	64,535
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.15	1.10	0.72	11.0	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	3,726	3,726	0.09	0.12	0.01	3,763
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.31	3.16	2.08	31.5	0.11	0.03	13.4	13.4	0.03	3.39	3.42	—	10,718	10,718	0.27	0.33	0.03	10,825

Fast Food Restaurant with Drive Thru	7.60	7.25	4.78	72.5	0.24	0.07	30.7	30.8	0.07	7.78	7.85	—	24,626	24,626	0.61	0.77	0.06	24,870
High Turnover (Sit Down Restaurant)	1.02	0.98	0.65	9.78	0.03	0.01	4.15	4.16	0.01	1.05	1.06	—	3,324	3,324	0.08	0.10	0.01	3,357
Fast Food Restaurant w/o Drive Thru	0.47	0.44	0.29	4.45	0.01	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,512	1,512	0.04	0.05	< 0.005	1,527
Bank (with Drive-Through)	0.60	0.57	0.38	5.74	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,949	1,949	0.05	0.06	< 0.005	1,968
Strip Mall	1.84	1.75	1.21	18.6	0.06	0.02	8.17	8.19	0.02	2.07	2.09	—	6,532	6,532	0.15	0.19	0.02	6,593
Total	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.08	0.07	0.06	1.09	< 0.005	< 0.005	0.53	0.53	< 0.005	0.13	0.14	—	392	392	0.01	0.01	0.02	395
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	7.12	6.47	8.58	187	0.82	0.22	104	104	0.20	26.2	26.4	—	75,400	75,400	0.65	1.38	3.13	75,831
Parking Lot	0.02	0.02	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.32
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.27	0.25	0.32	6.82	0.03	0.01	3.75	3.76	0.01	0.95	0.96	—	2,734	2,734	0.02	0.05	0.11	2,750
University/College (4yr)	1.72	1.61	1.46	29.1	0.12	0.03	14.8	14.8	0.03	3.75	3.78	—	10,856	10,856	0.13	0.23	0.45	10,928
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.21	0.20	0.12	2.02	0.01	< 0.005	0.84	0.85	< 0.005	0.21	0.22	—	631	631	0.01	0.02	0.03	637
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	0.59	0.57	0.34	5.80	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,815	1,815	0.04	0.05	0.07	1,831
Fast Food Restaurant with Drive Thru	1.37	1.31	0.79	13.3	0.05	0.01	5.58	5.59	0.01	1.41	1.43	—	4,170	4,170	0.09	0.12	0.17	4,208

High Turnover (Sit Down Restaurant)	0.18	0.18	0.11	1.80	0.01	< 0.005	0.75	0.76	< 0.005	0.19	0.19	—	563	563	0.01	0.02	0.02	568
Fast Food Restaurant w/o Drive Thru	0.08	0.08	0.05	0.82	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	256	256	0.01	0.01	0.01	258
Bank (with Drive-Through)	0.11	0.10	0.06	1.05	< 0.005	< 0.005	0.44	0.44	< 0.005	0.11	0.11	—	330	330	0.01	0.01	0.01	333
Strip Mall	0.33	0.32	0.20	3.44	0.01	< 0.005	1.49	1.49	< 0.005	0.38	0.38	—	1,106	1,106	0.02	0.03	0.04	1,116
Total	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.40	0.28	7.55	0.03	0.01	2.93	2.94	0.01	0.74	0.75	—	2,540	2,540	0.03	0.05	0.23	2,556
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	40.2	36.5	41.2	1,357	4.83	1.20	570	571	1.11	144	145	—	489,192	489,192	3.77	7.69	43.8	491,621
Parking Lot	0.09	0.08	0.03	0.25	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.2	19.2	< 0.005	< 0.005	< 0.005	20.5

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.52	1.39	1.51	49.3	0.18	0.04	20.6	20.7	0.04	5.23	5.27	—	17,738	17,738	0.14	0.28	1.59	17,828
University/College (4yr)	9.65	9.05	7.05	204	0.70	0.18	81.5	81.6	0.16	20.6	20.8	—	70,397	70,397	0.75	1.28	6.27	70,804
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.16	1.11	0.58	13.3	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	4,085	4,085	0.07	0.10	0.36	4,117
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.33	3.20	1.68	38.1	0.12	0.03	13.4	13.4	0.03	3.39	3.42	—	11,752	11,752	0.22	0.29	1.03	11,846
Fast Food Restaurant with Drive Thru	7.66	7.36	3.86	87.6	0.27	0.07	30.7	30.8	0.07	7.78	7.85	—	27,001	27,001	0.50	0.67	2.36	27,216

High Turnover (Sit Down Restaurant)	1.03	0.99	0.52	11.8	0.04	0.01	4.15	4.16	0.01	1.05	1.06	—	3,645	3,645	0.07	0.09	0.32	3,674
Fast Food Restaurant w/o Drive Thru	0.47	0.45	0.24	5.38	0.02	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,657	1,657	0.03	0.04	0.15	1,671
Bank (with Drive-Through)	0.61	0.58	0.31	6.93	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	2,137	2,137	0.04	0.05	0.19	2,154
Strip Mall	1.86	1.78	0.97	22.8	0.07	0.02	8.17	8.19	0.02	2.07	2.09	—	7,164	7,164	0.12	0.17	0.63	7,218
Total	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.39	0.35	5.73	0.02	0.01	2.93	2.94	0.01	0.74	0.75	—	2,313	2,313	0.04	0.06	0.01	2,331
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	39.3	35.7	52.0	950	4.39	1.20	570	571	1.11	144	145	—	444,911	444,911	4.08	8.89	1.14	447,664
Parking Lot	0.09	0.08	0.03	0.35	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	0.01	< 0.005	< 0.005	20.1
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.49	1.36	1.91	34.7	0.16	0.04	20.6	20.7	0.04	5.23	5.27	—	16,134	16,134	0.15	0.33	0.04	16,235
University/College (4yr)	9.51	8.89	8.84	151	0.63	0.18	81.5	81.6	0.16	20.6	20.8	—	64,074	64,074	0.86	1.48	0.16	64,535
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.15	1.10	0.72	11.0	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	3,726	3,726	0.09	0.12	0.01	3,763
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.31	3.16	2.08	31.5	0.11	0.03	13.4	13.4	0.03	3.39	3.42	—	10,718	10,718	0.27	0.33	0.03	10,825
Fast Food Restaurant with Drive Thru	7.60	7.25	4.78	72.5	0.24	0.07	30.7	30.8	0.07	7.78	7.85	—	24,626	24,626	0.61	0.77	0.06	24,870
High Turnover (Sit Down Restaurant)	1.02	0.98	0.65	9.78	0.03	0.01	4.15	4.16	0.01	1.05	1.06	—	3,324	3,324	0.08	0.10	0.01	3,357

Fast Food Restaurant w/o Drive Thru	0.47	0.44	0.29	4.45	0.01	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,512	1,512	0.04	0.05	< 0.005	1,527
Bank (with Drive-Through)	0.60	0.57	0.38	5.74	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,949	1,949	0.05	0.06	< 0.005	1,968
Strip Mall	1.84	1.75	1.21	18.6	0.06	0.02	8.17	8.19	0.02	2.07	2.09	—	6,532	6,532	0.15	0.19	0.02	6,593
Total	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.08	0.07	0.06	1.09	< 0.005	< 0.005	0.53	0.53	< 0.005	0.13	0.14	—	392	392	0.01	0.01	0.02	395
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	7.12	6.47	8.58	187	0.82	0.22	104	104	0.20	26.2	26.4	—	75,400	75,400	0.65	1.38	3.13	75,831
Parking Lot	0.02	0.02	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.32
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.27	0.25	0.32	6.82	0.03	0.01	3.75	3.76	0.01	0.95	0.96	—	2,734	2,734	0.02	0.05	0.11	2,750

University/College	1.72	1.61	1.46	29.1	0.12	0.03	14.8	14.8	0.03	3.75	3.78	—	10,856	10,856	0.13	0.23	0.45	10,928
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.21	0.20	0.12	2.02	0.01	< 0.005	0.84	0.85	< 0.005	0.21	0.22	—	631	631	0.01	0.02	0.03	637
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	0.59	0.57	0.34	5.80	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,815	1,815	0.04	0.05	0.07	1,831
Fast Food Restaurant with Drive Thru	1.37	1.31	0.79	13.3	0.05	0.01	5.58	5.59	0.01	1.41	1.43	—	4,170	4,170	0.09	0.12	0.17	4,208
High Turnover (Sit Down Restaurant)	0.18	0.18	0.11	1.80	0.01	< 0.005	0.75	0.76	< 0.005	0.19	0.19	—	563	563	0.01	0.02	0.02	568
Fast Food Restaurant w/o Drive Thru	0.08	0.08	0.05	0.82	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	256	256	0.01	0.01	0.01	258
Bank (with Drive-Through)	0.11	0.10	0.06	1.05	< 0.005	< 0.005	0.44	0.44	< 0.005	0.11	0.11	—	330	330	0.01	0.01	0.01	333

Strip Mall	0.33	0.32	0.20	3.44	0.01	< 0.005	1.49	1.49	< 0.005	0.38	0.38	—	1,106	1,106	0.02	0.03	0.04	1,116
Total	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Industria Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533

High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548

Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143

University/College	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0

Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863

University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6

Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092

Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102

Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	216	199	10.6	1,256	0.07	2.11	—	2.11	1.60	—	1.60	—	5,034	5,034	0.21	0.04	—	5,052
Total	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	19.4	17.9	0.96	113	0.01	0.19	—	0.19	0.14	—	0.14	—	411	411	0.02	< 0.005	—	412
Total	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.94	2.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5

University/College	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198

Industria Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0

University/College	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassla	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	331	331	331	120,815	4,158	4,158	4,158	1,517,670
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	26,402	26,402	26,402	9,636,731	808,575	808,575	808,575	295,129,807
Parking Lot	77.0	77.0	77.0	28,110	15.7	15.7	15.7	5,732
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1,017	1,017	1,017	371,205	29,307	29,307	29,307	10,697,022
University/College (4yr)	7,272	7,272	7,272	2,654,280	115,625	115,625	115,625	42,203,052
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	960	960	960	350,400	6,596	6,596	6,596	2,407,539
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	2,762	2,762	2,762	1,008,130	18,976	18,976	18,976	6,926,317
Fast Food Restaurant with Drive Thru	6,348	6,348	6,348	2,317,020	43,597	43,597	43,597	15,913,015
High Turnover (Sit Down Restaurant)	856	856	856	312,440	5,886	5,886	5,886	2,148,244

Fast Food Restaurant w/o Drive Thru	389	389	389	141,985	2,676	2,676	2,676	976,887
Bank (with Drive-Through)	502	502	502	183,230	3,450	3,450	3,450	1,259,323
Strip Mall	1,526	1,526	1,526	556,889	11,601	11,601	11,601	4,234,325

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	331	331	331	120,815	4,158	4,158	4,158	1,517,670
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	26,402	26,402	26,402	9,636,731	808,575	808,575	808,575	295,129,807
Parking Lot	77.0	77.0	77.0	28,110	15.7	15.7	15.7	5,732
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1,017	1,017	1,017	371,205	29,307	29,307	29,307	10,697,022
University/College (4yr)	7,272	7,272	7,272	2,654,280	115,625	115,625	115,625	42,203,052
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	960	960	960	350,400	6,596	6,596	6,596	2,407,539
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	2,762	2,762	2,762	1,008,130	18,976	18,976	18,976	6,926,317

Fast Food Restaurant with Drive Thru	6,348	6,348	6,348	2,317,020	43,597	43,597	43,597	15,913,015
High Turnover (Sit Down Restaurant)	856	856	856	312,440	5,886	5,886	5,886	2,148,244
Fast Food Restaurant w/o Drive Thru	389	389	389	141,985	2,676	2,676	2,676	976,887
Bank (with Drive-Through)	502	502	502	183,230	3,450	3,450	3,450	1,259,323
Strip Mall	1,526	1,526	1,526	556,889	11,601	11,601	11,601	4,234,325

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3110400	1,036,800	39,663,586	13,220,498	1,614,159

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425
Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425

Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—

Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—
Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—

Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00

Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2057 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Auto-specific fleet mix
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Project Operation - Truck) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Project Operation - Truck)
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Industrial Park	24,675	1000sqft	705	24,675,000	5,994,592	—	—	—
Parking Lot	6,685	1000sqft	154	0.00	34,549	—	—	—
City Park	197	Acre	197	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	15,155	1000sqft	348	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	4,959	1000sqft	114	0.00	0.00	—	—	—
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
University/College (4yr)	5,000	Student	39.8	1,379,200	1,268,091	1,268,091	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Hotel	120	Room	0.60	60,000	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	43.9	1000sqft	2.20	43,900	52,991	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	869	789	1,549	2,053	14.0	96.4	460	556	92.9	124	216	37,900	1,520,189	1,558,089	3,021	220	8,740	1,707,815
Mit.	631	567	1,539	797	13.9	94.3	460	554	91.3	124	215	37,900	1,515,155	1,553,055	3,020	220	8,740	1,702,763
% Reduced	27%	28%	1%	61%	1%	2%	—	< 0.5%	2%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	652	588	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Mit.	630	566	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
% Reduced	3%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	696	656	1,589	1,134	13.0	54.6	458	513	52.8	123	176	31,158	1,504,82	1,535,97	2,989	220	8,644	1,684,80
Mit.	567	535	1,584	514	13.0	53.5	458	512	52.0	123	175	31,158	1,502,33 7	1,533,49 6	2,989	220	8,644	1,682,31 6
% Reduced	18%	18%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	127	120	290	207	2.37	9.96	83.6	93.6	9.63	22.5	32.1	5,159	249,140	254,299	495	36.4	1,431	278,939
Mit.	103	97.6	289	93.8	2.36	9.77	83.6	93.4	9.49	22.5	32.0	5,159	248,729	253,888	495	36.4	1,431	278,527
% Reduced	18%	18%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,44 7	1,214,44 7	8.98	192	170	1,272,02 0
Area	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	869	789	1,549	2,053	14.0	96.4	460	556	92.9	124	216	37,900	1,520,18 9	1,558,08 9	3,021	220	8,740	1,707,81 5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,02	1,215,02	8.91	192	4.40	1,272,45
Area	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	652	588	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.2	20.3	1,366	255	11.4	25.4	458	484	24.3	123	148	—	1,214,690	1,214,690	8.95	192	73.3	1,272,177
Area	641	623	9.55	702	0.32	12.9	—	12.9	12.2	—	12.2	1,953	6,267	8,220	9.31	0.03	—	8,461
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	696	656	1,589	1,134	13.0	54.6	458	513	52.8	123	176	31,158	1,504,820	1,535,978	2,989	220	8,644	1,684,808
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623
Area	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	127	120	290	207	2.37	9.96	83.6	93.6	9.63	22.5	32.1	5,159	249,140	254,299	495	36.4	1,431	278,939

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	631	567	1,539	797	13.9	94.3	460	554	91.3	124	215	37,900	1,515,155	1,553,055	3,020	220	8,740	1,702,763
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Vegetati	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	630	566	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.2	20.3	1,366	255	11.4	25.4	458	484	24.3	123	148	—	1,214,690	1,214,690	8.95	192	73.3	1,272,177
Area	512	503	4.30	82.4	0.28	11.8	—	11.8	11.4	—	11.4	1,953	3,784	5,738	9.20	0.01	—	5,970
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	567	535	1,584	514	13.0	53.5	458	512	52.0	123	175	31,158	1,502,337	1,533,496	2,989	220	8,644	1,682,316
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623
Area	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	103	97.6	289	93.8	2.36	9.77	83.6	93.4	9.49	22.5	32.0	5,159	248,729	253,888	495	36.4	1,431	278,527

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	29.4	19.1	1,246	229	11.0	24.6	445	470	23.6	120	143	—	1,173,780	1,173,780	8.50	185	164	1,229,421
Parking Lot	0.76	0.50	32.3	5.93	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,446	30,446	0.22	4.81	4.26	31,889
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.90	0.16	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	0.12	886
University/College (4yr)	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Unenclo Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Gasolin e/Servic e Station	1.49	1.17	19.6	16.7	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,820	2,820	0.21	0.45	0.10	2,959
Conveni ence Market (24 hour)	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Fast Food Restaura nt with Drive Thru	0.03	0.02	1.12	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,057	1,057	0.01	0.17	0.15	1,107
High Turnover (Sit Down Restaura nt)	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Fast Food Restaura nt w/o Drive Thru	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,214
Total	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	28.0	17.9	1,331	233	11.0	24.6	445	470	23.6	120	143	—	1,174,278	1,174,278	8.44	186	4.26	1,229,780
Parking Lot	0.73	0.46	34.5	6.03	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,459	30,459	0.22	4.81	0.11	31,899
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.96	0.17	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	< 0.005	886
University/College (4yr)	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443

Gasoline/Service Station	1.31	1.01	21.1	17.2	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,885	2,885	0.20	0.46	< 0.005	3,027
Convenience Market (24 hour)	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Fast Food Restaurant with Drive Thru	0.03	0.02	1.20	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,058	1,058	0.01	0.17	< 0.005	1,108
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Total	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	5.26	3.40	238	42.0	2.01	4.50	81.0	85.5	4.30	21.8	26.1	—	194,367	194,367	1.40	30.7	11.8	203,565
Parking Lot	0.14	0.09	6.17	1.09	0.05	0.12	2.10	2.22	0.11	0.56	0.68	—	5,042	5,042	0.04	0.80	0.30	5,280
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	140	140	< 0.005	0.02	0.01	147
University/College (4yr)	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Gasoline/Service Station	0.26	0.20	3.69	3.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	471	471	0.03	0.07	0.01	495
Convenience Market (24 hour)	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3

Fast Food Restaurant with Drive Thru	< 0.005	< 0.005	0.21	0.04	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	175	175	< 0.005	0.03	0.01	183
High Turnover (Sit Down Restaurant)	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Total	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	29.4	19.1	1,246	229	11.0	24.6	445	470	23.6	120	143	—	1,173,78	1,173,78	8.50	185	164	1,229,42
Parking Lot	0.76	0.50	32.3	5.93	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,446	30,446	0.22	4.81	4.26	31,889
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.90	0.16	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	0.12	886
University/College (4yr)	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Gasoline/Service Station	1.49	1.17	19.6	16.7	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,820	2,820	0.21	0.45	0.10	2,959
Convenience Market (24 hour)	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443

Fast Food Restaurant with Drive Thru	0.03	0.02	1.12	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,057	1,057	0.01	0.17	0.15	1,107
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,214
Total	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	28.0	17.9	1,331	233	11.0	24.6	445	470	23.6	120	143	—	1,174,278	1,174,278	8.44	186	4.26	1,229,780
Parking Lot	0.73	0.46	34.5	6.03	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,459	30,459	0.22	4.81	0.11	31,899

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.96	0.17	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	< 0.005	886
University/College (4yr)	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Gasoline/Service Station	1.31	1.01	21.1	17.2	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,885	2,885	0.20	0.46	< 0.005	3,027
Convenience Market (24 hour)	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Fast Food Restaurant with Drive Thru	0.03	0.02	1.20	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,058	1,058	0.01	0.17	< 0.005	1,108

High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Total	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	5.26	3.40	238	42.0	2.01	4.50	81.0	85.5	4.30	21.8	26.1	—	194,367	194,367	1.40	30.7	11.8	203,565
Parking Lot	0.14	0.09	6.17	1.09	0.05	0.12	2.10	2.22	0.11	0.56	0.68	—	5,042	5,042	0.04	0.80	0.30	5,280
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Office Park	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	140	140	< 0.005	0.02	0.01	147
University/College (4yr)	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Gasoline/Service Station	0.26	0.20	3.69	3.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	471	471	0.03	0.07	0.01	495
Convenience Market (24 hour)	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Fast Food Restaurant with Drive Thru	< 0.005	< 0.005	0.21	0.04	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	175	175	< 0.005	0.03	0.01	183
High Turnover (Sit Down Restaurant)	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7

Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Total	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartme nts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclo sed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasolin e/Servic e Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049

Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7

Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533

High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9

Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863

Universit (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6

Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092

Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102

Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	216	199	10.6	1,256	0.07	2.11	—	2.11	1.60	—	1.60	—	5,034	5,034	0.21	0.04	—	5,052
Total	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	19.4	17.9	0.96	113	0.01	0.19	—	0.19	0.14	—	0.14	—	411	411	0.02	< 0.005	—	412
Total	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.94	2.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5

University/College	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0

University/College	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassla	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	11,103	11,103	11,103	4,052,599	488,532	488,532	488,532	178,314,337
Parking Lot	288	288	288	105,118	12,672	12,672	12,672	4,625,185
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	8.00	8.00	8.00	2,920	352	352	352	128,478
University/College (4yr)	20.0	20.0	20.0	7,300	880	880	880	321,200
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	4.00	4.00	4.00	1,460	176	176	176	64,234
Gasoline/Service Station	1,440	1,440	1,440	525,600	288	288	288	105,120
Convenience Market (24 hour)	4.00	4.00	4.00	1,460	176	176	176	64,240
Fast Food Restaurant with Drive Thru	10.00	10.00	10.00	3,650	440	440	440	160,599
High Turnover (Sit Down Restaurant)	2.00	2.00	2.00	730	88.0	88.0	88.0	32,121

Fast Food Restaurant w/o Drive Thru	2.00	2.00	2.00	730	88.0	88.0	88.0	32,120
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	20.0	20.0	20.0	7,299	880	880	880	321,143

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	11,103	11,103	11,103	4,052,599	488,532	488,532	488,532	178,314,337
Parking Lot	288	288	288	105,118	12,672	12,672	12,672	4,625,185
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	8.00	8.00	8.00	2,920	352	352	352	128,478
University/College (4yr)	20.0	20.0	20.0	7,300	880	880	880	321,200
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	4.00	4.00	4.00	1,460	176	176	176	64,234
Gasoline/Service Station	1,440	1,440	1,440	525,600	288	288	288	105,120
Convenience Market (24 hour)	4.00	4.00	4.00	1,460	176	176	176	64,240

Fast Food Restaurant with Drive Thru	10.00	10.00	10.00	3,650	440	440	440	160,599
High Turnover (Sit Down Restaurant)	2.00	2.00	2.00	730	88.0	88.0	88.0	32,121
Fast Food Restaurant w/o Drive Thru	2.00	2.00	2.00	730	88.0	88.0	88.0	32,120
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	20.0	20.0	20.0	7,299	880	880	880	321,143

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3110400	1,036,800	39,663,586	13,220,498	1,614,159

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425
Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425

Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—

Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—
Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—

Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00

Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2057 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Truck-specific fleet mix.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

APPENDIX B
INITIAL PHASE MOBILE SOURCE CALEEMOD® INPUTS

Table B-1. Fleet Mix (Initial Phase)
Pacific Gateway
San Joaquin County, California

CalEEMod® Default[1]	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	SBUS	MH
	49%	3%	22%	16%	3%	1%	1%	2%	0%	0%	2%	0%	0%

Autos[2]	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2
	52%	3%	24%	17%	3%	1%

Heavy-Duty Trucks[2]	HHDT
	100%

Notes:
[1] CalEEMod® default for San Joaquin County calendar year 2032.
[2] Vehicle categories are defined based on Fehr & Peer's assumed vehicle categories.

Abbreviations:
CalEEMod® - CALifornia Emissions Estimator MODel
HHDT - Heavy Heavy-Duty Truck
LDA - Light-Duty Automobile
LHD - Light Heavy-Duty Truck
LDT - Light-Duty Truck
MCY - Motorcycle
MDV - Medium-Duty Vehicle
MH - Motor Home
MHD - Medium Heavy-Duty Truck
OBUS - Other Buses
SBUS - School Bus
UBUS - Urban Buses

Year 2032

Table B-2. Trip Lengths and Vehicle Miles Traveled by Autos to General Industrial Land Use (Initial Phase)
Pacific Gateway
San Joaquin County, California

Land Use	Vehicle Type	Trip Type	Average One-Way Trip Length[1,2]	Daily Trips (one-way trips/day)[3]	Daily VMT[4,5]
General Industrial	Auto	Home-Work	70.0	2,026	141,899
	Auto	Work-Other	13.4	907	12,131
	Auto	Other-Other	10.5	1,306	13,742

Notes:

[1] Trip length for Home-Work trips are based on the division of daily VMT and daily trips.

[2] Trip lengths for Work-Other and Other-Other trips are based on CalEEMod® defaults.

[3] Total daily trips for each land use are based on Project-specific data provided by Fehr & Peers. The trips were split into trip types based on CalEEMod® default trip type distribution.

[4] Daily VMT for Home-Work trips are based on Project-specific data provided by Fehr & Peers.

[5] Daily VMT is estimated as a product of average trip length and number of trips presented in this table.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel

VMT - vehicle miles traveled

yr - year

APPENDIX C
FULL BUILDOUT MOBILE SOURCE CALEEMOD® INPUTS

Table C-1. Fleet Mix (Full Buildout)
Pacific Gateway
San Joaquin County, California

CalEEMod® Default[1]	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2	MHDT	HHDT	OBUS	UBUS	MCY	SBUS	MH
	49%	3%	24%	15%	2%	1%	2%	3%	0%	0%	2%	0%	0%

Autos[2]	LDA	LDT1	LDT2	MDV	LHDT1	LHDT2
	52%	3%	26%	16%	2%	1%

Heavy-Duty Trucks[2]	HHDT
	100%

Notes:

[1] CalEEMod® default for San Joaquin County calendar year 2050. While the project buildout is expected to be completed in a later year, the latest calendar year in EMFAC was 2050. Thus, this year was used to model the emission factors for the full buildout scenario in the absence of an emission factor specific to operation in the year 2057. Since it is expected that emission factors would continue to improve over time this is a conservative assumption.

[2] Vehicle categories are defined based on Fehr & Peer's assumed vehicle categories.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
HHDT - Heavy Heavy-Duty Truck
LDA - Light-Duty Automobile
LHD - Light Heavy-Duty Truck
LDT - Light-Duty Truck
MCY - Motorcycle
MDV - Medium-Duty Vehicle
MH - Motor Home
MHD - Medium Heavy-Duty Truck
OBUS - Other Buses
SBUS - School Bus
UBUS - Urban Buses

Year 2050

Table C-2. Trip Lengths and Vehicle Miles Traveled by Autos to General Industrial and Office Land Uses (Full Buildout)
Pacific Gateway
San Joaquin County, California

Land Use	Vehicle Type	Trip Type	Average One-Way Trip Length[1,2]	Daily Trips (one-way trips/day)[3]	Daily VMT[4,5]
Business Park	Auto	Home-Work	47.5	486	23,101
	Auto	Work-Other	13.4	218	2,910
	Auto	Other-Other	10.5	313	3,296
General Industrial	Auto	Home-Work	51.3	12,618	647,465
	Auto	Work-Other	13.4	5,650	75,541
	Auto	Other-Other	10.5	8,134	85,569

Notes:

[1] Trip length for Home-Work trips are based on the division of daily VMT and daily trips.

[2] Trip lengths for Work-Other and Other-Other trips are based on CalEEMod® defaults.

[3] Total daily trips for each land use are based on Project-specific data provided by Fehr & Peers. The trips were split into trip types based on CalEEMod® default trip type distribution.

[4] Daily VMT for Home-Work trips are based on Project-specific data provided by Fehr & Peers.

[5] Daily VMT estimated as a product of average trip length and number of trips presented in this table.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel

VMT - vehicle miles traveled

yr - year

APPENDIX D
GHG CONSISTENCY

Table D-1. Consistency with 2022 CARB Scoping Plan Update
Pacific Gateway
San Joaquin Valley, California

2022 CARB Scoping Plan Priority Areas[1]	Priority GHG Reduction Strategies	Consistency
Transportation Electrification	Convert local government fleets to ZEVs and provide EV charging at public sites	**Consistent.** Although this goal is not applicable to an individual development project, the Project includes preferential parking spaces equipped with charging stations for electric vehicles and other clean air vehicles in all parking lots to encourage energy-efficient vehicular use.
	Create a jurisdiction-specific ZEV ecosystem to support deployment of ZEVs statewide (such as building standards that exceed state building codes, permit streamlining, infrastructure siting, consumer education, preferential parking policies, and ZEV readiness plans)	
VMT Reduction	Reduce or eliminate minimum parking standards	**Consistent.** Although this goal is not applicable to an individual development project, the Project will include transportation demand management (TDM) strategies to reduce VMT. These include: 1. Implement a Voluntary Commute Trip Reduction (CTR) program. Required elements of the program include: - *Commute Trip Reduction Marketing* - implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program). - *Ridesharing Program* - implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers. - *Subsidized or Discounted Transit Program* - provides subsidized or discounted, or free transit passes for employees. - *End-of-Trip Bicycle Facilities* - installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use. - *Employer-Sponsored Vanpool* - implements an employer-sponsored vanpool service for employee groups of 5 to 15 people. 2. Implement Employee Parking Cash-Out program – requires project employers to offer employees the choice of foregoing their current subsidized/free parking for a cash payment (in exchange for not driving). 3. Expand Bikeway Network – construct a Class I off-street multi-use path or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance from the north edge of the project site to Linne Road. 4. Extend Public Transit Service to Project Site – expand San Joaquin Regional Transit District fixed-route bus service to the project site. 5. Operate a private employee shuttle system during peak periods that circulates within the site and off-site to the ACE Station located on Tracy Boulevard at Linne Road.
	Implement Complete Streets policies and investments, consistent with general plan circulation element requirements	
	Increase access to public transit by increasing density of development near transit, improving transit service by increasing service frequency, creating bus priority lanes, reducing or eliminating fares, microtransit, etc.	
	Increase public access to clean mobility options by planning for and investing in electric shuttles, bike share, car share, and walking	
	Implement parking pricing or transportation demand management pricing strategies	
	Amend zoning or development codes to enable mixed-use, walkable, transit-oriented, and compact infill development (such as increasing the allowable density of a neighborhood)	
	Preserve natural and working lands by implementing land use policies that guide development toward infill areas and do not convert "greenfield" land to urban uses (e.g., green belts, strategic conservation easements)	
Building Decarbonization	Adopt all-electric new construction reach codes for residential and commercial uses	**Consistent.** Although this goal is not applicable to an individual development project, the Project would meet the CalGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements. The Project buildings will be LEED compliant and encouraged to become certified. Additionally, the Project buildings shall be designed to accept roof-mounted solar panels affording tenants/users the opportunity to utilize solar energy, with a mitigation measure requiring the installation of solar to cover base building needs at industrial zoned buildings. Further, all landscaping equipment used to maintain individual buildings and Pacific Gateway master landscaping, parks, and open space will be required to be zero emission. Forklifts and yard mules at industrial buildings greater than 300,000 square feet will be zero emission. Finally, building construction shall meet the current applicable standards for energy efficiency to include energy efficient heating and cooling systems, energy efficient appliances, building systems equipment, and HVAC control systems. To ensure that all systems are working at their maximum capacity and design efficiencies, the Project will include mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet.
	Adopt policies and incentive programs to implement energy efficiency retrofits for existing buildings, such as weatherization, lighting upgrades, and replacing energy-intensive appliances and equipment with more efficient systems (such as Energy Star-rated equipment and equipment controllers)	
	Adopt policies and incentive programs to electrify all appliances and equipment in existing buildings such as appliance rebates, existing building reach codes, or time of sale electrification ordinances	
	Facilitate deployment of renewable energy production and distribution and energy storage on privately owned land uses (e.g., permit streamlining, information sharing)	
	Deploy renewable energy production and energy storage directly in new public projects and on existing public facilities (e.g., solar photovoltaic systems on rooftops of municipal buildings and on canopies in public parking lots, battery storage systems in municipal buildings)	

Notes:

[1] CARB's 2022 Scoping Plan, Appendix D, lists three Priority Areas that local governments should focus on when preparing a CEQA-qualified CAP in order to address the sources of GHGs within their jurisdiction. These represent areas which local governments have the most authority over and have the highest GHG reduction potential. These include transportation electrification, VMT reduction, and building decarbonization. Available at: https://ww2.arb.ca.gov/sites/default/files/2022-11/2022-sp-appendix-d-local-actions.pdf. Accessed: March 2025.

Abbreviations:

ACE - Altamont Commuter Express
CalGreen - California Green Building Standards Code
CAP - Climate Action Plan
CARB - California Air Resources Board
CEQA - California Environmental Quality Act
CTR - Commute Trip Reduction
EV - electric vehicle
GHG - greenhouse gas
HVAC - heating, ventilation, and air conditioning
LEED - Leadership in Energy and Environmental Design
PG&E - Pacific Gas & Electric
TDM - transportation demand management
VMT - vehicle miles traveled
ZEV - zero emission vehicle

Table D-2. Consistency with San Joaquin County Regional Transportation Plan/Sustainable Communities Strategy
Pacific Gateway
San Joaquin Valley, California

#	Goal	Strategy	Consistency Analysis
1	Enhance the environment for existing and future generations and conserve energy.	Strategy No. 1: Encourage efficient development patterns that maintain agricultural viability and natural resources.	**Consistent.** The Project will include parks and open spaces throughout the Project area. In addition, the Project will include sustainable design practices for landscape, which will include the use of native and climate adapted plant species, high efficiency weather-based irrigation systems, locally sourced and recycled materials, and stormwater best management practices. Water use for landscape irrigation is also in the forefront of current design practices and guidelines have been included to address water conservation. This approach to the design will create a contemporary landscape that is attractive, yet resource-efficient and relatively low-maintenance.
		Strategy No. 2: Encourage preservation of natural resources.	**Consistent.** The Project will include parks and open spaces throughout the Project area and will be internally well-connected via pedestrian and bicycle networks. Typically, these areas will include exercise stations, picnic areas, sitting areas, concession/food truck service areas, natural areas, and trails.
		Strategy No. 3: Enhance the connection between land use and transportation choices through projects supporting energy and water efficiency.	**Consistent.** The Project will implement strategies and build infrastructure to promote the efficient use of resources, including the use of recycled water generated from the treated wastewater for landscape irrigation, consideration of locally sourced, salvaged, and recycled materials for use throughout the landscape and hardscape design, and design of buildings to accomodate the installation of roof-mounted solar. The Project has also committed to incorporating solar photo voltaic (PV) panels sized to accomodate "base building" energy needs for limited industrial zoned buildings, as described in Section 1.3 of the Greenhouse Gas Emissions Technical Report. Additionally, the Project will meet the CalGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements.
		Strategy No. 4: Improve air quality by reducing transportation-related emissions.	**Consistent.** The Project will implement of a Voluntary Commute Trip Reduction (CTR) program. Required elements of the program include: - Commute Trip Reduction Marketing - implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program). - Ridesharing Program - implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers. - Subsidized or Discounted Transit Program - provides subsidized or discounted, or free transit passes for employees. - End-of-Trip Bicycle Facilities - installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use. - Employer-Sponsored Vanpool - implements an employer-sponsored vanpool service for employee groups of 5 to 15 people. Additionally, the Project will establish pedestrian and bicycle circulation system within the Project site to encourage employee wellness and provide non-vehicle alternatives.
2	Maximize mobility and accessibility.	Strategy No. 5: Optimize the public transportation system to provide efficient and convenient access for users of all income levels.	**Consistent.** While transit service is not currently provided to the area, the project plans to extend public transit service to the project site. This will include expanding San Joaquin RTD fixed-route bus service to the project site. Additionally, an Altamont Commuter Express (ACE) train station is situated on Tracy Boulevard at Linne Road (two miles north of the project).
		Strategy No. 6: Encourage infill development and development near transit, including transit-oriented development to maximize existing transit investments.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 7: Provide transportation improvements to facilitate nonmotorized travel, including incorporation of complete streets elements as appropriate.	**Consistent.** The Project will provide end-of-trip bicycle facilities, which includes installation and maintenance of bike parking, bike lockers, showers, and personal lockers for employee use. Class 1 bicycle paths have been included on all major circulation streets within the project area to encourage and allow for alternatives to motor vehicles. All roads will include a landscape strip on both sides planted with street trees. Landscape setbacks will generally be planted with grasses, evergreen shrubs, and double rows of large screen trees. Sidewalks will be present on both sides of most streets and will incorporate accessible pedestrian signals. The Project has also committed to nonmotorized travel-related mititgation measures including Mitigation Measure 4.12-2, which states that, "Prior to the occupancy of the first building within the second phase of development, the project applicant shall implement Transportation Demand Management (TDM) Strategy 3 from Mitigation Measure 4.12-4(b), as follows: Expand Bikeway Network – construct a Class I off-street multi-use path on the west side of MacArthur Drive or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance from the north edge of the project site to Linne Road."

Table D-2. Consistency with San Joaquin County Regional Transportation Plan/Sustainable Communities Strategy
Pacific Gateway
San Joaquin Valley, California

#	Goal	Strategy	Consistency Analysis
2 *(Cont'd)*	Maximize mobility and accessibility.	Strategy No. 8: Improve freight access to key strategic economic centers.	Consistent. The Project will create new employment generating uses located nearby the following interchanges: - Interstate 580 and Interstate 5 interchange; - Interstate 580/Highway 132 Interchange; - S Chrisman Rd/Highway 132 Interchange; - S Bird Rd/Highway 132 Interchange; and - W Lehman Rd/Interstate 5 Interchange
		Strategy No. 9: Promote safe and efficient strategies to improve the movement of goods by air, water, rail, and roadway.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
3	Increase safety and security.	Strategy No. 10: Facilitate projects that reduce the number and severity of traffic incidents.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 11: Support local and state efforts for transportation network resiliency, reliability, and climate adaptation.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
4	Preserve the efficiency of the existing transportation system.	Strategy No. 12: Prioritize projects that make more efficient use of the existing road network.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 13: Support the continued maintenance and preservation of the existing transportation system.	**Consistent**. The proposed Project includes several potential future intersection and roadway improvements that would be triggered by full buildout of the proposed project in the Off-Site Improvements Study Area, which is generally located north of the project site. However, the list of off-site physical roadway improvements that would be constructed by the proposed Project is not definitive at this time due to a variety of factors, with the main factor being that many of the intersections/roadways are in jurisdictions other than San Joaquin County, and, thus, successful implementation of identified improvements would require other agency approval (e.g., City of Tracy, Caltrans). In such instances of extraterritorial jurisdiction, the County cannot impose the improvements on the other jurisdictions.
		Strategy No. 14: Promote electric power, alternative fuels and autonomous technologies for freight and agriculture.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 15: Manage the adoption of electric vehicles and private connected and autonomous vehicles.	**Consistent.** The Project will provide preferential parking space locations for electric vehicles and other clean air vehicles in all parking lots to encourage energy-efficient vehicular use
		Strategy No. 16: Promote electric power, alternative fuels, and autonomous technologies for public transit.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
5	Support economic vitality.	Strategy No. 17: Support transportation improvements that improve economic competitiveness, revitalize commercial corridors and strategic economic centers, and enhance travel and tourism opportunities.	**Consistent**. The Project plans to construct roadways to support the Project, which will attract a wide variety of development that will generate construction and permanent jobs and provide for workforce and business development within San Joaquin County and the surrounding communities. This will in turn contribute to a vibrant workplace in the San Joaquin Valley.
		Strategy No. 18: Support workforce training across industries, particularly transportation-related industries.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 19: Encourage and/or strengthen small business while supporting large employer recruitment.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 20: Invest in high-speed internet infrastructure to support e-business and reduce commuting.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
6	Promote interagency coordination and public participation for transportation decision making and planning efforts.	Strategy No. 21: Provide equitable access to transportation planning.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 22: Engage the public early, clearly, and continuously.	**Consistent.** The Project would not impede implementation of this strategy.
		Strategy No. 23: Use a variety of methods to engage the public and encourage representation from diverse income and ethnic backgrounds.	**Consistent.** The Project would not impede implementation of this strategy.

Table D-2. Consistency with San Joaquin County Regional Transportation Plan/Sustainable Communities Strategy
Pacific Gateway
San Joaquin Valley, California

#	Goal	Strategy	Consistency Analysis
7	Maximize cost-effectiveness.	Strategy No. 24: Support efforts to streamline the development process.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 25: Support the use of state and federal grants to supplement local funding and pursue discretionary grant funding opportunities from outside the region.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 26: Support projects that maximize cost-effectiveness.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 27: Maximize funding of existing transportation options.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
8	Improve the quality of life for residents.	Strategy No. 28: Promote a broader range of housing types.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 29: Support the development a regional trust fund dedicated to addressing housing issues.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 30: Enhance public health through active transportation projects.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.

Notes:
San Joaquin Council of Governments. 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). Available here: https://www.sjcog.org/608/Adopted-2022-RTPSCS-Plan. Accessed: January 2025.

Abbreviations:
ACE - Altamont Commuter Express
COG - Council of Governments
CTR - Commute Trip Reduction
SCS - Sustainable Communities Strategy
SJV - San Joaquin Valley
RTD - Regional Transportation District
RTP - Regional Transportation Plan

Table D-3. Consistency with San Joaquin County General Plan
Pacific Gateway
San Joaquin Valley, California

#	General Plan Policy Name	General Plan Policy Description	Consistency Analysis
LU-1.1	Compact Growth and Development	The County shall discourage urban sprawl and promote compact development patterns, mixed-use development, and higher development intensities that conserve agricultural land resources, protect habitat, support transit, reduce vehicle trips, improve air quality, make efficient use of existing infrastructure, encourage healthful, active living, conserve energy and water, and diversify San Joaquin County's housing stock.	**Consistent.** The Project will include mixed-use development, including a number of land uses including but not limited to: Business Park, University, Commercial Retail Uses, and Parks/Open Spaces. The Proposed Project will attract a wide variety of development that will generate construction and permanent jobs and provide for workforce and business development within San Joaquin County and the surrounding communities. This will in turn contribute to a vibrant workplace in the San Joaquin Valley. Additionally, transit service is not currently provided to the area, the project plans to extend public transit service to the project site. This will include expanding San Joaquin RTD fixed-route bus service to the project site. Additionally, an Altamont Commuter Express (ACE) train station is situated on Tracy Boulevard at Linne Road (two miles north of the project). The project is placed along Chrisman Road, an existing Surface Transportation Assistance Act (STAA) route, making efficient use of existing infrastructure.
LU-1.6	New Employment-Generating Uses	The County shall direct new employment generating uses to locate within Urban and Rural Communities and City Fringe Areas, at freeway interchanges, and in other areas designated for commercial or industrial development. The County may allow employment-generating uses in other unincorporated areas when development proposals demonstrate that the project will not conflict with adjacent uses and will provide: jobs to County residents; adequate infrastructure and services (i.e., water, sewer, drainage, and transportation); and positive tax benefits to the County.	**Consistent.** The Project will create new employment generating uses located nearby the following interchanges: - Interstate 580 and Interstate 5 interchange; - Interstate 580/Highway 132 Interchange; - S Chrisman Rd/Highway 132 Interchange; - S Bird Rd/Highway 132 Interchange; and - W Lehman Rd/Interstate 5 Interchange In addition, the Project will provide jobs to County residents and adequate infrastructure/services. Improvements for the construction of the infrastructure to develop the project area includes without limitation, the complete roadways network of streetlights, traffic signals, medians and joint trench within roads, water system and infrastructure, sewer treatment and infrastructure, fire protection and infrastructure, and electric and natural gas infrastructure.
LU-1.8	Support for Alternative Transportation Modes	The County shall encourage land use patterns that promote walking and bicycling and the use of public transit as alternatives to the personal automobile.	**Consistent.** The Project will establish pedestrian and bicycle circulation system within the Project site to encourage employee wellness and provide non-vehicle alternatives.
LU-2.2	Sustainable Building Practices	The County shall promote and, where appropriate, require sustainable building practices that incorporate a "whole system" approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.	**Consistent.** The Project will implement strategies and build infrastructure to promote the efficient use of resources, which includes but is not limited to: - Consistency with CalGreen Building Standards Code in effect at the time of building permit application, which include a number of energy saving requirements. - Design of the site will reduce the mass grading to the extent feasible and decrease the use of earth moving equipment needed to grade the site, which leads to a reduction in total emissions from construction equipment and dust. - Site planning and building design will consider building orientation, window placements, and materials selection to assist in minimizing energy use - Energy efficient LED lighting and control systems will be utilized for buildings, traffic, street, and any other outdoor lighting. - Buildings will be designed to accept roof-mounted solar panels affording tenants/users the opportunity to utilize solar energy. The Project has committed to incorporating solar photo voltaic (PV) panels sized to accomodate "base building" energy needs for limited industrial zoned buildings, as described in Section 1.3 of the Greenhouse Gas Emissions Technical Report. - Where warehouse spaces are required to be climate controlled, install insulated dock doors and dock door seals to reduce energy loss. - Section warehouse spaces by temperature and group cool and warm temperature spaces together to decrease energy usage. - Lighting levels for outdoor illumination will be required to meet the minimum standards required for safety. All exterior lighting will be required to be LED and controlled by timers, and unless otherwise required, only lighting required for parking lot security and safety will be provided at night. - The use of daylight or clerestory windows and roof skylights will be utilized as a means of providing natural light and reducing the need for lighting during daytime. - Light colored "cool" roofs will be required for all new buildings, which helps to reduce heat gain and conserve energy use. - Canopies, awnings, and architectural shade structures will also be encouraged on the south and west elevations to minimize heat gain. - Tree species will be chosen based on their large canopy characteristics at maturity and will be strategically placed on the west and east portions of the site to shade paving areas and building elevations to reduce sun exposure and minimize heat gain.
LU-3.11	Solar Access	The County shall encourage new residential subdivisions and new commercial, office, industrial, and public buildings to be oriented and landscaped to enhance natural lighting and solar access in order to maximize energy efficiency.	**Consistent.** The Project will implement the use of daylight or clerestory windows and roof skylights will be utilized as a means of providing natural light and reducing the need for lighting during daytime.

Table D-3. Consistency with San Joaquin County General Plan
Pacific Gateway
San Joaquin Valley, California

#	General Plan Policy Name	General Plan Policy Description	Consistency Analysis
LU-5.22	Mixed Use Development	The County shall require new mixed-use developments to be developed under a single plan that details the full buildout of the development and any associated phasing for construction and includes specific design guidelines and standards that address the overall site design, scale of development, relationship to adjacent uses, circulation and parking, architecture, infrastructure, and landscaping.	**Consistent.** The Project's Specific Plan will serve as a reference for the full buildout of the development, including specific design guidelines and standards that address the overall site design, scale of development, relationship to adjacent uses, circulation and parking, architecture, infrastructure, and landscaping.
LU-6.8	Sustainable Technologies	The County shall encourage all employment and industrial projects to incorporate sustainable technologies including energy and water efficient practices.	**Consistent.** The Project will use sustainable technologies, including energy and water efficient practices where available. This includes the use of high-efficiency irrigation systems and designing buildings to include energy efficient appliances, building systems, and HVAC control systems.
ED-2.4	Green Economy	The County shall encourage the development and expansion of industries and businesses that rely on environmentally-sustainable products and services, such as renewable energy, green building, clean transportation, water conservation, waste management and recycling, and sustainable land management.	**Consistent.** The Project will implement strategies and build infrastructure to promote the efficient use of resources, including the use of recycled water generated from the treated wastewater for landscape irrigation, consideration of locally sourced, salvaged, and recycled materials for use throughout the landscape and hardscape design, and design of buildings to accept roof-mounted solar providing tenants with solar energy. The Project has committed to incorporating solar PV panels sized to accomodate "base building" energy needs for limited industrial zoned buildings, as described in Section 1.3 of the Greenhouse Gas Emissions Technical Report.
TM-6.7	Bicyclist Amenities	The County shall encourage new large employers to provide bicycle racks.	**Consistent.** The Project will provide end-of-trip bicycle facilities, which includes installation and maintenance of bike parking, bike lockers, showers, and personal lockers for employee use.
TM-7.2	Critical Facilities Access	The County shall require new development to provide adequate access to facilities critical to goods movement, including railroad yards, intermodal facilities, the Port of Stockton, the Stockton Metropolitan Airport, and Interstate highways.	**Consistent.** As noted in LU-1.6, the Project will be located nearby to Interstate 5 and Interstate 580.
IS-4.18	Graywater and Rainwater Systems	The County shall encourage homeowners, businesses, and developers to install graywater systems and rainwater harvest systems, consistent with local and State guidelines, regulations, and standards, in order to reduce consumption of potable water.	**Consistent.** The Project will use the recycled water generated from the treated wastewater for landscape irrigation, which would reduce consumption of potable water. Additionally, Stormwater Best Management Practices, such as rain gardens, bioswales and rainwater harvesting, will be encouraged to be incorporated into the landscape to maximize on-site infiltration of stormwater, to the extent possible.
IS-4.19	Water Efficient Landscaping	The County shall encourage water efficient landscaping and use of native, drought-tolerant plants consistent with the Model Landscape Ordinance.	**Consistent.** The Project will include sustainable design practices for landscape, which will include the use of native and climate adapted plant species, high efficiency weather-based irrigation systems, locally sourced and recycled materials, and stormwater best management practices. Water use for landscape irrigation is also in the forefront of current design practices and guidelines have been included to address water conservation. This approach to the design will create a contemporary landscape that is attractive, yet resource-efficient and relatively low-maintenance.
PHS-5.14	Energy Consumption Reduction	The County shall encourage new development to incorporate green building practices and reduce air quality impacts from energy consumption.	**Consistent.** As noted for **NCR-5.11**, the Project will meet the CalGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements.
PHS-6.3	GHG Reduction Strategies	The County shall promote greenhouse gas emission reductions by encouraging efficient farming methods (e.g., no-till farming, crop rotation, cover cropping); supporting the installation of renewable energy technologies; and protecting grasslands, open space, oak woodlands, riparian forest and farmlands from conversion to urban uses.	**Consistent.** The Project will include parks and open spaces throughout the Project area and the Project buildings shall be designed to accept roof-mounted solar panels providing tenants/users with solar energy. The Project has committed to incorporating solar PV panels sized to accomodate "base building" energy needs for limited industrial zoned buildings, as described in Section 1.3 of the Greenhouse Gas Emissions Technical Report.
PHS-6.6	Business-related GHG Reduction Strategies	The County shall encourage all businesses to help reduce GHG emissions by: replacing high mileage fleet vehicles with more efficient and/or alternative fuel vehicles; increasing the energy efficiency of facilities; transitioning toward the use of renewable energy instead of non-renewable energy sources; adopting purchasing practices that promote emissions reductions and reusable materials; and increasing recycling.	**Consistent.** As noted for **PHS-5.14**, **ED-2.4**, **LU-2.2**, and **NCR-5.11** the Project will implement strategies and build infrastructure to promote the efficient use of resources and thereby reduce the greenhouse gas impact of operations and construction. Please note that there are uncertainties related to which businesses will operate within the Project, as businesses/tenants have not yet been selected.

Table D-3. Consistency with San Joaquin County General Plan
Pacific Gateway
San Joaquin Valley, California

#	General Plan Policy Name	General Plan Policy Description	Consistency Analysis
PHS-6.7	New Development	The County shall require new development to incorporate all feasible mitigation measures to reduce construction and operational GHG emissions.	**Consistent.** The Project has incorporated the feasible project design features to reduce construction and operational GHG emissions. This includes the incorporation of various Transportation Demand Management (TDM) strategies, as described in the Project's Transportation Impact Analysis Report.
PHS-6.9	Public Awareness	The County shall support public awareness about climate change and encourage County residents and businesses to become involved in activities and lifestyle changes that will aid in reduction of greenhouse gas emissions through alternative energy use, energy and water conservation, waste reduction and recycling, and other sustainable practices.	**Consistent.** The Project will support public awareness of sustainable practices, such as through implementation of a Voluntary Commute Trip Reduction (CTR) program. Required elements of the program include: - Commute Trip Reduction Marketing - implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program). - Ridesharing Program - implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers. - Subsidized or Discounted Transit Program - provides subsidized or discounted, or free transit passes for employees. - End-of-Trip Bicycle Facilities - installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use. - Employer-Sponsored Vanpool - implements an employer-sponsored vanpool service for employee groups of 5 to 15 people. This program will include incentives for commuters to use alternative modes of transportation.
NCR-3.5	Low Impact Development	The County shall require new development to minimize or eliminate stormwater quality and hydro-modification impacts through site design, source controls, runoff reduction measures, best management practices (BMPs), and Low Impact Development (LID).	**Consistent.** As described in the Specific Plan, Stormwater Best Management Practices, such as rain gardens, bioswales and rainwater harvesting, should be incorporated into the landscape to maximize on-site infiltration of stormwater, to the extent possible. The Project's drainage system has been designed to utilize retention ponds.
NCR-5.1	Nonrenewable Energy and Energy Efficiency	The County shall support the efforts of residents, businesses, and energy providers to reduce the consumption of nonrenewable energy and shall promote energy providers' programs to increase energy efficiency and implement demand response programs.	**Consistent.** The Project would support reduced energy consumption and increased energy efficiency through green building practices, as discussed in **PHS-5.14, LU-2.2, and NCR-5.11.**
NCR-5.11	Green Building Practices	The County shall encourage green building practices in new construction.	**Consistent.** The Project will comply with the applicable requirements in the Green Building Code, which include the following: • Reducing water consumption by 20 percent • Diverting 50 percent of construction waste from landfills • Installation of low pollutant-emitting materials • Installation of separate water meters for nonresidential buildings' indoor and outdoor water use • Moisture-sensing irrigation systems for larger landscape projects • Mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity and design efficiencies. In addition, the Project buildings will be LEED compliant and encouraged to become certified.
NCR-5.14	Natural Daylighting in Commercial Operations	The County shall encourage commercial and employment operations to incorporate natural daylighting by the use of windows and skylights to reduce energy demand for lighting.	**Consistent.** The Project would use daylight or clerestory windows and roof skylights as a means of providing natural light and reducing the need for lighting during daytime.
NCR-5.2	Alternative Energy	The County shall encourage residents, businesses, and energy providers to develop and use alternative, renewable energy sources, including but not limited to, biomass, solar, wind, and geothermal.	**Consistent.** The Project buildings shall be designed to accept roof-mounted solar panels providing tenants/users with solar energy. The Project has committed to incorporating solar PV panels sized to accomodate "base building" energy needs for limited industrial zoned buildings, as described in Section 1.3 of the Greenhouse Gas Emissions Technical Report.

References:
San Joaquin County. County Wide General Plan 2035. Available here: https://www.sjgov.org/commdev/cgi-bin/cdyn.exe?grp=planning&htm=gp2035. Accessed: January 2025.

Abbreviations:
BMPs - best management practices
CTR - Commute Trip Reduction
HVAC - heating, ventilation, and air conditioning
LEED - Leadership in Energy and Environmental Design
LED - light emitting diode
LID - Low Impact Development

Appendix F

Prepared for
Ridgeline Property Group
San Joaquin County, California

Prepared by
Ramboll Americas Engineering Solutions, Inc.
Irvine, California

Project Number
1690030668_Conv-001

Date
April 2025

PACIFIC GATEWAY PROJECT ENERGY TECHNICAL REPORT

SAN JOAQUIN COUNTY, CALIFORNIA

RAMBOLL

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APPENDICES

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ACRONYMS AND ABBREVIATIONS

Acronym	Definition
AB	Assembly Bill
ACC	Advanced Clean Cars
ACF	Advanced Clean Fleets
ATCM	Airborne Toxic Control Measure
CalEEMod®	California Emissions Estimator Model®
CalGreen	California Green Building Standards Code
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COG	Council of Governments
CPUC	California Public Utilities Commission
CVRP	Clean Vehicle Rebate Project
DOORS	Diesel Off-Road Online Reporting System
DOT	U.S. Department of Transportation
EIR	Environmental Impact Report
EO	Executive Order
EPA	U.S. Environmental Protection Agency
EV	Electric vehicle
GHG	greenhouse gas
GHS	grid harmonization strategies
GWh	gigawatt hours
HOV	high-occupancy vehicle
hp	horsepower
HVAC	Heating, Ventilation and Air Conditioning
IEPR	Integrated Energy Policy Report
ISTEA	Intermodal Surface Transportation Efficiency Act
kWh	kilowatt hours

ACRONYMS AND ABBREVIATIONS *(CONTINUED)*

Acronym	Definition
LCFS	Low Carbon Fuel Standard
LPG	liquefied petroleum gas
mpg	miles per gallon
MPO	Metropolitan Planning Organization
MW	megawatt
MWh	megawatt hours
NHTSA	National Highway Traffic Safety Administration
NO_X	oxides of nitrogen
PG&E	Pacific Gas and Electric Company
PM	particulate matter
RPS	Renewables Portfolio Standard
RTPs	regional transportation plans
SAFE	Safer Affordable Fuel-Efficient
SB	Senate Bill
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SDG&E	San Diego Gas & Electric
SR	State Route
TDV	time dependent valuation
TEA	Transportation Efficiency Act
VDECS	Verified Diesel Emission Control Strategies
VFW	Veteran of Foreign Wars
VMT	vehicle miles traveled
VW	Volkswagen
ZEV	zero-emission vehicle
ZNE	zero net energy

1. INTRODUCTION

Ramboll Americas Engineering Solutions, Inc. (Ramboll) was asked to prepare an Energy Technical Report for the proposed Pacific Gateway development in San Joaquin County, California (Project).

This Energy Technical Report analyzes the Project's energy impacts from construction and operations. In particular, this report describes the existing setting of the Project site, describes the relevant regulatory background, discusses the methodology used to evaluate energy impacts related to the Project, and evaluates potential impacts related to energy that would be affected as a result of implementation of the Project.

1.1 Existing Conditions

The existing 1,576.7-acre site is currently developed with active agricultural uses, which include commercial scale almond and cherry orchards, as well as an agricultural processing and manufacturing facility operated by A.B. FAB, Inc. This area is designated by both the General Plan and zoning as Agricultural. The site is located in southwest San Joaquin County, northeast of the Interstate 580 (I-580) and north of State Route 132 (SR 132). The site is approximately one mile from the southern boundary of the City of Tracy.

1.2 Project Analysis

The Project will include a variety of uses within the Specific Plan Area, including modern Class "A" industrial warehouse and distribution facilities, a university campus, commercial retail uses, business park, and a Veteran of Foreign Wars (VFW) facility. Open spaces and public facilities such as parks and pedestrian and bike facilities will also be incorporated to provide accessibility and recreational spaces for the workforce and community.

The Project includes Specific Plan zoning designations for Limited Industrial (I-L), General Commercial (C-G), Public (P-F), and Business Park (B-P) use types. The Proposed Plan will allow nonconforming existing agricultural uses to continue to operate at the adoption of the Pacific Gateway Specific Plan and until development in conformance with this Specific Plan occurs.

1.3 Mitigation Measures

The Project will include a number of mitigation measures. Those which are expected to result in a quantified impact are summarized below:

MM-Energy-1 (Solar Photovoltaic [PV])

The proposed project is incorporating solar PV panels sized to accommodate "Base Building" energy needs for limited industrial zoned buildings.[1]

[1] "Base Building" shall be defined as energy to power LED warehouse lights, site lighting, no less than 3,000 SF of office, or more than 10,000 SF of office, up to 1 electric forklift charging station for every 40,000 SF of warehouse area, electricity to power one (1) quad outlet and dock equipment for any dock position utilized in tenant's business, warehouse air circulation at the rate of one (1) air change per hour, and all Title 24 requirements, including EV charging stations pursuant to Title 24.

MM-Energy-2 (Zero-Emission [ZE] Equipment)

The Project will utilize various zero-emission equipment. This includes forklift equipment and yard mules used at all industrial warehouse buildings greater than 300,000 square feet (22,993,500 square feet total). Additionally, all landscape equipment used to maintain individual building projects (24,675,000 square feet total) and Pacific Gateway master landscaping, parks and open space will be required to be zero-emission.

2. ENERGY ENVIRONMENTAL AND REGULATORY OVERVIEW

2.1 General Setting

2.1.1 Energy Production and Distribution

Among the states, California ranks eighth in the nation in production of crude oil and 15th in production of natural gas.[2] In 2023, renewable resources, including hydroelectric and small-scale consumer-sited power, accounted for 54% of California's in-state electricity generation. Natural gas and nuclear supplied the remaining in-state electricity generation.[3]

Electricity Supply

The production of electricity requires the combustion, consumption, or conversion of other energy resources, including water, wind, oil, natural gas, coal, solar, geothermal, and nuclear. Of the electricity that is generated within the state in 2023, 43.68 % is generated by natural gas-fired power plants, 19.17 % by solar, 14.80% by hydroelectric, 8.22% by nuclear power plants, 6.46% by wind, and a remaining 7.44% by other renewables.[4]

For San Joaquin County, Pacific Gas and Electric Company (PG&E) is the primary supplier of electricity to businesses and residents of the area. PG&E's 70,000-square-mile service area covers both Northern and Central California. By the end of 2023, about 47 percent of the energy delivered to PG&E's customers came from eligible renewable energy-related projects.[5]

Transportation Fuels Supply

Most petroleum fuel refined in California is for use in on-road motor vehicles and is refined within California to meet state-specific formulations required by the California Air Resources Board (CARB). The major categories of petroleum fuels are gasoline and diesel for passenger vehicles, transit, and rail vehicles; and fuel oil for industry and emergency electrical power generation. Other liquid fuels include kerosene, jet fuel, and residual fuel oil for marine vessels.

California's oil fields make it the third-largest petroleum-producing state in the United States, behind Texas and North Dakota (federal offshore production is the biggest producer in the United States). Crude oil is moved from area to area within California through a network of pipelines that carry it from both onshore and offshore oil wells to the refineries that are located in the San Francisco Bay Area, the Los Angeles area, and the Central Valley.

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[2] U.S. Energy Information Administration. 2024. California State Profile and Energy Estimates: Profile Overview. Available online at: http://www.eia.gov/state/?sid=CA. Accessed: January 2025.

[3] U.S. Energy Information Administration. 2024. California State Profile and Energy Estimates: Profile Analysis. Available online at: https://www.eia.gov/state/analysis.cfm?sid=CA. Accessed: January 2025.

[4] California Energy Commission. 2025. 2023 Total System Electric Generation. Available online at: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2023-total-system-electric-generation. Accessed: January 2025.

[5] Pacific Gas and Electric Company. 2024. 2024 Corporate Responsibility and Sustainability Report. Executive Summary. Available online at: https://www.pgecorp.com/assets/pgecorp/csr/csr_2024/assets/PGE_CSR_2024_Executive_Summary.pdf. Accessed: January 2025.

Currently, 14 petroleum refineries operate in California, processing approximately 1.7 million barrels per day of crude oil.[6]

Other transportation fuel sources are alternative fuels, such as methanol and denatured ethanol (alcohol mixtures that contain no less than 70% alcohol), natural gas (compressed or liquefied), liquefied petroleum gas (LPG), hydrogen, and fuels derived from biological materials (i.e., biomass).

2.1.2 Energy Consumption

Electricity Consumption

Californians consumed 287,826 gigawatt hours (GWh) of electricity in 2022.[7] Of this total, San Joaquin County consumed 5,771 GWh.[8]

Transportation Sector Fuels Consumption

The transportation sector is a major end-use of energy in California, accounting for approximately 42.6% of total state-wide energy consumption in 2022, the most recent year for which data is available.[9] In addition, energy is consumed in connection with construction and maintenance of transportation infrastructure, such as streets, highways, freeways, rail lines, and airport runways.

2.2 Regulatory Overview

2.2.1 Federal Programs

2.2.1.1 Energy Policy and Conservation Act

The Energy Policy and Conservation Act of 1975 was established in response to the oil crisis of 1973, which increased oil prices due to a shortage of reserves. The Act requires that all vehicles sold in the U.S. meet certain fuel economy goals, known as the Corporate Average Fuel Economy standards. The National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation (DOT) administers the Corporate Average Fuel Economy program, and the U.S. Environmental Protection Agency (EPA) provides the fuel economy data.

In April 2010, the EPA and NHTSA issued a final rulemaking establishing new federal fuel economy standards for model years 2012 to 2016 passenger cars and light-duty trucks. For model year 2012, the fuel economy standards for passenger cars, light trucks, and combined

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[6] U.S. Energy Information Administration. 2024. Petroleum & Other Liquids. Number and Capacity of Petroleum Refineries. Available online at: https://www.eia.gov/dnav/pet/pet_pnp_cap1_dcu_SCA_a.htm. Accessed: January 2025.

[7] A watt hour is a unit of energy equivalent to one watt of power expended for one hour. For example, a typical light bulb is 60 watts, meaning that if it is left on for one hour, 60-watt hours have been used. One kilowatt equals 1,000 watts. The consumption of electrical energy by homes and businesses is usually measured in kilowatt hours (kWh). Some large businesses and institutions also use megawatt hours (MWh), where one MWh equals 1,000 kWh. One gigawatt equals one thousand (1,000) megawatts, or one million (1,000,000) kilowatts. The energy output of large power plants over long periods of time, or the energy consumption of jurisdictions, can be expressed in gigawatt hours (GWh).

[8] Electricity data for San Joaquin County and the State of California in 2022 are obtained from the California Energy Commission, electricity consumption by county. Available at: https://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed: January 2025.

[9] U.S. Energy Information Administration. 2024. California State Profile and Energy Estimates: California Energy Consumption by End-Use Sector, 2022. Available online at: https://www.eia.gov/state/?sid=CA#tabs-2. Accessed: January 2025.

cars and trucks were 33.3 miles per gallon (mpg), 25.4 mpg, and 29.7 mpg, respectively.[10] These standards increase progressively up to 37.8 mpg, 28.8 mpg, and 34.1, respectively, for model year 2016. In subsequent rulemakings, the agencies extended the national program of fuel economy standards to passenger vehicles and light-duty trucks of model years 2017-2025, culminating in fuel economy of 54.5 mpg by model year 2025,[11] as well as to medium- and heavy-duty vehicles of model years 2014-2018, including large pickup trucks and vans, semi-trucks, and all types and sizes of work trucks and buses.[12]

In August 2016, the EPA and NHTSA adopted the next phase (Phase 2) of the fuel economy and GHG standards for medium- and heavy-duty trucks, which apply to vehicles with model year 2018 and later.[13] In response to the EPA's adoption of the Phase 2 standards, CARB staff brought a proposed California Phase 2 program before its Board in 2017; and the Board approved the program in March 2018.[14]

In 2018, the EPA and NHTSA proposed to amend certain existing Corporate Average Fuel Economy standards for passenger cars and light trucks and establish new standards, covering model years 2021-2026. Compared to maintaining the post-2020 standards now in place, the proposal would increase U.S. fuel consumption.[15]

In 2019, the EPA and NHTSA announced the One National Program Rule, which allows the federal government to set the standard for uniform fuel economy and greenhouse gas emissions of automobiles and light-duty trucks. This rule pre-empts state and local programs from setting the national standard, which includes California's GHG and ZEV programs.[16]

In December 2021, EPA finalized revised national greenhouse gas emissions standards for passenger cars and light trucks for model years 2023-2026.[17]

[10] United States Environmental Protection Agency (EPA) and United States Department of Transportation (DOT). 2010. *Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards*. Final Rule. 75 Fed. Reg. 25324-25728.

[11] United States Environmental Protection Agency (EPA) and United States Department of Transportation (DOT). 2012. *2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards*; Final Rule. 77 Fed. Reg. 62623.

[12] United States Environmental Protection Agency (EPA) and United States Department of Transportation (DOT). 2011. *Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles.* 76 Fed. Reg. 57106.

[13] USEPA. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/final-rule-greenhouse-gas-emissions-and-fuel-efficiency. Accessed: February 2025.

[14] CARB. CA Phase 2 GHG webpage: https://ww2.arb.ca.gov/our-work/programs/greenhouse-gas-standards-medium-and-heavy-duty-engines-and-vehicles/phase2. Accessed: February 2025.

[15] Federal Register. 2018. *The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks*. Available at: https://www.federalregister.gov/documents/2018/08/24/2018-16820/the-safer-affordable-fuel-efficient-safe-vehicles-rule-for-model-years-2021-2026-passenger-cars-and. Accessed: February 2025.

[16] EPA. 2019. *Trump Administration Announces One National Program Rule on Federal Preemption of State Fuel Economy Standards*. Available at: https://www.epa.gov/newsreleases/trump-administration-announces-one-national-program-rule-federal-preemption-state-fuel. Accessed: February 2025.

[17] United States Environmental Protection Agency. 2021. Regulations for Greenhouse Gas Emissions from Passenger Cars and Trucks. Available at: https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-greenhouse-gas-emissions-passenger-cars-and. Accessed: February 2025.

2.2.1.2 Energy Policy Act of 2005 and Energy Independence and Security Act of 2007

The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Energy Policy Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products. Because driving fuel-efficient vehicles and installing energy-efficient appliances can provide many benefits, such as lower energy bills, increased indoor comfort, and reduced air pollution, businesses are eligible for tax credits for buying hybrid vehicles, building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are given for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

The Energy Policy Act of 2005 also established the first renewable fuel volume mandate in the United States. The original Renewable Fuel Standard program required 7.5 billion gallons of renewable fuel to be blended into gasoline by 2012. The Energy Independence and Security Act of 2007 (EISA)[18] facilitates the reduction of national GHG emissions by aiming to:

- Move the United States toward greater energy independence and security.
- Increase the production of clean renewable fuels.
- Protect consumers.
- Increase the efficiency of products, buildings and vehicles.
- Promote research and deploy GHG capture and storage options.
- Improve the energy performance of the Federal Government.
- Increase U.S. energy security, develop renewable fuel production, and improve vehicle fuel economy.

EPA has enacted three key provisions (the CAFE Standards, the Renewable Fuel Standard, and the appliance/lighting efficiency standards) to reinforce these energy reduction goals and has committed to develop, implement, and revise regulations and voluntary programs for the following in EISA, among others:

- Increased CAFE Standards
- Federal Vehicle Fleets
- Renewable Fuel Standard
- Biofuels Infrastructure
- Carbon Capture and Sequestration

[18] USEPA. Summary of the Energy Independence and Security Act. June 2024. Available at: https://www.epa.gov/laws-regulations/summary-energy-independence-and-security-act. Accessed: February 2025.

Under the Energy Independence and Security Act of 2007, the Renewable Fuel Standard program was expanded to include diesel and to increase the volume of renewable fuel required to be blended into transportation fuel from 9 billion gallons in 2008 to 36 billion gallons by 2022.

2.2.1.3 American Recovery and Reinvestment Act

The American Recovery and Reinvestment Act of 2009 was passed in response to the economic crisis of the late 2000s, with the primary purpose of maintaining existing jobs and creating new jobs. Among the secondary objectives of the American Recovery and Reinvestment Act was investment in "green" energy programs, including funding the following through grants, loans, or other mechanisms: private companies developing renewable energy technologies; local and state governments implementing energy efficiency and clean energy programs; research in renewable energy, biofuels, and carbon capture; and development of high efficiency or electric vehicles.[19]

2.2.1.4 Intermodal Surface Transportation Efficiency Act

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 promotes the development of intermodal transportation systems to maximize mobility as well as address national and local interests in air quality and energy. The ISTEA contains factors that metropolitan planning organizations (MPO), such as the Kern Council of Governments (Kern COG), are to address in developing transportation plans and programs, including some energy-related factors. To meet the ISTEA requirements, MPOs have adopted explicit policies defining the social, economic, energy, and environmental values that guide transportation decisions in their respective metropolitan areas. The planning process for specific projects would then address these policies. Another requirement of the ISTEA is to consider the consistency of transportation planning with federal, state, and local energy goals. Through this requirement, energy consumption is expected to be a decision criterion, along with cost and other values to determine the best transportation solution.

2.2.1.5 Transportation Equity Act for the 21st Century

The Transportation Equity Act for the 21st Century ("TEA-21") was signed into law in 1998 and builds upon the initiatives established in the ISTEA legislation discussed above. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety.

[19] United States Environmental Protection Agency (EPA). 2009. *Recovery: EPA Gets Involved.* Available at: https://archive.epa.gov/recovery/web/html/. Accessed: February 2025.

2.2.2 State Programs

2.2.2.1 AB 32, SB 32, AB 1279 (State-wide GHG Reductions with Energy Co-Benefits)

The California Global Warming Solutions Act of 2006 (AB 32) was signed into law in September 2006.[20] The law instructed CARB to develop and enforce regulations for the reporting and verification of state-wide GHG emissions. The bulk of GHG emissions in California are carbon dioxide that result from fossil fuel consumption. Therefore, a reduction in GHG emissions typically translates into reduced fuel and increased energy efficiency. The bill directed CARB to set a state-wide GHG emission limit based on 1990 levels, to be achieved by 2020.

AB 32 requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. In December 2008, CARB adopted its Climate Change Scoping Plan: A Framework for Change (Scoping Plan), which included the state's strategies for achieving AB 32's reduction targets. These strategies are implemented with additional rules and regulations of relevance to energy analysis, such as the Advanced Clean Cars Program, the low carbon fuel standard (LCFS), Title 24 building efficiency standards, and the Renewable Portfolio Standard (RPS). These are discussed further below.

Enacted in 2016, Senate Bill (SB) 32 (Pavley, 2016) codifies a 2030 GHG emissions reduction goal and requires CARB to ensure that state-wide GHG emissions are reduced to 40 percent below 1990 levels by 2030. Similar to AB 32, a reduction in GHG emissions typically corresponds with a reduction in energy usage as the bulk of GHGs result from the combustion of fossil fuel.

Enacted in 2022, AB 1279 declares the policy of the state to achieve net zero GHG emissions as soon as possible, but no later than 2045, and achieve and maintain net negative GHG emissions thereafter. Additionally, the bill requires that by 2045, state-wide anthropogenic GHG emissions be reduced to at least 85% below 1990 levels.

2.2.2.2 SB 350 (Clean Energy and Pollution Reduction Act of 2015)

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This bill requires the State Energy Resources Conservation and Development Commission to establish annual targets for state-wide energy efficiency savings and demand reduction that will achieve a cumulative doubling of state-wide energy efficiency savings in electricity and natural gas final end uses of retail customers by January 1, 2030.

2.2.2.3 2022 Integrated Energy Policy Report Update

The 2022 Integrated Energy Policy Report (IEPR) Update provides an assessment of major energy trends and issues for a variety of energy sectors, as well as policy recommendations.[21] Prepared by the California Energy Commission (CEC), this report details the key energy issues facing California and develops potential strategies to address these

[20] CARB. Assembly Bill 32 Overview. 2006a. Available at: http://www.arb.ca.gov/cc/ab32/ab32.htm. Accessed: February 2025.

[21] California Energy Commission. 2022. 2022 Integrated Energy Policy Report Update. Available at: https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2022-integrated-energy-policy-report-update. Accessed: February 2025.

issues. The 2022 IEPR Update includes a discussion of several strategies to reduce climate change impacts and lessen energy consumption and recommendations for each topic. Examples include a discussion grid reliability, integration within the Western Interconnection, the role of hydrogen to support California's future energy demand, and the transition from fossil gas. The assessments and forecasted energy demand within this report will be used by the CEC to develop future energy policies. The 2023 IEPR is available in draft form, but has not been formally adopted at this time.

2.2.2.4 Title 24 Building Energy Efficiency Standards

The California Green Building Standards Code, as specified in Title 24, Part 11 of the California Code of Regulations, commonly referred to as CalGreen Building Standards (CalGreen), establishes voluntary and mandatory standards to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a positive environmental impact and encouraging sustainable construction practices in five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The provisions of this code apply to the planning, design, operation, construction, replacement, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such building structures throughout California. Examples of CalGreen provisions include reducing indoor water use, moisture sensing irrigation systems for landscaped areas, construction waste diversion goals, and energy system inspections. CalGreen is periodically amended; the most recent 2022 standards became effective on January 1, 2023.

The Energy Efficiency Standards for Residential and Non-residential Buildings, as specified in Title 24, Part 6, of the California Code of Regulations, were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods for building features such as space conditioning, water heating, lighting, and whole envelope. The 2005, 2008, and 2013 updates to the efficiency standards included provisions such as cool roofs on commercial buildings, increased use of skylights, and higher efficiency lighting, HVAC, and water heating systems. Additionally, some standards focused on larger energy-saving concepts such as reducing loads at peak periods and seasons and improving the quality of such energy-saving installations. Past updates to the Title 24 standards have proven very effective in reducing building energy use, with the 2013 update estimated to reduce energy consumption in residential buildings by 25% and energy consumption in commercial buildings by 30%, relative to the 2008 standards.[22] The 2016 updates included additional high efficiency lighting requirements, high performance attic and walls, and higher efficiency water and space heaters. The 2016 standards were expected to reduce residential electricity consumption by 28% and non-residential electricity by 5%.[23] The 2019 updates included a requirement for solar photovoltaic systems for new homes, requirements for newly constructed healthcare facilities, additional high efficiency lighting requirements, high performance attic and walls,

[22] CEC. 2012. Energy Commission Approves More Efficient Buildings for California's Future. Available at: https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/C17.pdf. Accessed: February 2025.

[23] CEC. 2015. 2016 Building Energy Efficiency Standards Adoption Hearing. Available at: https://web.archive.org/web/20190602115405/http://www.energy.ca.gov/title24/2016standards/rulemaking/documents/2015-06-10_hearing/2015-06-10_Adoption_Hearing_Presentation.pdf. Accessed: February 2025.

higher efficiency water and space heaters, and high efficiency air filters. The 2019 standards were expected to reduce high-rise residential and non-residential electricity consumption by approximately 10.7% and natural gas consumption by 1% and require new low-rise residential buildings to achieve zero net electricity consumption using a combination of building efficiency and on-site renewable electricity generation.[24]

The 2022 Title 24 standards are the currently applicable building energy efficiency standards, and became effective on January 1, 2023.[25] The 2022 updates included revisions to the requirements for non-residential electric vehicle (EV) charging, including requirements for the inclusion of a minimum number of EV capable spaces and minimum number of EV charging stations based on total parking quantities, and the facilitation of future EV installation for medium- and heavy-duty EV stations for various land uses including warehouse and retail uses.

As the Project phasing schedule anticipates buildout as early as 2056, further reductions can be anticipated from future Title 24 code cycles. Thus, this analysis represents a conservative estimate of energy-related emissions. Estimated Project energy use rates for both the unmitigated and mitigated case are based on data provided by ConSol, which is described in more detail in Section 4.2 below.

The California Public Utilities Commission, CEC, and CARB also have a shared, established goal of achieving Zero Net Energy (ZNE) for new construction in California. The key policy timelines include: (1) all new residential construction in California will be ZNE by 2020, and (2) all new commercial construction in California will be ZNE by 2030. The ZNE goal generally means that new buildings must use a combination of improved efficiency and renewable energy generation to meet 100 percent of their annual energy need, as specifically defined by the CEC:

> "A ZNE Code Building is one where the value of the energy produced by on-site renewable energy resources is equal to the value of the energy consumed annually by the building, at the level of a single 'project' seeking development entitlements and building code permits, measured using the [CEC]'s Time Dependent Valuation (TDV) metric. A ZNE Code Building meets an Energy Use Intensity value designated in the Building Energy Efficiency Standards by building type and climate zone that reflect best practices for highly efficient buildings."[26]

While the adopted 2019 Title 24 standards do not achieve the 2020 ZNE goal, they do move the State further along the path to achieving this goal. The CEC has more recently focused on grid harmonization strategies (GHS), to bring maximum benefits to the grid, environment, and occupants; and GHG emissions reductions.[27]

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[24] CEC. 2023. 2022 Title 24 Impact Analysis. June. Available at: https://www.energy.ca.gov/publications/2023/impact-analysis-2022-update-california-energy-code. Accessed: February 2025.

[25] CEC. 2019. California's Energy Efficiency Standards for Residential and Nonresidential Buildings. Available online at: https://www.energy.ca.gov/publications/2022/2022-building-energy-efficiency-standards-residential-and-nonresidential. Accessed: February 2025.

[26] CEC, 2015 Integrated Energy Policy Report (2015), p. 41.

[27] CEC. 2018. The 2019 Building Energy Efficiency Standards ZNE Strategy. September 11. Available at: https://www.cesa.org/wp-content/uploads/CESA-webinar-slides-9.11.2018.pdf. Accessed: February 2025.

At the time of this writing, the CEC had adopted the 2022 Energy Code. In December 2021, the California Building Standards Commission approved the code for inclusion into the California Building Standards Code. The Energy Code encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. Buildings whose permit applications are applied for or after January 1, 2023, must comply with the 2022 Energy Code.

2.2.2.5 Renewables Portfolio Standard

SB 1078 (2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to obtain at least 20 percent of their energy supply from renewable sources by 2017. SB 107 (2006) changed that target date to 2010. In November 2008, then-Governor Schwarzenegger signed Executive Order S-14-08, which expanded the state's RPS to 33 percent renewable power by 2020. In April 2011, then-Governor Brown signed SB 2X, which legislated the prior Executive Order S-14-08 renewable standard. SB 350 (2015) set an additional RPS goal of 50 percent renewables by 2030. And SB 100 (2018) accelerated and extended again the RPS – requiring achievement of a 50 percent RPS by 2026 and a 60 percent RPS by 2030. SB 100 also established a state policy goal to achieve 100 percent carbon-free electricity by 2045. SB 1020 (September 2022) revises the standards from SB 100, requiring the following percentage of retail sales of electricity to California end-use customers to come from eligible renewable energy resources and zero-carbon resources: 90% by December 31, 2035, 95% by December 31, 2040, and 100% by December 31, 2045.

2.2.2.6 Mobile Source Regulations

SB 743 (Transportation Analysis Under CEQA)

Public Resources Code Section 21099(c)(1), as codified through enactment of SB 743, was enacted with the intent to change the focus of transportation analyses conducted under the California Environmental Quality Act (CEQA). It authorized the Governor's Office of Planning and Research to establish "alternative metrics to the metrics used for traffic levels of service for transportation impacts outside transit priority areas." SB 743 reflects a legislative policy to balance the needs of congestion management with state-wide goals related to infill development, promotion of public health through active transportation, and reduction of GHG emissions. As finalized in December 2018, amendments to the State CEQA Guidelines adopted in furtherance of SB 743 establish vehicle miles traveled (VMT), in lieu of level of service, as the new metric for transportation analysis. Implementation of SB 743 is anticipated to improve the efficiency of transportation fuels consumption.

SB 375 (Land Use Planning)

SB 375, the Sustainable Communities and Climate Protection Act of 2008, supports the State's climate action goals to reduce GHG emissions from passenger vehicles through better integrated coordinated transportation, land use, and housing planning that provides easier access to jobs, services, public transit, and active transportation options. SB 375 required CARB to establish GHG emission reduction targets (Regional Targets) for each metropolitan planning region. On September 23, 2010, CARB adopted Regional Targets applying to the years 2020 and 2035. In 2011, CARB adopted Regional Targets of 5% for 2020 and 10% for 2035 for the area under the jurisdiction of San Joaquin Council of Governments (SJCOG). These targets were in place through September 30, 2018. In March 2018, CARB approved

updated regional targets of 12% for 2020 and 16% for 2035 for SJCOG, which will be applied by SJCOG in future planning cycles. The targets are expressed as a percentage change in per capita passenger vehicle GHG emissions relative to 2005 emissions levels.

SB 375 requires MPOs, including SJCOG, to incorporate a "sustainable communities strategy" (SCS) in their regional transportation plans (RTPs) that will achieve the GHG emission Reduction Targets set by CARB, primarily by reducing VMT from light-duty vehicles through development of more compact, complete, and efficient communities. SJCOG prepared the 2018 Regional Transportation Plan and SCS[28] to fulfill this requirement; and the CARB accepted SJCOG's GHG quantification demonstration for that plan, which demonstrates achievement of the targets set prior to 2018.[29] Most recently, SJCOG has adopted their 2022 Regional Transportation Plan Update on August 25, 2022.

Advanced Clean Cars Program and Advanced Clean Fleets Program

In 2012, CARB approved the Advanced Clean Cars (ACC) program, a new emissions-control program for non-commercial passenger vehicles and light-duty truck for model years 2017-2025. The program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions. In August 2022, CARB adopted Advanced Clean Cars II (ACC II) regulations which "will seek to reduce criteria and greenhouse gas emissions from new light- and medium-duty vehicles beyond the 2025 model year, and increase the number of zero-emission vehicles (ZEVs) for sale".[30] In April 2023, CARB adopted the Advanced Clean Fleets (ACF) regulation which, "requires fleets that are well suited for electrification to reduce emissions through requirements to both phase-in the use of ZEVs for targeted fleets and requirements that manufacturers only manufacture ZEV trucks starting in the 2036 model year".[31].

Commercial Motor Vehicle Idling Regulation

In July 2004, CARB initially adopted an Airborne Toxic Control Measure (ATCM) to limit idling of diesel-fueled commercial motor vehicles (idling ATCM) and subsequently amended it in October 2005, October 2009, and December 2013. This ATCM is set forth in Title 13, California Code of Regulations, Section 2485, and requires, among other things, that drivers of diesel-fueled commercial motor vehicles with gross vehicle weight ratings greater than 10,000 pounds, including buses and sleeper berth equipped trucks, not idle the vehicle's primary diesel engine longer than five minutes at any location. This anti-idling regulation helps to reduce fuel consumption by reducing engine usage. The ATCM also requires owners and motor carriers that own or dispatch these vehicles to ensure compliance with the ATCM

[28] San Joaquin Council of Governments. 2022. The 2022 Regional Transportation Plan and Sustainable Communities Strategy. Available at: https://www.sjcog.org/275/RTP-Sustainable-Communities-Strategy. Accessed: February 2025.

[29] CARB. 2020. Technical Evaluation of the Greenhouse Gas Emissions Reduction Quantification for San Joaquin Council of Governments' SB 375 2018 Sustainable Communities Strategy. Available at: https://ww2.arb.ca.gov/sites/default/files/2021-02/Technical%20Evaluation%20of%20the%20GHG%20Emissions%20Reduction%20Quantification%20for%20the%20SJCOG%20SB%20375%20SCS%20Sept%202020.pdf. Accessed: February 2025.

[30] Advanced Clean Cars II Program. Available at: https://ww2.arb.ca.gov/advanced-clean-cars-ii-meetings-workshops. Accessed: February 2025.

[31] Advanced Clean Fleets. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets. Accessed: February 2025.

requirements. The regulation consists of new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. Under the new engine requirements, 2008 and newer model year heavy-duty diesel engines need to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling or optionally meet a stringent oxides of nitrogen idling emission standard.

In-Use Off-Road Diesel-Fueled Fleets Regulation

In May 2008, CARB approved the In-Use Off-Road Diesel-Fueled Fleets Regulation (Off-Road Regulation), which was later amended in December 2009, July 2010, and December 2011. The overall purpose of the Off-Road Regulation is to reduce emissions of oxides of nitrogen (NO_X) and particulate matter (PM) from off-road diesel vehicles operating within California. The regulation applies to all self-propelled off-road diesel vehicles 25 horsepower (hp) or greater used in California and most two-engine vehicles. The Off Road Regulation:

- Imposes limits on idling (i.e., fleets must limit unnecessary idling to 5 minutes), requires a written idling policy, and requires a disclosure when selling vehicles;
- Requires all vehicles to be reported to CARB (using the Diesel Off-Road Online Reporting System, DOORS) and labeled;
- Restricts the adding of older vehicles into fleets starting on January 1, 2014; and
- Requires fleets to reduce their emissions by retiring, replacing, or repowering older engines, or installing Verified Diesel Emission Control Strategies (VDECS) (i.e., exhaust retrofits).

The anti-idling component of this Off-Road Regulation helps to reduce fuel consumption by reducing engine usage.

The latest amendments include the following changes:[32]

- Phase out of the oldest and highest-emitting off-road engines from operation;
- Restrict the addition of vehicles with Tier 3 and Tier 4 Interim engines;
- Require contracting entities to obtain and retain a fleet's valid Certificate of Reported Compliance prior to awarding a contract or hiring a fleet;
- Mandate the use of R99 or R100 Renewable Diesel for all fleets;
- Provide voluntary compliance flexibility options for fleets that adopt zero-emission technology; and
- Provide additional flexibility for permanent low-use vehicles.

[32] CARB. 2022. Rulemaking Documents for the In-Use Off-Road Diesel-Fueled Fleets Regulation. Available at: https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation/rulemaking-documents. Accessed: February 2025.

Tractor-Trailer Greenhouse Gas Regulation

CARB's Tractor-Trailer Greenhouse Gas regulation reduces the energy consumption of large trucks. CARB developed this regulation to make heavy-duty tractors more fuel-efficient. Fuel efficiency is improved by requiring the use of aerodynamic tractors and trailers that are also equipped with low rolling resistance tires. The tractors and trailers subject to this regulation must either use EPA's SmartWay (SmartWay) certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. The SmartWay certification process is part of their broader voluntary program called the SmartWay Transport Partnership Program. The regulation applies primarily to owners of 53-foot or longer box-type trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. All owners regardless of where their vehicle is registered must comply with the regulation when they operate their affected vehicles on California highways. Besides the owners of these vehicles, drivers, motor carriers, California-based brokers and California-based shippers that operate or use them also share in the responsibility for compliance with the regulation.

Zero-Emission Vehicles

ZEVs include hydrogen fuel cell EVs and plug-in EVs, such as battery EVs and plug-in hybrid electric vehicles.

In 2012, Governor Brown issued Executive Order (EO) B-16-2012, which calls for the increased penetration of ZEVs into California's vehicle fleet in order to help California achieve a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. In furtherance of that state-wide target for the transportation sector, the EO also calls upon CARB, the CEC and the California Public Utilities Commission to establish benchmarks that will: (1) allow over 1.5 million ZEVs to be on California roadways by 2025, and (2) provide the State's residents with easy access to ZEV infrastructure. EO B-16-2012 specifically directed California to "encourage the development and success of ZEVs to protect the environment, stimulate economic growth, and improve the quality of life in the State."[33]

In 2018, Governor Brown also issued EO B-48-18, which launched an eight-year initiative to accelerate the sales of ZEVs through a mix of rebate programs and infrastructure improvements. The EO also sets a new target of five million ZEVs in California by 2030 and includes funding for multiple state agencies to increase EV charging infrastructure and provide purchase rebates/incentives.

In furtherance of the State's ZEV penetration goals, in February 2013, the Governor's Interagency Working Group on Zero-emission Vehicles issued the *2013 ZEV Action Plan: A roadmap toward 1.5 million zero-emission vehicles on California* roadways *by 2025*.[34] The 2013 ZEV Action Plan identifies four broad goals for State government to advance ZEVs: 1) Complete needed infrastructure and planning; 2) Expand consumer awareness and demand; 3) Transform fleets; and 4) Grow jobs and investment in the private sector. As part of these goals, some highlighted strategies and actions include: i) supporting ZEV

[33] Executive Order B-16-2012. Available at: https://www.ca.gov/archive/gov39/2012/03/23/news17472/. Accessed: February 2025

[34] Governor's Interagency Working Group on Zero-emission Vehicles. 2013. Available at: http://opr.ca.gov/docs/Governors_Office_ZEV_Action_Plan_(02-13).pdf. Accessed: February 2025.

infrastructure planning and investment by private entities; ii) enabling universal access to ZEV infrastructure for California drivers; iii) reducing upfront purchase costs for ZEVs; iv) promoting consumer awareness of ZEVs; and v) helping to expand ZEVs in bus fleets. The Action Plan discusses the challenges of ZEV expansion, which include the need to enable EV chargers in homes, increase consumer awareness, address upfront costs and operational limitations, and address that ZEVs are not commercially available for all categories of vehicles.

In October 2016, the Governor's Interagency Working Group on Zero-Emission Vehicles issued the *2016 ZEV Action Plan: A roadmap toward 1.5 million zero-emission vehicles on California* roadways *by 2025*.[35] This report provides an update on progress toward achieving the 2013 goals and highlights the following four top priorities for the upcoming years: 1) Raise consumer awareness and education about ZEVs; 2) Ensure ZEVs are accessible to a broad range of Californians; 3) Make ZEV technologies commercially viable in targeted applications in the medium-duty, heavy-duty, and freight sectors; and 4) Aid ZEV market growth beyond California. The broad goals to advance ZEV adoption are: i) achieve mainstream consumer awareness of ZEV options and benefits; ii) make ZEVs an affordable and attractive option for drivers; iii) ensure convenient charging and fueling infrastructure for greatly expanded use of ZEVs; iv) maximize economic and job opportunities from ZEV technologies; v) bolster ZEV market growth outside of California; and vi) lead by example by integrating ZEVs into State government. The goals and strategies proposed in the 2013 Action Plan will continue to be implemented; however, additional strategies are proposed to help achieve the new goals, including setting targets to increase home charging stations in multiunit dwellings and disadvantaged communities and for public transit and school bus electrification. The 2016 Action Plan describes challenges toward achieving the 2025 goal of 1.5 million ZEVs in California, such as that most consumers are still not aware of the benefits of passenger ZEVs and that over 1,000,000 charge points will be needed at homes, workplaces, and public locations but only 11,000 non-home charge points are installed as stated in the 2016 ZEV Action Plan.

In September 2018, the Governor’s Interagency Working Group on Zero-emission Vehicles published the 2018 ZEV Action Plan Priorities Update.[36] This update is the result of Governor Brown’s directive to update the 2016 Zero-Emission Vehicle Action Plan to help expand private investment in zero-emission vehicle infrastructure, particularly in low income and disadvantaged communities. The 2018 Priorities Update serves three fundamental purposes: 1) Provide direction to state agencies on the most important actions to be executed in 2018 to enable progress toward the 2025 targets and 2030 Vision; 2) Give stakeholders transparency into the actions state agencies plan to take (or are taking) this year to further the ZEV market; and 3) Create a platform for stakeholder engagement, feedback, and collaboration. As of July 2018, over 410,000 ZEVs have been sold in California, which is approximately 150,000 ZEVs since the publication of the 2016 Action Plan in October 2016.

[35] Governor’s Interagency Working Group on Zero-emission Vehicles. 2016. Available at: https://www.ca.gov/archive/gov39/wp-content/uploads/2018/01/2016_ZEV_Action_Plan-1.pdf. Accessed: February 2025.

[36] Governor’s Interagency Working Group on Zero-emission Vehicles. 2018. Available at: https://static.business.ca.gov/wp-content/uploads/2019/12/2018-ZEV-Action-Plan-Priorities-Update.pdf. Accessed: February 2025

In July 2020, CARB prepared an Assessment of CARB's ZEVs Programs Per Senate Bill 498. In this report, CARB staff reviews its programs that affect the adoption of light, medium, and heavy-duty ZEVs, including identifying each program's goals and status in meeting those goals, performing a cost-benefit analysis where data are available, and comparing CARB's ZEV programs with those of other jurisdictions. Additionally, pursuant to SB 498, CARB provides policy recommendations for increasing the use of ZEVs in the State, as well as recommendations for vehicle fleet operators to increase the use of ZEVs.[37]

The California Zero-Emission Vehicle Market Development Strategy was published in February 2021.[38] This strategy was prepared to meet the targets identified by Governor Newsom in EO N-79-20, which include the following zero-emission vehicle targets for California:

- 100% of in-state sales of new passenger cars and light-duty trucks will be zero-emission by 2035,
- 100% zero-emission medium and heavy-duty vehicles in the state by 2045 where feasible and by 2035 for drayage trucks, and
- 100% zero-emission off-road vehicles and equipment operations by 2035, where feasible.

A document prioritizing near-term actions for the next year was prepared in August 2021 called the ZEV Pillar Priorities.[39] This annual implementation document identifies the near-term actions to create market opportunity, remove barriers, and further collective understanding.

In June 2020, CARB approved the Advanced Clean Trucks regulation, which has requirements for manufacturer ZEV sales and a one-time reporting requirement for large entities and fleets.[40] The Advanced Clean Truck Regulation is part of a holistic approach to accelerate a large-scale transition of zero-emission medium and heavy-duty vehicles from Class 2b to Class 8. Manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. Large employers including retailers, manufacturers, brokers, and others are required to report information about shipments and shuttle services. Fleet owners, with 50 or more trucks, are required to report about their existing fleet operations. This information helps to identify future strategies to ensure that fleets purchase available zero-emission trucks and place them in service where suitable to meet their needs.

[37] CARB. 2020. Assessment of CARB's Zero-Emission Vehicles Programs Per Senate Bill 498. Available at: https://ww2.arb.ca.gov/sites/default/files/2019-12/SB%20498%20Report%20Draft%20121719.pdf. Accessed: February 2025.

[38] CARB. 2021. California Zero-Emission Vehicle Market Development Strategy. Available at: https://static.business.ca.gov/wp-content/uploads/2021/02/ZEV_Strategy_Feb2021.pdf. Accessed: February 2025.

[39] CARB. 2021. ZEV Pillar Priorities. Available at: https://static.business.ca.gov/wp-content/uploads/2021/08/ZEVPillarPriority.pdf. Accessed: February 2025.

[40] CARB. 2020. Advanced Clean Trucks. Available at: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-trucks. Accessed: February 2025.

California is incentivizing the purchase of ZEVs through implementation of the Clean Vehicle Rebate Project (CVRP), which is administered by a non-profit organization (The Center for Sustainable Energy) for CARB and currently subsidizes the purchase of passenger near-zero and ZEVs as follows:

- Hydrogen Fuel Cell EVs: $5,000;
  - Battery EVs: $2,500;
  - Plug-In Hybrid EVs: $1,500; and
  - Neighborhood Electric Vehicles and Zero-Emission Motorcycles: $900.

In March 2017, CARB received Volkswagen's (VW) first 30-month ZEV Investment Plan (Plan).[41] This Plan is required by California's partial settlement with VW resulting from VW's use of illegal devices in its 2.0-liter (2.0L) diesel cars sold in the State from model years 2009 to 2015. The Plan describes how VW is proposing to spend the first $200 million in California on ZEV charging infrastructure (including the development and maintenance of ZEV charging stations), public awareness, increasing ZEV access, and a green city demonstration. In June 2017, Electrify America (a subsidiary of VW) provided CARB with additional information on the Plan.[42] CARB approved the first of the four plans in July 2017.[43]

In its 2014 First Update, CARB recognized that the light-duty vehicle fleet "will need to become largely electrified by 2050 in order to meet California's emission reduction goals."[44] Accordingly, CARB's ACC program – summarized above – requires about 15 percent of new cars sold in California in 2025 to be a plug-in hybrid, battery electric or fuel cell vehicle.[45]

Other state-wide and regional initiatives that spur ZEV uptake include the following:

- CARB currently subsidizes the purchase of passenger near-zero and zero-emission vehicles and provides access to high-occupancy vehicle (HOV) lanes to ZEV drivers.
- The VW settlement will result in $800 million in ZEV projects in California over the next ten years, with a focus on increasing public awareness and infrastructure in the first funding cycle.[46]
- The CalGreen standards require new residential and non-residential construction to be pre-wired to facilitate the future installation and use of EV chargers (see Section 4.106.4 and Section 5.106.5.3 of 2016 CalGreen standards for the residential and non-residential pre-wiring requirements, respectively).

[41] VOLKSWAGEN, Group of America. 2017. California ZEV Investment Plan: Cycle 1, March 8, 2017. Available at: https://www.electrifyamerica.com/assets/pdf/California%20ZEV%20Investment%20Plan%20Cycle%201.3bc672a3.pdf. Accessed: February 2025.

[42] Electrify America. 2017. Supplement to the California ZEV Investment Plan, Cycle 1, June 29, 2017. Available at: https://www.electrifyamerica.com/assets/pdf/Cycle%201%20CA%20ZEV%20Invest%20Plan%20Supplement.a92e7705.pdf. Accessed: February 2025.

[43] CARB, 2017. CARB Approves $200 Million VW Zero-Emission Vehicle Investment in California, July, 27. Available at: https://ww2.arb.ca.gov/news/carb-approves-200-million-vw-zero-emission-vehicle-investment-california. Accessed: February 2025.

[44] CARB, First Update to the Climate Change Scoping Plan: Building on the Framework (May 2014), p. 48.

[45] Id. at p. 47.

[46] CARB, Volkswagen Settlement – California ZEV Investments webpage, available at: https://www.arb.ca.gov/msprog/vw_info/vsi/vw-zevinvest/vw-zevinvest.htm. Accessed: February 2025.

In January 2017, three of California's largest utilities submitted proposals to the California Public Utilities Commission (CPUC) to electrify the State's transportation sector through more than $1 billion in investments:

- Southern California Edison (SCE) filed an application to expand electric transportation in its service area. Some of SCE's proposals include monetary rewards to rideshare drivers who use an EV, additional fast charge infrastructure at targeted locations within the region, and rates that are designed to incentivize EV adoption.[47]
- PG&E submitted an application that aims to expand the electrification of medium- and heavy-duty vehicle fleets, expand fast-charging stations that can refuel EVs in 20-30 minutes, and explore new uses for vehicle electrification.[48]
- San Diego Gas & Electric (SDG&E) submitted an application to install tens of thousands of charging stations in its service area to boost the transition to ZEVs, trucks, shuttles, and delivery fleets.[49]

On September 23, 2020, California Governor Gavin Newsom issued EO N-79-20, which entails the following actions:

- All new passenger vehicles sold in California be zero-emission by 2035.
- All medium- and heavy-duty vehicles be zero-emission where feasible by 2045.
- All off-road vehicles and equipment be zero-emission where feasible by 2035.

Governor Newsom ordered extensive interagency efforts to support the EO, including evaluations of technological feasibility and cost effectiveness, expansion of EV charging options and affordable fueling, as well as identification of near-term strategies to increase zero-emission public transportation options.

The EO was generally aimed at transitioning away from fossil fuel dependence in the State, with emphasis on transportation initiatives. However, Governor Newsom addressed efforts to repurpose oil production facilities and extraction sites while continuing the State's existing goals to reduce the carbon intensity of fuels.[50]

[47] SCE, Application of Southern California Edison Company (U 338-E) for Approval of Its 2017 Transportation Electrification Proposals (January 20, 2017).

[48] PG&E, In the Matter of the Application of Pacific Gas and Electric Company for Approval of its Senate Bill 350 Transportation Electrification Program (January 20, 2017).

[49] SDG&E, Application of San Diego Gas & Electric Company (U902E) for Approval of SB 350 Transportation Electrification Proposals (January 20, 2017).

[50] State of California. 2020. Executive Order N-79-20. Available at: https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf. Accessed: February 2025.

3. SIGNIFICANCE THRESHOLDS

The analysis provided in this report evaluates the significance of the Project's energy by reference to the following questions from Section VI, Energy, of Appendix G of the CEQA Guidelines:

Threshold 1. Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?

Threshold 2. Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

While no quantitative thresholds related to energy are included in the CEQA Guidelines, Part I of Appendix F of the CEQA Guidelines states as follows:

> "The goal of conserving energy implies the wise and efficient use of energy. The means of achieving this goal include:
>
> 1. decreasing overall per capita energy consumption,
> 2. decreasing reliance on fossil fuels such as coal, natural gas and oil, and
> 3. increasing reliance on renewable energy resources."

Appendix F of the CEQA Guidelines states that an Environmental Impact Report (EIR) should include a discussion of the potential energy impacts of a project, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

For purposes of this analysis, impacts to energy resources will be considered to be significant if the Project would result in the wasteful, inefficient or unnecessary consumption of fuel or energy, and conversely if the Project would not incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation or other Project features.

To determine whether a project would result in the wasteful, inefficient or unnecessary consumption of fuel or energy, and conversely whether the Project would fail to incorporate renewable energy or energy efficiency measures into building design, equipment use, transportation or other project features, Appendix F of the CEQA Guidelines identifies six categories of potential energy-related environmental impacts:

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate the energy intensiveness of materials may be discussed.
2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.
3. The effects of the project on peak and base period demands for electricity and other forms of energy.
4. The degree to which the project complies with existing energy standards.
5. The effects of the project on energy resources.
6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

This report, relative to Threshold 1, assesses the Project's electricity, natural gas, and fossil fuel consumption during construction and operation by way of the six questions above. This report, relative to Threshold 2, evaluates the Project for consistency with applicable plans related to renewable energy and energy efficiency (see **Appendix B, Table B-1**: State Plan-Level Consistency Analysis and **Appendix B, Table B-2** and **Table B-3**: Local Plan-Level Consistency Analysis). The Local Plan-Level Consistency Analysis is based on San Joaquin Council of Government's Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)[51] and the applicable San Joaquin County General Plan[52] policies and objectives.

[51] San Joaquin Council of Governments. 2022. Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://www.sjcog.org/275/RTP-Sustainable-Communities-Strategy. Accessed: February 2025.

[52] San Joaquin County. County Wide General Plan 2035. Available here: https://www.sjgov.org/commdev/cgi-bin/cdyn.exe?grp=planning&htm=gp2035. Accessed: February 2025.

4. METHODOLOGY FOR DEVELOPMENT OF ENERGY PROJECTIONS

This section describes the methodology that Ramboll used to develop the regulatory compliance-based energy projections associated with the Project, which include one-time demand from construction and annual operational demand. This section also identifies the results of the energy projections for the Project based on compliance with applicable regulatory requirements.

Additional information regarding methodology can be found in the **Greenhouse Gas Emissions Technical Report** and **Air Quality Technical Report** for the Project; the methodology specific to energy usage is discussed in this report.

4.1 Construction Equipment & Activities

Construction of the Project requires the use of transportation fuel, including gasoline, diesel, and natural gas use in construction equipment, delivery via vendor trucks, and construction worker vehicles. Fuel consumed by construction equipment would be the primary energy resource expended over the course of construction, while VMT associated with the transportation of construction materials and construction worker commutes would also result in fuel consumption. Heavy-duty construction equipment associated with construction activities would use diesel fuel. Construction workers would travel to and from the Project site throughout the duration of construction (Project construction is planned to begin in 2026, with Full Buildout expected in 2057.); this analysis assumed that construction workers would primarily use gasoline-powered passenger vehicles.

Heavy-duty construction equipment of various types would be used during each phase of construction. CalEEMod® was used to estimate construction equipment usage, and results are included in **Appendix A**. Fuel consumption from construction equipment was estimated by converting the total carbon dioxide (CO_2) emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of diesel. The estimated diesel fuel usage from off-road construction sources, which totals 2,413,472 gallons of diesel over the course of the Project construction period, is shown in **Table 4-1**.

Fuel consumption from worker, vendor, and hauling trips are estimated by converting the total CO_2 emissions from each construction phase to gallons using conversion factors for CO_2 to gallons of gasoline, diesel, or natural gas. Worker vehicles are assumed to include light-duty automobiles and trucks, vendor vehicles are assumed to include an equal mix of medium heavy-duty trucks and heavy heavy-duty trucks, and hauling vehicles are assumed to include heavy heavy-duty trucks. Estimated fuel usage, which totals 12,041,969 gallons of gasoline, 8,798,913 gallons of diesel, and 334,903 gallons of natural gas over the course of the Project construction period, is shown in **Table 4-2**.

4.2 Operational Energy Requirements

Energy requirements are evaluated for Initial Phase buildout (2032) and Full Buildout (2057). In the absence of data available for 2051-2056, data for 2050 was substituted. Please note that this is a conservative approach since it is expected that energy requirements would become more stringent over time due to regulations likely becoming more stringent in the future.

4.2.1 Electricity

Operation of the Project will result in electricity demand for the Project land uses. The annual electricity usage for each land use is presented in **Table 4-3**. The total electricity use for the Project incorporates 2019 Title 24 standards. Estimates for the Project are conservative because they assume the Project would be built to the 2019 Title 24, Part 6 standards, even though subsequent, more energy-efficient iterations of the code would apply for buildings built at a later time.

4.2.2 Natural Gas

The Project will require natural gas, mainly for building heating and hot water. Natural gas is estimated using CalEEMod® defaults based on averages for the electricity demand forecast zone for each land use. The annual natural gas usage for each land use is presented in **Table 4-4**. Estimates for the Project are conservative because they assume the Project would be built to the 2019 Title 24, Part 6 standards, even though subsequent, more energy-efficient iterations of the code would apply for buildings built at a later time.

4.2.3 Fuel Usage

4.2.3.1 Gasoline

Gasoline fuel consumption for Project operation is shown in **Table 4-5**. Operational gasoline fuel usage occurs due to gasoline-powered vehicle trips when traveling to Project land uses and is calculated based on gasoline-powered vehicle VMT. The development of the VMT is described in detail in the **Greenhouse Gas Emissions Technical Report** and **Air Quality Technical Report**. Gasoline fuel consumption for the Project is calculated by dividing total gasoline-powered VMT by average fuel efficiency of gasoline vehicles in San Joaquin County from the EMFAC2021 database for calendar year 2032 and 2050 for the Initial Phase and Full Buildout, respectively.

4.2.3.2 Diesel

Diesel fuel consumption for Project operation is shown in **Table 4-6**. Operational diesel fuel usage occurs due to transportation refrigeration unit trips, diesel vehicle trips, diesel generator use for the wastewater treatment plant, forklift, and yard truck usage.

Fuel consumption for vehicles is based on total VMT, which is described in detail in the **Greenhouse Gas Emissions Technical Report** and **Air Quality Technical Report**. Diesel fuel consumption for the Project is calculated by dividing total diesel-powered VMT by the average fuel efficiency of diesel vehicles in San Joaquin County from the EMFAC2021 database for calendar year 2032 and 2050 for the Initial Phase and Full Buildout, respectively.

For the off-road equipment (forklift and yard truck) the annual diesel-related activity is based on Project-specific information detailed in the **Air Quality Technical Report**. Diesel fuel consumption for the Project is calculated by multiplying the annual hours of usage by

the fuel consumption rate (gallons/hour). The fuel consumption rate is derived from the OFFROAD2021 database for calendar year 2032 and 2050 for the Initial Phase and Full Buildout, respectively.

The diesel generator emissions are based on annual usage and fuel consumption rate, which are detailed in the **Air Quality Technical Report**.

4.2.3.3 Electricity

Electricity consumption from EVs and plug-in hybrid electric vehicles (PHEVs) for Project operation is shown in **Table 4-7**. Operational transportation-related electricity usage occurs due to vehicle trips when traveling to Project land uses and is calculated based on EV VMT. The development of the VMT is described in detail in the **Greenhouse Gas Emissions Technical Report** and **Air Quality Technical Report**. Electricity consumption for the Project is calculated by dividing total electric-powered VMT by the average energy efficiency of EVs and PHEVs in San Joaquin County from the EMFAC2021 database for calendar year 2032 and 2050 for the Initial Phase and Full Buildout, respectively.

4.2.3.4 Natural Gas

Natural gas fuel consumption for Project operation is shown in **Table 4-8**. Operational natural gas fuel usage occurs due to natural gas vehicle trips to the site.

Fuel consumption is based on total VMT, which described in detail in the **Greenhouse Gas Emissions Technical Report** and **Air Quality Technical Report**. Natural gas fuel consumption for the Project is calculated by dividing total natural gas-powered VMT by the average fuel efficiency of natural gas vehicles in San Joaquin County from the EMFAC2021 database for calendar year 2032 and 2050 for the Initial Phase and Full Buildout, respectively.

5. MITIGATION MEASURES

The following mitigation measures would reduce emissions associated with the proposed project.

5.1 Description of Mitigation Measures

As described in **Section 1.3** of this report, the Project will include a number of mitigation measures intended to reduce Project impacts. Quantification of energy impacts associated with these measures are described as follows.

5.1.1 MM-Energy-1 (Solar PV)

The proposed project is incorporating solar PV panels for "Base Building" energy needs for limited industrial zoned buildings. This measure was assessed based on the amount of electricity required to cover warehouse-related Title 24 electricity consumption. Additional forklift charging anticipated as part of the mitigation measures is assumed to be supplemented by solar PV and thus was not incorporated into Project electricity consumption table.

5.1.2 MM-Energy-2 (ZE Equipment)

The Project will utilize various zero-emission equipment. This includes forklift equipment and yard mules used at all industrial warehouse buildings greater than 300,000 square feet (22,993,500 square feet total). A reduced fuel consumption associated with this measure was assessed based on the difference in emissions when comparing forklift and yard mule combustion emissions at warehouses less than 300,000 square feet and similar emissions at all warehouse land uses.

Additionally, all landscape equipment used to maintain individual building projects (24,675,000 square feet total) and Pacific Gateway master landscaping, parks and open space will be required to be zero-emission. This aligns with mitigation measure LL-1 in CalEEMod®. Note that CalEEMod® does not assess fuel consumption associated with landscaping equipment, thus, this measure was not quantitatively incorporated into this energy assessment.

6. PROJECT INVENTORY IN CONTEXT

This section assesses the significance of the Project's energy demand for purposes of CEQA. Project impacts – i.e., energy use beyond existing Baseline conditions – are assessed against the thresholds.

6.1 Threshold 1

Would the Project Result in a Potentially Significant Environmental Impact Due to Wasteful, Inefficient, or Unnecessary Consumption of Energy Resources, during Project Construction or Operation?

6.1.1 Energy Requirements and Energy Use Efficiencies

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

> *The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal. If appropriate the energy intensiveness of materials may be discussed.*

6.1.1.1 Construction

Construction of the proposed project would result in fuel usage as shown in **Table 6-1**. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies).

6.1.1.2 Operations

Operation of the Project would result in electricity, natural gas, gasoline, and diesel fuel usage. Operational electricity and diesel consumption was assessed with the incorporation of mitigation measures as described in **Section 5**, as shown in **Table 6-2** and **Table 6-3**. A summary of operational energy consumption, which incorporates these mitigation measures, are shown in **Table 6-4**. There are no unusual project characteristics that would require consumption that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies).

Over the lifetime of the Project, the fuel efficiency of the vehicles being used for Project operation is expected to improve. The amount of fuel consumption from vehicular trips to and from the Project site during operation would correspondingly decrease over time as vehicles become more efficient and an increasing number of EVs penetrate the California fleet mix. Numerous regulations have been adopted that encourage, and require, increased fuel efficiency. For example, CARB has adopted an approach to passenger vehicles that combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emissions vehicles in California. As such, operation of the Project is expected to use decreasing amounts of fuel over time, due to advances in fuel economy.

6.1.2 Local and Regional Energy Supplies

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

> *The effects of the project on local and regional energy supplies and on requirements for additional capacity.*

6.1.2.1 Construction

The Project's fuel consumption during construction is discussed in **Section 4.1**. Fuel consumption was estimated using EMFAC2021 and OFFROAD2021 databases for San Joaquin County and the State based on the maximum annual year of fuel consumption during construction. Relative to total electricity and fuel comparison countywide, Project construction would use approximately 0.26% of gasoline, 0.47% of diesel fuel, and 0.61% of natural gas over the duration of construction (**Table 6-1**). In comparison to state-wide usage, construction of the Project would equate to approximately 0.005% of gasoline usage and 0.01% of diesel fuel usage (**Table 6-1**). Therefore, fuel use during construction would be temporary and negligible.

6.1.2.2 Operations

Electricity

The Project's electricity demand during operation is discussed in **Section 4.2.1**. For comparison, based on 2022 consumption, operation of the Initial Phase of the Project would equate to 1.2% of the total electricity demand countywide and 0.02% of the total electricity demand state-wide (**Table 6-4**). For Full Buildout, these numbers increase to 8% of the total electricity demand countywide and 0.16% of the total electricity demand state-wide (**Table 6-4**). Please note that utilizing the latest values from 2022 is a conservative approach since it is expected that energy usage would decrease over time due to regulations likely becoming more stringent in the future. Therefore, the Project is not expected to have an impact on the local utility.

In 2022, total in-state electricity consumption was 287,826 GWh.[53] The Project's anticipated Full Buildout electricity usage of 477,666,888 kWh/year is approximately 0.17% of the state-wide demand in 2022 as noted in **Table 6-4**. Given that the state is growing annually, the anticipated state-wide energy demand for the Project Operational buildout years of 2032 and 2050 will likely be greater than that in 2022, and thus the Project's relative percentage contribution to the state-wide energy demand would be even less.

Overall, the Project's projected electricity demand is consistent with, and a small percentage of, state and regional projections. Therefore, the Project will not require additional generation capacity beyond more general state-wide expansion.

Natural Gas

The Project's natural gas demand during operation is described in **Section 4.2.2**. For comparison, based on 2022 consumption, operation of the Initial Buildout of the Project would equate to 0.68% of the total natural gas demand countywide and 0.01% of the total natural gas demand state-wide (**Table 6-4**). For Full Buildout, these numbers increase to

[53] California Energy Commission. 2022. Electricity consumption by county. Available at: https://ecdms.energy.ca.gov/elecbycounty.aspx Accessed: February 2025.

4.4% of the total natural gas demand countywide and 0.07% of the total natural gas demand state-wide (**Table 6-4**).

Overall, the Project's natural gas consumption is a small percentage of state and regional consumption. Therefore, the Project is not expected to have an impact on the local natural gas resources.

Gasoline

The Project's fuel usage during operation is discussed in **Section 4.2.3**. As discussed in **Section 4.2.3.1**, Project gasoline consumption due to mobile VMT for the Initial Buildout is approximately 2,104,642 gallons/year for Initial Phase buildout, which is 0.8% of the gasoline that would be used countywide in and 0.016% of the gasoline used state-wide in 2032. For Full Buildout, this increases to 10,637,735 gallons/year, which is 4.1% of the gasoline that would be used countywide in and 0.09% of the gasoline used state-wide in 2050 (latest year that EMFAC2021 and OFFROAD2021 data is available).

Diesel

The Project's fuel usage during operation is discussed in **Section 4.2.4**. As discussed in **Section 4.2.3.1**, Project diesel consumption is approximately 4,024,425 gallons/year for Initial Phase buildout, which is 2.9% of the diesel that would be used countywide in and 0.08% of the diesel used state-wide in 2032. For Full Buildout, this increases to 21,539,745 gallons/year, which is 13.8% of the diesel that would be used countywide in and 0.37% of the gasoline used state-wide in 2050 (latest year that EMFAC2021 and OFFROAD2021 data is available). Please note that it is expected that diesel usage would decrease over time due to regulations likely becoming more stringent in the future, and increased penetration of zero-emission technologies.

6.1.2.3 Summary

The Project will not have a substantial impact on the local or regional energy supplies or require additional capacity to be constructed. The Project's impacts are less than significant.

6.1.3 Peak and Base Period Demands

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

> *The effects of the project on peak and base period demands for electricity and other forms of energy.*

6.1.3.1 Construction

The Project's base energy consumption compared to regional and state-wide energy consumption is discussed above in **Section 6.1.2**. The electricity demand associated with construction of the Project will be supplied by existing on-site power poles when available. In the event of an emergency or during a power outage, the use of generator sets is permissible, which are comprised of a generator and diesel engine used to produce power off-grid. Therefore, relatively negligible impacts to energy demand are expected as a result of construction activities.

6.1.3.2 Operation

The Project operation will not have a substantial impact on the peak and base period demands for electricity or other forms of energy. The Project's base energy consumption compared to regional and state-wide energy consumption is discussed above in **Section 6.1.2**. Further details and reasoning on the peak demand are described below.

In 2021, California's peak grid demand was 43,982 MW (megawatt). On September 8, PG&E reached a maximum demand of 20,118 MW.[54] While PG&E data was not available for 2023, the 2023 California's peak grid demand was similar to 2021 demand at 44,534 MW.[55] In comparison, the Project's maximum demand is expected to be approximately 80 MW in 2057. Thus, the Project will have a relatively negligible effect on state-wide and PG&E peak demands.

6.1.3.3 Summary

As described above, the Project will not have a substantial impact on peak and base period demands for electricity and other forms of energy. The Project's impacts are less than significant.

6.1.4 Existing Energy Standards

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

> *The degree to which the project complies with existing energy standards.*

6.1.4.1 Construction

Project construction requires use of on-road trucks for soil hauling and deliveries, and off-road equipment such as excavators, tractors/loaders/backhoes, forklifts, and graders. The construction activities would comply with state requirements designed to minimize idling and associated emissions, which also minimizes use of fuel. Specifically, idling of commercial vehicles and off-road equipment would be limited to five minutes in accordance with the Commercial Motor Vehicle Idling Regulation and the Off-Road Regulation, and the trucks used would be compliant with the requirements of the Tractor-Trailer Greenhouse Gas Regulation.

6.1.4.2 Operation

Electricity

The Project's anticipated electricity use is discussed in **Section 4.2.1**.

The electricity demand estimate for the Project incorporates the 2019 Title 24 standards, based on CalEEMod© defaults. However, the Project will comply with the latest Title 24 Standards at the time of opening, which will be more stringent than the 2019 Title 24 standards.

[54] California ISO. 2021. 2020-2021 Transmission Plan. Available online at: https://stakeholdercenter.caiso.com/initiativedocuments/reviseddraft-2021-2022transmissionplan.pdf. Accessed: February 2025.

[55] California ISO. 2023. 2023 Statistics. Available online at: https://www.caiso.com/documents/2023statistics.pdf. Accessed: February 2025.

Natural Gas

The Project's anticipated natural gas use is discussed in **Section 4.2.2**.

The natural gas demand for the Project is estimated in accordance with the Title 24 standards. For this analysis, the Project is assumed to meet 2019 Title 24 standards, based on CalEEMod© defaults. However, the Project will comply with the latest Title 24 Standards at the time of opening, which will be more stringent than the 2019 Title 24 standards.

Fuel Usage

The Project's anticipated fuel use is discussed in **Section 4.2.3**. There are no unusual project characteristics that would require the use of gasoline and diesel that would be more energy intensive than is used for comparable activities, or equipment that would not conform to current emissions standards (and related fuel efficiencies).

6.1.4.3 Summary

As described above, the Project will comply with all applicable energy standards, many of which are growing stronger over time, with the foreseeable result that the Project's energy-related GHG emissions will be reduced over time as California's electricity-generating system moves away from natural gas to renewable sources such as solar power and as passenger vehicles and trucks are increasing are powered by electric batteries rather than gasoline and diesel fuel. Further, the Project has incorporated several mitigation measures to reduce Project-related energy consumption and encourage the transition to renewable resources. Thus, in consideration of these factors, the Project's impacts are **less than significant**.

6.1.5 Energy Resources

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

> *The effects of the project on energy resources.*

The Project's energy use is discussed in **Section 4** above, including electricity, natural gas, gasoline, and diesel consumption associated with on-site equipment, mobile operations, and construction activities. The Project's use of energy will not have a substantial effect on state-wide or regional energy resources. Total operational energy use requirements for the Project are summarized in **Table 6-4**. Programs and measures relevant to energy resources are discussed in detail above.

The Project will not significantly impact energy resources and the Project's impacts are less than significant.

6.1.6 Transportation Energy Use

This section addresses the following category of environmental impact described in Appendix F of the CEQA Guidelines:

> *The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.*

Conventional gasoline and diesel vehicles consume gasoline or diesel fuel, whereas EVs consume electricity that can be sourced by fossil fuels or renewables. EVs, including battery-electric vehicles and PHEVs, comprise a growing fraction of the passenger vehicles on the roads in California. EV adoption is expected to increase over the upcoming decades

due in part to improvements in battery technology and public initiatives and goals. This increase in EV adoption will decrease the fuel requirements due to transportation.

New state-wide regulations such as Truck and Bus Rule (Title 13 CCR Section 2025), On-Road Heavy-Duty Vehicle Program (Title 13, CCR Section 1956.8), Pavley Clean Car Standards and the ACC program have been instated which reduce emissions and fuel requirements from trucks and cars.

Fuel usage for the Project shown in **Table 4-5**, **Table 4-6**, and **Table 4-8** is expected decrease over time as fleets become more fuel-efficient and switch to more EVs.

6.1.7 Summary

Based on the above analysis of each of the environmental impact factors identified in CEQA Guidelines Appendix F, the potential for the Project to result in wasteful, inefficient, or unnecessary consumption of fuel or energy, and conversely to fail to incorporate energy efficiency measures into equipment use, transportation or other project features is **less than significant.**

6.2 Threshold 2

Would the Project Conflict with or Obstruct a State or Local Plan for Renewable Energy or Energy Efficiency?

The Proposed Project would comply with any applicable state plans for renewable energy or energy efficiency to the extent required by law. Further, the Project would be consistent with the renewable energy and energy efficiency provisions of the San Joaquin County General Plan.[56] This plan is described in more detail in **Section 2.2.3** and the relevant provisions of each plan are listed in **Appendix B**. The Project has been evaluated for consistency with state plans and has been concluded to be consistent; the assessment for state plan measures is found in **Appendix B, Table B-1**. Additionally, the Project has been evaluated for consistency with the relevant provisions and has been concluded to be consistent; the assessment for individual local plan measures is found in **Appendix B, Table B-2** and **Table B-3**. As such, Project impacts are **less than significant**.

[56] San Joaquin County. 2035 San Joaquin County General Plan. Available at: https://www.sjgov.org/commdev/cgi-bin/cdyn.exe?grp=planning&htm=gp2035. Accessed: February 2025.

TABLES

Table 4-1. Construction Off-Road Equipment Fuel Consumption
Pacific Gateway
San Joaquin County, California

Year	CO_2 Emissions[1] (MT/yr)	Diesel Consumption[2] (gallons/yr)
2026	693	67,875
2027	340	33,301
2028	341	33,399
2029	340	33,301
2030	340	33,301
2031	186	18,178
2032	2,423	237,316
2033	2,000	195,886
2034	1,030	100,921
2035	1,020	99,902
2036	1,023	100,196
2037	1,020	99,902
2038	1,893	185,428
2039	1,206	118,155
2040	1,023	100,196
2041	1,020	99,902
2042	1,020	99,902
2043	1,020	99,902
2044	1,023	100,196
2045	922	90,343
2046	699	68,423
2047	1,192	116,794
2048	406	39,785
2049	340	33,301
2050	340	33,301
2051	340	33,301
2052	340	33,301
2053	340	33,301
2054	340	33,301
2055	322	31,548
2056	98	9,618

Conversions:

10.21 kg CO_2/gallon diesel

1,000 kg CO_2/MT CO_2

Notes:

[1] Offroad emissions estimated using the CalEEMod® 2022 model. Available at: www.caleemod.com. Accessed: February 2025.

[2] The conversion factor for diesel is 10.21 kg CO_2/gallon per The Climate Registry, 2024. Available at: https://theclimateregistry.org/wp-content/uploads/2024/03/2024-Emission-Factor-Document_FINAL.pdf. Accessed: February 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel

CO_2 - carbon dioxide

kg - kilograms

MT - metric ton

yr - year

Table 4-2. Construction On-Road Fuel Consumption
Pacific Gateway
San Joaquin County, California

Year	Gasoline Consumption[1,2] (gallons/yr)	Diesel Consumption[1,2] (gallons/yr)	Natural Gas Consumption (gallons/yr)
2026	90,984	83,424	2,955
2027	250,233	233,026	8,389
2028	245,611	228,193	8,376
2029	240,051	221,659	8,272
2030	235,551	215,378	8,188
2031	88,065	66,374	2,567
2032	62,261	50,505	1,973
2033	410,862	355,087	14,021
2034	661,989	499,140	19,745
2035	656,829	487,263	19,354
2036	650,340	475,961	18,989
2037	641,312	463,443	18,560
2038	634,517	454,212	18,126
2039	642,761	432,288	17,176
2040	608,151	425,377	16,742
2041	602,237	417,339	16,295
2042	598,585	411,368	15,857
2043	595,184	406,032	15,487
2044	594,009	402,573	15,183
2045	562,362	375,105	14,010
2046	511,621	330,128	12,229
2047	42,271	913	32
2048	315,020	210,904	7,629
2049	297,564	227,221	8,102
2050	296,916	226,274	7,960
2051	296,916	226,274	7,960
2052	296,916	226,274	7,960
2053	296,916	226,274	7,960
2054	296,916	226,274	7,960
2055	255,531	194,581	6,845
2056	63,486	49	0

Conversions:[3]

8.78 kg CO_2/gallon gasoline
10.21 kg CO_2/gallon diesel
4.5 kg CO_2/gallon natural gas
1,000 kg CO_2/MT CO_2

Notes:

[1] Onroad CO_2 emissions are calculated using emission factors from EMFAC2021 based on fleet wide totals, including worker, vendor, and hauling trips. Worker vehicles are assumed to include light-duty automobiles and trucks (50% LDA, 25% LDT1, 25% LDT2). Vendor vehicles are assumed to include medium heavy-duty trucks and heavy heavy-duty trucks (50% MHDT, 50% HHDT). Hauling vehicles are assumed to include heavy heavy-duty trucks (100% HHDT). Onroad CO_2 emissions can be referenced in the CalEEMod® output.

[2] CO_2 emissions for worker, vendor, and hauling trips were split based on gasoline, diesel, or natural gas fuel consumption. The fuel consumption breakdown was derived using fuel consumption in San Joaquin County using EMFAC2021.

[3] The conversion factors for gasoline, diesel, and natural gas are 8.78 kg CO_2/gallon, 10.21 kg CO_2/gallon, and 4.5 kg CO_2/gallon, respectively, per The Climate Registry, 2023. Available at: https://theclimateregistry.org/wp-content/uploads/2023/06/2023-Default-Emission-Factors-Final.pdf. Accessed: February 2025.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
CO_2 - carbon dioxide
EMFAC - EMission FACtors model
kg - kilograms
HHDT - heavy heavy-duty trucks
LDA - light-duty automobile
LDT - light-duty truck
MHDT - medium heavy-duty trucks
MT - metric ton
yr - year

Table 4-3. Unmitigated Operational Electricity Consumption
Pacific Gateway
San Joaquin County, California

Land Use	Electricity Demand (kWh/yr)[1]
Initial Phase	
General Office Building	240,687
Other Non-Asphalt Surfaces	0
Parking Lot	938,701
University/College (4yr)	146,225
Industrial Park	82,922,031
Government Office Building	2,367,108
Other Asphalt Surfaces	0
City Park	0
Total	**86,614,752**
Full Buildout	
General Office Building	240,687
Government Office Building	2,367,108
Industrial Park	516,431,380
Parking Lot	5,887,866
City Park	0
Other Asphalt Surfaces	0
Other Non-Asphalt Surfaces	0
Office Park	1,946,428
University/College (4yr)	8,066,932
Apartments Mid Rise	7,228,498
Unenclosed Parking with Elevator	985,173
Hotel	367,683
Gasoline/Service Station	206,599
Convenience Market (24 hour)	409,734
Fast Food Restaurant with Drive Thru	546,089
High Turnover (Sit Down Restaurant)	562,151
Fast Food Restaurant w/o Drive Thru	160,614
Bank (with Drive-Through)	51,650
Strip Mall	382,460
Total	**543,521,755**

Notes:

[1] Project electricity demand is obtained from CalEEMod® outputs.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
kWh - kilowatt hours
yr - year

Table 4-4. Operational Natural Gas Consumption
Pacific Gateway
San Joaquin County, California

Land Use	Natural Gas Demand (kBTU/yr)[1]
Initial Phase	
General Office Building	331,994
Other Non-Asphalt Surfaces	0
Parking Lot	0
University/College (4yr)	877,271
Industrial Park	114,379,059
Government Office Building	3,265,086
Other Asphalt Surfaces	0
City Park	0
Total	**118,853,410**
Full Buildout	
General Office Building	331,994
Government Office Building	3,265,086
Industrial Park	712,343,077
Parking Lot	0
City Park	0
Other Asphalt Surfaces	0
Other Non-Asphalt Surfaces	0
Office Park	2,684,819
University/College (4yr)	48,397,263
Apartments Mid Rise	22,067,987
Unenclosed Parking with Elevator	0
Hotel	1,917,419
Gasoline/Service Station	829,172
Convenience Market (24 hour)	241,901
Fast Food Restaurant with Drive Thru	1,657,172
High Turnover (Sit Down Restaurant)	1,705,912
Fast Food Restaurant w/o Drive Thru	487,403
Bank (with Drive-Through)	207,293
Strip Mall	378,664
Total	**792,078,718**

Notes:

[1] Project natural gas demand is obtained from CalEEMod® outputs.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel
kBTU - one-thousand British thermal units
yr - year

Table 4-5. Operational Gasoline Consumption
Pacific Gateway
San Joaquin County, California

Mobile Source Activity	VMT (miles/yr)[1]	Gasoline Consumption (gallons/yr)[2]
Initial Phase		
Gasoline-Powered Vehicles[3]	59,926,462	2,104,642
Full Buildout		
Gasoline-Powered Vehicles[3]	338,335,309	10,637,735

Constants:

Average efficiency of Autos in:	Gasoline	Plug-in Hybrid[4]	
2032	28.5	26.9	miles per gallon[5]
2050	31.9	26.8	miles per gallon[5]
Average efficiency of Heavy-Duty Trucks in:			
2032	4.5	--	miles per gallon[5]
2050	4.8	--	miles per gallon[5]

Notes:

[1] Vehicle miles traveled are based VMT from Fehr & Peers and project-specific details. More information on VMT can be found in the Air Quality and Greenhouse Gas Technical Reports.

[2] Gasoline consumption is calculated by assuming an average fuel efficiency and the reported VMT. The portion of the VMT that is gasoline vehicles is determined using the project-specific fleet mix.

[3] Please note that gasoline-powered vehicles includes both gasoline vehicles and plug-in hybrid vehicles.

[4] Please note that EMFAC assumes zero plug-in hybrid Heavy-Duty Trucks (HHDT) in 2032 and 2050.

[5] The average fuel efficiency is obtained from EMFAC2021 for San Joaquin County based on the fuel consumption and vehicle miles traveled for the years 2032 and 2050. Fuel consumption and vehicles miles traveled data was not available for calendar year 2057 (buildout), thus the latest data year available was used.

Abbreviations:

EMFAC - EMission FACtors model

HHDT - heavy heavy-duty truck

VMT - vehicle miles traveled

yr - year

Table 4-6. Unmitigated Operational Diesel Consumption
Pacific Gateway
San Joaquin County, California

Mobile Source Activity	Annual Diesel Related Activity[1,2]	Diesel Consumption (gallons/yr)[3]
Initial Phase		
Diesel Generator - Wastewater Treatment Plant (hours per year)[4]	200	7,973
Forklift (hours per year)	1,388,285	1,485,465
Yard Truck (hours per year)	21,450	73,574
Transportation Refrigeration Units (hours per year)[1]	113,115	83,705
Diesel Vehicles (VMT per year)[2]	27,070,021	3,868,761
Full Buildout		
Diesel Generator - Wastewater Treatment Plant (hours per year)[4]	200	7,973
Forklift (hours per year)	8,646,120	8,991,965
Yard Truck (hours per year)	130,130	451,551
Transportation Refrigeration Units (hours per year)[1]	712,208	527,034
Diesel Vehicles (VMT per year)[2]	154,940,920	20,357,239

Constants:

Average efficiency of Autos in:

2032	16.9	miles per gallon[5]
2050	18.9	miles per gallon[5]

Average efficiency of Heavy-Duty Trucks in:

2032	6.8	miles per gallon[5]
2050	7.5	miles per gallon[5]

Forklift fuel consumption rate in:

2032	1.07	gallons per hour[6]
2050	1.04	gallons per hour[6]

Yard Truck fuel consumption rate in:

2032	3.43	gallons per hour[7]
2050	3.47	gallons per hour[7]

TRU fuel consumption rate in:

2032	0.74	gallons per hour[8]
2050	0.74	gallons per hour[8]

Notes:

[1] TRU Cycle Duration is based on 2 hours of off-site loading time, 2 hours of on-site unloading time, and the duration of the on-site and off-site transit. Assumptions based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: February 2025.

[2] Diesel vehicle miles traveled are based on VMT from Fehr & Peers and project-specific details. More information on VMT can be found in the Air Quality Technical Report.

[3] Diesel consumption for diesel vehicles is calculated by assuming an average fuel efficiency and the reported VMT. The portion of the VMT that is from diesel vehicles is determined using the project-specific fleet mix. TRU diesel consumption is calculated based on OFFROAD2021 annual fuel consumption rate and the annual operation.

[4] Diesel generator usage based on Project-specific information. More information on Diesel generators can be found in the Air Quality Technical Report.

[5] The average fuel efficiency is obtained from EMFAC2021 for San Joaquin County based on the fuel consumption and vehicle miles traveled for the 2032 and 2050.

[6] Forklift fuel consumption rate is obtained from the OFFROAD2021 emissions output for Calendar Year 2032 and 2050, Industrial - Forklifts in San Joaquin County. More information on Forklifts can be found in the Air Quality and Greenhouse Gas Technical Reports.

[7] Yard Truck fuel consumption rate is obtained from the OFFROAD2021 emissions output for Calendar Year 2032 and 2050, Industrial - Yard Goat in San Joaquin County. More information on Yard Trucks can be found in the Air Quality and Greenhouse Gas Technical Reports.

[8] TRU fuel consumption rate is obtained from the OFFROAD2021 emissions output for Calendar Year 2032 and 2050, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin County. More information on TRUs can be found in the Air Quality and Greenhouse Gas Technical Reports.

Abbreviations:
CARB - California Air Resources Board
EMFAC - EMission FACtors model
TRU - Transport Refrigeration Units
VMT - vehicle miles traveled
yr - year

Table 4-7. Operational Electricity Consumption from Vehicles
Pacific Gateway
San Joaquin County, California

Mobile Source Activity	Total VMT (miles/yr)[1]	Electricity Consumption[2] (kWh/yr)
Initial Phase		
Plug-in Hybrid Electric Vehicles[3]	1,068,389	323,754
Electric Vehicles	5,693,383	5,177,554
Full Buildout		
Plug-in Hybrid Electric Vehicles[3]	7,322,245	2,218,862
Electric Vehicles	59,653,892	67,948,585

Constants:

	Electricity	Plug-in Hybrid[5]
Average efficiency of Autos in:		
2032	2.5	3.3 mi/kWh[4]
2050	2.3	3.3 mi/kWh[4]
Average efficiency of Heavy-Duty Trucks in:		
2032	0.5	-- mi/kWh[4]
2050	0.5	-- mi/kWh[4]

Notes:

[1] Vehicle miles traveled are based on VMT from Fehr & Peers and project-specific details. More information on VMT can be found in the Air Quality Technical Report.

[2] Electricity consumption from electric miles driven is calculated by assuming an average energy economy and the reported VMT. The portion of the VMT that is electric-powered is determined using the project-specific fleet mix.

[3] The VMT from plug-in hybrid electric vehicles accounts for electric vehicle miles traveled (eVMT).

[4] The average fuel efficiency is obtained from EMFAC2021 for San Joaquin County based on the fuel consumption and vehicle miles traveled for the years 2032 and 2050.

[5] Please note that EMFAC assumes zero plug-in hybrid HHDT in 2032 and 2050.

Abbreviations:

EMFAC - EMission FACtors model
eVMT - electric vehicle miles traveled
HHDT - heavy heavy-duty truck
kWh - kilowatt-hour
mi - mile
VMT - vehicle miles traveled
yr - year

Table 4-8. Operational Natural Gas Consumption from Vehicles
Pacific Gateway
San Joaquin County, California

Mobile Source Activity	VMT (miles/yr)[1]	Natural Gas Consumption (gallons/yr)[2]
Initial Phase		
Natural Gas Vehicles	326,645	61,631
Full Buildout		
Natural Gas Vehicles	1,443,398	253,228

Constants:[3]
Average efficiency of Heavy-Duty Trucks in:

2032	5.3 miles per gallon[4]
2050	5.7 miles per gallon[4]

Notes:

[1] Vehicle miles traveled are based on VMT from Fehr & Peers and project-specific details. More information on VMT can be found in the Air Quality Technical Report.

[2] Natural gas consumption is calculated by assuming an average fuel efficiency and the reported VMT. The portion of the VMT that is natural gas vehicles is determined using the project-specific fleet mix.

[3] Please note that EMFAC assumes zero natural gas Autos (LDA, LDT1, LDT2, MDV, LHDT1, and LHDT2) in 2032 and 2050.

[4] The average fuel efficiency is obtained from EMFAC2021 for San Joaquin County based on the fuel consumption and vehicle miles traveled for the years 2032 and 2050.

Abbreviations:
EMFAC - EMission FACtors model
LDA - light-duty automobiles
LDT - light-duty trucks
LHDT - light heavy-duty trucks
MDV - medium-duty vehicle
VMT - vehicle miles traveled
yr - year

Table 6-1. Construction Energy Resource Summary
Pacific Gateway
San Joaquin County, California

Energy Resource	Maximum Annual Construction Consumption[1]	Maximum Annual Construction Consumption Year[2]	San Joaquin County		California	
			Annual Consumption	Project's Construction Contribution[2] (%)	Annual Consumption	Project's Construction Contribution[2] (%)
Gasoline (gallons)[3]	661,989	2034	257,879,583	0.2567%	12,838,300,808	0.005156%
Diesel (gallons)[4]	639,640	2038	137,244,611	0.466%	5,057,823,004	0.0126%
Natural Gas (gallons)[5]	19,745	2034	3,238,919	0.610%	315,535,421	0.0063%

Notes:

[1] Offroad and onroad emissions are calculated using CalEEMod® 2022. See Tables 4-1 and 4-2 for detailed fuel consumption of the Off-Road Equipment and On-Road Vehicles categories, respectively.

[2] The Project's construction contribution was calculated based on the maximum annual construction energy consumption in a given construction year.

[3] Gasoline data for San Joaquin County and the State of California are obtained from EMFAC2021 for the maximum annual construction consumption year.

[4] Diesel data for San Joaquin County and the State of California are obtained from EMFAC2021 and OFFROAD2021 for the maximum annual construction consumption year.

[5] Natural gas data for San Joaquin County and the State of California are obtained from EMFAC2021 and OFFROAD2021 for the maximum annual construction consumption year.

Abbreviations:

% - percent

CalEEMod® - CALifornia Emissions Estimator MODel

EMFAC - California Air Resources Board Emissions Factor Model

Table 6-2. Mitigated Operational Electricity Consumption
Pacific Gateway
San Joaquin County, California

Land Use	Electricity Demand (kWh/yr)[1]
Initial Phase	
General Office Building	481,374
Other Non-Asphalt Surfaces	0
Parking Lot	1,877,402
University/College (4yr)	292,450
Industrial Park	56,731,455
Government Office Building	4,734,216
Other Asphalt Surfaces	0
City Park	0
Total	**64,116,897**
Full Buildout	
General Office Building	481,374
Government Office Building	4,734,216
Industrial Park	353,318,690
Parking Lot	11,775,732
City Park	0
Other Asphalt Surfaces	0
Other Non-Asphalt Surfaces	0
Office Park	3,892,856
University/College (4yr)	16,133,864
Apartments Mid Rise	14,456,996
Unenclosed Parking with Elevator	1,970,346
Hotel	735,366
Gasoline/Service Station	413,198
Convenience Market (24 hour)	819,468
Fast Food Restaurant with Drive Thru	1,092,178
High Turnover (Sit Down Restaurant)	1,124,302
Fast Food Restaurant w/o Drive Thru	321,228
Bank (with Drive-Through)	103,300
Strip Mall	764,920
Total	**407,499,440**

Notes:

[1] Project electricity demand is obtained from CalEEMod® outputs.

[2] Electricity demand associated with the 'Industrial Park' land uses were adjusted to reflect the base building energy solar PV project mitigation measure, which was assumed to cover Title 24-related electricity consumption as calculated by CalEEMod®.

Abbreviations:

CalEEMod® - CALifornia Emissions Estimator MODel

kWh - kilowatt hours

PV - photovoltaic

Table 6-3. Mitigated Operational Diesel Consumption
Pacific Gateway
San Joaquin County, California

Mobile Source Activity	Annual Diesel Related Activity[1,2]	Diesel Consumption (gallons/yr)[3]
Initial Phase		
Diesel Generator - Wastewater Treatment Plant (hours per year)[4]	200	7,973
Forklift (hours per year)	55,217	59,082
Yard Truck (hours per year)	1,430	4,905
Transportation Refrigeration Units (hours per year)[1]	113,115	83,705
Diesel Vehicles (VMT per year)[2]	27,070,021	3,868,761
Full Buildout		
Diesel Generator - Wastewater Treatment Plant (hours per year)[4]	200	7,973
Forklift (hours per year)	589,198	612,766
Yard Truck (hours per year)	10,010	34,735
Transportation Refrigeration Units (hours per year)[1]	712,208	527,034
Diesel Vehicles (VMT per year)[2]	154,940,920	20,357,239

Constants:

Average efficiency of Autos in:		
2032	16.9	miles per gallon[5]
2050	18.9	miles per gallon[5]
Average efficiency of Heavy-Duty Trucks in:		
2032	6.8	miles per gallon[5]
2050	7.5	miles per gallon[5]
Forklift fuel consumption rate in:		
2032	1.07	gallons per hour[6]
2050	1.04	gallons per hour[6]
Yard Truck fuel consumption rate in:		
2032	3.43	gallons per hour[7]
2050	3.47	gallons per hour[7]
TRU fuel consumption rate in:		
2032	0.74	gallons per hour[8]
2050	0.74	gallons per hour[8]

Notes:

[1] TRU Cycle Duration is based on 2 hours of off-site loading time, 2 hours of on-site unloading time, and the duration of the on-site and off-site transit. Assumptions based on Table II.G.1 of CARB Proposed Amendments to the Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets, and Facilities Where TRUs Operate. Available at: https://ww2.arb.ca.gov/sites/default/files/barcu/board/rulemaking/tru2021/appi.pdf. Accessed: February 2025.

[2] Diesel vehicle miles traveled are based on VMT from Fehr & Peers and project-specific details. More information on VMT can be found in the Air Quality Technical Report.

[3] Diesel consumption for diesel vehicles is calculated by assuming an average fuel efficiency and the reported VMT. The portion of the VMT that is from diesel vehicles is determined using the project-specific fleet mix. TRU diesel consumption is calculated based on OFFROAD2021 annual fuel consumption rate and the annual operation.

[4] Diesel generator usage based on Project-specific information. More information on diesel generators can be found in the Air Quality Technical Report.

[5] The average fuel efficiency is obtained from EMFAC2021 for San Joaquin County based on the fuel consumption and vehicle miles traveled for the 2032 and 2050.

[6] Forklift fuel consumption rate is obtained from the OFFROAD2021 emissions output for Calendar Year 2032 and 2050, Industrial - Forklifts in San Joaquin County. More information on forklifts and the associated project mitigation measure can be found in the Air Quality and Greenhouse Gas Technical Reports.

[7] Yard Truck fuel consumption rate is obtained from the OFFROAD2021 emissions output for Calendar Year 2032 and 2050, Industrial - Yard Goat in San Joaquin County. More information on yard trucks and the associated project mitigation measure can be found in the Air Quality and Greenhouse Gas Technical Reports.

[8] TRU fuel consumption rate is obtained from the OFFROAD2021 emissions output for Calendar Year 2032 and 2050, Transportation Refrigeration Unit - Instate Trailer and Transportation Refrigeration Unit - Out-Of-State Trailer in San Joaquin County. More information on TRUs can be found in the Air Quality and Greenhouse Gas Technical Reports.

Abbreviations:

CARB - California Air Resources Board
EMFAC - EMission Factors' model
TRU - Transport Refrigeration Units
VMT - vehicle miles traveled
yr - year

Table 6-4. Operation Energy Resource Summary
Pacific Gateway
San Joaquin County, California

Energy Resource	Operation[1]	Year	San Joaquin County		California	
			Consumption	Project's Contribution (%)[2]	Consumption	Project's Contribution (%)[2]
Initial Phase						
Electricity (kWh/yr)[3,4]	69,618,205	2032	5,771,280,050	1.206%	287,826,110,475	0.0242%
Gasoline (gallons/yr)[5]	2,104,642	2032	261,973,939	0.803%	13,170,284,059	0.0160%
Diesel (gallons/yr)[6]	4,024,425	2032	137,801,642	2.92%	5,078,009,999	0.0793%
Natural Gas (kBTU/yr)[7,8]	127,401,649	2032	18,725,463,244	0.68%	1,170,784,235,075	0.0109%
Full Buildout						
Electricity (kWh/yr)[3,4]	477,666,888	2050	5,771,280,050	8.277%	287,826,110,475	0.1660%
Gasoline (gallons/yr)[5]	10,637,735	2050	259,974,706	4.092%	12,030,439,090	0.0884%
Diesel (gallons/yr)[6]	21,539,745	2050	155,627,341	13.84%	5,852,131,819	0.3681%
Natural Gas (kBTU/yr)[7,8]	827,201,409	2050	18,725,463,244	4.42%	1,170,784,235,075	0.0707%

Conversions:

99,976.1	Btu/therm
1,000	Btu/kBtu
1,000,000	kWh/GWh
1,000	kWh/MWh
139	kBtu/gallon of CNG

Notes:

[1] Project data are based on CalEEMod® output.

[2] The project's construction contribution was calculated based on the maximum annual operational energy consumption.

[3] Electricity data for San Joaquin County in 2022 from http://www.ecdms.energy.ca.gov/elecbycounty.aspx.

[4] Electricity data for the State is obtained for all counties in 2022 from http://www.ecdms.energy.ca.gov/elecbycounty.aspx.

[5] Gasoline data for San Joaquin County and the State of California are obtained from EMFAC2021 for calendar year 2032 and 2050.

[6] Diesel data for San Joaquin County and the State of California are obtained from EMFAC2021 and OFFROAD2021 for calendar year 2032 and 2050.

[7] Natural gas data for San Joaquin County in 2022 from http://www.ecdms.energy.ca.gov/gasbycounty.aspx.

[8] Natural gas data for the State is obtained for all counties in 2022 from http://www.ecdms.energy.ca.gov/gasbycounty.aspx.

Abbreviations:

Btu - British thermal unit
CalEEMod® - CALifornia Emissions Estimator MODel
CNG - compressed natural gas
EMFAC - EMission FACtors model
GWh - gigawatt hours
kWh - kilowatt hours
kBtu - kilo-British thermal unit
MWh - megawatt hours
yr - year

APPENDIX A
CalEEMod® OUTPUT

Pacific Gateway (Initial Phase Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Construction)
Construction Start Date	1/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	198	198	36.9	103	0.16	1.12	19.5	20.2	1.03	4.80	5.42	—	36,659	36,659	0.76	3.41	99.3	37,792
Mit.	73.4	73.2	30.1	105	0.16	0.38	19.5	19.9	0.37	4.80	5.17	—	36,659	36,659	0.76	3.41	99.3	37,792
% Reduced	63%	63%	18%	-2%	—	66%	—	1%	64%	—	5%	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	198	198	39.4	86.2	0.16	1.24	19.8	21.0	1.14	10.1	11.3	—	35,182	35,182	0.83	3.44	2.58	36,232
Mit.	73.2	73.2	32.7	88.2	0.16	0.38	19.8	19.9	0.37	10.1	10.3	—	35,182	35,182	0.83	3.44	2.58	36,232
% Reduced	63%	63%	17%	-2%	—	70%	—	5%	68%	—	9%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	59.0	58.8	31.2	70.8	0.14	0.84	16.7	17.2	0.78	4.50	5.27	—	29,922	29,922	0.65	2.95	32.7	30,850
Mit.	23.2	23.0	25.8	72.5	0.14	0.32	16.7	17.0	0.31	4.50	4.69	—	29,922	29,922	0.65	2.95	32.7	30,850
% Reduced	61%	61%	17%	-2%	—	62%	—	1%	60%	—	11%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.8	10.7	5.69	12.9	0.02	0.15	3.05	3.14	0.14	0.82	0.96	—	4,954	4,954	0.11	0.49	5.41	5,108
Mit.	4.23	4.20	4.71	13.2	0.02	0.06	3.05	3.11	0.06	0.82	0.86	—	4,954	4,954	0.11	0.49	5.41	5,108
% Reduced	61%	61%	17%	-2%	—	62%	—	1%	60%	—	11%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.55	8.39	36.9	103	0.16	1.12	19.5	20.2	1.03	4.80	5.42	—	36,659	36,659	0.76	3.41	99.3	37,792
2027	9.16	7.99	34.8	97.0	0.16	0.61	19.5	20.2	0.58	4.80	5.38	—	36,022	36,022	0.72	3.41	88.3	37,143
2028	8.21	7.65	33.5	91.4	0.16	0.57	19.5	20.1	0.55	4.80	5.34	—	35,282	35,282	0.72	3.25	78.1	36,348
2029	7.83	6.68	31.8	86.4	0.16	0.55	19.5	20.1	0.52	4.80	5.32	—	34,526	34,526	0.68	2.81	68.7	35,448
2030	7.49	6.40	30.3	82.0	0.16	0.53	19.5	20.1	0.51	4.80	5.31	—	33,774	33,774	0.55	2.67	60.7	34,644

2031	198	198	29.3	78.0	0.16	0.51	19.5	20.1	0.36	4.80	5.16	—	32,987	32,987	0.51	2.54	53.0	33,808
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	9.10	7.87	39.4	86.2	0.16	1.24	19.8	21.0	1.14	10.1	11.3	—	35,182	35,182	0.83	3.44	2.58	36,232
2027	8.23	7.49	37.4	80.9	0.16	0.61	19.5	20.2	0.58	4.80	5.38	—	34,573	34,573	0.83	3.44	2.29	35,623
2028	7.74	6.68	35.5	76.7	0.16	0.57	19.5	20.1	0.55	4.80	5.34	—	33,865	33,865	0.80	3.31	2.02	34,873
2029	7.44	6.28	34.2	72.6	0.16	0.55	19.5	20.1	0.52	4.80	5.32	—	33,139	33,139	0.76	3.29	1.78	34,141
2030	7.07	5.95	32.7	69.2	0.16	0.53	19.5	20.1	0.51	4.80	5.31	—	32,414	32,414	0.62	3.12	1.57	33,360
2031	198	198	31.2	65.6	0.16	0.51	19.5	20.1	0.36	4.80	5.16	—	31,651	31,651	0.59	2.98	1.37	32,556
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.81	4.12	27.0	42.3	0.08	0.84	12.7	13.5	0.78	4.50	5.27	—	14,235	14,235	0.38	1.07	13.0	14,575
2027	7.06	6.42	31.2	70.8	0.14	0.52	16.7	17.2	0.50	4.09	4.59	—	29,922	29,922	0.65	2.95	32.7	30,850
2028	6.67	5.77	30.0	66.7	0.14	0.49	16.7	17.2	0.47	4.11	4.58	—	29,388	29,388	0.65	2.80	28.9	30,267
2029	6.34	5.36	28.4	63.3	0.14	0.47	16.7	17.2	0.45	4.09	4.54	—	28,680	28,680	0.62	2.79	25.4	29,552
2030	6.12	5.11	27.1	60.1	0.14	0.45	16.7	17.1	0.44	4.09	4.53	—	28,052	28,052	0.50	2.67	22.4	28,884
2031	59.0	58.8	10.5	24.1	0.05	0.20	6.16	6.36	0.16	1.50	1.66	—	9,958	9,958	0.18	0.70	7.00	10,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.88	0.75	4.93	7.72	0.01	0.15	2.32	2.47	0.14	0.82	0.96	—	2,357	2,357	0.06	0.18	2.16	2,413
2027	1.29	1.17	5.69	12.9	0.02	0.09	3.05	3.14	0.09	0.75	0.84	—	4,954	4,954	0.11	0.49	5.41	5,108
2028	1.22	1.05	5.48	12.2	0.02	0.09	3.05	3.14	0.09	0.75	0.84	—	4,866	4,866	0.11	0.46	4.79	5,011
2029	1.16	0.98	5.18	11.5	0.02	0.09	3.05	3.13	0.08	0.75	0.83	—	4,748	4,748	0.10	0.46	4.21	4,893
2030	1.12	0.93	4.95	11.0	0.02	0.08	3.05	3.13	0.08	0.75	0.83	—	4,644	4,644	0.08	0.44	3.72	4,782
2031	10.8	10.7	1.91	4.40	0.01	0.04	1.12	1.16	0.03	0.27	0.30	—	1,649	1,649	0.03	0.12	1.16	1,685

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.79	7.78	30.1	105	0.16	0.38	19.5	19.9	0.37	4.80	5.17	—	36,659	36,659	0.76	3.41	99.3	37,792
2027	8.44	7.42	28.5	99.0	0.16	0.37	19.5	19.9	0.37	4.80	5.16	—	36,022	36,022	0.72	3.41	88.3	37,143
2028	7.52	7.10	27.6	93.4	0.16	0.36	19.5	19.9	0.36	4.80	5.16	—	35,282	35,282	0.72	3.25	78.1	36,348
2029	7.16	6.16	26.2	88.4	0.16	0.36	19.5	19.9	0.36	4.80	5.15	—	34,526	34,526	0.68	2.81	68.7	35,448
2030	6.85	5.89	24.9	84.0	0.16	0.36	19.5	19.9	0.35	4.80	5.15	—	33,774	33,774	0.55	2.67	60.7	34,644
2031	73.4	73.2	24.2	80.1	0.16	0.35	19.5	19.9	0.22	4.80	5.01	—	32,987	32,987	0.51	2.54	53.0	33,808
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	8.35	7.26	32.7	88.2	0.16	0.38	19.8	19.9	0.37	10.1	10.3	—	35,182	35,182	0.83	3.44	2.58	36,232
2027	7.50	6.91	31.1	83.0	0.16	0.37	19.5	19.9	0.37	4.80	5.16	—	34,573	34,573	0.83	3.44	2.29	35,623
2028	7.06	6.13	29.6	78.7	0.16	0.36	19.5	19.9	0.36	4.80	5.16	—	33,865	33,865	0.80	3.31	2.02	34,873
2029	6.77	5.75	28.6	74.7	0.16	0.36	19.5	19.9	0.36	4.80	5.15	—	33,139	33,139	0.76	3.29	1.78	34,141
2030	6.43	5.44	27.3	71.2	0.16	0.36	19.5	19.9	0.35	4.80	5.15	—	32,414	32,414	0.62	3.12	1.57	33,360
2031	73.2	73.2	26.0	67.7	0.16	0.35	19.5	19.9	0.22	4.80	5.01	—	31,651	31,651	0.59	2.98	1.37	32,556
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.97	2.63	12.0	45.9	0.08	0.20	12.7	12.9	0.20	4.50	4.69	—	14,235	14,235	0.38	1.07	13.0	14,575
2027	6.44	5.92	25.8	72.5	0.14	0.32	16.7	17.0	0.31	4.09	4.41	—	29,922	29,922	0.65	2.95	32.7	30,850
2028	6.08	5.30	25.0	68.4	0.14	0.31	16.7	17.0	0.31	4.11	4.42	—	29,388	29,388	0.65	2.80	28.9	30,267
2029	5.77	4.91	23.6	65.0	0.14	0.31	16.7	17.0	0.31	4.09	4.40	—	28,680	28,680	0.62	2.79	25.4	29,552
2030	5.57	4.68	22.5	61.8	0.14	0.31	16.7	17.0	0.30	4.09	4.40	—	28,052	28,052	0.50	2.67	22.4	28,884
2031	23.2	23.0	7.98	24.9	0.05	0.12	6.16	6.28	0.08	1.50	1.58	—	9,958	9,958	0.18	0.70	7.00	10,179
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.54	0.48	2.19	8.38	0.01	0.04	2.32	2.35	0.04	0.82	0.86	—	2,357	2,357	0.06	0.18	2.16	2,413
2027	1.18	1.08	4.71	13.2	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,954	4,954	0.11	0.49	5.41	5,108
2028	1.11	0.97	4.56	12.5	0.02	0.06	3.05	3.11	0.06	0.75	0.81	—	4,866	4,866	0.11	0.46	4.79	5,011

2029	1.05	0.90	4.31	11.9	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,748	4,748	0.10	0.46	4.21	4,893
2030	1.02	0.85	4.11	11.3	0.02	0.06	3.05	3.10	0.06	0.75	0.80	—	4,644	4,644	0.08	0.44	3.72	4,782
2031	4.23	4.20	1.46	4.54	0.01	0.02	1.12	1.15	0.01	0.27	0.29	—	1,649	1,649	0.03	0.12	1.16	1,685

3. Construction Emissions Details

3.1. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	29.2	28.8	0.05	1.24	—	1.24	1.14	—	1.14	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	4.55	4.50	0.01	0.19	—	0.19	0.18	—	0.18	—	827	827	0.03	0.01	—	830

Dust From Material Movement	—	—	—	—	—	—	3.07	3.07	—	1.58	1.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.83	0.82	< 0.005	0.04	—	0.04	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Dust From Material Movement	—	—	—	—	—	—	0.56	0.56	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.04	23.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80	3.80	< 0.005	< 0.005	0.01	3.85

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.57	3.48	28.2	0.05	0.13	—	0.13	0.13	—	0.13	—	5,298	5,298	0.21	0.04	—	5,316
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.54	4.40	0.01	0.02	—	0.02	0.02	—	0.02	—	827	827	0.03	0.01	—	830
Dust From Material Movement	—	—	—	—	—	—	3.07	3.07	—	1.58	1.58	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	0.80	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	137	137	0.01	< 0.005	—	137
Dust From Material Movement	—	—	—	—	—	—	0.56	0.56	—	0.29	0.29	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	22.9	22.9	< 0.005	< 0.005	0.04	23.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.80	3.80	< 0.005	< 0.005	0.01	3.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.62	3.04	27.2	27.6	0.06	1.12	—	1.12	1.03	—	1.03	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	10.9	11.0	0.02	0.45	—	0.45	0.41	—	0.41	—	2,639	2,639	0.11	0.02	—	2,648

Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.46	1.46	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	1.99	2.01	< 0.005	0.08	—	0.08	0.08	—	0.08	—	437	437	0.02	< 0.005	—	438
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.1	67.1	< 0.005	< 0.005	0.11	68.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.79	4.74	35.4	0.06	0.17	—	0.17	0.16	—	0.16	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.79	4.74	35.4	0.06	0.17	—	0.17	0.16	—	0.16	—	6,599	6,599	0.27	0.05	—	6,621
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	0.31	1.90	14.2	0.02	0.07	—	0.07	0.07	—	0.07	—	2,639	2,639	0.11	0.02	—	2,648
Dust From Material Movement	—	—	—	—	—	—	3.68	3.68	—	1.46	1.46	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.35	2.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	437	437	0.02	< 0.005	—	438
Dust From Material Movement	—	—	—	—	—	—	0.67	0.67	—	0.27	0.27	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.05	0.96	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	181	181	< 0.005	0.01	0.62	184
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.06	0.76	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.02	166

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	67.1	67.1	< 0.005	< 0.005	0.11	68.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.1	11.1	< 0.005	< 0.005	0.02	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.38	0.32	2.96	3.90	0.01	0.11	—	0.11	0.10	—	0.10	—	721	721	0.03	0.01	—	723
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.54	0.71	< 0.005	0.02	—	0.02	0.02	—	0.02	—	119	119	< 0.005	< 0.005	—	120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.28	6.72	4.32	82.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,527	15,527	0.30	0.56	53.3	15,755
Vendor	0.99	0.60	22.7	7.62	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,735	18,735	0.36	2.82	46.0	19,631
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.87	6.23	5.44	65.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,034	14,034	0.38	0.60	1.38	14,224
Vendor	0.96	0.57	24.1	7.89	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,751	18,751	0.36	2.82	1.20	19,602
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.05	1.87	1.47	20.1	0.00	0.00	4.31	4.31	0.00	1.01	1.01	—	4,324	4,324	0.10	0.18	6.92	4,387
Vendor	0.29	0.18	7.11	2.33	0.04	0.08	1.54	1.62	0.08	0.43	0.51	—	5,633	5,633	0.11	0.85	5.99	5,895

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.27	3.67	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	716	716	0.02	0.03	1.14	726
Vendor	0.05	0.03	1.30	0.42	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	933	933	0.02	0.14	0.99	976
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.47	3.12	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.52	0.47	3.12	15.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	0.94	4.50	0.01	0.03	—	0.03	0.03	—	0.03	—	721	721	0.03	0.01	—	723

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.17	0.82	< 0.005	0.01	—	0.01	0.01	—	0.01	—	119	119	< 0.005	< 0.005	—	120
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.28	6.72	4.32	82.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,527	15,527	0.30	0.56	53.3	15,755
Vendor	0.99	0.60	22.7	7.62	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,735	18,735	0.36	2.82	46.0	19,631
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.87	6.23	5.44	65.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,034	14,034	0.38	0.60	1.38	14,224
Vendor	0.96	0.57	24.1	7.89	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,751	18,751	0.36	2.82	1.20	19,602
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.05	1.87	1.47	20.1	0.00	0.00	4.31	4.31	0.00	1.01	1.01	—	4,324	4,324	0.10	0.18	6.92	4,387
Vendor	0.29	0.18	7.11	2.33	0.04	0.08	1.54	1.62	0.08	0.43	0.51	—	5,633	5,633	0.11	0.85	5.99	5,895
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.37	0.34	0.27	3.67	0.00	0.00	0.79	0.79	0.00	0.18	0.18	—	716	716	0.02	0.03	1.14	726
Vendor	0.05	0.03	1.30	0.42	0.01	0.01	0.28	0.30	0.01	0.08	0.09	—	933	933	0.02	0.14	0.99	976
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	8.05	11.1	0.02	0.29	—	0.29	0.27	—	0.27	—	2,055	2,055	0.08	0.02	—	2,062
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.47	2.02	< 0.005	0.05	—	0.05	0.05	—	0.05	—	340	340	0.01	< 0.005	—	341

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.94	6.38	3.79	76.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,281	15,281	0.26	0.56	47.9	15,504
Vendor	0.99	0.58	21.7	7.31	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,343	18,343	0.36	2.82	40.4	19,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.04	5.89	4.92	60.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,817	13,817	0.38	0.60	1.24	14,006
Vendor	0.96	0.57	23.1	7.58	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,360	18,360	0.36	2.82	1.05	19,211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.18	5.05	3.73	53.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	12,138	12,138	0.26	0.51	17.7	12,316
Vendor	0.83	0.49	19.4	6.37	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	15,729	15,729	0.31	2.42	14.9	16,472
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.92	0.68	9.73	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	2,010	2,010	0.04	0.09	2.94	2,039
Vendor	0.15	0.09	3.54	1.16	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,604	2,604	0.05	0.40	2.47	2,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.45	3.08	15.0	0.02	0.10	—	0.10	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.51	0.45	3.08	15.0	0.02	0.10	—	0.10	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.44	0.39	2.64	12.8	0.02	0.09	—	0.09	0.08	—	0.08	—	2,055	2,055	0.08	0.02	—	2,062
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.48	2.34	< 0.005	0.02	—	0.02	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.94	6.38	3.79	76.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	15,281	15,281	0.26	0.56	47.9	15,504
Vendor	0.99	0.58	21.7	7.31	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,343	18,343	0.36	2.82	40.4	19,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.04	5.89	4.92	60.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,817	13,817	0.38	0.60	1.24	14,006
Vendor	0.96	0.57	23.1	7.58	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	18,360	18,360	0.36	2.82	1.05	19,211
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.18	5.05	3.73	53.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	12,138	12,138	0.26	0.51	17.7	12,316
Vendor	0.83	0.49	19.4	6.37	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	15,729	15,729	0.31	2.42	14.9	16,472
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.94	0.92	0.68	9.73	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	2,010	2,010	0.04	0.09	2.94	2,039
Vendor	0.15	0.09	3.54	1.16	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,604	2,604	0.05	0.40	2.47	2,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.18	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.02	0.85	7.67	11.1	0.02	0.26	—	0.26	0.24	—	0.24	—	2,061	2,061	0.08	0.02	—	2,068
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.40	2.03	< 0.005	0.05	—	0.05	0.04	—	0.04	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.19	6.08	3.72	71.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,985	14,985	0.26	0.56	42.9	15,202
Vendor	0.84	0.58	20.9	6.99	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,900	17,900	0.36	2.67	35.2	18,740
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.74	5.14	4.39	56.5	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,551	13,551	0.34	0.60	1.11	13,740
Vendor	0.82	0.55	22.2	7.25	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,916	17,916	0.36	2.69	0.91	18,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.96	4.45	3.68	49.5	0.00	0.00	12.3	12.3	0.00	2.89	2.89	—	11,937	11,937	0.26	0.48	15.9	12,104
Vendor	0.69	0.48	18.7	6.11	0.12	0.23	4.41	4.64	0.23	1.22	1.45	—	15,391	15,391	0.31	2.30	13.0	16,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.81	0.67	9.03	0.00	0.00	2.25	2.25	0.00	0.53	0.53	—	1,976	1,976	0.04	0.08	2.63	2,004
Vendor	0.13	0.09	3.41	1.12	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,548	2,548	0.05	0.38	2.16	2,665
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.44	3.04	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.50	0.44	3.04	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.43	0.38	2.61	12.8	0.02	0.08	—	0.08	0.08	—	0.08	—	2,061	2,061	0.08	0.02	—	2,068
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.48	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.19	6.08	3.72	71.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,985	14,985	0.26	0.56	42.9	15,202
Vendor	0.84	0.58	20.9	6.99	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,900	17,900	0.36	2.67	35.2	18,740
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.14	4.39	56.5	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,551	13,551	0.34	0.60	1.11	13,740
Vendor	0.82	0.55	22.2	7.25	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,916	17,916	0.36	2.69	0.91	18,727
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.96	4.45	3.68	49.5	0.00	0.00	12.3	12.3	0.00	2.89	2.89	—	11,937	11,937	0.26	0.48	15.9	12,104
Vendor	0.69	0.48	18.7	6.11	0.12	0.23	4.41	4.64	0.23	1.22	1.45	—	15,391	15,391	0.31	2.30	13.0	16,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.81	0.67	9.03	0.00	0.00	2.25	2.25	0.00	0.53	0.53	—	1,976	1,976	0.04	0.08	2.63	2,004
Vendor	0.13	0.09	3.41	1.12	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,548	2,548	0.05	0.38	2.16	2,665
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2029) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.15	0.97	8.58	12.9	0.02	0.28	—	0.28	0.25	—	0.25	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.36	11.1	0.02	0.24	—	0.24	0.22	—	0.22	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.34	2.02	< 0.005	0.04	—	0.04	0.04	—	0.04	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.85	5.29	3.23	66.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,708	14,708	0.23	0.11	38.2	14,786
Vendor	0.82	0.43	20.0	6.83	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,421	17,421	0.36	2.67	30.5	18,257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.51	4.91	4.32	52.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,304	13,304	0.30	0.60	0.99	13,491
Vendor	0.78	0.40	21.3	7.07	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,438	17,438	0.36	2.67	0.79	18,244
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.66	4.18	3.22	46.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,687	11,687	0.23	0.48	14.1	11,850
Vendor	0.69	0.36	17.8	5.94	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,939	14,939	0.31	2.29	11.3	15,640
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.85	0.76	0.59	8.44	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,935	1,935	0.04	0.08	2.33	1,962
Vendor	0.13	0.07	3.25	1.08	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,473	2,473	0.05	0.38	1.88	2,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2029) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.44	3.02	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.44	3.02	14.9	0.02	0.09	—	0.09	0.09	—	0.09	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.37	2.59	12.8	0.02	0.08	—	0.08	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.85	5.29	3.23	66.7	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,708	14,708	0.23	0.11	38.2	14,786
Vendor	0.82	0.43	20.0	6.83	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,421	17,421	0.36	2.67	30.5	18,257
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.51	4.91	4.32	52.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,304	13,304	0.30	0.60	0.99	13,491
Vendor	0.78	0.40	21.3	7.07	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	17,438	17,438	0.36	2.67	0.79	18,244
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.66	4.18	3.22	46.3	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,687	11,687	0.23	0.48	14.1	11,850
Vendor	0.69	0.36	17.8	5.94	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,939	14,939	0.31	2.29	11.3	15,640
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.85	0.76	0.59	8.44	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,935	1,935	0.04	0.08	2.33	1,962
Vendor	0.13	0.07	3.25	1.08	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,473	2,473	0.05	0.38	1.88	2,589
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2030) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.12	0.94	8.39	12.9	0.02	0.26	—	0.26	0.24	—	0.24	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.81	7.19	11.0	0.02	0.22	—	0.22	0.21	—	0.21	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.31	2.02	< 0.005	0.04	—	0.04	0.04	—	0.04	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.55	5.02	2.74	62.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,463	14,463	0.23	0.11	33.8	14,537
Vendor	0.82	0.43	19.2	6.68	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,914	16,914	0.22	2.54	26.9	17,702
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.17	4.61	3.83	49.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,086	13,086	0.30	0.56	0.87	13,262
Vendor	0.78	0.40	20.5	6.90	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,931	16,931	0.22	2.54	0.70	17,693
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	3.95	2.80	43.2	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,494	11,494	0.23	0.48	12.5	11,656
Vendor	0.69	0.36	17.2	5.81	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,504	14,504	0.19	2.18	9.94	15,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.72	0.51	7.89	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,903	1,903	0.04	0.08	2.07	1,930
Vendor	0.13	0.07	3.13	1.06	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,401	2,401	0.03	0.36	1.65	2,511
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2030) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.48	0.43	3.00	14.9	0.02	0.09	—	0.09	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	0.43	3.00	14.9	0.02	0.09	—	0.09	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.37	2.57	12.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.55	5.02	2.74	62.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,463	14,463	0.23	0.11	33.8	14,537
Vendor	0.82	0.43	19.2	6.68	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,914	16,914	0.22	2.54	26.9	17,702
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.17	4.61	3.83	49.4	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	13,086	13,086	0.30	0.56	0.87	13,262
Vendor	0.78	0.40	20.5	6.90	0.14	0.27	5.14	5.41	0.27	1.42	1.69	—	16,931	16,931	0.22	2.54	0.70	17,693
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	3.95	2.80	43.2	0.00	0.00	12.3	12.3	0.00	2.88	2.88	—	11,494	11,494	0.23	0.48	12.5	11,656
Vendor	0.69	0.36	17.2	5.81	0.12	0.23	4.39	4.63	0.23	1.21	1.45	—	14,504	14,504	0.19	2.18	9.94	15,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.72	0.51	7.89	0.00	0.00	2.24	2.24	0.00	0.53	0.53	—	1,903	1,903	0.04	0.08	2.07	1,930
Vendor	0.13	0.07	3.13	1.06	0.02	0.04	0.80	0.84	0.04	0.22	0.26	—	2,401	2,401	0.03	0.36	1.65	2,511
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.10	0.92	8.12	12.8	0.02	0.24	—	0.24	0.22	—	0.22	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.30	0.25	2.21	3.50	0.01	0.07	—	0.07	0.06	—	0.06	—	653	653	0.03	0.01	—	655
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.05	0.05	0.40	0.64	< 0.005	0.01	—	0.01	0.01	—	0.01	—	108	108	< 0.005	< 0.005	—	108
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.25	4.72	2.67	58.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,207	14,207	0.19	0.11	29.8	14,276
Vendor	0.82	0.43	18.5	6.51	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,383	16,383	0.22	2.40	23.2	17,127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.34	3.31	46.2	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	12,854	12,854	0.26	0.56	0.77	13,029
Vendor	0.78	0.40	19.7	6.59	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,400	16,400	0.22	2.40	0.60	17,122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	1.22	1.19	0.87	12.9	0.00	0.00	3.91	3.91	0.00	0.92	0.92	—	3,588	3,588	0.06	0.03	3.50	3,603
Vendor	0.22	0.11	5.24	1.76	0.04	0.07	1.40	1.47	0.04	0.39	0.42	—	4,465	4,465	0.06	0.65	2.73	4,664
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.16	2.35	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	594	594	0.01	0.01	0.58	596
Vendor	0.04	0.02	0.96	0.32	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	739	739	0.01	0.11	0.45	772
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.43	2.99	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.43	2.99	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.13	0.12	0.81	4.06	0.01	0.02	—	0.02	0.02	—	0.02	—	653	653	0.03	0.01	—	655
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.74	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.25	4.72	2.67	58.6	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	14,207	14,207	0.19	0.11	29.8	14,276
Vendor	0.82	0.43	18.5	6.51	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,383	16,383	0.22	2.40	23.2	17,127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.34	3.31	46.2	0.00	0.00	14.4	14.4	0.00	3.38	3.38	—	12,854	12,854	0.26	0.56	0.77	13,029
Vendor	0.78	0.40	19.7	6.59	0.14	0.27	5.14	5.41	0.14	1.42	1.56	—	16,400	16,400	0.22	2.40	0.60	17,122
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.22	1.19	0.87	12.9	0.00	0.00	3.91	3.91	0.00	0.92	0.92	—	3,588	3,588	0.06	0.03	3.50	3,603
Vendor	0.22	0.11	5.24	1.76	0.04	0.07	1.40	1.47	0.04	0.39	0.42	—	4,465	4,465	0.06	0.65	2.73	4,664
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.16	2.35	0.00	0.00	0.71	0.71	0.00	0.17	0.17	—	594	594	0.01	0.01	0.58	596
Vendor	0.04	0.02	0.96	0.32	0.01	0.01	0.25	0.27	0.01	0.07	0.08	—	739	739	0.01	0.11	0.45	772

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	6.13	9.88	0.01	0.21	—	0.21	0.19	—	0.19	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21	0.18	1.75	2.82	< 0.005	0.06	—	0.06	0.05	—	0.05	—	430	430	0.02	< 0.005	—	432
Paving	0.66	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.32	0.51	< 0.005	0.01	—	0.01	0.01	—	0.01	—	71.3	71.3	< 0.005	< 0.005	—	71.5
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.26	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.03	33.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	0.01	5.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Paving (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.37	0.33	2.27	10.6	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.31	2.31	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.65	3.01	< 0.005	0.02	—	0.02	0.02	—	0.02	—	430	430	0.02	< 0.005	—	432
Paving	0.66	0.66	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	0.55	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	71.3	71.3	< 0.005	< 0.005	—	71.5
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.02	0.51	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.26	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.12	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	32.8	32.8	< 0.005	< 0.005	0.03	33.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.44	5.44	< 0.005	< 0.005	0.01	5.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Architectural Coating (2031) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	197	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	197	197	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.0	38.0	< 0.005	< 0.005	—	38.2
Architectural Coatings	56.1	56.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.30	6.30	< 0.005	< 0.005	—	6.32
Architectural Coatings	10.2	10.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	0.94	0.53	11.7	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,841	2,841	0.04	0.02	5.95	2,855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.66	9.23	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,571	2,571	0.05	0.11	0.15	2,606
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.18	2.70	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	751	751	0.01	0.01	0.73	754
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.49	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.12	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Architectural Coating (2031) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	72.2	72.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	1.10	< 0.005	0.01	—	0.01	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	72.2	72.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	0.31	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	38.0	38.0	< 0.005	< 0.005	—	38.2
Architectural Coatings	20.6	20.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	< 0.005	0.04	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.30	6.30	< 0.005	< 0.005	—	6.32
Architectural Coatings	3.75	3.75	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	0.94	0.53	11.7	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,841	2,841	0.04	0.02	5.95	2,855
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.66	9.23	0.00	0.00	2.88	2.88	0.00	0.68	0.68	—	2,571	2,571	0.05	0.11	0.15	2,606
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.26	0.25	0.18	2.70	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	751	751	0.01	0.01	0.73	754
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.49	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	124	124	< 0.005	< 0.005	0.12	125
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2026	3/7/2026	6.00	57.0	—
Grading	Grading	3/9/2026	8/25/2026	6.00	146	—
Building Construction	Building Construction	8/26/2026	4/26/2031	6.00	1,462	—
Paving	Paving	4/28/2031	8/26/2031	6.00	104	—
Architectural Coating	Architectural Coating	8/27/2031	12/25/2031	6.00	104	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42

Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,714	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	674	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	343	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,714	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	674	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	343	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	6,167,400	2,055,800	303,575

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	85.5	0.00	—
Grading	—	—	438	0.00	—
Paving	0.00	0.00	0.00	0.00	116

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt

General Office Building	0.00	0%
Other Non-Asphalt Surfaces	24.6	0%
Parking Lot	24.6	100%
University/College (4yr)	0.00	0%
Industrial Park	0.00	0%
Government Office Building	0.00	0%
Other Asphalt Surfaces	67.0	100%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	204	0.03	< 0.005
2027	0.00	204	0.03	< 0.005
2028	0.00	204	0.03	< 0.005
2029	0.00	204	0.03	< 0.005
2030	0.00	204	0.03	< 0.005
2031	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2

Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954

Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4

Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

Pacific Gateway (Remaining East Development Area Construction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Remaining East Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	7,162	1000sqft	235	7,162,300	1,362,000	—	—	—
Parking Lot	1,649	1000sqft	37.8	0.00	0.00	—	—	—

Other Non-Asphalt Surfaces	1,104	1000sqft	25.3	0.00	0.00	—	—	—
City Park	36.4	Acre	36.4	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	3,554	1000sqft	81.6	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	255	254	41.5	117	0.26	0.79	34.2	34.7	0.73	8.40	8.82	—	53,440	53,440	0.82	4.17	68.8	54,772
Mit.	86.2	86.0	36.8	119	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	53,440	53,440	0.82	4.17	68.8	54,772
% Reduced	66%	66%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	255	254	46.7	101	0.26	0.93	34.2	34.7	0.85	10.1	11.0	—	52,333	52,333	0.95	4.40	2.08	53,671
Mit.	86.2	86.0	41.8	103	0.26	0.32	34.2	34.5	0.31	10.1	10.2	—	52,333	52,333	0.95	4.40	2.08	53,671
% Reduced	66%	66%	10%	-2%	—	66%	—	< 0.5%	63%	—	7%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	97.9	97.7	37.4	84.9	0.22	0.67	29.3	29.6	0.62	7.19	7.53	—	44,307	44,307	0.76	3.57	25.5	45,416
Mit.	34.1	33.9	33.4	86.7	0.22	0.27	29.3	29.6	0.27	7.19	7.45	—	44,307	44,307	0.76	3.57	25.5	45,416
% Reduced	65%	65%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.9	17.8	6.83	15.5	0.04	0.12	5.35	5.41	0.11	1.31	1.37	—	7,335	7,335	0.13	0.59	4.21	7,519
Mit.	6.22	6.19	6.09	15.8	0.04	0.05	5.35	5.40	0.05	1.31	1.36	—	7,335	7,335	0.13	0.59	4.21	7,519
% Reduced	65%	65%	11%	-2%	—	60%	—	< 0.5%	57%	—	1%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.10	2.61	19.4	26.4	0.06	0.79	9.37	10.2	0.73	3.69	4.42	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	9.86	9.12	41.5	117	0.26	0.44	34.2	34.7	0.42	8.40	8.82	—	53,440	53,440	0.82	4.17	68.8	54,772
2034	9.38	8.64	40.2	113	0.26	0.43	34.2	34.7	0.41	8.40	8.81	—	52,318	52,318	0.75	4.17	58.6	53,637
2035	9.23	8.56	39.2	108	0.26	0.42	34.2	34.6	0.40	8.40	8.80	—	51,282	51,282	0.75	3.93	49.6	52,522
2036	8.99	8.25	38.3	104	0.26	0.40	34.2	34.6	0.39	8.40	8.79	—	50,350	50,350	0.75	3.93	41.6	51,582
2037	8.64	7.91	36.8	102	0.26	0.39	34.2	34.6	0.38	8.40	8.78	—	49,524	49,524	0.75	3.93	34.5	50,750
2038	8.43	7.70	36.0	99.9	0.26	0.39	34.2	34.6	0.38	8.40	8.77	—	48,697	48,697	0.75	3.70	28.6	49,846
2039	255	254	5.32	16.1	0.01	0.11	5.05	5.06	0.10	1.18	1.19	—	4,696	4,696	0.06	0.04	2.98	4,712
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2032	9.88	8.86	46.7	101	0.26	0.93	34.2	34.7	0.85	10.1	11.0	—	52,333	52,333	0.95	4.40	2.08	53,671
2033	9.30	8.51	44.5	96.6	0.26	0.44	34.2	34.7	0.42	8.40	8.82	—	51,165	51,165	0.89	4.17	1.78	52,430
2034	8.95	8.23	43.4	92.7	0.26	0.43	34.2	34.7	0.41	8.40	8.81	—	50,073	50,073	0.89	4.17	1.52	51,339
2035	8.80	8.08	42.1	89.7	0.26	0.42	34.2	34.6	0.40	8.40	8.80	—	49,064	49,064	0.89	3.93	1.29	50,259
2036	8.64	7.93	40.4	87.0	0.26	0.40	34.2	34.6	0.39	8.40	8.79	—	48,155	48,155	0.82	3.93	1.08	49,349
2037	8.36	7.65	39.4	84.2	0.26	0.39	34.2	34.6	0.38	8.40	8.78	—	47,351	47,351	0.82	3.93	0.89	48,544
2038	8.02	6.53	38.8	81.9	0.26	0.39	34.2	34.6	0.38	8.40	8.77	—	46,546	46,546	0.79	3.70	0.74	47,668
2039	255	254	38.2	80.2	0.26	0.38	34.2	34.6	0.37	8.40	8.77	—	45,908	45,908	0.79	3.70	0.61	47,031
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.51	3.03	20.4	31.7	0.07	0.67	13.2	13.8	0.62	5.06	5.67	—	11,052	11,052	0.30	0.57	4.25	11,232
2033	7.96	7.32	37.4	84.9	0.22	0.38	29.2	29.6	0.36	7.17	7.53	—	44,307	44,307	0.76	3.57	25.5	45,416
2034	7.60	6.96	35.6	81.1	0.22	0.37	29.2	29.6	0.35	7.17	7.52	—	43,365	43,365	0.70	3.57	21.7	44,468
2035	7.58	6.89	34.7	78.7	0.22	0.36	29.2	29.6	0.34	7.17	7.51	—	42,494	42,494	0.70	3.37	18.3	43,534
2036	7.47	6.84	33.9	76.1	0.22	0.35	29.3	29.6	0.34	7.19	7.52	—	41,825	41,825	0.70	3.38	15.4	42,866
2037	7.16	6.53	33.1	73.6	0.22	0.34	29.2	29.6	0.33	7.17	7.50	—	41,017	41,017	0.70	3.37	12.8	42,052
2038	6.92	6.29	32.5	72.4	0.22	0.33	29.2	29.6	0.32	7.17	7.49	—	40,323	40,323	0.65	3.17	10.6	41,294
2039	97.9	97.7	5.36	14.9	0.03	0.07	4.51	4.58	0.07	1.09	1.15	—	5,748	5,748	0.10	0.30	1.26	5,841
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.64	0.55	3.72	5.79	0.01	0.12	2.40	2.52	0.11	0.92	1.04	—	1,830	1,830	0.05	0.09	0.70	1,860
2033	1.45	1.34	6.83	15.5	0.04	0.07	5.33	5.40	0.07	1.31	1.37	—	7,335	7,335	0.13	0.59	4.21	7,519
2034	1.39	1.27	6.50	14.8	0.04	0.07	5.33	5.40	0.06	1.31	1.37	—	7,179	7,179	0.12	0.59	3.59	7,362
2035	1.38	1.26	6.34	14.4	0.04	0.06	5.33	5.40	0.06	1.31	1.37	—	7,035	7,035	0.12	0.56	3.03	7,208
2036	1.36	1.25	6.19	13.9	0.04	0.06	5.35	5.41	0.06	1.31	1.37	—	6,925	6,925	0.12	0.56	2.55	7,097
2037	1.31	1.19	6.04	13.4	0.04	0.06	5.33	5.39	0.06	1.31	1.37	—	6,791	6,791	0.12	0.56	2.12	6,962
2038	1.26	1.15	5.94	13.2	0.04	0.06	5.33	5.39	0.06	1.31	1.37	—	6,676	6,676	0.11	0.52	1.75	6,837
2039	17.9	17.8	0.98	2.72	< 0.005	0.01	0.82	0.84	0.01	0.20	0.21	—	952	952	0.02	0.05	0.21	967

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	9.28	8.66	36.8	119	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	53,440	53,440	0.82	4.17	68.8	54,772
2034	8.82	8.19	35.6	115	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	52,318	52,318	0.75	4.17	58.6	53,637
2035	8.68	8.13	34.8	111	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	51,282	51,282	0.75	3.93	49.6	52,522
2036	8.46	7.83	34.1	107	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	50,350	50,350	0.75	3.93	41.6	51,582
2037	8.12	7.50	32.7	104	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	49,524	49,524	0.75	3.93	34.5	50,750
2038	7.92	7.30	32.1	102	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	48,697	48,697	0.75	3.70	28.6	49,846
2039	86.2	86.0	2.16	16.1	0.01	0.05	5.05	5.06	0.05	1.18	1.19	—	4,696	4,696	0.06	0.04	2.98	4,712
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	9.28	8.39	41.8	103	0.26	0.32	34.2	34.5	0.31	10.1	10.2	—	52,333	52,333	0.95	4.40	2.08	53,671
2033	8.71	8.05	39.8	98.7	0.26	0.32	34.2	34.5	0.31	8.40	8.71	—	51,165	51,165	0.89	4.17	1.78	52,430
2034	8.38	7.78	38.9	94.8	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	50,073	50,073	0.89	4.17	1.52	51,339
2035	8.25	7.65	37.7	91.9	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	49,064	49,064	0.89	3.93	1.29	50,259
2036	8.11	7.52	36.3	89.3	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	48,155	48,155	0.82	3.93	1.08	49,349
2037	7.85	7.25	35.4	86.6	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	47,351	47,351	0.82	3.93	0.89	48,544
2038	7.51	6.13	34.8	84.3	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	46,546	46,546	0.79	3.70	0.74	47,668
2039	86.2	86.0	34.4	82.7	0.26	0.31	34.2	34.5	0.31	8.40	8.71	—	45,908	45,908	0.79	3.70	0.61	47,031
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	1.66	1.54	7.86	37.6	0.07	0.13	13.2	13.3	0.13	5.06	5.19	—	11,052	11,052	0.30	0.57	4.25	11,232
2033	7.46	6.92	33.4	86.7	0.22	0.27	29.2	29.5	0.27	7.17	7.44	—	44,307	44,307	0.76	3.57	25.5	45,416
2034	7.11	6.58	31.7	82.9	0.22	0.27	29.2	29.5	0.27	7.17	7.44	—	43,365	43,365	0.70	3.57	21.7	44,468

2035	7.11	6.52	31.0	80.6	0.22	0.27	29.2	29.5	0.27	7.17	7.43	—	42,494	42,494	0.70	3.37	18.3	43,534
2036	7.02	6.48	30.3	78.0	0.22	0.27	29.3	29.6	0.27	7.19	7.45	—	41,825	41,825	0.70	3.38	15.4	42,866
2037	6.71	6.18	29.7	75.7	0.22	0.27	29.2	29.5	0.26	7.17	7.43	—	41,017	41,017	0.70	3.37	12.8	42,052
2038	6.49	5.95	29.2	74.5	0.22	0.27	29.2	29.5	0.26	7.17	7.43	—	40,323	40,323	0.65	3.17	10.6	41,294
2039	34.1	33.9	3.88	15.4	0.03	0.04	4.51	4.56	0.04	1.09	1.13	—	5,748	5,748	0.10	0.30	1.26	5,841
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.30	0.28	1.43	6.87	0.01	0.02	2.40	2.43	0.02	0.92	0.95	—	1,830	1,830	0.05	0.09	0.70	1,860
2033	1.36	1.26	6.09	15.8	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,335	7,335	0.13	0.59	4.21	7,519
2034	1.30	1.20	5.79	15.1	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,179	7,179	0.12	0.59	3.59	7,362
2035	1.30	1.19	5.65	14.7	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	7,035	7,035	0.12	0.56	3.03	7,208
2036	1.28	1.18	5.53	14.2	0.04	0.05	5.35	5.40	0.05	1.31	1.36	—	6,925	6,925	0.12	0.56	2.55	7,097
2037	1.23	1.13	5.41	13.8	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	6,791	6,791	0.12	0.56	2.12	6,962
2038	1.18	1.09	5.32	13.6	0.04	0.05	5.33	5.38	0.05	1.31	1.36	—	6,676	6,676	0.11	0.52	1.75	6,837
2039	6.22	6.19	0.71	2.80	< 0.005	0.01	0.82	0.83	0.01	0.20	0.21	—	952	952	0.02	0.05	0.21	967

3. Construction Emissions Details

3.1. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.66	0.56	4.58	5.29	0.01	0.19	—	0.19	0.17	—	0.17	—	1,088	1,088	0.04	0.01	—	1,092
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	2.08	2.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.84	0.97	< 0.005	0.03	—	0.03	0.03	—	0.03	—	180	180	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	—	0.74	0.74	—	0.38	0.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.02	27.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.52	4.52	< 0.005	< 0.005	< 0.005	4.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.10	0.53	5.82	0.01	0.02	—	0.02	0.02	—	0.02	—	1,088	1,088	0.04	0.01	—	1,092
Dust From Material Movement	—	—	—	—	—	—	4.04	4.04	—	2.08	2.08	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.10	1.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	180	180	0.01	< 0.005	—	181
Dust From Material Movement	—	—	—	—	—	—	0.74	0.74	—	0.38	0.38	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	27.3	27.3	< 0.005	< 0.005	0.02	27.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	4.52	4.52	< 0.005	< 0.005	< 0.005	4.53
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63	1.37	10.4	13.8	0.03	0.42	—	0.42	0.39	—	0.39	—	3,524	3,524	0.14	0.03	—	3,536
Dust From Material Movement	—	—	—	—	—	—	4.92	4.92	—	1.95	1.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.89	2.51	0.01	0.08	—	0.08	0.07	—	0.07	—	583	583	0.02	< 0.005	—	585
Dust From Material Movement	—	—	—	—	—	—	0.90	0.90	—	0.36	0.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.07	81.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	13.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.41	0.39	2.50	18.9	0.03	0.08	—	0.08	0.08	—	0.08	—	3,524	3,524	0.14	0.03	—	3,536
Dust From Material Movement	—	—	—	—	—	—	4.92	4.92	—	1.95	1.95	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	3.45	0.01	0.01	—	0.01	0.01	—	0.01	—	583	583	0.02	< 0.005	—	585
Dust From Material Movement	—	—	—	—	—	—	0.90	0.90	—	0.36	0.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	81.1	81.1	< 0.005	< 0.005	0.07	81.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	0.01	13.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Building Construction (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	0.90	7.87	12.8	0.02	0.22	—	0.22	0.21	—	0.21	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.94	1.53	< 0.005	0.03	—	0.03	0.02	—	0.02	—	287	287	0.01	< 0.005	—	288
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.49	7.29	5.73	77.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,273	22,273	0.46	0.20	1.18	22,345
Vendor	1.33	0.68	33.1	11.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	27,663	27,663	0.39	4.18	0.90	28,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.89	0.87	0.57	9.43	0.00	0.00	3.01	3.01	0.00	0.71	0.71	—	2,734	2,734	0.05	0.02	2.36	2,744
Vendor	0.17	0.09	3.88	1.35	0.03	0.03	1.07	1.10	0.03	0.30	0.32	—	3,311	3,311	0.05	0.50	1.79	3,463
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.10	1.72	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	453	453	0.01	< 0.005	0.39	454
Vendor	0.03	0.02	0.71	0.25	0.01	0.01	0.20	0.20	0.01	0.05	0.06	—	548	548	0.01	0.08	0.30	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Building Construction (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.98	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.36	1.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	287	287	0.01	< 0.005	—	288
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.07	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.5	47.5	< 0.005	< 0.005	—	47.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.49	7.29	5.73	77.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,273	22,273	0.46	0.20	1.18	22,345
Vendor	1.33	0.68	33.1	11.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	27,663	27,663	0.39	4.18	0.90	28,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.89	0.87	0.57	9.43	0.00	0.00	3.01	3.01	0.00	0.71	0.71	—	2,734	2,734	0.05	0.02	2.36	2,744
Vendor	0.17	0.09	3.88	1.35	0.03	0.03	1.07	1.10	0.03	0.30	0.32	—	3,311	3,311	0.05	0.50	1.79	3,463
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.16	0.10	1.72	0.00	0.00	0.55	0.55	0.00	0.13	0.13	—	453	453	0.01	< 0.005	0.39	454
Vendor	0.03	0.02	0.71	0.25	0.01	0.01	0.20	0.20	0.01	0.05	0.06	—	548	548	0.01	0.08	0.30	573
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.90	0.75	6.57	11.0	0.02	0.17	—	0.17	0.16	—	0.16	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.16	0.14	1.20	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.62	7.49	3.76	93.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	24,276	24,276	0.33	0.20	39.7	24,383
Vendor	1.20	0.75	30.1	10.9	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,767	26,767	0.39	3.95	29.1	27,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	6.96	4.88	72.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,969	21,969	0.40	0.20	1.03	22,040
Vendor	1.09	0.68	32.0	11.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,798	26,798	0.39	3.95	0.75	27,986
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.08	5.96	4.01	64.5	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,298	19,298	0.34	0.17	14.7	19,372
Vendor	0.98	0.60	26.8	9.43	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,955	22,955	0.33	3.39	10.8	23,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.09	0.73	11.8	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,195	3,195	0.06	0.03	2.43	3,207
Vendor	0.18	0.11	4.90	1.72	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,800	3,800	0.06	0.56	1.78	3,971
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.07	—	0.07	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.62	7.49	3.76	93.1	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	24,276	24,276	0.33	0.20	39.7	24,383
Vendor	1.20	0.75	30.1	10.9	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,767	26,767	0.39	3.95	29.1	27,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	6.96	4.88	72.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,969	21,969	0.40	0.20	1.03	22,040
Vendor	1.09	0.68	32.0	11.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	26,798	26,798	0.39	3.95	0.75	27,986
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	6.08	5.96	4.01	64.5	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,298	19,298	0.34	0.17	14.7	19,372
Vendor	0.98	0.60	26.8	9.43	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,955	22,955	0.33	3.39	10.8	23,983
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.11	1.09	0.73	11.8	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,195	3,195	0.06	0.03	2.43	3,207
Vendor	0.18	0.11	4.90	1.72	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,800	3,800	0.06	0.56	1.78	3,971
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.88	0.74	6.45	10.9	0.02	0.16	—	0.16	0.15	—	0.15	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.18	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	7.02	3.69	89.2	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,972	23,972	0.27	0.20	34.2	24,072
Vendor	1.20	0.75	29.0	10.6	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,949	25,949	0.39	3.95	24.5	27,160
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	4.81	69.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,696	21,696	0.40	0.20	0.89	21,766
Vendor	1.09	0.68	31.1	11.0	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,980	25,980	0.39	3.95	0.63	27,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.62	3.28	60.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,057	19,057	0.28	0.17	12.7	19,128
Vendor	0.98	0.60	25.9	9.23	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,253	22,253	0.33	3.39	9.04	23,279
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.03	0.60	11.1	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,155	3,155	0.05	0.03	2.10	3,167
Vendor	0.18	0.11	4.73	1.68	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,684	3,684	0.06	0.56	1.50	3,854

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.16	7.02	3.69	89.2	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,972	23,972	0.27	0.20	34.2	24,072
Vendor	1.20	0.75	29.0	10.6	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,949	25,949	0.39	3.95	24.5	27,160
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	4.81	69.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,696	21,696	0.40	0.20	0.89	21,766
Vendor	1.09	0.68	31.1	11.0	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,980	25,980	0.39	3.95	0.63	27,167
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.62	3.28	60.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	19,057	19,057	0.28	0.17	12.7	19,128
Vendor	0.98	0.60	25.9	9.23	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	22,253	22,253	0.33	3.39	9.04	23,279
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.03	0.60	11.1	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,155	3,155	0.05	0.03	2.10	3,167
Vendor	0.18	0.11	4.73	1.68	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,684	3,684	0.06	0.56	1.50	3,854
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.02	6.96	3.69	85.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,702	23,702	0.27	0.20	29.3	23,797
Vendor	1.20	0.75	28.1	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,184	25,184	0.39	3.71	20.3	26,320
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.69	6.56	4.75	66.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,452	21,452	0.40	0.20	0.76	21,522
Vendor	1.09	0.68	30.0	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,215	25,215	0.39	3.71	0.53	26,332
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.56	3.28	58.8	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,842	18,842	0.28	0.17	10.8	18,911
Vendor	0.98	0.60	25.2	9.01	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	21,597	21,597	0.33	3.18	7.51	22,562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.02	0.60	10.7	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,120	3,120	0.05	0.03	1.79	3,131
Vendor	0.18	0.11	4.59	1.64	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,576	3,576	0.06	0.53	1.24	3,735
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	7.02	6.96	3.69	85.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,702	23,702	0.27	0.20	29.3	23,797
Vendor	1.20	0.75	28.1	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,184	25,184	0.39	3.71	20.3	26,320
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.69	6.56	4.75	66.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,452	21,452	0.40	0.20	0.76	21,522
Vendor	1.09	0.68	30.0	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	25,215	25,215	0.39	3.71	0.53	26,332
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.74	5.56	3.28	58.8	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,842	18,842	0.28	0.17	10.8	18,911
Vendor	0.98	0.60	25.2	9.01	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	21,597	21,597	0.33	3.18	7.51	22,562
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.05	1.02	0.60	10.7	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,120	3,120	0.05	0.03	1.79	3,131
Vendor	0.18	0.11	4.59	1.64	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,576	3,576	0.06	0.53	1.24	3,735
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	3.63	81.5	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,459	23,459	0.27	0.20	24.9	23,550
Vendor	1.17	0.73	27.5	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,494	24,494	0.39	3.71	16.6	25,627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.56	6.43	3.89	63.7	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,233	21,233	0.33	0.20	0.65	21,301
Vendor	1.09	0.68	29.4	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,526	24,526	0.39	3.71	0.43	25,643
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.64	5.52	3.23	56.2	0.00	0.00	21.6	21.6	0.00	5.07	5.07	—	18,701	18,701	0.29	0.17	9.27	18,769
Vendor	0.98	0.60	24.5	9.03	0.20	0.20	7.67	7.88	0.20	2.12	2.32	—	21,064	21,064	0.34	3.19	6.17	22,030
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.03	1.01	0.59	10.3	0.00	0.00	3.95	3.95	0.00	0.92	0.92	—	3,096	3,096	0.05	0.03	1.53	3,107
Vendor	0.18	0.11	4.48	1.65	0.04	0.04	1.40	1.44	0.04	0.39	0.42	—	3,487	3,487	0.06	0.53	1.02	3,647
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.82	6.69	3.63	81.5	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,459	23,459	0.27	0.20	24.9	23,550
Vendor	1.17	0.73	27.5	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,494	24,494	0.39	3.71	16.6	25,627
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.56	6.43	3.89	63.7	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,233	21,233	0.33	0.20	0.65	21,301
Vendor	1.09	0.68	29.4	10.7	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	24,526	24,526	0.39	3.71	0.43	25,643
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.64	5.52	3.23	56.2	0.00	0.00	21.6	21.6	0.00	5.07	5.07	—	18,701	18,701	0.29	0.17	9.27	18,769
Vendor	0.98	0.60	24.5	9.03	0.20	0.20	7.67	7.88	0.20	2.12	2.32	—	21,064	21,064	0.34	3.19	6.17	22,030
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.03	1.01	0.59	10.3	0.00	0.00	3.95	3.95	0.00	0.92	0.92	—	3,096	3,096	0.05	0.03	1.53	3,107
Vendor	0.18	0.11	4.48	1.65	0.04	0.04	1.40	1.44	0.04	0.39	0.42	—	3,487	3,487	0.06	0.53	1.02	3,647

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.49	6.36	2.84	79.4	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,247	23,247	0.27	0.20	21.1	23,334
Vendor	1.17	0.73	26.9	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,880	23,880	0.39	3.71	13.4	25,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	3.82	61.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,042	21,042	0.33	0.20	0.55	21,110
Vendor	1.09	0.68	28.6	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,912	23,912	0.39	3.71	0.35	25,029
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.34	5.22	3.16	54.1	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,482	18,482	0.28	0.17	7.82	18,548
Vendor	0.98	0.60	24.0	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,480	20,480	0.33	3.18	4.97	21,442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.95	0.58	9.88	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,060	3,060	0.05	0.03	1.29	3,071
Vendor	0.18	0.11	4.37	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,391	3,391	0.06	0.53	0.82	3,550
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.49	6.36	2.84	79.4	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	23,247	23,247	0.27	0.20	21.1	23,334
Vendor	1.17	0.73	26.9	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,880	23,880	0.39	3.71	13.4	25,010
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	3.82	61.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	21,042	21,042	0.33	0.20	0.55	21,110
Vendor	1.09	0.68	28.6	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,912	23,912	0.39	3.71	0.35	25,029
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.34	5.22	3.16	54.1	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,482	18,482	0.28	0.17	7.82	18,548
Vendor	0.98	0.60	24.0	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,480	20,480	0.33	3.18	4.97	21,442
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.97	0.95	0.58	9.88	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,060	3,060	0.05	0.03	1.29	3,071
Vendor	0.18	0.11	4.37	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,391	3,391	0.06	0.53	0.82	3,550
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	2.77	77.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,972	22,972	0.27	0.20	17.8	23,056
Vendor	1.17	0.73	26.4	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,328	23,328	0.39	3.48	10.7	24,385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.96	5.04	3.82	59.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,790	20,790	0.33	0.20	0.46	20,858
Vendor	1.09	0.68	28.0	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,360	23,360	0.36	3.48	0.28	24,406
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.11	5.00	3.16	52.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,261	18,261	0.23	0.17	6.59	18,325
Vendor	0.98	0.60	23.5	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,007	20,007	0.33	2.98	3.98	20,908
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.93	0.91	0.58	9.66	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,023	3,023	0.04	0.03	1.09	3,034
Vendor	0.18	0.11	4.28	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,312	3,312	0.06	0.49	0.66	3,461
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	6.29	6.16	2.77	77.3	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	22,972	22,972	0.27	0.20	17.8	23,056
Vendor	1.17	0.73	26.4	10.1	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,328	23,328	0.39	3.48	10.7	24,385
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.96	5.04	3.82	59.0	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,790	20,790	0.33	0.20	0.46	20,858
Vendor	1.09	0.68	28.0	10.4	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	23,360	23,360	0.36	3.48	0.28	24,406
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	5.11	5.00	3.16	52.9	0.00	0.00	21.6	21.6	0.00	5.05	5.05	—	18,261	18,261	0.23	0.17	6.59	18,325
Vendor	0.98	0.60	23.5	8.81	0.20	0.20	7.65	7.85	0.20	2.12	2.32	—	20,007	20,007	0.33	2.98	3.98	20,908
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.93	0.91	0.58	9.66	0.00	0.00	3.94	3.94	0.00	0.92	0.92	—	3,023	3,023	0.04	0.03	1.09	3,034
Vendor	0.18	0.11	4.28	1.61	0.04	0.04	1.40	1.43	0.04	0.39	0.42	—	3,312	3,312	0.06	0.49	0.66	3,461
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.51	0.93	< 0.005	0.01	—	0.01	0.01	—	0.01	—	180	180	0.01	< 0.005	—	181
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.01	0.01	0.09	0.17	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.8	29.8	< 0.005	< 0.005	—	29.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.83	4.91	3.76	57.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,644	20,644	0.33	0.20	0.39	20,712
Vendor	1.09	0.68	27.7	10.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	22,868	22,868	0.36	3.48	0.22	23,914
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.36	0.27	4.48	0.00	0.00	1.89	1.89	0.00	0.44	0.44	—	1,590	1,590	0.02	0.01	0.48	1,595
Vendor	0.09	0.05	2.01	0.75	0.02	0.02	0.67	0.69	0.02	0.19	0.20	—	1,717	1,717	0.03	0.26	0.28	1,796
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	263	263	< 0.005	< 0.005	0.08	264
Vendor	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.12	0.13	< 0.005	0.03	0.04	—	284	284	< 0.005	0.04	0.05	297
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.22	1.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	180	180	0.01	< 0.005	—	181
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.8	29.8	< 0.005	< 0.005	—	29.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.83	4.91	3.76	57.6	0.00	0.00	25.3	25.3	0.00	5.92	5.92	—	20,644	20,644	0.33	0.20	0.39	20,712
Vendor	1.09	0.68	27.7	10.2	0.24	0.24	8.96	9.20	0.24	2.48	2.71	—	22,868	22,868	0.36	3.48	0.22	23,914
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.43	0.36	0.27	4.48	0.00	0.00	1.89	1.89	0.00	0.44	0.44	—	1,590	1,590	0.02	0.01	0.48	1,595
Vendor	0.09	0.05	2.01	0.75	0.02	0.02	0.67	0.69	0.02	0.19	0.20	—	1,717	1,717	0.03	0.26	0.28	1,796
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	263	263	< 0.005	< 0.005	0.08	264
Vendor	0.02	0.01	0.37	0.14	< 0.005	< 0.005	0.12	0.13	< 0.005	0.03	0.04	—	284	284	< 0.005	0.04	0.05	297
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Paving (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.31	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.49	5.31	9.75	0.01	0.11	—	0.11	0.10	—	0.10	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.19	2.01	3.69	0.01	0.04	—	0.04	0.04	—	0.04	—	571	571	0.02	< 0.005	—	573
Paving	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.37	0.67	< 0.005	0.01	—	0.01	0.01	—	0.01	—	94.6	94.6	< 0.005	< 0.005	—	94.9
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.07	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	< 0.005	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	0.01	40.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.60	6.60	< 0.005	< 0.005	< 0.005	6.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Paving (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.27	2.14	10.5	0.01	0.05	—	0.05	0.05	—	0.05	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.29	0.27	2.14	10.5	0.01	0.05	—	0.05	0.05	—	0.05	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.27	2.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.10	0.81	3.96	0.01	0.02	—	0.02	0.02	—	0.02	—	571	571	0.02	< 0.005	—	573
Paving	0.86	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.15	0.72	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	94.6	94.6	< 0.005	< 0.005	—	94.9
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.01	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	114	114	< 0.005	< 0.005	0.07	114
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	103	103	< 0.005	< 0.005	< 0.005	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	39.9	39.9	< 0.005	< 0.005	0.01	40.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.60	6.60	< 0.005	< 0.005	< 0.005	6.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Architectural Coating (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	253	253	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	253	253	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.5	50.5	< 0.005	< 0.005	—	50.7
Architectural Coatings	95.8	95.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.36	8.36	< 0.005	< 0.005	—	8.39
Architectural Coatings	17.5	17.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.01	0.55	15.1	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,562	4,562	0.05	0.04	2.98	4,578
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	0.98	0.75	11.5	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,129	4,129	0.07	0.04	0.08	4,142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.37	0.27	4.51	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,600	1,600	0.02	0.02	0.49	1,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	265	265	< 0.005	< 0.005	0.08	266
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Architectural Coating (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	84.9	84.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	84.9	84.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.28	0.41	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	50.5	50.5	< 0.005	< 0.005	—	50.7
Architectural Coatings	32.1	32.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.36	8.36	< 0.005	< 0.005	—	8.39
Architectural Coatings	5.86	5.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.19	1.01	0.55	15.1	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,562	4,562	0.05	0.04	2.98	4,578

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.17	0.98	0.75	11.5	0.00	0.00	5.05	5.05	0.00	1.18	1.18	—	4,129	4,129	0.07	0.04	0.08	4,142
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.37	0.27	4.51	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,600	1,600	0.02	0.02	0.49	1,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.82	0.00	0.00	0.35	0.35	0.00	0.08	0.08	—	265	265	< 0.005	< 0.005	0.08	266
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2032	3/28/2032	6.00	75.0	—
Grading	Grading	3/29/2032	11/10/2032	6.00	195	—
Building Construction	Building Construction	11/11/2032	2/1/2039	6.00	1,949	—
Paving	Paving	2/2/2039	7/12/2039	6.00	138	—
Architectural Coating	Architectural Coating	7/13/2039	12/20/2039	6.00	138	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3,008	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,174	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	602	11.9	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	3,008	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,174	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	602	11.9	LDA,LDT1,LDT2

Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	10,743,450	3,581,150	378,390

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	113	0.00	—
Grading	—	—	585	0.00	—
Paving	0.00	0.00	0.00	0.00	145

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	37.8	100%

Other Non-Asphalt Surfaces	25.3	0%
City Park	0.00	0%
Other Asphalt Surfaces	81.6	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2032	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2

Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2

Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708

Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0

Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific construction schedule.

Pacific Gateway (Central Development Area Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Central Development Area Construction)
Construction Start Date	1/1/2038
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	6,857	1000sqft	198	6,856,500	1,786,304	—	—	—
Parking Lot	1,823	1000sqft	41.9	0.00	0.00	—	—	—

Other Asphalt Surfaces	4,015	1000sqft	92.2	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	1,299	1000sqft	29.8	0.00	0.00	—	—	—
City Park	72.4	Acre	72.4	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	196	196	34.1	93.9	0.25	0.61	32.8	33.1	0.56	10.1	10.7	—	46,095	46,095	0.70	3.54	22.4	47,189
Mit.	67.6	67.4	30.3	96.4	0.25	0.30	32.8	33.1	0.30	10.1	10.2	—	46,095	46,095	0.70	3.54	22.4	47,189
% Reduced	66%	66%	11%	-3%	—	51%	—	< 0.5%	47%	—	4%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	196	196	36.9	77.3	0.25	0.61	32.8	33.1	0.56	10.1	10.7	—	44,051	44,051	0.76	3.54	0.58	45,125
Mit.	67.5	67.4	33.0	79.8	0.25	0.30	32.8	33.1	0.30	10.1	10.2	—	44,051	44,051	0.76	3.54	0.58	45,125
% Reduced	66%	66%	10%	-3%	—	51%	—	< 0.5%	47%	—	4%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	93.8	93.8	29.9	67.0	0.21	0.47	28.1	28.4	0.43	6.88	7.19	—	37,798	37,798	0.60	3.04	7.55	38,727
Mit.	32.8	32.8	26.6	69.1	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	37,798	37,798	0.60	3.04	7.55	38,727
% Reduced	65%	65%	11%	-3%	—	45%	—	< 0.5%	41%	—	1%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	17.1	17.1	5.45	12.2	0.04	0.09	5.12	5.18	0.08	1.26	1.31	—	6,258	6,258	0.10	0.50	1.25	6,412
Mit.	5.98	5.98	4.86	12.6	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,258	6,258	0.10	0.50	1.25	6,412
% Reduced	65%	65%	11%	-3%	—	45%	—	< 0.5%	41%	—	1%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.69	2.26	16.5	23.7	0.06	0.61	19.8	20.4	0.56	10.1	10.7	—	6,749	6,749	0.27	0.05	0.12	6,772
2039	7.79	6.33	34.1	93.9	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	46,095	46,095	0.70	3.54	22.4	47,189
2040	7.46	6.09	33.7	92.1	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	45,538	45,538	0.64	3.54	18.2	46,627
2041	7.33	5.96	33.1	91.0	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	45,045	45,045	0.64	3.54	14.8	46,131
2042	7.14	5.70	32.8	89.8	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	44,608	44,608	0.64	3.31	12.0	45,624
2043	6.94	5.55	32.4	88.8	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	44,227	44,227	0.64	3.31	9.61	45,240
2044	6.62	5.41	32.0	87.8	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	43,899	43,899	0.64	3.25	7.71	44,892
2045	6.48	5.34	31.7	87.7	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	43,615	43,615	0.64	3.25	6.16	44,606
2046	6.42	5.27	31.6	86.8	0.25	0.34	32.8	33.1	0.33	8.04	8.37	—	43,370	43,370	0.64	3.25	4.90	44,360
2047	196	196	5.02	14.1	0.01	0.07	4.84	4.84	0.07	1.13	1.14	—	4,368	4,368	0.06	0.03	0.61	4,377

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.69	2.26	17.9	23.6	0.07	0.61	19.8	20.4	0.56	10.1	10.7	—	7,866	7,866	0.27	0.71	0.08	8,081
2039	7.59	6.15	36.9	77.3	0.25	0.50	32.8	33.1	0.46	8.04	8.40	—	44,051	44,051	0.76	3.54	0.58	45,125
2040	7.26	5.83	36.3	76.0	0.25	0.37	32.8	33.1	0.36	8.04	8.40	—	43,508	43,508	0.76	3.54	0.47	44,582
2041	7.07	5.63	35.9	74.8	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	43,026	43,026	0.70	3.54	0.38	44,099
2042	7.00	5.57	34.6	73.4	0.25	0.36	32.8	33.1	0.35	8.04	8.39	—	42,599	42,599	0.70	3.31	0.31	43,604
2043	6.87	5.50	34.2	73.1	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	42,226	42,226	0.70	3.31	0.25	43,232
2044	6.44	5.30	33.8	72.0	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	41,905	41,905	0.70	3.31	0.20	42,911
2045	5.62	5.20	33.7	71.7	0.25	0.35	32.8	33.1	0.34	8.04	8.38	—	41,628	41,628	0.70	3.31	0.16	42,633
2046	5.55	5.10	33.4	71.6	0.25	0.34	32.8	33.1	0.33	8.04	8.37	—	41,388	41,388	0.70	3.31	0.13	42,393
2047	196	196	5.02	11.0	0.01	0.07	4.84	4.84	0.07	1.13	1.14	—	3,966	3,966	0.06	0.04	0.02	3,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	2.25	1.89	12.9	19.3	0.05	0.47	10.7	11.2	0.43	4.80	5.23	—	5,438	5,438	0.22	0.05	0.06	5,458
2039	6.10	4.93	29.1	63.5	0.20	0.33	26.2	26.5	0.32	6.53	6.84	—	35,235	35,235	0.57	2.76	7.55	36,080
2040	6.29	5.10	29.9	67.0	0.21	0.32	28.1	28.4	0.31	6.88	7.19	—	37,798	37,798	0.60	3.04	6.77	38,727
2041	6.05	4.87	29.3	65.8	0.21	0.31	28.0	28.3	0.30	6.86	7.16	—	37,280	37,280	0.60	3.03	5.48	38,204
2042	5.93	4.76	29.0	64.7	0.21	0.31	28.0	28.3	0.30	6.86	7.16	—	36,912	36,912	0.60	2.84	4.42	37,778
2043	5.87	4.64	28.7	64.4	0.21	0.30	28.0	28.3	0.30	6.86	7.16	—	36,591	36,591	0.60	2.84	3.56	37,456
2044	5.58	4.58	28.5	63.7	0.21	0.30	28.1	28.4	0.29	6.88	7.17	—	36,414	36,414	0.60	2.85	2.86	37,280
2045	5.50	4.45	28.0	63.4	0.21	0.30	28.0	28.3	0.29	6.86	7.15	—	36,075	36,075	0.55	2.84	2.27	36,937
2046	4.89	4.03	24.7	55.8	0.19	0.26	24.2	24.4	0.25	5.93	6.18	—	31,144	31,144	0.48	2.45	1.57	31,889
2047	93.8	93.8	2.38	8.92	0.01	0.03	2.33	2.36	0.02	0.55	0.57	—	2,497	2,497	0.04	0.02	0.13	2,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.41	0.35	2.35	3.53	0.01	0.09	1.95	2.04	0.08	0.88	0.95	—	900	900	0.04	0.01	0.01	904
2039	1.11	0.90	5.31	11.6	0.04	0.06	4.78	4.84	0.06	1.19	1.25	—	5,834	5,834	0.09	0.46	1.25	5,973
2040	1.15	0.93	5.45	12.2	0.04	0.06	5.12	5.18	0.06	1.26	1.31	—	6,258	6,258	0.10	0.50	1.12	6,412

2041	1.10	0.89	5.35	12.0	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,172	6,172	0.10	0.50	0.91	6,325
2042	1.08	0.87	5.29	11.8	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,111	6,111	0.10	0.47	0.73	6,255
2043	1.07	0.85	5.24	11.8	0.04	0.06	5.11	5.16	0.05	1.25	1.31	—	6,058	6,058	0.10	0.47	0.59	6,201
2044	1.02	0.83	5.19	11.6	0.04	0.05	5.12	5.17	0.05	1.26	1.31	—	6,029	6,029	0.10	0.47	0.47	6,172
2045	1.00	0.81	5.12	11.6	0.04	0.05	5.11	5.16	0.05	1.25	1.31	—	5,973	5,973	0.09	0.47	0.38	6,115
2046	0.89	0.74	4.51	10.2	0.03	0.05	4.41	4.46	0.05	1.08	1.13	—	5,156	5,156	0.08	0.41	0.26	5,280
2047	17.1	17.1	0.43	1.63	< 0.005	< 0.005	0.42	0.43	< 0.005	0.10	0.10	—	413	413	0.01	< 0.005	0.02	415

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.79	0.77	4.61	35.9	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,749	6,749	0.27	0.05	0.12	6,772
2039	7.29	5.94	30.3	96.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	46,095	46,095	0.70	3.54	22.4	47,189
2040	6.97	5.71	29.9	94.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	45,538	45,538	0.64	3.54	18.2	46,627
2041	6.84	5.58	29.4	93.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	45,045	45,045	0.64	3.54	14.8	46,131
2042	6.65	5.33	29.1	92.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,608	44,608	0.64	3.31	12.0	45,624
2043	6.46	5.18	28.8	91.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,227	44,227	0.64	3.31	9.61	45,240
2044	6.15	5.05	28.5	90.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,899	43,899	0.64	3.25	7.71	44,892
2045	6.02	4.98	28.2	90.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,615	43,615	0.64	3.25	6.16	44,606
2046	5.96	4.92	28.2	89.6	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,370	43,370	0.64	3.25	4.90	44,360
2047	67.6	67.4	2.09	14.1	0.01	0.04	4.84	4.84	0.04	1.13	1.14	—	4,368	4,368	0.06	0.03	0.61	4,377
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.83	0.76	10.4	35.7	0.07	0.15	19.8	19.9	0.14	10.1	10.2	—	7,866	7,866	0.27	0.71	0.08	8,081
2039	7.09	5.76	33.0	79.8	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	44,051	44,051	0.76	3.54	0.58	45,125

2040	6.77	5.44	32.5	78.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,508	43,508	0.76	3.54	0.47	44,582
2041	6.58	5.25	32.2	77.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	43,026	43,026	0.70	3.54	0.38	44,099
2042	6.52	5.19	30.9	76.0	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	42,599	42,599	0.70	3.31	0.31	43,604
2043	6.39	5.13	30.6	75.7	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	42,226	42,226	0.70	3.31	0.25	43,232
2044	5.97	4.94	30.3	74.7	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,905	41,905	0.70	3.31	0.20	42,911
2045	5.15	4.85	30.2	74.5	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,628	41,628	0.70	3.31	0.16	42,633
2046	5.09	4.74	30.0	74.4	0.25	0.30	32.8	33.1	0.30	8.04	8.34	—	41,388	41,388	0.70	3.31	0.13	42,393
2047	67.5	67.4	2.09	11.0	0.01	0.04	4.84	4.84	0.04	1.13	1.14	—	3,966	3,966	0.06	0.04	0.02	3,979
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.61	0.59	3.49	28.6	0.05	0.10	10.7	10.8	0.10	4.80	4.90	—	5,438	5,438	0.22	0.05	0.06	5,458
2039	5.58	4.52	25.4	66.4	0.20	0.24	26.2	26.4	0.24	6.53	6.77	—	35,235	35,235	0.57	2.76	7.55	36,080
2040	5.86	4.78	26.6	69.1	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	37,798	37,798	0.60	3.04	6.77	38,727
2041	5.63	4.54	26.1	68.0	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	37,280	37,280	0.60	3.03	5.48	38,204
2042	5.52	4.44	25.8	66.9	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,912	36,912	0.60	2.84	4.42	37,778
2043	5.46	4.33	25.6	66.7	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,591	36,591	0.60	2.84	3.56	37,456
2044	5.18	4.26	25.4	66.0	0.21	0.26	28.1	28.3	0.26	6.88	7.14	—	36,414	36,414	0.60	2.85	2.86	37,280
2045	5.11	4.14	25.0	65.8	0.21	0.26	28.0	28.2	0.25	6.86	7.12	—	36,075	36,075	0.55	2.84	2.27	36,937
2046	4.52	3.75	21.8	57.9	0.19	0.23	24.2	24.4	0.22	5.93	6.15	—	31,144	31,144	0.48	2.45	1.57	31,889
2047	32.8	32.8	1.34	9.19	0.01	0.02	2.33	2.34	0.02	0.55	0.56	—	2,497	2,497	0.04	0.02	0.13	2,505
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2038	0.11	0.11	0.64	5.22	0.01	0.02	1.95	1.97	0.02	0.88	0.89	—	900	900	0.04	0.01	0.01	904
2039	1.02	0.82	4.63	12.1	0.04	0.04	4.78	4.82	0.04	1.19	1.24	—	5,834	5,834	0.09	0.46	1.25	5,973
2040	1.07	0.87	4.86	12.6	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,258	6,258	0.10	0.50	1.12	6,412
2041	1.03	0.83	4.77	12.4	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,172	6,172	0.10	0.50	0.91	6,325
2042	1.01	0.81	4.71	12.2	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,111	6,111	0.10	0.47	0.73	6,255
2043	1.00	0.79	4.67	12.2	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	6,058	6,058	0.10	0.47	0.59	6,201
2044	0.94	0.78	4.64	12.1	0.04	0.05	5.12	5.17	0.05	1.26	1.30	—	6,029	6,029	0.10	0.47	0.47	6,172
2045	0.93	0.76	4.57	12.0	0.04	0.05	5.11	5.15	0.05	1.25	1.30	—	5,973	5,973	0.09	0.47	0.38	6,115

2046	0.83	0.68	3.99	10.6	0.03	0.04	4.41	4.45	0.04	1.08	1.12	—	5,156	5,156	0.08	0.41	0.26	5,280
2047	5.98	5.98	0.24	1.68	< 0.005	< 0.005	0.42	0.43	< 0.005	0.10	0.10	—	413	413	0.01	< 0.005	0.02	415

3. Construction Emissions Details

3.1. Demolition (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	1.60	12.4	13.2	0.03	0.40	—	0.40	0.37	—	0.37	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	7.35	7.35	—	1.11	1.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.5	37.5	< 0.005	< 0.005	—	37.7
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.22	6.22	< 0.005	< 0.005	—	6.24
Demoliti on	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	< 0.005	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	0.09	5.50	1.38	0.04	0.07	1.53	1.61	0.07	0.42	0.49	—	4,336	4,336	0.05	0.68	0.08	4,539
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	47.5	47.5	< 0.005	0.01	0.01	49.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	< 0.005	8.23

3.2. Demolition (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.58	4.90	18.2	0.03	0.07	—	0.07	0.07	—	0.07	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	7.35	7.35	—	1.11	1.11	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.20	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	37.5	37.5	< 0.005	< 0.005	—	37.7
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	6.22	6.22	< 0.005	< 0.005	—	6.24
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.29	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	104	104	< 0.005	< 0.005	< 0.005	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.15	0.09	5.50	1.38	0.04	0.07	1.53	1.61	0.07	0.42	0.49	—	4,336	4,336	0.05	0.68	0.08	4,539
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.16	1.16	< 0.005	< 0.005	< 0.005	1.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.06	0.01	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	47.5	47.5	< 0.005	0.01	0.01	49.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	7.86	7.86	< 0.005	< 0.005	< 0.005	8.23

3.3. Site Preparation (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	16.5	20.3	0.05	0.61	—	0.61	0.56	—	0.56	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.65	2.23	16.5	20.3	0.05	0.61	—	0.61	0.56	—	0.56	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.25	5.23	0.01	0.16	—	0.16	0.15	—	0.15	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.78	0.95	< 0.005	0.03	—	0.03	0.03	—	0.03	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	0.10	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.9	31.9	< 0.005	< 0.005	0.01	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.28	5.28	< 0.005	< 0.005	< 0.005	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.67	7.29	0.01	0.03	—	0.03	0.03	—	0.03	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	226	226	0.01	< 0.005	—	227

Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	134	134	< 0.005	< 0.005	0.10	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	< 0.005	121
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	31.9	31.9	< 0.005	< 0.005	0.01	32.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.28	5.28	< 0.005	< 0.005	< 0.005	5.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.57	2.16	14.3	23.2	0.06	0.52	—	0.52	0.48	—	0.48	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.57	2.16	14.3	23.2	0.06	0.52	—	0.52	0.48	—	0.48	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.51	1.27	8.42	13.6	0.04	0.30	—	0.30	0.28	—	0.28	—	3,872	3,872	0.16	0.03	—	3,886
Dust From Material Movement	—	—	—	—	—	—	5.40	5.40	—	2.15	2.15	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.28	0.23	1.54	2.48	0.01	0.06	—	0.06	0.05	—	0.05	—	641	641	0.03	0.01	—	643
Dust From Material Movement	—	—	—	—	—	—	0.99	0.99	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	< 0.005	0.12	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	138	138	< 0.005	< 0.005	< 0.005	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	83.2	83.2	< 0.005	< 0.005	0.03	83.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	< 0.005	13.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.59	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.59	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.44	0.43	2.69	20.8	0.04	0.08	—	0.08	0.08	—	0.08	—	3,872	3,872	0.16	0.03	—	3,886
Dust From Material Movement	—	—	—	—	—	—	5.40	5.40	—	2.15	2.15	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.08	0.49	3.79	0.01	0.01	—	0.01	0.01	—	0.01	—	641	641	0.03	0.01	—	643
Dust From Material Movement	—	—	—	—	—	—	0.99	0.99	—	0.39	0.39	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	153	153	< 0.005	< 0.005	0.12	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.39	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	138	138	< 0.005	< 0.005	< 0.005	139
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	83.2	83.2	< 0.005	< 0.005	0.03	83.4

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	< 0.005	13.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.52	2.12	13.8	22.7	0.06	0.50	—	0.50	0.46	—	0.46	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.16	1.07	1.76	< 0.005	0.04	—	0.04	0.04	—	0.04	—	511	511	0.02	< 0.005	—	513

Dust From Material Movement	—	—	—	—	—	—	0.71	0.71	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.20	0.32	< 0.005	0.01	—	0.01	0.01	—	0.01	—	84.6	84.6	< 0.005	< 0.005	—	84.9
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.38	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	137	137	< 0.005	< 0.005	< 0.005	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	< 0.005	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.81

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.58	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.36	2.74	< 0.005	0.01	—	0.01	0.01	—	0.01	—	511	511	0.02	< 0.005	—	513
Dust From Material Movement	—	—	—	—	—	—	0.71	0.71	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	84.6	84.6	< 0.005	< 0.005	—	84.9
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.02	0.38	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	137	137	< 0.005	< 0.005	< 0.005	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	< 0.005	10.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.63	5.28	9.67	0.02	0.11	—	0.11	0.10	—	0.10	—	1,869	1,869	0.08	0.02	—	1,875
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.96	1.77	< 0.005	0.02	—	0.02	0.02	—	0.02	—	309	309	0.01	< 0.005	—	310
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.71	4.83	2.65	72.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,837	21,837	0.25	0.19	14.2	21,914
Vendor	1.12	0.70	24.7	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,861	21,861	0.35	3.33	8.12	22,870
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.58	4.70	3.60	55.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,762	19,762	0.32	0.19	0.37	19,828
Vendor	1.05	0.65	26.5	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,891	21,891	0.35	3.33	0.21	22,893
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.30	3.61	2.71	44.5	0.00	0.00	18.8	18.8	0.00	4.40	4.40	—	15,790	15,790	0.20	0.15	4.81	15,844
Vendor	0.85	0.52	20.0	7.49	0.18	0.18	6.66	6.84	0.18	1.84	2.02	—	17,054	17,054	0.27	2.60	2.74	17,837
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.49	8.13	0.00	0.00	3.43	3.43	0.00	0.80	0.80	—	2,614	2,614	0.03	0.02	0.80	2,623
Vendor	0.16	0.10	3.65	1.37	0.03	0.03	1.22	1.25	0.03	0.34	0.37	—	2,823	2,823	0.05	0.43	0.45	2,953
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.32	2.29	11.6	0.02	0.06	—	0.06	0.06	—	0.06	—	1,869	1,869	0.08	0.02	—	1,875
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.42	2.12	< 0.005	0.01	—	0.01	0.01	—	0.01	—	309	309	0.01	< 0.005	—	310
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.71	4.83	2.65	72.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,837	21,837	0.25	0.19	14.2	21,914
Vendor	1.12	0.70	24.7	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,861	21,861	0.35	3.33	8.12	22,870
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.58	4.70	3.60	55.1	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,762	19,762	0.32	0.19	0.37	19,828
Vendor	1.05	0.65	26.5	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,891	21,891	0.35	3.33	0.21	22,893
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.30	3.61	2.71	44.5	0.00	0.00	18.8	18.8	0.00	4.40	4.40	—	15,790	15,790	0.20	0.15	4.81	15,844
Vendor	0.85	0.52	20.0	7.49	0.18	0.18	6.66	6.84	0.18	1.84	2.02	—	17,054	17,054	0.27	2.60	2.74	17,837
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.49	8.13	0.00	0.00	3.43	3.43	0.00	0.80	0.80	—	2,614	2,614	0.03	0.02	0.80	2,623
Vendor	0.16	0.10	3.65	1.37	0.03	0.03	1.22	1.25	0.03	0.34	0.37	—	2,823	2,823	0.05	0.43	0.45	2,953
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.39	4.57	2.59	70.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,703	21,703	0.19	0.19	11.9	21,777
Vendor	1.12	0.72	24.4	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,438	21,438	0.35	3.33	6.35	22,445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.38	3.60	53.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,642	19,642	0.32	0.19	0.31	19,707
Vendor	1.05	0.65	26.0	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,469	21,469	0.35	3.33	0.16	22,470
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.52	3.82	2.33	48.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,302	17,302	0.22	0.16	4.42	17,360
Vendor	0.94	0.60	21.8	8.26	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	18,437	18,437	0.30	2.86	2.35	19,300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.70	0.43	8.77	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,864	2,864	0.04	0.03	0.73	2,874
Vendor	0.17	0.11	3.98	1.51	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	3,052	3,052	0.05	0.47	0.39	3,195
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.39	4.57	2.59	70.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,703	21,703	0.19	0.19	11.9	21,777
Vendor	1.12	0.72	24.4	9.46	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,438	21,438	0.35	3.33	6.35	22,445
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.38	3.60	53.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,642	19,642	0.32	0.19	0.31	19,707
Vendor	1.05	0.65	26.0	9.78	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,469	21,469	0.35	3.33	0.16	22,470
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.52	3.82	2.33	48.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,302	17,302	0.22	0.16	4.42	17,360
Vendor	0.94	0.60	21.8	8.26	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	18,437	18,437	0.30	2.86	2.35	19,300
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.83	0.70	0.43	8.77	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,864	2,864	0.04	0.03	0.73	2,874
Vendor	0.17	0.11	3.98	1.51	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	3,052	3,052	0.05	0.47	0.39	3,195

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.44	2.59	69.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,589	21,589	0.19	0.19	9.89	21,660
Vendor	1.12	0.72	23.9	9.49	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,060	21,060	0.35	3.33	4.90	22,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	3.53	52.7	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,538	19,538	0.25	0.19	0.26	19,602
Vendor	1.05	0.65	25.7	9.81	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,091	21,091	0.35	3.33	0.13	22,092
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.29	3.59	2.33	46.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,163	17,163	0.22	0.16	3.66	17,221
Vendor	0.94	0.60	21.3	8.26	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	18,062	18,062	0.30	2.85	1.82	18,922
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.42	8.57	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,842	2,842	0.04	0.03	0.61	2,851
Vendor	0.17	0.11	3.89	1.51	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,990	2,990	0.05	0.47	0.30	3,133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.26	4.44	2.59	69.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,589	21,589	0.19	0.19	9.89	21,660
Vendor	1.12	0.72	23.9	9.49	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,060	21,060	0.35	3.33	4.90	22,066
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	3.53	52.7	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,538	19,538	0.25	0.19	0.26	19,602
Vendor	1.05	0.65	25.7	9.81	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	21,091	21,091	0.35	3.33	0.13	22,092
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.29	3.59	2.33	46.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,163	17,163	0.22	0.16	3.66	17,221
Vendor	0.94	0.60	21.3	8.26	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	18,062	18,062	0.30	2.85	1.82	18,922
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.78	0.66	0.42	8.57	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,842	2,842	0.04	0.03	0.61	2,851
Vendor	0.17	0.11	3.89	1.51	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,990	2,990	0.05	0.47	0.30	3,133
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	2.59	68.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,488	21,488	0.19	0.19	8.18	21,558
Vendor	1.12	0.72	23.6	9.26	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,723	20,723	0.35	3.10	3.77	21,661
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.01	4.13	2.78	51.5	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,448	19,448	0.25	0.19	0.21	19,511
Vendor	1.05	0.65	25.2	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,754	20,754	0.35	3.10	0.10	21,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.18	3.48	2.27	46.0	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,083	17,083	0.22	0.16	3.03	17,140
Vendor	0.94	0.60	21.0	8.07	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,774	17,774	0.30	2.66	1.40	18,576
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.64	0.41	8.40	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,828	2,828	0.04	0.03	0.50	2,838
Vendor	0.17	0.11	3.84	1.47	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,943	2,943	0.05	0.44	0.23	3,075
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.07	4.19	2.59	68.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,488	21,488	0.19	0.19	8.18	21,558
Vendor	1.12	0.72	23.6	9.26	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,723	20,723	0.35	3.10	3.77	21,661
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	5.01	4.13	2.78	51.5	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,448	19,448	0.25	0.19	0.21	19,511
Vendor	1.05	0.65	25.2	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,754	20,754	0.35	3.10	0.10	21,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.18	3.48	2.27	46.0	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,083	17,083	0.22	0.16	3.03	17,140
Vendor	0.94	0.60	21.0	8.07	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,774	17,774	0.30	2.66	1.40	18,576
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.64	0.41	8.40	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,828	2,828	0.04	0.03	0.50	2,838
Vendor	0.17	0.11	3.84	1.47	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,943	2,943	0.05	0.44	0.23	3,075
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.53	67.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,401	21,401	0.19	0.19	6.72	21,470
Vendor	1.12	0.70	23.3	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,429	20,429	0.35	3.10	2.88	21,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.78	51.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,370	19,370	0.25	0.19	0.17	19,433
Vendor	1.05	0.65	24.9	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,460	20,460	0.35	3.10	0.07	21,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.13	3.37	2.27	45.8	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,014	17,014	0.22	0.16	2.49	17,071
Vendor	0.94	0.60	20.8	8.09	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,522	17,522	0.30	2.66	1.07	18,323
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.62	0.41	8.36	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,817	2,817	0.04	0.03	0.41	2,826
Vendor	0.17	0.11	3.80	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,901	2,901	0.05	0.44	0.18	3,034

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.53	67.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,401	21,401	0.19	0.19	6.72	21,470
Vendor	1.12	0.70	23.3	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,429	20,429	0.35	3.10	2.88	21,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.88	4.06	2.78	51.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,370	19,370	0.25	0.19	0.17	19,433
Vendor	1.05	0.65	24.9	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,460	20,460	0.35	3.10	0.07	21,394
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.13	3.37	2.27	45.8	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	17,014	17,014	0.22	0.16	2.49	17,071
Vendor	0.94	0.60	20.8	8.09	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,522	17,522	0.30	2.66	1.07	18,323
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.62	0.41	8.36	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,817	2,817	0.04	0.03	0.41	2,826
Vendor	0.17	0.11	3.80	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,901	2,901	0.05	0.44	0.18	3,034
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.82	3.94	2.53	66.3	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,330	21,330	0.19	0.13	5.53	21,378
Vendor	0.87	0.70	23.0	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,173	20,173	0.35	3.10	2.18	21,109
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.72	50.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,305	19,305	0.25	0.19	0.14	19,368
Vendor	0.82	0.65	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,204	20,204	0.35	3.10	0.06	21,138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.03	3.33	2.28	45.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,004	17,004	0.22	0.16	2.05	17,060
Vendor	0.75	0.58	20.6	8.11	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	17,350	17,350	0.30	2.67	0.81	18,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.61	0.42	8.24	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,815	2,815	0.04	0.03	0.34	2,825
Vendor	0.14	0.11	3.76	1.48	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	2,872	2,872	0.05	0.44	0.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.82	3.94	2.53	66.3	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,330	21,330	0.19	0.13	5.53	21,378
Vendor	0.87	0.70	23.0	9.29	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,173	20,173	0.35	3.10	2.18	21,109
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.72	50.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,305	19,305	0.25	0.19	0.14	19,368
Vendor	0.82	0.65	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	20,204	20,204	0.35	3.10	0.06	21,138
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.03	3.33	2.28	45.1	0.00	0.00	20.7	20.7	0.00	4.85	4.85	—	17,004	17,004	0.22	0.16	2.05	17,060
Vendor	0.75	0.58	20.6	8.11	0.19	0.19	7.35	7.54	0.19	2.03	2.22	—	17,350	17,350	0.30	2.67	0.81	18,153
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.74	0.61	0.42	8.24	0.00	0.00	3.78	3.78	0.00	0.89	0.89	—	2,815	2,815	0.04	0.03	0.34	2,825
Vendor	0.14	0.11	3.76	1.48	0.04	0.04	1.34	1.38	0.04	0.37	0.41	—	2,872	2,872	0.05	0.44	0.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.79	0.66	5.50	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.53	66.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,268	21,268	0.19	0.13	4.53	21,315
Vendor	0.87	0.70	22.7	9.31	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,951	19,951	0.35	3.10	1.62	20,886
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.87	3.81	2.72	50.0	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,248	19,248	0.25	0.19	0.12	19,312
Vendor	0.82	0.62	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,982	19,982	0.35	3.10	0.04	20,916
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.97	3.21	2.22	44.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	16,908	16,908	0.16	0.16	1.67	16,963
Vendor	0.75	0.58	20.3	8.11	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,112	17,112	0.30	2.66	0.60	17,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.59	0.40	8.19	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,799	2,799	0.03	0.03	0.28	2,808
Vendor	0.14	0.11	3.71	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,833	2,833	0.05	0.44	0.10	2,966
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.69	3.87	2.53	66.2	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,268	21,268	0.19	0.13	4.53	21,315
Vendor	0.87	0.70	22.7	9.31	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,951	19,951	0.35	3.10	1.62	20,886
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.87	3.81	2.72	50.0	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,248	19,248	0.25	0.19	0.12	19,312
Vendor	0.82	0.62	24.6	9.58	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,982	19,982	0.35	3.10	0.04	20,916
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.97	3.21	2.22	44.9	0.00	0.00	20.6	20.6	0.00	4.84	4.84	—	16,908	16,908	0.16	0.16	1.67	16,963
Vendor	0.75	0.58	20.3	8.11	0.19	0.19	7.33	7.52	0.19	2.02	2.22	—	17,112	17,112	0.30	2.66	0.60	17,913
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.59	0.40	8.19	0.00	0.00	3.77	3.77	0.00	0.88	0.88	—	2,799	2,799	0.03	0.03	0.28	2,808
Vendor	0.14	0.11	3.71	1.48	0.04	0.04	1.34	1.37	0.04	0.37	0.40	—	2,833	2,833	0.05	0.44	0.10	2,966

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.57	4.72	8.96	0.02	0.09	—	0.09	0.08	—	0.08	—	1,773	1,773	0.07	0.01	—	1,779
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.12	0.10	0.86	1.64	< 0.005	0.02	—	0.02	0.01	—	0.01	—	294	294	0.01	< 0.005	—	295
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.63	3.81	2.53	65.4	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,215	21,215	0.19	0.13	3.71	21,261
Vendor	0.87	0.70	22.7	9.34	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,759	19,759	0.35	3.10	1.18	20,694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.81	3.68	2.72	49.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,201	19,201	0.25	0.19	0.10	19,264
Vendor	0.82	0.65	24.3	9.61	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,790	19,790	0.35	3.10	0.03	20,724
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.28	2.68	1.92	38.6	0.00	0.00	17.8	17.8	0.00	4.18	4.18	—	14,556	14,556	0.14	0.14	1.19	14,603
Vendor	0.62	0.50	17.5	6.98	0.17	0.17	6.32	6.49	0.17	1.75	1.91	—	14,626	14,626	0.26	2.30	0.38	15,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.49	0.35	7.05	0.00	0.00	3.25	3.25	0.00	0.76	0.76	—	2,410	2,410	0.02	0.02	0.20	2,418
Vendor	0.11	0.09	3.20	1.27	0.03	0.03	1.15	1.18	0.03	0.32	0.35	—	2,421	2,421	0.04	0.38	0.06	2,536
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.31	2.17	11.0	0.02	0.06	—	0.06	0.05	—	0.05	—	1,773	1,773	0.07	0.01	—	1,779
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.40	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	294	294	0.01	< 0.005	—	295
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.63	3.81	2.53	65.4	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	21,215	21,215	0.19	0.13	3.71	21,261
Vendor	0.87	0.70	22.7	9.34	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,759	19,759	0.35	3.10	1.18	20,694
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.81	3.68	2.72	49.9	0.00	0.00	24.2	24.2	0.00	5.67	5.67	—	19,201	19,201	0.25	0.19	0.10	19,264
Vendor	0.82	0.65	24.3	9.61	0.23	0.23	8.58	8.80	0.23	2.37	2.60	—	19,790	19,790	0.35	3.10	0.03	20,724
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.28	2.68	1.92	38.6	0.00	0.00	17.8	17.8	0.00	4.18	4.18	—	14,556	14,556	0.14	0.14	1.19	14,603
Vendor	0.62	0.50	17.5	6.98	0.17	0.17	6.32	6.49	0.17	1.75	1.91	—	14,626	14,626	0.26	2.30	0.38	15,317
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.49	0.35	7.05	0.00	0.00	3.25	3.25	0.00	0.76	0.76	—	2,410	2,410	0.02	0.02	0.20	2,418
Vendor	0.11	0.09	3.20	1.27	0.03	0.03	1.15	1.18	0.03	0.32	0.35	—	2,421	2,421	0.04	0.38	0.06	2,536
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	5.02	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.59	1.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.01	< 0.005	—	178
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Paving (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.03	0.03	0.24	1.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	177	177	0.01	< 0.005	—	178
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.22	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.4	29.4	< 0.005	< 0.005	—	29.5
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.0	12.0	< 0.005	< 0.005	< 0.005	12.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.99	1.99	< 0.005	< 0.005	< 0.005	2.00
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Paving (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	0.16	1.77	3.44	< 0.005	0.03	—	0.03	0.02	—	0.02	—	536	536	0.02	< 0.005	—	538
Paving	0.72	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.03	0.32	0.63	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	< 0.005	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.01	6.01	< 0.005	< 0.005	< 0.005	6.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Paving (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	2.03	2.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.09	0.74	3.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	536	536	0.02	< 0.005	—	538
Paving	0.72	0.72	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.68	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	0.13	0.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	36.3	36.3	< 0.005	< 0.005	< 0.005	36.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.01	6.01	< 0.005	< 0.005	< 0.005	6.02
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Architectural Coating (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	195	195	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	195	195	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	92.5	92.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	16.9	16.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.75	0.51	13.0	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	4,234	4,234	0.04	0.03	0.61	4,244
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.54	9.95	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	3,832	3,832	0.05	0.04	0.02	3,845
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.25	4.87	0.00	0.00	2.28	2.28	0.00	0.54	0.54	—	1,862	1,862	0.02	0.02	0.12	1,868
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.04	0.89	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	308	308	< 0.005	< 0.005	0.02	309
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Architectural Coating (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	66.6	66.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	66.6	66.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5

Architect Coatings	31.6	31.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	5.76	5.76	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.91	0.75	0.51	13.0	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	4,234	4,234	0.04	0.03	0.61	4,244
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.54	9.95	0.00	0.00	4.84	4.84	0.00	1.13	1.13	—	3,832	3,832	0.05	0.04	0.02	3,845
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.35	0.34	0.25	4.87	0.00	0.00	2.28	2.28	0.00	0.54	0.54	—	1,862	1,862	0.02	0.02	0.12	1,868
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.04	0.89	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	308	308	< 0.005	< 0.005	0.02	309
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2038	1/5/2038	6.00	4.00	—
Site Preparation	Site Preparation	1/6/2038	4/25/2038	6.00	94.0	—
Grading	Grading	4/26/2038	2/2/2039	6.00	243	—
Building Construction	Building Construction	2/3/2039	11/11/2046	6.00	2,433	—
Paving	Paving	11/12/2046	5/31/2047	6.00	173	—
Architectural Coating	Architectural Coating	6/1/2047	12/19/2047	6.00	173	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—

Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	82.8	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,880	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,124	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	576	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT

Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	82.8	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,880	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,124	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	576	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	10,284,750	3,428,250	428,369

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	28,754	—
Site Preparation	—	—	141	0.00	—
Grading	—	—	729	0.00	—
Paving	0.00	0.00	0.00	0.00	164

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	41.9	100%
Other Asphalt Surfaces	92.2	100%
Other Non-Asphalt Surfaces	29.8	0%
City Park	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005
2047	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit

Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1

Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100

Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0

Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—

Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific construction schedule.
Construction: Architectural Coatings	—

Pacific Gateway (West Development Area Construction) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (West Development Area Construction)
Construction Start Date	1/1/2047
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	6,169	1000sqft	174	6,168,900	1,386,500	—	—	—
Parking Lot	1,331	1000sqft	30.5	0.00	0.00	—	—	—

Other Non-Asphalt Surfaces	899	1000sqft	20.6	0.00	0.00	—	—	—
City Park	58.5	Acre	58.5	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	3,750	1000sqft	86.1	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	188	185	61.6	182	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
Mit.	71.2	69.1	52.2	188	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
% Reduced	62%	63%	15%	-3%	—	13%	—	< 0.5%	11%	—	< 0.5%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	186	185	64.9	149	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
Mit.	69.6	69.0	55.6	155	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
% Reduced	63%	63%	14%	-4%	—	13%	—	< 0.5%	11%	—	< 0.5%	—	—	—	—	—	—	—

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	91.7	90.9	49.8	120	0.37	0.53	51.0	51.5	0.51	12.5	13.0	—	63,623	63,623	0.99	4.47	1.41	64,982
Mit.	36.0	35.5	43.3	125	0.37	0.46	51.0	51.4	0.46	12.5	12.9	—	63,623	63,623	0.99	4.47	1.41	64,982
% Reduced	61%	61%	13%	-4%	—	12%	—	< 0.5%	10%	—	< 0.5%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.7	16.6	9.10	21.8	0.07	0.10	9.30	9.40	0.09	2.27	2.37	—	10,533	10,533	0.16	0.74	0.23	10,758
Mit.	6.57	6.47	7.91	22.8	0.07	0.08	9.30	9.39	0.08	2.27	2.36	—	10,533	10,533	0.16	0.74	0.23	10,758
% Reduced	61%	61%	13%	-4%	—	12%	—	< 0.5%	10%	—	< 0.5%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	2.26	1.90	11.8	21.0	0.06	0.35	19.8	20.2	0.33	10.1	10.5	—	6,743	6,743	0.27	0.05	0.02	6,766
2048	5.80	4.75	28.6	78.8	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	38,913	38,913	0.58	2.93	2.82	39,803
2049	5.74	4.70	28.6	78.8	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	38,778	38,778	0.58	2.72	2.28	39,607
2050	188	185	61.6	182	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	175	175	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	2.25	1.90	11.8	20.9	0.06	0.35	19.8	20.2	0.33	10.1	10.5	—	6,729	6,729	0.27	0.05	< 0.005	6,752
2048	4.99	4.65	30.3	65.0	0.23	0.32	29.5	29.8	0.30	7.23	7.54	—	37,136	37,136	0.64	2.98	0.07	38,041
2049	4.93	4.59	30.3	65.0	0.23	0.31	29.5	29.8	0.30	7.23	7.54	—	37,004	37,004	0.64	2.78	0.06	37,849
2050	186	185	64.9	149	0.47	0.68	67.7	68.3	0.66	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	1.77	1.77	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	175	175	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	1.92	1.61	9.50	17.1	0.05	0.29	10.7	11.0	0.27	4.83	5.10	—	5,442	5,442	0.22	0.04	0.01	5,461
2048	4.09	3.78	24.2	54.0	0.18	0.27	23.9	24.1	0.26	5.95	6.21	—	30,173	30,173	0.48	2.37	0.97	30,890
2049	4.22	3.91	25.2	56.9	0.19	0.27	25.2	25.4	0.26	6.18	6.43	—	32,069	32,069	0.50	2.38	0.84	32,793
2050	91.7	90.9	49.8	120	0.37	0.53	51.0	51.5	0.51	12.5	13.0	—	63,623	63,623	0.99	4.47	1.41	64,982
2051	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	22.7	22.7	—	5.67	5.67	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.21	0.21	—	—	—	—	19.5	19.5	—	4.87	4.87	—	0.00	0.00	0.00	0.00	—	0.00
2056	83.5	83.5	—	—	—	—	3.89	3.89	—	0.97	0.97	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.35	0.29	1.73	3.13	0.01	0.05	1.96	2.01	0.05	0.88	0.93	—	901	901	0.04	0.01	< 0.005	904
2048	0.75	0.69	4.41	9.85	0.03	0.05	4.36	4.41	0.05	1.09	1.13	—	4,995	4,995	0.08	0.39	0.16	5,114
2049	0.77	0.71	4.60	10.4	0.04	0.05	4.59	4.64	0.05	1.13	1.17	—	5,309	5,309	0.08	0.39	0.14	5,429

2050	16.7	16.6	9.10	21.8	0.07	0.10	9.30	9.40	0.09	2.27	2.37	—	10,533	10,533	0.16	0.74	0.23	10,758
2051	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	4.14	4.14	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.04	0.04	—	—	—	—	3.55	3.55	—	0.89	0.89	—	0.00	0.00	0.00	0.00	—	0.00
2056	15.2	15.2	—	—	—	—	0.71	0.71	—	0.18	0.18	—	0.00	0.00	0.00	0.00	—	0.00

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.78	0.75	4.58	35.8	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,743	6,743	0.27	0.05	0.02	6,766
2048	5.35	4.41	25.3	81.8	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	38,913	38,913	0.58	2.93	2.82	39,803
2049	5.29	4.36	25.3	81.8	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	38,778	38,778	0.58	2.72	2.28	39,607
2050	71.2	69.1	52.2	188	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	85,051	85,051	1.24	5.49	4.33	86,724
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	59.2	59.2	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.77	0.75	4.59	35.7	0.06	0.13	19.8	19.9	0.13	10.1	10.2	—	6,729	6,729	0.27	0.05	< 0.005	6,752
2048	4.55	4.31	27.0	68.0	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	37,136	37,136	0.64	2.98	0.07	38,041

2049	4.49	4.25	27.0	68.0	0.23	0.28	29.5	29.8	0.27	7.23	7.51	—	37,004	37,004	0.64	2.78	0.06	37,849
2050	69.6	69.0	55.6	155	0.47	0.59	67.7	68.2	0.58	16.5	17.1	—	80,785	80,785	1.38	5.63	0.11	82,498
2051	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2055	1.77	1.77	—	—	—	—	26.5	26.5	—	6.63	6.63	—	0.00	0.00	0.00	0.00	—	0.00
2056	59.2	59.2	—	—	—	—	8.16	8.16	—	2.04	2.04	—	0.00	0.00	0.00	0.00	—	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.60	0.58	3.43	28.8	0.05	0.10	10.7	10.8	0.10	4.83	4.93	—	5,442	5,442	0.22	0.04	0.01	5,461
2048	3.64	3.43	21.1	57.3	0.18	0.23	23.9	24.1	0.23	5.95	6.18	—	30,173	30,173	0.48	2.37	0.97	30,890
2049	3.84	3.62	22.4	59.4	0.19	0.24	25.2	25.4	0.24	6.18	6.41	—	32,069	32,069	0.50	2.38	0.84	32,793
2050	36.0	35.5	43.3	125	0.37	0.46	51.0	51.4	0.46	12.5	12.9	—	63,623	63,623	0.99	4.47	1.41	64,982
2051	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	22.7	22.7	—	5.67	5.67	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	22.6	22.6	—	5.65	5.65	—	0.00	0.00	0.00	0.00	—	0.00
2055	0.21	0.21	—	—	—	—	19.5	19.5	—	4.87	4.87	—	0.00	0.00	0.00	0.00	—	0.00
2056	28.7	28.7	—	—	—	—	3.89	3.89	—	0.97	0.97	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2047	0.11	0.11	0.63	5.26	0.01	0.02	1.96	1.98	0.02	0.88	0.90	—	901	901	0.04	0.01	< 0.005	904
2048	0.66	0.63	3.85	10.5	0.03	0.04	4.36	4.40	0.04	1.09	1.13	—	4,995	4,995	0.08	0.39	0.16	5,114
2049	0.70	0.66	4.08	10.8	0.04	0.04	4.59	4.64	0.04	1.13	1.17	—	5,309	5,309	0.08	0.39	0.14	5,429
2050	6.57	6.47	7.91	22.8	0.07	0.08	9.30	9.39	0.08	2.27	2.36	—	10,533	10,533	0.16	0.74	0.23	10,758
2051	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2052	—	—	—	—	—	—	4.14	4.14	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2053	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00
2054	—	—	—	—	—	—	4.13	4.13	—	1.03	1.03	—	0.00	0.00	0.00	0.00	—	0.00

2055	0.04	0.04	—	—	—	—	3.55	3.55	—	0.89	0.89	—	0.00	0.00	0.00	0.00	—	0.00
2056	5.24	5.24	—	—	—	—	0.71	0.71	—	0.18	0.18	—	0.00	0.00	0.00	0.00	—	0.00

3. Construction Emissions Details

3.1. Site Preparation (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.16	1.82	11.8	17.4	0.05	0.35	—	0.35	0.33	—	0.33	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.16	1.82	11.8	17.4	0.05	0.35	—	0.35	0.33	—	0.33	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.47	3.03	4.49	0.01	0.09	—	0.09	0.08	—	0.08	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.55	0.82	< 0.005	0.02	—	0.02	0.02	—	0.02	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.40	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.02	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	< 0.005	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	< 0.005	30.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.09	5.09	< 0.005	< 0.005	< 0.005	5.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.13	0.67	7.29	0.01	0.03	—	0.03	0.03	—	0.03	—	1,364	1,364	0.06	0.01	—	1,369
Dust From Material Movement	—	—	—	—	—	—	5.06	5.06	—	2.60	2.60	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.12	1.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	226	226	0.01	< 0.005	—	227
Dust From Material Movement	—	—	—	—	—	—	0.92	0.92	—	0.47	0.47	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.02	0.40	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	129	129	< 0.005	< 0.005	0.02	129

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.30	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	116	116	< 0.005	< 0.005	< 0.005	117
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	30.7	30.7	< 0.005	< 0.005	< 0.005	30.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.09	5.09	< 0.005	< 0.005	< 0.005	5.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	10.7	20.6	0.06	0.34	—	0.34	0.31	—	0.31	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.23	1.87	10.7	20.6	0.06	0.34	—	0.34	0.31	—	0.31	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.34	1.12	6.46	12.4	0.04	0.20	—	0.20	0.19	—	0.19	—	3,965	3,965	0.16	0.03	—	3,979
Dust From Material Movement	—	—	—	—	—	—	5.53	5.53	—	2.20	2.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.21	1.18	2.26	0.01	0.04	—	0.04	0.03	—	0.03	—	657	657	0.03	0.01	—	659

Dust From Material Movement	—	—	—	—	—	—	1.01	1.01	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	147	147	< 0.005	< 0.005	0.02	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.35	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	82.0	82.0	< 0.005	< 0.005	0.01	82.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	< 0.005	13.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.45	0.43	2.75	21.3	0.04	0.08	—	0.08	0.08	—	0.08	—	3,965	3,965	0.16	0.03	—	3,979
Dust From Material Movement	—	—	—	—	—	—	5.53	5.53	—	2.20	2.20	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.08	0.50	3.88	0.01	0.01	—	0.01	0.01	—	0.01	—	657	657	0.03	0.01	—	659
Dust From Material Movement	—	—	—	—	—	—	1.01	1.01	—	0.40	0.40	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.45	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	147	147	< 0.005	< 0.005	0.02	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.35	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	134
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	82.0	82.0	< 0.005	< 0.005	0.01	82.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.6	13.6	< 0.005	< 0.005	< 0.005	13.6

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.20	1.84	10.5	20.1	0.06	0.32	—	0.32	0.30	—	0.30	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.71	1.37	< 0.005	0.02	—	0.02	0.02	—	0.02	—	449	449	0.02	< 0.005	—	451
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.13	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.4	74.4	< 0.005	< 0.005	—	74.6
Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.27	9.27	< 0.005	< 0.005	< 0.005	9.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.72	4.57	35.4	0.06	0.13	—	0.13	0.13	—	0.13	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.05	0.31	2.41	< 0.005	0.01	—	0.01	0.01	—	0.01	—	449	449	0.02	< 0.005	—	451
Dust From Material Movement	—	—	—	—	—	—	0.63	0.63	—	0.25	0.25	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.44	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	74.4	74.4	< 0.005	< 0.005	—	74.6

Dust From Material Movement	—	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.34	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	133	133	< 0.005	< 0.005	< 0.005	133
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.27	9.27	< 0.005	< 0.005	< 0.005	9.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.54	1.54	< 0.005	< 0.005	< 0.005	1.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.26	12.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.26	12.0	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.60	4.96	9.46	0.02	0.09	—	0.09	0.08	—	0.08	—	1,897	1,897	0.08	0.02	—	1,903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	0.90	1.73	< 0.005	0.02	—	0.02	0.01	—	0.01	—	314	314	0.01	< 0.005	—	315
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.11	3.37	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	19,017	19,017	0.17	0.11	2.27	19,058
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,499	17,499	0.31	2.79	0.55	18,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.37	3.31	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,212	17,212	0.23	0.17	0.06	17,269
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,527	17,527	0.31	2.79	0.01	18,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.58	1.84	36.5	0.00	0.00	17.2	17.2	0.00	4.02	4.02	—	13,959	13,959	0.14	0.14	0.78	14,004
Vendor	0.60	0.48	16.6	6.57	0.16	0.16	6.09	6.25	0.16	1.68	1.84	—	13,858	13,858	0.25	2.21	0.19	14,523
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.34	6.67	0.00	0.00	3.13	3.13	0.00	0.73	0.73	—	2,311	2,311	0.02	0.02	0.13	2,319
Vendor	0.11	0.09	3.04	1.20	0.03	0.03	1.11	1.14	0.03	0.31	0.34	—	2,294	2,294	0.04	0.37	0.03	2,404
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.37	0.33	2.32	11.8	0.02	0.06	—	0.06	0.06	—	0.06	—	1,897	1,897	0.08	0.02	—	1,903
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.42	2.15	< 0.005	0.01	—	0.01	0.01	—	0.01	—	314	314	0.01	< 0.005	—	315
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.11	3.37	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	19,017	19,017	0.17	0.11	2.27	19,058
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,499	17,499	0.31	2.79	0.55	18,340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.37	3.31	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,212	17,212	0.23	0.17	0.06	17,269
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,527	17,527	0.31	2.79	0.01	18,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.62	2.58	1.84	36.5	0.00	0.00	17.2	17.2	0.00	4.02	4.02	—	13,959	13,959	0.14	0.14	0.78	14,004
Vendor	0.60	0.48	16.6	6.57	0.16	0.16	6.09	6.25	0.16	1.68	1.84	—	13,858	13,858	0.25	2.21	0.19	14,523
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.47	0.34	6.67	0.00	0.00	3.13	3.13	0.00	0.73	0.73	—	2,311	2,311	0.02	0.02	0.13	2,319
Vendor	0.11	0.09	3.04	1.20	0.03	0.03	1.11	1.14	0.03	0.31	0.34	—	2,294	2,294	0.04	0.37	0.03	2,404
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2049) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.76	6.22	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.90	0.76	6.22	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.65	5.34	10.2	0.02	0.09	—	0.09	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	0.97	1.87	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.05	3.31	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,992	18,992	0.17	0.11	1.89	19,032
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,390	17,390	0.31	2.59	0.39	18,170
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.26	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,189	17,189	0.23	0.17	0.05	17,246
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,418	17,418	0.31	2.59	0.01	18,198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.74	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,099	15,099	0.15	0.15	0.70	15,147
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,916	14,916	0.27	2.22	0.14	15,584
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.50	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,500	2,500	0.02	0.02	0.12	2,508
Vendor	0.12	0.09	3.26	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,469	2,469	0.04	0.37	0.02	2,580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2049) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.05	3.31	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,992	18,992	0.17	0.11	1.89	19,032
Vendor	0.78	0.63	20.1	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,390	17,390	0.31	2.59	0.39	18,170
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.26	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,189	17,189	0.23	0.17	0.05	17,246
Vendor	0.72	0.58	21.6	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,418	17,418	0.31	2.59	0.01	18,198
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.74	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,099	15,099	0.15	0.15	0.70	15,147
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,916	14,916	0.27	2.22	0.14	15,584
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.51	0.50	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,500	2,500	0.02	0.02	0.12	2,508
Vendor	0.12	0.09	3.26	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,469	2,469	0.04	0.37	0.02	2,580
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	0.65	5.31	10.2	0.02	0.09	—	0.09	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	0.97	1.87	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.69	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,083	15,083	0.15	0.15	0.59	15,131
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,835	14,835	0.27	2.22	0.10	15,504
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.49	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,497	2,497	0.02	0.02	0.10	2,505
Vendor	0.12	0.09	3.25	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,456	2,456	0.04	0.37	0.02	2,567
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.79	2.69	2.00	39.5	0.00	0.00	18.6	18.6	0.00	4.35	4.35	—	15,083	15,083	0.15	0.15	0.59	15,131
Vendor	0.65	0.52	17.8	7.12	0.17	0.17	6.59	6.77	0.17	1.82	2.00	—	14,835	14,835	0.27	2.22	0.10	15,504
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.49	0.36	7.21	0.00	0.00	3.39	3.39	0.00	0.79	0.79	—	2,497	2,497	0.02	0.02	0.10	2,505
Vendor	0.12	0.09	3.25	1.30	0.03	0.03	1.20	1.23	0.03	0.33	0.36	—	2,456	2,456	0.04	0.37	0.02	2,567
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2051) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.14. Building Construction (2051) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.15. Building Construction (2052) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.5	17.5	—	4.37	4.37	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.21	5.21	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.19	3.19	—	0.80	0.80	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.16. Building Construction (2052) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.5	17.5	—	4.37	4.37	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	5.21	5.21	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.19	3.19	—	0.80	0.80	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.17. Building Construction (2053) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.18. Building Construction (2053) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.19. Building Construction (2054) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—

Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.20. Building Construction (2054) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	17.4	17.4	—	4.35	4.35	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	5.20	5.20	—	1.30	1.30	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.18	3.18	—	0.79	0.79	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.95	0.95	—	0.24	0.24	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.21. Building Construction (2055) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	15.0	15.0	—	3.74	3.74	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	4.47	4.47	—	1.12	1.12	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	2.73	2.73	—	0.68	0.68	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.82	0.82	—	0.20	0.20	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.22. Building Construction (2055) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	20.4	20.4	—	5.10	5.10	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	6.10	6.10	—	1.52	1.52	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	15.0	15.0	—	3.74	3.74	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	4.47	4.47	—	1.12	1.12	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	2.73	2.73	—	0.68	0.68	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.82	0.82	—	0.20	0.20	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.23. Building Construction_2055 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.90	0.75	6.19	11.9	0.02	0.11	—	0.11	0.10	—	0.10	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.66	0.56	4.56	8.80	0.02	0.08	—	0.08	0.07	—	0.07	—	1,766	1,766	0.07	0.01	—	1,772
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.12	0.10	0.83	1.61	< 0.005	0.01	—	0.01	0.01	—	0.01	—	292	292	0.01	< 0.005	—	293
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.40	2.32	1.72	34.0	0.00	0.00	16.0	16.0	0.00	3.74	3.74	—	12,969	12,969	0.13	0.13	0.51	13,010
Vendor	0.56	0.45	15.3	6.12	0.15	0.15	5.67	5.82	0.15	1.57	1.72	—	12,756	12,756	0.23	1.91	0.08	13,330
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.42	0.31	6.20	0.00	0.00	2.92	2.92	0.00	0.68	0.68	—	2,147	2,147	0.02	0.02	0.08	2,154
Vendor	0.10	0.08	2.80	1.12	0.03	0.03	1.03	1.06	0.03	0.29	0.31	—	2,112	2,112	0.04	0.32	0.01	2,207
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction_2055 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.34	0.31	2.16	11.0	0.02	0.06	—	0.06	0.05	—	0.05	—	1,766	1,766	0.07	0.01	—	1,772
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.39	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	292	292	0.01	< 0.005	—	293
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.94	3.20	2.22	58.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	18,972	18,972	0.17	0.11	1.58	19,012
Vendor	0.78	0.63	19.9	8.20	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,296	17,296	0.31	2.59	0.27	18,076
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.31	3.20	2.44	44.6	0.00	0.00	21.8	21.8	0.00	5.10	5.10	—	17,170	17,170	0.23	0.17	0.04	17,227
Vendor	0.72	0.58	21.4	8.44	0.20	0.20	7.72	7.92	0.20	2.13	2.34	—	17,324	17,324	0.31	2.59	0.01	18,104
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.40	2.32	1.72	34.0	0.00	0.00	16.0	16.0	0.00	3.74	3.74	—	12,969	12,969	0.13	0.13	0.51	13,010
Vendor	0.56	0.45	15.3	6.12	0.15	0.15	5.67	5.82	0.15	1.57	1.72	—	12,756	12,756	0.23	1.91	0.08	13,330
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.42	0.31	6.20	0.00	0.00	2.92	2.92	0.00	0.68	0.68	—	2,147	2,147	0.02	0.02	0.08	2,154
Vendor	0.10	0.08	2.80	1.12	0.03	0.03	1.03	1.06	0.03	0.29	0.31	—	2,112	2,112	0.04	0.32	0.01	2,207

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Paving (2055) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.26. Paving (2055) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.21	0.21	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Paving	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.27. Paving (2056) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.63	0.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—

Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.28. Paving (2056) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	1.77	1.77	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.63	0.63	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paving	0.11	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.12	0.12	—	0.03	0.03	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.04	0.04	—	0.01	0.01	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.29. Paving_2055 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.59	1.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	182	182	0.01	< 0.005	—	183
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.1	30.1	< 0.005	< 0.005	—	30.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Paving_2055 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	1.26	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	182	182	0.01	< 0.005	—	183

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.23	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	30.1	30.1	< 0.005	< 0.005	—	30.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	< 0.005	12.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.04
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Paving_2056 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.42	4.88	9.68	0.01	0.06	—	0.06	0.06	—	0.06	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.71	3.39	< 0.005	0.02	—	0.02	0.02	—	0.02	—	530	530	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.31	0.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	87.7	87.7	< 0.005	< 0.005	—	88.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	< 0.005	35.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.91	5.91	< 0.005	< 0.005	< 0.005	5.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Paving_2056 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.24	2.07	10.4	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.73	3.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	530	530	0.02	< 0.005	—	532
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.13	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	87.7	87.7	< 0.005	< 0.005	—	88.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.01	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.4	99.4	< 0.005	< 0.005	< 0.005	99.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.09	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.7	35.7	< 0.005	< 0.005	< 0.005	35.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.91	5.91	< 0.005	< 0.005	< 0.005	5.93
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Architectural Coating (2056) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	82.9	82.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	—	—	—	—	—	—	3.85	3.85	—	0.96	0.96	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.70	0.70	—	0.18	0.18	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.34. Architectural Coating (2056) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	28.1	28.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.12	5.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	8.16	8.16	—	2.04	2.04	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	3.85	3.85	—	0.96	0.96	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	—	—	—	—	—	—	0.70	0.70	—	0.18	0.18	—	—	—	—	—	—	—
Vendor	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

Hauling	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

3.35. Architectural Coating_2056 (2050) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	175	175	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	82.9	82.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	15.1	15.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.57	1.28	0.89	23.4	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	7,589	7,589	0.07	0.05	0.63	7,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.28	0.98	17.8	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	6,868	6,868	0.09	0.07	0.02	6,891
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.60	0.44	8.74	0.00	0.00	4.11	4.11	0.00	0.96	0.96	—	3,336	3,336	0.03	0.03	0.13	3,347

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.60	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	552	552	0.01	0.01	0.02	554
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Architectural Coating_2056 (2050) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134

Architectural Coatings	59.2	59.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.35	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	63.3	63.3	< 0.005	< 0.005	—	63.5
Architectural Coatings	28.1	28.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	10.5	10.5	< 0.005	< 0.005	—	10.5
Architectural Coatings	5.12	5.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.57	1.28	0.89	23.4	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	7,589	7,589	0.07	0.05	0.63	7,605
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	1.33	1.28	0.98	17.8	0.00	0.00	8.71	8.71	0.00	2.04	2.04	—	6,868	6,868	0.09	0.07	0.02	6,891
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.60	0.44	8.74	0.00	0.00	4.11	4.11	0.00	0.96	0.96	—	3,336	3,336	0.03	0.03	0.13	3,347
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.08	1.60	0.00	0.00	0.75	0.75	0.00	0.18	0.18	—	552	552	0.01	0.01	0.02	554
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2047	4/19/2047	6.00	94.0	—
Grading	Grading	4/20/2047	1/29/2048	6.00	244	—
Building Construction	Building Construction	1/30/2048	11/10/2055	6.00	2,436	—
Building Construction_2055	Building Construction	1/1/2050	11/10/2050	6.00	269	—
Paving	Paving	11/11/2055	5/30/2056	6.00	173	—
Paving_2055	Paving	11/11/2050	12/31/2050	6.00	44.0	—
Paving_2056	Paving	1/1/2050	5/30/2050	6.00	128	—
Architectural Coating	Architectural Coating	5/31/2056	12/18/2056	6.00	173	—
Architectural Coating_2056	Architectural Coating	5/31/2050	12/18/2050	6.00	173	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction_2055	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction_2055	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction_2055	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction_2055	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction_2055	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2055	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving_2055	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving_2055	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2056	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving_2056	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving_2056	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating_2056	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction_2055	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction_2055	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction_2055	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction_2055	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction_2055	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Paving_2055	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving_2055	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving_2055	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Paving_2056	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving_2056	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving_2056	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48
Architectural Coating_2056	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,011	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT

Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Building Construction_2055	—	—	—	—
Building Construction_2055	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction_2055	Vendor	1,011	9.10	HHDT,MHDT
Building Construction_2055	Hauling	0.00	20.0	HHDT
Building Construction_2055	Onsite truck	—	—	HHDT
Paving_2055	—	—	—	—
Paving_2055	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2055	Vendor	—	9.10	HHDT,MHDT
Paving_2055	Hauling	0.00	20.0	HHDT
Paving_2055	Onsite truck	—	—	HHDT
Paving_2056	—	—	—	—
Paving_2056	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2056	Vendor	—	9.10	HHDT,MHDT
Paving_2056	Hauling	0.00	20.0	HHDT
Paving_2056	Onsite truck	—	—	HHDT
Architectural Coating_2056	—	—	—	—
Architectural Coating_2056	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating_2056	Vendor	—	9.10	HHDT,MHDT
Architectural Coating_2056	Hauling	0.00	20.0	HHDT
Architectural Coating_2056	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	1,011	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Building Construction_2055	—	—	—	—

Building Construction_2055	Worker	2,591	11.9	LDA,LDT1,LDT2
Building Construction_2055	Vendor	1,011	9.10	HHDT,MHDT
Building Construction_2055	Hauling	0.00	20.0	HHDT
Building Construction_2055	Onsite truck	—	—	HHDT
Paving_2055	—	—	—	—
Paving_2055	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2055	Vendor	—	9.10	HHDT,MHDT
Paving_2055	Hauling	0.00	20.0	HHDT
Paving_2055	Onsite truck	—	—	HHDT
Paving_2056	—	—	—	—
Paving_2056	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving_2056	Vendor	—	9.10	HHDT,MHDT
Paving_2056	Hauling	0.00	20.0	HHDT
Paving_2056	Onsite truck	—	—	HHDT
Architectural Coating_2056	—	—	—	—
Architectural Coating_2056	Worker	1,036	11.9	LDA,LDT1,LDT2
Architectural Coating_2056	Vendor	—	9.10	HHDT,MHDT
Architectural Coating_2056	Hauling	0.00	20.0	HHDT
Architectural Coating_2056	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	9,253,350	3,084,450	358,586

Architectural Coating_2056	0.00	0.00	9,253,350	3,084,450	358,586

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	141	0.00	—
Grading	—	—	732	0.00	—
Paving	0.00	0.00	0.00	0.00	137
Paving_2055	0.00	0.00	0.00	0.00	137
Paving_2056	0.00	0.00	0.00	0.00	137

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	30.5	100%
Other Non-Asphalt Surfaces	20.6	0%
City Park	0.00	0%
Other Asphalt Surfaces	86.1	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2047	0.00	204	0.03	< 0.005
2048	0.00	204	0.03	< 0.005

2049	0.00	204	0.03	< 0.005
2050	0.00	204	0.03	< 0.005
2051	0.00	204	0.03	< 0.005
2052	0.00	204	0.03	< 0.005
2053	0.00	204	0.03	< 0.005
2054	0.00	204	0.03	< 0.005
2055	0.00	204	0.03	< 0.005
2056	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Project-specific schedule.
Land Use	Land uses are based on Project-specific information.
Construction: Architectural Coatings	—

Pacific Gateway (Gateway Center Development Area Construction) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Gateway Center Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Industrial Park	525	1000sqft	15.8	525,400	163,561	—	—	—
Parking Lot	510	1000sqft	11.7	0.00	0.00	—	—	—

Other Asphalt Surfaces	583	1000sqft	13.4	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	132	1000sqft	3.00	0.00	0.00	—	—	—
City Park	9.00	Acre	9.00	0.00	0.00	0.00	—	—
Hotel	120	Room	0.60	174,240	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	5.00	1000sqft	0.40	5,000	13,196	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers
Construction	C-13	Use Low-VOC Paints for Construction

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.7	14.6	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	7,848	7,848	0.27	0.46	7.34	7,998
Mit.	8.34	8.30	6.60	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	7,848	7,848	0.27	0.46	7.34	7,998
% Reduced	43%	43%	70%	-36%	—	85%	—	4%	83%	—	7%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	14.7	14.6	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	7,607	7,607	0.27	0.46	0.19	7,750
Mit.	8.32	8.30	6.92	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	7,607	7,607	0.27	0.46	0.19	7,750
% Reduced	43%	43%	69%	-37%	—	85%	—	4%	83%	—	7%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	10.9	10.9	17.8	22.5	0.05	0.73	12.2	13.0	0.67	5.76	6.44	—	6,467	6,467	0.21	0.40	2.31	6,592
Mit.	6.21	6.18	5.67	27.9	0.05	0.11	12.2	12.4	0.11	5.76	5.87	—	6,467	6,467	0.21	0.40	2.31	6,592
% Reduced	43%	43%	68%	-24%	—	85%	—	5%	84%	—	9%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.99	1.99	3.26	4.11	0.01	0.13	2.23	2.37	0.12	1.05	1.18	—	1,071	1,071	0.03	0.07	0.38	1,091
Mit.	1.13	1.13	1.03	5.10	0.01	0.02	2.23	2.25	0.02	1.05	1.07	—	1,071	1,071	0.03	0.07	0.38	1,091
% Reduced	43%	43%	68%	-24%	—	85%	—	5%	84%	—	9%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	3.02	2.55	18.6	25.8	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	7,848	7,848	0.27	0.46	7.34	7,998
2034	1.92	1.69	11.0	23.4	0.05	0.22	3.64	3.86	0.20	0.89	1.10	—	7,728	7,728	0.17	0.46	6.25	7,877
2035	1.89	1.67	10.8	22.9	0.05	0.20	3.64	3.85	0.19	0.89	1.09	—	7,617	7,617	0.17	0.44	5.29	7,758
2036	1.84	1.62	10.5	22.4	0.05	0.19	3.64	3.84	0.18	0.89	1.08	—	7,517	7,517	0.17	0.44	4.43	7,657
2037	1.79	1.57	10.2	22.0	0.05	0.18	3.64	3.83	0.17	0.89	1.06	—	7,429	7,429	0.17	0.44	3.68	7,568
2038	1.76	1.54	10.0	21.8	0.05	0.18	3.64	3.82	0.16	0.89	1.06	—	7,340	7,340	0.17	0.41	3.04	7,471
2039	1.72	1.42	9.84	21.5	0.05	0.17	3.64	3.82	0.16	0.89	1.05	—	7,271	7,271	0.16	0.41	2.49	7,401
2040	1.68	1.39	9.73	21.2	0.05	0.17	3.64	3.81	0.16	0.89	1.05	—	7,208	7,208	0.16	0.41	2.03	7,338
2041	1.66	1.37	9.61	21.1	0.05	0.16	3.64	3.81	0.15	0.89	1.05	—	7,153	7,153	0.16	0.41	1.65	7,282
2042	1.64	1.34	9.53	20.9	0.05	0.16	3.64	3.80	0.15	0.89	1.04	—	7,104	7,104	0.16	0.39	1.33	7,225
2043	1.61	1.31	9.44	20.8	0.05	0.15	3.64	3.80	0.14	0.89	1.04	—	7,062	7,062	0.16	0.39	1.07	7,182
2044	1.56	1.29	9.34	20.6	0.05	0.15	3.64	3.79	0.14	0.89	1.03	—	7,025	7,025	0.16	0.38	0.86	7,143
2045	0.80	0.71	5.08	10.1	0.01	0.08	0.13	0.20	0.07	0.03	0.10	—	1,621	1,621	0.06	0.01	0.02	1,627
2046	14.7	14.6	0.80	2.54	< 0.005	< 0.005	0.54	0.54	< 0.005	0.13	0.13	—	604	604	0.01	< 0.005	0.08	605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,744	6,744	0.27	0.05	0.01	6,767
2033	3.02	2.55	18.6	25.7	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	7,607	7,607	0.27	0.46	0.19	7,750
2034	1.87	1.65	11.4	21.3	0.05	0.22	3.64	3.86	0.20	0.89	1.10	—	7,490	7,490	0.18	0.46	0.16	7,633
2035	1.84	1.62	11.1	20.9	0.05	0.20	3.64	3.85	0.19	0.89	1.09	—	7,382	7,382	0.18	0.44	0.14	7,517
2036	1.81	1.59	10.7	20.5	0.05	0.19	3.64	3.84	0.18	0.89	1.08	—	7,285	7,285	0.17	0.44	0.11	7,420
2037	1.76	1.54	10.5	20.1	0.05	0.18	3.64	3.83	0.17	0.89	1.06	—	7,198	7,198	0.17	0.44	0.10	7,334
2038	1.72	1.42	10.3	19.8	0.05	0.18	3.64	3.82	0.16	0.89	1.06	—	7,112	7,112	0.17	0.41	0.08	7,240
2039	1.70	1.40	10.1	19.6	0.05	0.17	3.64	3.82	0.16	0.89	1.05	—	7,044	7,044	0.17	0.41	0.06	7,172
2040	1.66	1.36	10.0	19.5	0.05	0.17	3.64	3.81	0.16	0.89	1.05	—	6,983	6,983	0.17	0.41	0.05	7,111

2041	1.63	1.33	9.92	19.3	0.05	0.16	3.64	3.81	0.15	0.89	1.05	—	6,929	6,929	0.16	0.41	0.04	7,057
2042	1.62	1.32	9.74	19.1	0.05	0.16	3.64	3.80	0.15	0.89	1.04	—	6,881	6,881	0.16	0.39	0.03	7,002
2043	1.60	1.31	9.65	19.0	0.05	0.15	3.64	3.80	0.14	0.89	1.04	—	6,840	6,840	0.16	0.39	0.03	6,960
2044	1.54	1.28	9.54	18.9	0.05	0.15	3.64	3.79	0.14	0.89	1.03	—	6,804	6,804	0.16	0.39	0.02	6,924
2045	1.44	1.26	9.48	18.8	0.05	0.14	3.64	3.79	0.14	0.89	1.03	—	6,773	6,773	0.16	0.39	0.02	6,893
2046	14.7	14.6	5.04	9.97	0.01	0.07	0.54	0.54	0.07	0.13	0.13	—	1,611	1,611	0.06	0.01	< 0.005	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	2.72	2.30	17.8	22.5	0.05	0.73	12.2	13.0	0.67	5.76	6.44	—	5,261	5,261	0.21	0.04	0.11	5,279
2033	2.25	1.92	13.8	20.9	0.05	0.48	6.28	6.75	0.44	2.31	2.75	—	6,062	6,062	0.20	0.17	1.03	6,119
2034	1.60	1.40	9.57	18.4	0.04	0.19	3.11	3.30	0.17	0.76	0.94	—	6,467	6,467	0.15	0.40	2.31	6,592
2035	1.58	1.38	9.34	18.1	0.04	0.18	3.11	3.29	0.16	0.76	0.93	—	6,374	6,374	0.15	0.38	1.96	6,492
2036	1.56	1.37	9.10	17.8	0.04	0.17	3.12	3.29	0.16	0.77	0.92	—	6,307	6,307	0.15	0.38	1.65	6,425
2037	1.51	1.32	8.90	17.4	0.04	0.16	3.11	3.27	0.15	0.76	0.91	—	6,216	6,216	0.15	0.38	1.36	6,333
2038	1.48	1.29	8.77	17.2	0.04	0.15	3.11	3.26	0.14	0.76	0.90	—	6,141	6,141	0.14	0.35	1.13	6,252
2039	1.45	1.19	8.61	17.0	0.04	0.15	3.11	3.26	0.14	0.76	0.90	—	6,083	6,083	0.14	0.35	0.92	6,193
2040	1.43	1.18	8.47	16.9	0.04	0.14	3.12	3.26	0.13	0.77	0.90	—	6,047	6,047	0.14	0.36	0.75	6,157
2041	1.40	1.15	8.35	16.7	0.04	0.14	3.11	3.25	0.13	0.76	0.89	—	5,984	5,984	0.14	0.35	0.61	6,094
2042	1.38	1.13	8.27	16.6	0.04	0.14	3.11	3.25	0.13	0.76	0.89	—	5,943	5,943	0.14	0.33	0.49	6,046
2043	1.37	1.11	8.20	16.5	0.04	0.13	3.11	3.24	0.12	0.76	0.89	—	5,907	5,907	0.14	0.33	0.40	6,010
2044	1.33	1.10	8.14	16.4	0.04	0.13	3.12	3.25	0.12	0.77	0.89	—	5,892	5,892	0.14	0.33	0.32	5,995
2045	0.83	0.72	5.18	10.3	0.02	0.08	0.78	0.86	0.07	0.19	0.26	—	2,386	2,386	0.07	0.08	0.06	2,413
2046	10.9	10.9	0.97	2.42	< 0.005	0.01	0.40	0.41	0.01	0.09	0.10	—	543	543	0.01	< 0.005	0.03	545
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.50	0.42	3.26	4.11	0.01	0.13	2.23	2.37	0.12	1.05	1.18	—	871	871	0.03	0.01	0.02	874
2033	0.41	0.35	2.51	3.81	0.01	0.09	1.15	1.23	0.08	0.42	0.50	—	1,004	1,004	0.03	0.03	0.17	1,013
2034	0.29	0.26	1.75	3.36	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,071	1,071	0.02	0.07	0.38	1,091
2035	0.29	0.25	1.70	3.30	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,055	1,055	0.02	0.06	0.32	1,075
2036	0.28	0.25	1.66	3.24	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,044	1,044	0.02	0.06	0.27	1,064

2037	0.28	0.24	1.62	3.18	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,029	1,029	0.02	0.06	0.23	1,049
2038	0.27	0.24	1.60	3.15	0.01	0.03	0.57	0.60	0.03	0.14	0.17	—	1,017	1,017	0.02	0.06	0.19	1,035
2039	0.27	0.22	1.57	3.10	0.01	0.03	0.57	0.59	0.02	0.14	0.16	—	1,007	1,007	0.02	0.06	0.15	1,025
2040	0.26	0.21	1.54	3.08	0.01	0.03	0.57	0.60	0.02	0.14	0.16	—	1,001	1,001	0.02	0.06	0.12	1,019
2041	0.25	0.21	1.52	3.05	0.01	0.03	0.57	0.59	0.02	0.14	0.16	—	991	991	0.02	0.06	0.10	1,009
2042	0.25	0.21	1.51	3.02	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	984	984	0.02	0.06	0.08	1,001
2043	0.25	0.20	1.50	3.01	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	978	978	0.02	0.06	0.07	995
2044	0.24	0.20	1.48	3.00	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	975	975	0.02	0.06	0.05	993
2045	0.15	0.13	0.95	1.88	< 0.005	0.01	0.14	0.16	0.01	0.03	0.05	—	395	395	0.01	0.01	0.01	400
2046	1.99	1.99	0.18	0.44	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	89.9	89.9	< 0.005	< 0.005	< 0.005	90.2

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	1.40	1.30	6.60	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	7,848	7,848	0.27	0.46	7.34	7,998
2034	1.35	1.24	6.46	25.5	0.05	0.10	3.64	3.75	0.10	0.89	1.00	—	7,728	7,728	0.17	0.46	6.25	7,877
2035	1.34	1.24	6.37	25.1	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,617	7,617	0.17	0.44	5.29	7,758
2036	1.31	1.20	6.29	24.7	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,517	7,517	0.17	0.44	4.43	7,657
2037	1.28	1.17	6.14	24.4	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,429	7,429	0.17	0.44	3.68	7,568
2038	1.25	1.15	6.06	24.2	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,340	7,340	0.17	0.41	3.04	7,471
2039	1.22	1.03	6.00	24.0	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,271	7,271	0.16	0.41	2.49	7,401
2040	1.18	1.00	5.96	23.8	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,208	7,208	0.16	0.41	2.03	7,338
2041	1.17	0.99	5.90	23.6	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,153	7,153	0.16	0.41	1.65	7,282
2042	1.15	0.96	5.86	23.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,104	7,104	0.16	0.39	1.33	7,225
2043	1.13	0.94	5.83	23.4	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,062	7,062	0.16	0.39	1.07	7,182

2044	1.09	0.93	5.79	23.3	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,025	7,025	0.16	0.38	0.86	7,143
2045	0.54	0.51	2.10	10.8	0.01	0.04	0.13	0.17	0.04	0.03	0.07	—	1,621	1,621	0.06	0.01	0.02	1,627
2046	8.34	8.30	0.80	2.54	< 0.005	< 0.005	0.54	0.54	< 0.005	0.13	0.13	—	604	604	0.01	< 0.005	0.08	605
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.81	0.78	4.72	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,744	6,744	0.27	0.05	0.01	6,767
2033	1.34	1.23	6.92	35.8	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	7,607	7,607	0.27	0.46	0.19	7,750
2034	1.31	1.20	6.81	23.4	0.05	0.10	3.64	3.75	0.10	0.89	1.00	—	7,490	7,490	0.18	0.46	0.16	7,633
2035	1.29	1.19	6.68	23.1	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,382	7,382	0.18	0.44	0.14	7,517
2036	1.28	1.17	6.52	22.8	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,285	7,285	0.17	0.44	0.11	7,420
2037	1.25	1.14	6.42	22.5	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,198	7,198	0.17	0.44	0.10	7,334
2038	1.21	1.02	6.35	22.3	0.05	0.10	3.64	3.75	0.10	0.89	0.99	—	7,112	7,112	0.17	0.41	0.08	7,240
2039	1.20	1.01	6.31	22.1	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	7,044	7,044	0.17	0.41	0.06	7,172
2040	1.16	0.97	6.25	22.0	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,983	6,983	0.17	0.41	0.05	7,111
2041	1.14	0.95	6.21	21.8	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,929	6,929	0.16	0.41	0.04	7,057
2042	1.13	0.95	6.07	21.7	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,881	6,881	0.16	0.39	0.03	7,002
2043	1.12	0.94	6.03	21.7	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,840	6,840	0.16	0.39	0.03	6,960
2044	1.07	0.92	6.00	21.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,804	6,804	0.16	0.39	0.02	6,924
2045	0.98	0.91	5.99	21.5	0.05	0.10	3.64	3.74	0.10	0.89	0.99	—	6,773	6,773	0.16	0.39	0.02	6,893
2046	8.32	8.30	2.10	10.7	0.01	0.04	0.54	0.54	0.04	0.13	0.13	—	1,611	1,611	0.06	0.01	< 0.005	1,616
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.59	0.58	3.20	27.9	0.05	0.11	12.2	12.4	0.10	5.76	5.87	—	5,261	5,261	0.21	0.04	0.11	5,279
2033	0.85	0.81	4.68	27.1	0.05	0.11	6.28	6.39	0.11	2.31	2.42	—	6,062	6,062	0.20	0.17	1.03	6,119
2034	1.11	1.02	5.67	20.2	0.04	0.09	3.11	3.20	0.09	0.76	0.85	—	6,467	6,467	0.15	0.40	2.31	6,592
2035	1.11	1.01	5.58	20.0	0.04	0.09	3.11	3.20	0.09	0.76	0.85	—	6,374	6,374	0.15	0.38	1.96	6,492
2036	1.10	1.01	5.51	19.8	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	6,307	6,307	0.15	0.38	1.65	6,425
2037	1.07	0.98	5.43	19.5	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,216	6,216	0.15	0.38	1.36	6,333

2038	1.04	0.95	5.37	19.3	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,141	6,141	0.14	0.35	1.13	6,252
2039	1.03	0.86	5.31	19.1	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	6,083	6,083	0.14	0.35	0.92	6,193
2040	1.00	0.85	5.22	19.1	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	6,047	6,047	0.14	0.36	0.75	6,157
2041	0.98	0.82	5.16	18.9	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,984	5,984	0.14	0.35	0.61	6,094
2042	0.97	0.81	5.13	18.8	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,943	5,943	0.14	0.33	0.49	6,046
2043	0.96	0.80	5.10	18.8	0.04	0.09	3.11	3.20	0.08	0.76	0.85	—	5,907	5,907	0.14	0.33	0.40	6,010
2044	0.93	0.79	5.08	18.7	0.04	0.09	3.12	3.21	0.08	0.77	0.85	—	5,892	5,892	0.14	0.33	0.32	5,995
2045	0.57	0.51	2.53	11.3	0.02	0.05	0.78	0.83	0.04	0.19	0.24	—	2,386	2,386	0.07	0.08	0.06	2,413
2046	6.21	6.18	0.75	2.47	< 0.005	0.01	0.40	0.41	0.01	0.09	0.10	—	543	543	0.01	< 0.005	0.03	545
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.11	0.10	0.58	5.10	0.01	0.02	2.23	2.25	0.02	1.05	1.07	—	871	871	0.03	0.01	0.02	874
2033	0.16	0.15	0.85	4.95	0.01	0.02	1.15	1.17	0.02	0.42	0.44	—	1,004	1,004	0.03	0.03	0.17	1,013
2034	0.20	0.19	1.03	3.69	0.01	0.02	0.57	0.58	0.02	0.14	0.16	—	1,071	1,071	0.02	0.07	0.38	1,091
2035	0.20	0.18	1.02	3.65	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,055	1,055	0.02	0.06	0.32	1,075
2036	0.20	0.18	1.01	3.60	0.01	0.02	0.57	0.59	0.02	0.14	0.16	—	1,044	1,044	0.02	0.06	0.27	1,064
2037	0.19	0.18	0.99	3.55	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,029	1,029	0.02	0.06	0.23	1,049
2038	0.19	0.17	0.98	3.53	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,017	1,017	0.02	0.06	0.19	1,035
2039	0.19	0.16	0.97	3.49	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	1,007	1,007	0.02	0.06	0.15	1,025
2040	0.18	0.15	0.95	3.48	0.01	0.02	0.57	0.59	0.02	0.14	0.15	—	1,001	1,001	0.02	0.06	0.12	1,019
2041	0.18	0.15	0.94	3.45	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	991	991	0.02	0.06	0.10	1,009
2042	0.18	0.15	0.94	3.43	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	984	984	0.02	0.06	0.08	1,001
2043	0.18	0.15	0.93	3.42	0.01	0.02	0.57	0.58	0.02	0.14	0.15	—	978	978	0.02	0.06	0.07	995
2044	0.17	0.14	0.93	3.42	0.01	0.02	0.57	0.59	0.02	0.14	0.15	—	975	975	0.02	0.06	0.05	993
2045	0.10	0.09	0.46	2.07	< 0.005	0.01	0.14	0.15	0.01	0.03	0.04	—	395	395	0.01	0.01	0.01	400
2046	1.13	1.13	0.14	0.45	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	89.9	89.9	< 0.005	< 0.005	< 0.005	90.2

3. Construction Emissions Details

3.1. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.30	1.09	8.97	10.4	0.02	0.37	—	0.37	0.34	—	0.34	—	2,133	2,133	0.09	0.02	—	2,140

Dust From Material Movement	—	—	—	—	—	—	7.92	7.92	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.64	1.89	< 0.005	0.07	—	0.07	0.06	—	0.06	—	353	353	0.01	< 0.005	—	354
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	0.05	53.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.85	8.85	< 0.005	< 0.005	0.01	8.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.20	1.04	11.4	0.02	0.04	—	0.04	0.04	—	0.04	—	2,133	2,133	0.09	0.02	—	2,140
Dust From Material Movement	—	—	—	—	—	—	7.92	7.92	—	4.07	4.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.19	2.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	353	353	0.01	< 0.005	—	354
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.74	0.74	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	53.5	53.5	< 0.005	< 0.005	0.05	53.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.85	8.85	< 0.005	< 0.005	0.01	8.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	1.39	1.17	8.84	11.7	0.03	0.36	—	0.36	0.33	—	0.33	—	3,005	3,005	0.12	0.02	—	3,015
Dust From Material Movement	—	—	—	—	—	—	4.19	4.19	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.25	0.21	1.61	2.14	0.01	0.07	—	0.07	0.06	—	0.06	—	498	498	0.02	< 0.005	—	499
Dust From Material Movement	—	—	—	—	—	—	0.77	0.77	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	69.1	69.1	< 0.005	< 0.005	0.06	69.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.35	0.34	2.13	16.1	0.03	0.07	—	0.07	0.06	—	0.06	—	3,005	3,005	0.12	0.02	—	3,015
Dust From Material Movement	—	—	—	—	—	—	4.19	4.19	—	1.66	1.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.39	2.94	0.01	0.01	—	0.01	0.01	—	0.01	—	498	498	0.02	< 0.005	—	499
Dust From Material Movement	—	—	—	—	—	—	0.77	0.77	—	0.30	0.30	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	69.1	69.1	< 0.005	< 0.005	0.06	69.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	0.01	11.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.64	1.38	10.2	13.9	0.03	0.41	—	0.41	0.37	—	0.37	—	3,640	3,640	0.15	0.03	—	3,653
Dust From Material Movement	—	—	—	—	—	—	5.08	5.08	—	2.02	2.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	0.25	1.87	2.54	0.01	0.07	—	0.07	0.07	—	0.07	—	603	603	0.02	< 0.005	—	605

Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.6	82.6	< 0.005	< 0.005	0.06	82.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.01	13.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.40	2.58	19.5	0.03	0.08	—	0.08	0.08	—	0.08	—	3,640	3,640	0.15	0.03	—	3,653
Dust From Material Movement	—	—	—	—	—	—	5.08	5.08	—	2.02	2.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.47	3.56	0.01	0.01	—	0.01	0.01	—	0.01	—	603	603	0.02	< 0.005	—	605
Dust From Material Movement	—	—	—	—	—	—	0.93	0.93	—	0.37	0.37	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.02	0.28	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	82.6	82.6	< 0.005	< 0.005	0.06	82.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	13.7	13.7	< 0.005	< 0.005	0.01	13.7

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Building Construction (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.05	0.88	7.67	12.8	0.02	0.20	—	0.20	0.19	—	0.19	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	0.27	2.34	3.90	0.01	0.06	—	0.06	0.06	—	0.06	—	732	732	0.03	0.01	—	734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.06	0.05	0.43	0.71	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	< 0.005	< 0.005	—	122
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.81	0.79	0.40	9.88	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,577	2,577	0.04	0.02	4.21	2,588
Vendor	0.13	0.08	3.23	1.17	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,875	2,875	0.04	0.42	3.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.74	0.52	7.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,332	2,332	0.04	0.02	0.11	2,339
Vendor	0.12	0.07	3.43	1.20	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,878	2,878	0.04	0.42	0.08	3,006
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.15	2.44	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	729	729	0.01	0.01	0.56	732
Vendor	0.04	0.02	1.03	0.36	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	878	878	0.01	0.13	0.41	917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.09	121
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	145	145	< 0.005	0.02	0.07	152
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.42	2.97	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.13	0.91	4.55	0.01	0.02	—	0.02	0.02	—	0.02	—	732	732	0.03	0.01	—	734
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.02	0.17	0.83	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	121	121	< 0.005	< 0.005	—	122
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.81	0.79	0.40	9.88	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,577	2,577	0.04	0.02	4.21	2,588
Vendor	0.13	0.08	3.23	1.17	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,875	2,875	0.04	0.42	3.13	3,005
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.74	0.52	7.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,332	2,332	0.04	0.02	0.11	2,339
Vendor	0.12	0.07	3.43	1.20	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,878	2,878	0.04	0.42	0.08	3,006
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.23	0.23	0.15	2.44	0.00	0.00	0.82	0.82	0.00	0.19	0.19	—	729	729	0.01	0.01	0.56	732
Vendor	0.04	0.02	1.03	0.36	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	878	878	0.01	0.13	0.41	917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	121	121	< 0.005	< 0.005	0.09	121
Vendor	0.01	< 0.005	0.19	0.07	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	145	145	< 0.005	0.02	0.07	152
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.88	0.74	6.45	10.9	0.02	0.16	—	0.16	0.15	—	0.15	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.14	1.18	2.00	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.75	0.39	9.46	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,544	2,544	0.03	0.02	3.63	2,555
Vendor	0.13	0.08	3.11	1.14	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,787	2,787	0.04	0.42	2.63	2,917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.72	0.71	0.51	7.32	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,303	2,303	0.04	0.02	0.09	2,310
Vendor	0.12	0.07	3.34	1.18	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,790	2,790	0.04	0.42	0.07	2,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.60	0.35	6.46	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,023	2,023	0.03	0.02	1.34	2,030
Vendor	0.11	0.06	2.78	0.99	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,390	2,390	0.04	0.36	0.97	2,500
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.18	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	335	335	< 0.005	< 0.005	0.22	336
Vendor	0.02	0.01	0.51	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	396	396	0.01	0.06	0.16	414
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.54	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.76	0.75	0.39	9.46	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,544	2,544	0.03	0.02	3.63	2,555
Vendor	0.13	0.08	3.11	1.14	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,787	2,787	0.04	0.42	2.63	2,917
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.51	7.32	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,303	2,303	0.04	0.02	0.09	2,310
Vendor	0.12	0.07	3.34	1.18	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,790	2,790	0.04	0.42	0.07	2,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.60	0.35	6.46	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,023	2,023	0.03	0.02	1.34	2,030
Vendor	0.11	0.06	2.78	0.99	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,390	2,390	0.04	0.36	0.97	2,500
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.18	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	335	335	< 0.005	< 0.005	0.22	336
Vendor	0.02	0.01	0.51	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	396	396	0.01	0.06	0.16	414
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.39	9.05	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,516	2,516	0.03	0.02	3.11	2,526
Vendor	0.13	0.08	3.02	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,705	2,705	0.04	0.40	2.18	2,827
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.70	0.50	7.03	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,277	2,277	0.04	0.02	0.08	2,284
Vendor	0.12	0.07	3.22	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,708	2,708	0.04	0.40	0.06	2,828
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.59	0.35	6.24	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,000	2,000	0.03	0.02	1.15	2,007
Vendor	0.11	0.06	2.70	0.97	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,320	2,320	0.04	0.34	0.81	2,423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.11	0.11	0.06	1.14	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	331	331	< 0.005	< 0.005	0.19	332
Vendor	0.02	0.01	0.49	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	384	384	0.01	0.06	0.13	401
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.74	0.39	9.05	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,516	2,516	0.03	0.02	3.11	2,526
Vendor	0.13	0.08	3.02	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,705	2,705	0.04	0.40	2.18	2,827
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.70	0.50	7.03	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,277	2,277	0.04	0.02	0.08	2,284
Vendor	0.12	0.07	3.22	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,708	2,708	0.04	0.40	0.06	2,828
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.59	0.35	6.24	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	2,000	2,000	0.03	0.02	1.15	2,007
Vendor	0.11	0.06	2.70	0.97	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,320	2,320	0.04	0.34	0.81	2,423
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.14	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	331	331	< 0.005	< 0.005	0.19	332
Vendor	0.02	0.01	0.49	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	384	384	0.01	0.06	0.13	401
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.38	8.65	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,490	2,490	0.03	0.02	2.64	2,500
Vendor	0.13	0.08	2.96	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,631	2,631	0.04	0.40	1.79	2,752
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.68	0.41	6.76	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,254	2,254	0.04	0.02	0.07	2,261
Vendor	0.12	0.07	3.16	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,634	2,634	0.04	0.40	0.05	2,754
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.34	5.96	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,985	1,985	0.03	0.02	0.98	1,992
Vendor	0.11	0.06	2.64	0.97	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,262	2,262	0.04	0.34	0.66	2,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.09	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	329	329	0.01	< 0.005	0.16	330
Vendor	0.02	0.01	0.48	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	375	375	0.01	0.06	0.11	392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.72	0.71	0.38	8.65	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,490	2,490	0.03	0.02	2.64	2,500
Vendor	0.13	0.08	2.96	1.11	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,631	2,631	0.04	0.40	1.79	2,752
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.70	0.68	0.41	6.76	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,254	2,254	0.04	0.02	0.07	2,261
Vendor	0.12	0.07	3.16	1.15	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,634	2,634	0.04	0.40	0.05	2,754
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.59	0.34	5.96	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,985	1,985	0.03	0.02	0.98	1,992
Vendor	0.11	0.06	2.64	0.97	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,262	2,262	0.04	0.34	0.66	2,366
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.11	0.06	1.09	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	329	329	0.01	< 0.005	0.16	330
Vendor	0.02	0.01	0.48	0.18	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	375	375	0.01	0.06	0.11	392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.67	0.30	8.42	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,467	2,467	0.03	0.02	2.24	2,477
Vendor	0.13	0.08	2.89	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,565	2,565	0.04	0.40	1.44	2,686
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.41	6.50	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,233	2,233	0.04	0.02	0.06	2,241
Vendor	0.12	0.07	3.07	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,568	2,568	0.04	0.40	0.04	2,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.57	0.55	0.34	5.74	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,962	1,962	0.03	0.02	0.83	1,969
Vendor	0.11	0.06	2.57	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,200	2,200	0.04	0.34	0.53	2,303
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.05	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	325	325	< 0.005	< 0.005	0.14	326
Vendor	0.02	0.01	0.47	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	364	364	0.01	0.06	0.09	381
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.69	0.67	0.30	8.42	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,467	2,467	0.03	0.02	2.24	2,477
Vendor	0.13	0.08	2.89	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,565	2,565	0.04	0.40	1.44	2,686
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.41	6.50	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,233	2,233	0.04	0.02	0.06	2,241
Vendor	0.12	0.07	3.07	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,568	2,568	0.04	0.40	0.04	2,688
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.55	0.34	5.74	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,962	1,962	0.03	0.02	0.83	1,969
Vendor	0.11	0.06	2.57	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,200	2,200	0.04	0.34	0.53	2,303
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.05	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	325	325	< 0.005	< 0.005	0.14	326
Vendor	0.02	0.01	0.47	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	364	364	0.01	0.06	0.09	381

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.29	8.21	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,438	2,438	0.03	0.02	1.89	2,447
Vendor	0.13	0.08	2.83	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,505	2,505	0.04	0.37	1.15	2,619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.41	6.26	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,207	2,207	0.04	0.02	0.05	2,214
Vendor	0.12	0.07	3.01	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,509	2,509	0.04	0.37	0.03	2,621
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.34	5.62	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,938	1,938	0.02	0.02	0.70	1,945
Vendor	0.11	0.06	2.52	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,149	2,149	0.04	0.32	0.43	2,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.03	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	321	321	< 0.005	< 0.005	0.12	322
Vendor	0.02	0.01	0.46	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	356	356	0.01	0.05	0.07	372
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.67	0.65	0.29	8.21	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,438	2,438	0.03	0.02	1.89	2,447
Vendor	0.13	0.08	2.83	1.09	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,505	2,505	0.04	0.37	1.15	2,619
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.41	6.26	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,207	2,207	0.04	0.02	0.05	2,214
Vendor	0.12	0.07	3.01	1.12	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,509	2,509	0.04	0.37	0.03	2,621
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.53	0.34	5.62	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,938	1,938	0.02	0.02	0.70	1,945
Vendor	0.11	0.06	2.52	0.95	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,149	2,149	0.04	0.32	0.43	2,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.10	0.06	1.03	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	321	321	< 0.005	< 0.005	0.12	322
Vendor	0.02	0.01	0.46	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	356	356	0.01	0.05	0.07	372
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	5.81	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.06	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.29	7.99	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,421	2,421	0.03	0.02	1.58	2,430
Vendor	0.13	0.08	2.77	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,453	2,453	0.04	0.37	0.91	2,566
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.52	0.40	6.11	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,191	2,191	0.04	0.02	0.04	2,198
Vendor	0.12	0.07	2.97	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,456	2,456	0.04	0.37	0.02	2,568
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.44	0.33	5.43	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,925	1,925	0.02	0.02	0.59	1,931
Vendor	0.11	0.06	2.47	0.92	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,103	2,103	0.03	0.32	0.34	2,200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	0.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	319	319	< 0.005	< 0.005	0.10	320
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	348	348	0.01	0.05	0.06	364
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.63	0.53	0.29	7.99	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,421	2,421	0.03	0.02	1.58	2,430
Vendor	0.13	0.08	2.77	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,453	2,453	0.04	0.37	0.91	2,566
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.52	0.40	6.11	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,191	2,191	0.04	0.02	0.04	2,198
Vendor	0.12	0.07	2.97	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,456	2,456	0.04	0.37	0.02	2,568
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.52	0.44	0.33	5.43	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,925	1,925	0.02	0.02	0.59	1,931
Vendor	0.11	0.06	2.47	0.92	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,103	2,103	0.03	0.32	0.34	2,200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	0.99	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	319	319	< 0.005	< 0.005	0.10	320
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	348	348	0.01	0.05	0.06	364
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.51	0.29	7.79	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,406	2,406	0.02	0.02	1.32	2,414
Vendor	0.13	0.08	2.74	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,405	2,405	0.04	0.37	0.71	2,518
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.40	5.97	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,178	2,178	0.04	0.02	0.03	2,185
Vendor	0.12	0.07	2.92	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,409	2,409	0.04	0.37	0.02	2,521
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.26	5.33	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,918	1,918	0.02	0.02	0.49	1,925
Vendor	0.11	0.07	2.44	0.93	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,068	2,068	0.03	0.32	0.26	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.97	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	318	318	< 0.005	< 0.005	0.08	319
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	342	342	0.01	0.05	0.04	358

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.60	0.51	0.29	7.79	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,406	2,406	0.02	0.02	1.32	2,414
Vendor	0.13	0.08	2.74	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,405	2,405	0.04	0.37	0.71	2,518
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.40	5.97	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,178	2,178	0.04	0.02	0.03	2,185
Vendor	0.12	0.07	2.92	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,409	2,409	0.04	0.37	0.02	2,521
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.42	0.26	5.33	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,918	1,918	0.02	0.02	0.49	1,925
Vendor	0.11	0.07	2.44	0.93	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	2,068	2,068	0.03	0.32	0.26	2,165
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.05	0.97	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	318	318	< 0.005	< 0.005	0.08	319
Vendor	0.02	0.01	0.45	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	342	342	0.01	0.05	0.04	358
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.29	7.67	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,394	2,394	0.02	0.02	1.10	2,401
Vendor	0.13	0.08	2.68	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,363	2,363	0.04	0.37	0.55	2,476
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.39	5.84	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,166	2,166	0.03	0.02	0.03	2,173
Vendor	0.12	0.07	2.88	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,366	2,366	0.04	0.37	0.01	2,479
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.40	0.26	5.21	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,903	1,903	0.02	0.02	0.41	1,909
Vendor	0.11	0.07	2.39	0.93	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,026	2,026	0.03	0.32	0.20	2,123
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	0.95	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	315	315	< 0.005	< 0.005	0.07	316
Vendor	0.02	0.01	0.44	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	335	335	0.01	0.05	0.03	351
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.49	0.29	7.67	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,394	2,394	0.02	0.02	1.10	2,401
Vendor	0.13	0.08	2.68	1.06	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,363	2,363	0.04	0.37	0.55	2,476
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.39	5.84	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,166	2,166	0.03	0.02	0.03	2,173
Vendor	0.12	0.07	2.88	1.10	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,366	2,366	0.04	0.37	0.01	2,479
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.40	0.26	5.21	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,903	1,903	0.02	0.02	0.41	1,909
Vendor	0.11	0.07	2.39	0.93	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	2,026	2,026	0.03	0.32	0.20	2,123
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.05	0.95	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	315	315	< 0.005	< 0.005	0.07	316
Vendor	0.02	0.01	0.44	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	335	335	0.01	0.05	0.03	351
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.29	7.56	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,382	2,382	0.02	0.02	0.91	2,390
Vendor	0.13	0.08	2.64	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,325	2,325	0.04	0.35	0.42	2,430
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.31	5.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,156	2,156	0.03	0.02	0.02	2,163
Vendor	0.12	0.07	2.83	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,328	2,328	0.04	0.35	0.01	2,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.46	0.39	0.25	5.10	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,894	1,894	0.02	0.02	0.34	1,900
Vendor	0.11	0.07	2.36	0.90	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,994	1,994	0.03	0.30	0.16	2,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	314	314	< 0.005	< 0.005	0.06	315
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	330	330	0.01	0.05	0.03	345
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.29	7.56	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,382	2,382	0.02	0.02	0.91	2,390
Vendor	0.13	0.08	2.64	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,325	2,325	0.04	0.35	0.42	2,430
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.56	0.46	0.31	5.71	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,156	2,156	0.03	0.02	0.02	2,163
Vendor	0.12	0.07	2.83	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,328	2,328	0.04	0.35	0.01	2,433
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.39	0.25	5.10	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,894	1,894	0.02	0.02	0.34	1,900
Vendor	0.11	0.07	2.36	0.90	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,994	1,994	0.03	0.30	0.16	2,084
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	314	314	< 0.005	< 0.005	0.06	315
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	330	330	0.01	0.05	0.03	345

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.28	7.45	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,373	2,373	0.02	0.02	0.75	2,380
Vendor	0.13	0.08	2.61	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,292	2,292	0.04	0.35	0.32	2,397
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.31	5.68	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,148	2,148	0.03	0.02	0.02	2,155
Vendor	0.12	0.07	2.79	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,295	2,295	0.04	0.35	0.01	2,400
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.37	0.25	5.08	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,886	1,886	0.02	0.02	0.28	1,893
Vendor	0.11	0.07	2.33	0.91	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,966	1,966	0.03	0.30	0.12	2,056
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.05	313
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	325	325	0.01	0.05	0.02	340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.28	7.45	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,373	2,373	0.02	0.02	0.75	2,380
Vendor	0.13	0.08	2.61	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,292	2,292	0.04	0.35	0.32	2,397
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.54	0.45	0.31	5.68	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,148	2,148	0.03	0.02	0.02	2,155
Vendor	0.12	0.07	2.79	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,295	2,295	0.04	0.35	0.01	2,400
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.37	0.25	5.08	0.00	0.00	2.29	2.29	0.00	0.54	0.54	—	1,886	1,886	0.02	0.02	0.28	1,893
Vendor	0.11	0.07	2.33	0.91	0.02	0.02	0.82	0.84	0.02	0.23	0.25	—	1,966	1,966	0.03	0.30	0.12	2,056
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.93	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.05	313
Vendor	0.02	0.01	0.43	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	325	325	0.01	0.05	0.02	340
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.44	0.28	7.35	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,365	2,365	0.02	0.01	0.61	2,370
Vendor	0.10	0.08	2.58	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,263	2,263	0.04	0.35	0.24	2,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.30	5.57	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,140	2,140	0.03	0.02	0.02	2,147
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,267	2,267	0.04	0.35	0.01	2,371
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.45	0.37	0.25	5.00	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,885	1,885	0.02	0.02	0.23	1,892
Vendor	0.08	0.06	2.31	0.91	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	1,946	1,946	0.03	0.30	0.09	2,037
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.91	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.04	313
Vendor	0.02	0.01	0.42	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	322	322	0.01	0.05	0.02	337
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.53	0.44	0.28	7.35	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,365	2,365	0.02	0.01	0.61	2,370
Vendor	0.10	0.08	2.58	1.04	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,263	2,263	0.04	0.35	0.24	2,368
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.30	5.57	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,140	2,140	0.03	0.02	0.02	2,147
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,267	2,267	0.04	0.35	0.01	2,371
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.45	0.37	0.25	5.00	0.00	0.00	2.30	2.30	0.00	0.54	0.54	—	1,885	1,885	0.02	0.02	0.23	1,892
Vendor	0.08	0.06	2.31	0.91	0.02	0.02	0.82	0.85	0.02	0.23	0.25	—	1,946	1,946	0.03	0.30	0.09	2,037
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.05	0.91	0.00	0.00	0.42	0.42	0.00	0.10	0.10	—	312	312	< 0.005	< 0.005	0.04	313
Vendor	0.02	0.01	0.42	0.17	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.05	—	322	322	0.01	0.05	0.02	337
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	0.15	1.24	2.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	462	462	0.02	< 0.005	—	463
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.03	0.03	0.23	0.43	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.4	76.4	< 0.005	< 0.005	—	76.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.30	5.54	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,134	2,134	0.03	0.02	0.01	2,141
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,242	2,242	0.04	0.35	< 0.005	2,347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.12	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	421	421	< 0.005	< 0.005	0.04	423
Vendor	0.02	0.01	0.51	0.20	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	431	431	0.01	0.07	0.02	451
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	69.7	69.7	< 0.005	< 0.005	0.01	70.0
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	71.4	71.4	< 0.005	0.01	< 0.005	74.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.08	0.56	2.87	< 0.005	0.01	—	0.01	0.01	—	0.01	—	462	462	0.02	< 0.005	—	463
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.10	0.52	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	76.4	76.4	< 0.005	< 0.005	—	76.7
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.42	0.30	5.54	0.00	0.00	2.68	2.68	0.00	0.63	0.63	—	2,134	2,134	0.03	0.02	0.01	2,141
Vendor	0.09	0.07	2.76	1.08	0.03	0.03	0.96	0.99	0.03	0.27	0.29	—	2,242	2,242	0.04	0.35	< 0.005	2,347
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.10	0.08	0.06	1.12	0.00	0.00	0.51	0.51	0.00	0.12	0.12	—	421	421	< 0.005	< 0.005	0.04	423
Vendor	0.02	0.01	0.51	0.20	< 0.005	< 0.005	0.18	0.19	< 0.005	0.05	0.06	—	431	431	0.01	0.07	0.02	451
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.20	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	69.7	69.7	< 0.005	< 0.005	0.01	70.0
Vendor	< 0.005	< 0.005	0.09	0.04	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	71.4	71.4	< 0.005	0.01	< 0.005	74.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Paving (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	0.45	5.07	9.71	0.01	0.08	—	0.08	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.36	0.30	3.37	6.45	0.01	0.05	—	0.05	0.05	—	0.05	—	1,004	1,004	0.04	0.01	—	1,007
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.05	0.61	1.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	166	166	0.01	< 0.005	—	167
Paving	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	68.3	68.3	< 0.005	< 0.005	0.01	68.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	< 0.005	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.34. Paving (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.09	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.09	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.18	0.16	1.39	6.95	0.01	0.03	—	0.03	0.03	—	0.03	—	1,004	1,004	0.04	0.01	—	1,007
Paving	0.16	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.25	1.27	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	166	166	0.01	< 0.005	—	167
Paving	0.03	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.01	0.18	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	68.3	68.3	< 0.005	< 0.005	0.01	68.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	11.3	11.3	< 0.005	< 0.005	< 0.005	11.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Paving (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	0.45	5.02	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.38	0.73	< 0.005	0.01	—	0.01	0.01	—	0.01	—	114	114	< 0.005	< 0.005	—	114
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.01	0.07	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.9
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.70	7.70	< 0.005	< 0.005	< 0.005	7.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Paving (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.25	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.24	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.79	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	114	114	< 0.005	< 0.005	—	114
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.8	18.8	< 0.005	< 0.005	—	18.9
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	100	100	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.70	7.70	< 0.005	< 0.005	< 0.005	7.73
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.28	1.28	< 0.005	< 0.005	< 0.005	1.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Architectural Coating (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	14.5	14.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	14.5	14.5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Architectural Coatings	10.7	10.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.4	16.4	< 0.005	< 0.005	—	16.4
Architectural Coatings	1.95	1.95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.45	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	470	470	< 0.005	< 0.005	0.08	471
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.11	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	426	426	0.01	< 0.005	< 0.005	427
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.86	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	323	323	< 0.005	< 0.005	0.03	324
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	53.4	53.4	< 0.005	< 0.005	< 0.005	53.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.38. Architectural Coating (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	8.13	8.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.81	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	98.8	98.8	< 0.005	< 0.005	—	99.1
Architectural Coatings	6.01	6.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.4	16.4	< 0.005	< 0.005	—	16.4

Architect Coatings	1.10	1.10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	0.06	1.45	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	470	470	< 0.005	< 0.005	0.08	471
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.06	1.11	0.00	0.00	0.54	0.54	0.00	0.13	0.13	—	426	426	0.01	< 0.005	< 0.005	427
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.04	0.86	0.00	0.00	0.40	0.40	0.00	0.09	0.09	—	323	323	< 0.005	< 0.005	0.03	324
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.16	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	53.4	53.4	< 0.005	< 0.005	< 0.005	53.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation	Site Preparation	1/1/2032	6/20/2032	6.00	147	—
Grading	Grading	6/21/2032	8/23/2033	6.00	368	—
Building Construction	Building Construction	8/24/2033	3/23/2045	6.00	3,626	—
Paving	Paving	3/24/2045	2/1/2046	6.00	270	—
Architectural Coating	Architectural Coating	2/2/2046	12/13/2046	6.00	270	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29

Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	319	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	126	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2

Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	63.9	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	319	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	126	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2

Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	63.9	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	1,153,860	384,620	73,487

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	221	0.00	—
Grading	—	—	1,104	0.00	—
Paving	0.00	0.00	0.00	0.00	28.1

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Industrial Park	0.00	0%
Parking Lot	11.7	100%
Other Asphalt Surfaces	13.4	100%
Other Non-Asphalt Surfaces	3.00	0%
City Park	0.00	0%
Hotel	0.00	0%
Gasoline/Service Station	0.00	0%
Convenience Market (24 hour)	0.00	0%
Fast Food Restaurant with Drive Thru	0.00	0%
High Turnover (Sit Down Restaurant)	0.00	0%
Fast Food Restaurant w/o Drive Thru	0.00	0%
Bank (with Drive-Through)	0.00	0%
Strip Mall	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005

2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3

Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528

Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0

Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

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5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.1.2. Mitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

5.18.2.2. Mitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (University Center Development Area Construction)
Construction Start Date	1/1/2032
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
Strip Mall	38.9	1000sqft	1.80	38,900	39,795	—	—	—

Parking Lot	334	1000sqft	7.70	0.00	0.00	—	—	—
University/College (4yr)	4,600	Student	35.9	1,354,200	1,126,852	1,126,852	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Other Asphalt Surfaces	335	1000sqft	7.70	0.00	0.00	—	—	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Other Non-Asphalt Surfaces	454	1000sqft	10.4	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	56.5	56.4	22.3	73.6	0.12	0.93	19.8	20.7	0.85	10.1	11.0	—	28,048	28,048	0.42	1.73	31.5	28,606
Mit.	56.5	56.4	17.0	75.8	0.12	0.17	19.8	19.9	0.17	10.1	10.2	—	28,048	28,048	0.42	1.73	31.5	28,606
% Reduced	—	—	24%	-3%	—	81%	—	4%	80%	—	7%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	56.4	56.4	23.1	61.0	0.12	0.93	19.8	20.7	0.85	10.1	11.0	—	26,615	26,615	0.51	1.73	0.82	27,145
Mit.	56.4	56.4	18.5	63.1	0.12	0.17	19.8	19.9	0.17	10.1	10.2	—	26,615	26,615	0.51	1.73	0.82	27,145
% Reduced	—	—	20%	-4%	—	81%	—	4%	80%	—	7%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	45.4	45.4	18.9	52.8	0.10	0.72	16.8	17.0	0.66	5.56	6.21	—	22,814	22,814	0.40	1.46	11.5	23,271
Mit.	45.4	45.4	14.8	54.8	0.10	0.15	16.8	17.0	0.15	5.56	5.65	—	22,814	22,814	0.40	1.46	11.5	23,271
% Reduced	—	—	21%	-4%	—	79%	—	< 0.5%	78%	—	9%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.29	8.28	3.44	9.64	0.02	0.13	3.07	3.11	0.12	1.01	1.13	—	3,777	3,777	0.07	0.24	1.90	3,853
Mit.	8.29	8.28	2.71	9.99	0.02	0.03	3.07	3.10	0.03	1.01	1.03	—	3,777	3,777	0.07	0.24	1.90	3,853
% Reduced	—	—	21%	-4%	—	79%	—	< 0.5%	78%	—	9%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.4	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	3.02	2.55	18.6	25.8	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	6,758	6,758	0.27	0.05	0.26	6,781
2034	6.05	5.62	21.5	73.6	0.12	0.29	19.6	19.9	0.27	4.76	5.03	—	28,048	28,048	0.42	1.73	31.5	28,606
2035	5.95	5.57	21.0	71.0	0.12	0.27	19.6	19.9	0.26	4.76	5.02	—	27,568	27,568	0.42	1.64	26.8	28,094
2036	5.80	5.37	20.5	68.5	0.12	0.26	19.6	19.9	0.25	4.76	5.01	—	27,137	27,137	0.42	1.64	22.5	27,658
2037	5.57	5.15	19.6	66.9	0.12	0.25	19.6	19.9	0.24	4.76	5.00	—	26,756	26,756	0.42	1.64	18.8	27,274
2038	5.44	5.02	19.3	65.6	0.12	0.25	19.6	19.9	0.23	4.76	4.99	—	26,359	26,359	0.42	1.54	15.6	26,845

2039	5.22	4.30	18.9	64.2	0.12	0.24	19.6	19.9	0.23	4.76	4.98	—	26,059	26,059	0.41	1.54	12.9	26,542
2040	5.00	4.13	18.7	62.9	0.12	0.24	19.6	19.9	0.22	4.76	4.98	—	25,793	25,793	0.37	1.54	10.5	26,273
2041	4.91	4.05	18.4	62.2	0.12	0.23	19.6	19.9	0.22	4.76	4.98	—	25,558	25,558	0.37	1.54	8.62	26,036
2042	4.78	3.87	18.2	61.5	0.12	0.23	19.6	19.9	0.22	4.76	4.97	—	25,350	25,350	0.37	1.45	7.01	25,798
2043	4.65	3.77	18.0	60.7	0.12	0.22	19.6	19.9	0.21	4.76	4.97	—	25,169	25,169	0.37	1.45	5.67	25,616
2044	4.49	3.68	17.8	60.1	0.12	0.22	19.6	19.9	0.21	4.76	4.96	—	25,014	25,014	0.37	1.41	4.58	25,447
2045	4.40	3.63	17.6	60.0	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	24,879	24,879	0.37	1.41	3.69	25,312
2046	4.35	3.59	17.6	59.4	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	24,764	24,764	0.37	1.41	2.96	25,195
2047	0.70	0.61	5.02	10.0	0.01	0.07	0.13	0.20	0.07	0.03	0.09	—	1,621	1,621	0.06	0.01	0.02	1,626
2048	56.5	56.4	1.07	9.74	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,937	2,937	0.03	0.02	0.34	2,944
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	3.26	2.75	22.3	26.3	0.06	0.93	19.8	20.7	0.85	10.1	11.0	—	6,744	6,744	0.27	0.11	0.03	6,767
2033	3.02	2.55	18.6	25.7	0.06	0.73	9.37	10.1	0.68	3.69	4.37	—	6,742	6,742	0.27	0.05	0.01	6,765
2034	5.80	5.38	23.1	61.0	0.12	0.68	19.6	19.9	0.62	4.76	5.03	—	26,615	26,615	0.51	1.73	0.82	27,145
2035	5.70	5.28	22.4	59.1	0.12	0.27	19.6	19.9	0.26	4.76	5.02	—	26,152	26,152	0.51	1.64	0.69	26,654
2036	5.60	5.18	21.4	57.3	0.12	0.26	19.6	19.9	0.25	4.76	5.01	—	25,736	25,736	0.46	1.64	0.58	26,237
2037	5.41	5.00	20.9	55.6	0.12	0.25	19.6	19.9	0.24	4.76	5.00	—	25,368	25,368	0.46	1.64	0.49	25,869
2038	5.19	4.28	20.6	54.1	0.12	0.25	19.6	19.9	0.23	4.76	4.99	—	24,986	24,986	0.45	1.54	0.40	25,458
2039	5.10	4.19	20.3	53.1	0.12	0.24	19.6	19.9	0.23	4.76	4.98	—	24,696	24,696	0.45	1.54	0.33	25,168
2040	4.88	3.98	20.0	52.2	0.12	0.24	19.6	19.9	0.22	4.76	4.98	—	24,439	24,439	0.45	1.54	0.27	24,911
2041	4.75	3.85	19.8	51.4	0.12	0.23	19.6	19.9	0.22	4.76	4.98	—	24,211	24,211	0.41	1.54	0.22	24,682
2042	4.71	3.80	19.0	50.5	0.12	0.23	19.6	19.9	0.22	4.76	4.97	—	24,010	24,010	0.41	1.45	0.18	24,452
2043	4.62	3.75	18.8	50.3	0.12	0.22	19.6	19.9	0.21	4.76	4.97	—	23,834	23,834	0.41	1.45	0.15	24,277
2044	4.39	3.62	18.6	49.5	0.12	0.22	19.6	19.9	0.21	4.76	4.96	—	23,684	23,684	0.41	1.45	0.12	24,126
2045	3.84	3.56	18.5	49.3	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,553	23,553	0.41	1.45	0.10	23,996
2046	3.79	3.48	18.4	49.2	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,441	23,441	0.41	1.45	0.08	23,883
2047	56.4	56.4	18.2	49.0	0.12	0.21	19.6	19.9	0.20	4.76	4.96	—	23,345	23,345	0.41	1.45	0.06	23,788

2048	56.4	56.4	1.10	7.68	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,671	2,671	0.04	0.03	0.01	2,680
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	2.62	2.21	17.6	21.2	0.04	0.72	11.5	12.2	0.66	5.56	6.21	—	4,792	4,792	0.19	0.05	0.15	4,812
2033	2.59	2.18	15.9	22.1	0.05	0.63	8.03	8.66	0.58	3.17	3.74	—	5,782	5,782	0.23	0.05	0.10	5,802
2034	4.88	4.51	18.9	52.8	0.10	0.25	16.6	16.9	0.24	4.04	4.28	—	22,814	22,814	0.40	1.46	11.5	23,271
2035	4.90	4.50	18.5	51.8	0.10	0.24	16.8	17.0	0.22	4.06	4.28	—	22,699	22,699	0.40	1.40	9.89	23,138
2036	4.83	4.46	18.0	50.1	0.10	0.23	16.8	17.0	0.21	4.07	4.28	—	22,401	22,401	0.40	1.41	8.36	22,839
2037	4.62	4.26	17.6	48.6	0.10	0.22	16.8	17.0	0.21	4.06	4.26	—	22,021	22,021	0.40	1.40	6.96	22,457
2038	4.47	4.11	17.4	47.8	0.10	0.21	16.8	17.0	0.20	4.06	4.26	—	21,691	21,691	0.36	1.32	5.79	22,100
2039	4.35	3.57	17.0	46.6	0.10	0.21	16.8	17.0	0.20	4.06	4.25	—	21,440	21,440	0.35	1.32	4.77	21,848
2040	4.22	3.47	16.5	46.0	0.10	0.20	16.8	17.0	0.19	4.07	4.26	—	21,276	21,276	0.35	1.33	3.92	21,685
2041	4.06	3.31	16.2	45.2	0.10	0.20	16.8	17.0	0.19	4.06	4.25	—	21,022	21,022	0.35	1.32	3.19	21,428
2042	3.98	3.24	16.0	44.5	0.10	0.20	16.8	17.0	0.19	4.06	4.25	—	20,848	20,848	0.35	1.24	2.59	21,229
2043	3.94	3.16	15.9	44.3	0.10	0.19	16.8	17.0	0.18	4.06	4.24	—	20,696	20,696	0.35	1.24	2.10	21,077
2044	3.79	3.12	15.7	43.8	0.10	0.19	16.8	17.0	0.18	4.07	4.25	—	20,623	20,623	0.35	1.25	1.70	21,004
2045	3.73	3.03	15.5	43.6	0.10	0.18	16.8	17.0	0.18	4.06	4.23	—	20,454	20,454	0.32	1.24	1.36	20,833
2046	3.61	2.96	15.5	43.5	0.10	0.18	16.8	17.0	0.17	4.06	4.23	—	20,357	20,357	0.32	1.24	1.10	20,736
2047	1.79	1.72	4.30	8.77	0.01	0.06	0.31	0.37	0.06	0.07	0.13	—	1,559	1,559	0.05	0.02	0.02	1,567
2048	45.4	45.4	0.87	6.36	< 0.005	< 0.005	2.57	2.58	< 0.005	0.60	0.61	—	2,202	2,202	0.02	0.02	0.12	2,209
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.48	0.40	3.21	3.87	0.01	0.13	2.10	2.23	0.12	1.01	1.13	—	793	793	0.03	0.01	0.03	797
2033	0.47	0.40	2.90	4.02	0.01	0.11	1.47	1.58	0.11	0.58	0.68	—	957	957	0.04	0.01	0.02	961
2034	0.89	0.82	3.44	9.64	0.02	0.05	3.03	3.08	0.04	0.74	0.78	—	3,777	3,777	0.07	0.24	1.90	3,853
2035	0.89	0.82	3.37	9.46	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,758	3,758	0.07	0.23	1.64	3,831
2036	0.88	0.81	3.29	9.15	0.02	0.04	3.07	3.11	0.04	0.74	0.78	—	3,709	3,709	0.07	0.23	1.38	3,781
2037	0.84	0.78	3.22	8.87	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,646	3,646	0.07	0.23	1.15	3,718
2038	0.82	0.75	3.17	8.73	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,591	3,591	0.06	0.22	0.96	3,659
2039	0.79	0.65	3.11	8.50	0.02	0.04	3.06	3.10	0.04	0.74	0.78	—	3,550	3,550	0.06	0.22	0.79	3,617

2040	0.77	0.63	3.00	8.39	0.02	0.04	3.07	3.11	0.04	0.74	0.78	—	3,523	3,523	0.06	0.22	0.65	3,590
2041	0.74	0.60	2.95	8.25	0.02	0.04	3.06	3.10	0.03	0.74	0.78	—	3,480	3,480	0.06	0.22	0.53	3,548
2042	0.73	0.59	2.92	8.12	0.02	0.04	3.06	3.10	0.03	0.74	0.77	—	3,452	3,452	0.06	0.21	0.43	3,515
2043	0.72	0.58	2.89	8.08	0.02	0.04	3.06	3.10	0.03	0.74	0.77	—	3,426	3,426	0.06	0.21	0.35	3,490
2044	0.69	0.57	2.87	8.00	0.02	0.03	3.07	3.10	0.03	0.74	0.78	—	3,414	3,414	0.06	0.21	0.28	3,478
2045	0.68	0.55	2.83	7.96	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,386	3,386	0.05	0.21	0.23	3,449
2046	0.66	0.54	2.82	7.94	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,370	3,370	0.05	0.21	0.18	3,433
2047	0.33	0.31	0.78	1.60	< 0.005	0.01	0.06	0.07	0.01	0.01	0.02	—	258	258	0.01	< 0.005	< 0.005	259
2048	8.29	8.28	0.16	1.16	< 0.005	< 0.005	0.47	0.47	< 0.005	0.11	0.11	—	365	365	< 0.005	< 0.005	0.02	366

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.82	0.79	4.71	36.0	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,760	6,760	0.27	0.05	0.30	6,783
2033	0.81	0.78	4.70	36.0	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,758	6,758	0.27	0.05	0.26	6,781
2034	5.49	5.18	17.0	75.8	0.12	0.17	19.6	19.8	0.17	4.76	4.93	—	28,048	28,048	0.42	1.73	31.5	28,606
2035	5.40	5.14	16.6	73.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	27,568	27,568	0.42	1.64	26.8	28,094
2036	5.27	4.96	16.3	70.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	27,137	27,137	0.42	1.64	22.5	27,658
2037	5.05	4.75	15.6	69.4	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,756	26,756	0.42	1.64	18.8	27,274
2038	4.93	4.62	15.3	68.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,359	26,359	0.42	1.54	15.6	26,845
2039	4.72	3.91	15.1	66.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,059	26,059	0.41	1.54	12.9	26,542
2040	4.51	3.75	14.9	65.5	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,793	25,793	0.37	1.54	10.5	26,273
2041	4.42	3.67	14.7	64.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,558	25,558	0.37	1.54	8.62	26,036
2042	4.30	3.50	14.5	64.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,350	25,350	0.37	1.45	7.01	25,798
2043	4.17	3.40	14.4	63.4	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,169	25,169	0.37	1.45	5.67	25,616
2044	4.02	3.32	14.3	62.8	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,014	25,014	0.37	1.41	4.58	25,447

2045	3.94	3.28	14.1	62.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,879	24,879	0.37	1.41	3.69	25,312
2046	3.90	3.23	14.1	62.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,764	24,764	0.37	1.41	2.96	25,195
2047	0.44	0.41	2.09	10.8	0.01	0.04	0.13	0.16	0.04	0.03	0.07	—	1,621	1,621	0.06	0.01	0.02	1,626
2048	56.5	56.4	1.07	9.74	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,937	2,937	0.03	0.02	0.34	2,944
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.81	0.78	5.75	35.9	0.06	0.14	19.8	19.9	0.14	10.1	10.2	—	6,744	6,744	0.27	0.11	0.03	6,767
2033	0.80	0.78	4.71	35.8	0.06	0.14	9.37	9.51	0.14	3.69	3.83	—	6,742	6,742	0.27	0.05	0.01	6,765
2034	5.24	4.94	18.5	63.1	0.12	0.17	19.6	19.8	0.17	4.76	4.93	—	26,615	26,615	0.51	1.73	0.82	27,145
2035	5.15	4.85	18.0	61.3	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	26,152	26,152	0.51	1.64	0.69	26,654
2036	5.07	4.77	17.2	59.6	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,736	25,736	0.46	1.64	0.58	26,237
2037	4.90	4.60	16.9	58.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	25,368	25,368	0.46	1.64	0.49	25,869
2038	4.69	3.89	16.6	56.5	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,986	24,986	0.45	1.54	0.40	25,458
2039	4.60	3.80	16.5	55.6	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,696	24,696	0.45	1.54	0.33	25,168
2040	4.39	3.59	16.2	54.7	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,439	24,439	0.45	1.54	0.27	24,911
2041	4.26	3.47	16.1	53.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,211	24,211	0.41	1.54	0.22	24,682
2042	4.22	3.42	15.4	53.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	24,010	24,010	0.41	1.45	0.18	24,452
2043	4.14	3.38	15.2	52.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,834	23,834	0.41	1.45	0.15	24,277
2044	3.92	3.26	15.1	52.2	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,684	23,684	0.41	1.45	0.12	24,126
2045	3.37	3.20	15.0	52.1	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,553	23,553	0.41	1.45	0.10	23,996
2046	3.33	3.13	14.9	52.0	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,441	23,441	0.41	1.45	0.08	23,883
2047	56.4	56.4	14.8	51.9	0.12	0.17	19.6	19.8	0.17	4.76	4.92	—	23,345	23,345	0.41	1.45	0.06	23,788
2048	56.4	56.4	1.10	7.68	< 0.005	< 0.005	3.21	3.21	< 0.005	0.75	0.76	—	2,671	2,671	0.04	0.03	0.01	2,680
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.56	0.54	3.25	25.0	0.04	0.10	11.5	11.6	0.10	5.56	5.65	—	4,792	4,792	0.19	0.05	0.15	4,812
2033	0.69	0.67	4.03	30.7	0.05	0.12	8.03	8.15	0.12	3.17	3.28	—	5,782	5,782	0.23	0.05	0.10	5,802
2034	4.37	4.11	14.8	54.8	0.10	0.15	16.6	16.8	0.15	4.04	4.19	—	22,814	22,814	0.40	1.46	11.5	23,271

2035	4.43	4.13	14.7	53.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	22,699	22,699	0.40	1.40	9.89	23,138
2036	4.37	4.11	14.5	52.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	22,401	22,401	0.40	1.41	8.36	22,839
2037	4.18	3.91	14.2	50.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	22,021	22,021	0.40	1.40	6.96	22,457
2038	4.03	3.77	14.0	49.9	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,691	21,691	0.36	1.32	5.79	22,100
2039	3.93	3.23	13.7	48.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,440	21,440	0.35	1.32	4.77	21,848
2040	3.79	3.14	13.2	48.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	21,276	21,276	0.35	1.33	3.92	21,685
2041	3.64	2.99	13.0	47.4	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	21,022	21,022	0.35	1.32	3.19	21,428
2042	3.56	2.92	12.9	46.7	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,848	20,848	0.35	1.24	2.59	21,229
2043	3.53	2.84	12.8	46.6	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,696	20,696	0.35	1.24	2.10	21,077
2044	3.38	2.81	12.7	46.1	0.10	0.15	16.8	17.0	0.14	4.07	4.21	—	20,623	20,623	0.35	1.25	1.70	21,004
2045	3.34	2.73	12.5	46.0	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,454	20,454	0.32	1.24	1.36	20,833
2046	3.22	2.66	12.5	45.9	0.10	0.15	16.8	16.9	0.14	4.06	4.20	—	20,357	20,357	0.32	1.24	1.10	20,736
2047	1.57	1.55	1.85	9.41	0.01	0.03	0.31	0.34	0.03	0.07	0.11	—	1,559	1,559	0.05	0.02	0.02	1,567
2048	45.4	45.4	0.87	6.36	< 0.005	< 0.005	2.57	2.58	< 0.005	0.60	0.61	—	2,202	2,202	0.02	0.02	0.12	2,209
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2032	0.10	0.10	0.59	4.57	0.01	0.02	2.10	2.12	0.02	1.01	1.03	—	793	793	0.03	0.01	0.03	797
2033	0.13	0.12	0.74	5.61	0.01	0.02	1.47	1.49	0.02	0.58	0.60	—	957	957	0.04	0.01	0.02	961
2034	0.80	0.75	2.71	9.99	0.02	0.03	3.03	3.06	0.03	0.74	0.76	—	3,777	3,777	0.07	0.24	1.90	3,853
2035	0.81	0.75	2.69	9.81	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,758	3,758	0.07	0.23	1.64	3,831
2036	0.80	0.75	2.64	9.51	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,709	3,709	0.07	0.23	1.38	3,781
2037	0.76	0.71	2.59	9.25	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,646	3,646	0.07	0.23	1.15	3,718
2038	0.74	0.69	2.55	9.11	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,591	3,591	0.06	0.22	0.96	3,659
2039	0.72	0.59	2.51	8.89	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,550	3,550	0.06	0.22	0.79	3,617
2040	0.69	0.57	2.41	8.79	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,523	3,523	0.06	0.22	0.65	3,590
2041	0.66	0.55	2.37	8.65	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,480	3,480	0.06	0.22	0.53	3,548
2042	0.65	0.53	2.35	8.52	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,452	3,452	0.06	0.21	0.43	3,515
2043	0.64	0.52	2.33	8.50	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,426	3,426	0.06	0.21	0.35	3,490
2044	0.62	0.51	2.31	8.42	0.02	0.03	3.07	3.10	0.03	0.74	0.77	—	3,414	3,414	0.06	0.21	0.28	3,478

2045	0.61	0.50	2.28	8.39	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,386	3,386	0.05	0.21	0.23	3,449
2046	0.59	0.48	2.28	8.37	0.02	0.03	3.06	3.09	0.03	0.74	0.77	—	3,370	3,370	0.05	0.21	0.18	3,433
2047	0.29	0.28	0.34	1.72	< 0.005	0.01	0.06	0.06	0.01	0.01	0.02	—	258	258	0.01	< 0.005	< 0.005	259
2048	8.29	8.28	0.16	1.16	< 0.005	< 0.005	0.47	0.47	< 0.005	0.11	0.11	—	365	365	< 0.005	< 0.005	0.02	366

3. Construction Emissions Details

3.1. Demolition (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.28	1.92	16.2	16.9	0.03	0.62	—	0.62	0.57	—	0.57	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.78	0.78	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	0.29	2.45	2.54	< 0.005	0.09	—	0.09	0.09	—	0.09	—	516	516	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.45	0.46	< 0.005	0.02	—	0.02	0.02	—	0.02	—	85.5	85.5	< 0.005	< 0.005	—	85.8
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.01	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.65	0.16	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	512	512	0.01	0.08	0.02	536
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.01	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	77.1	77.1	< 0.005	0.01	0.05	80.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.01	13.4

3.2. Demolition (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	0.61	5.07	18.3	0.03	0.10	—	0.10	0.10	—	0.10	—	3,426	3,426	0.14	0.03	—	3,438
Demolition	—	—	—	—	—	—	0.78	0.78	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.09	0.76	2.75	< 0.005	0.02	—	0.02	0.01	—	0.01	—	516	516	0.02	< 0.005	—	518
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.14	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	85.5	85.5	< 0.005	< 0.005	—	85.8
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.38	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	111	111	< 0.005	< 0.005	0.01	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.02	0.01	0.65	0.16	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	512	512	0.01	0.08	0.02	536
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.06	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.01	17.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.10	0.02	< 0.005	< 0.005	0.02	0.03	< 0.005	0.01	0.01	—	77.1	77.1	< 0.005	0.01	0.05	80.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.84	2.84	< 0.005	< 0.005	< 0.005	2.85
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.8	12.8	< 0.005	< 0.005	0.01	13.4

3.3. Site Preparation (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314

Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.22	2.70	22.3	25.7	0.05	0.93	—	0.93	0.85	—	0.85	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.45	1.22	10.1	11.6	0.02	0.42	—	0.42	0.38	—	0.38	—	2,394	2,394	0.10	0.02	—	2,402
Dust From Material Movement	—	—	—	—	—	—	8.89	8.89	—	4.57	4.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	1.84	2.12	< 0.005	0.08	—	0.08	0.07	—	0.07	—	396	396	0.02	< 0.005	—	398

Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.05	60.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.94	9.94	< 0.005	< 0.005	0.01	9.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.50	0.50	2.59	28.3	0.05	0.10	—	0.10	0.10	—	0.10	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	—	19.7	19.7	—	10.1	10.1	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	0.23	1.17	12.8	0.02	0.05	—	0.05	0.05	—	0.05	—	2,394	2,394	0.10	0.02	—	2,402
Dust From Material Movement	—	—	—	—	—	—	8.89	8.89	—	4.57	4.57	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.21	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	396	396	0.02	< 0.005	—	398
Dust From Material Movement	—	—	—	—	—	—	1.62	1.62	—	0.83	0.83	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.57	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	143	143	< 0.005	< 0.005	0.27	144
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.45	0.00	0.00	0.15	0.15	0.00	0.03	0.03	—	130	130	< 0.005	< 0.005	0.01	130
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.21	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	60.0	60.0	< 0.005	< 0.005	0.05	60.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.94	9.94	< 0.005	< 0.005	0.01	9.98

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2032) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.05	2.56	19.4	25.8	0.06	0.79	—	0.79	0.73	—	0.73	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.78	0.66	4.97	6.60	0.02	0.20	—	0.20	0.19	—	0.19	—	1,688	1,688	0.07	0.01	—	1,694
Dust From Material Movement	—	—	—	—	—	—	2.36	2.36	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	0.91	1.20	< 0.005	0.04	—	0.04	0.03	—	0.03	—	280	280	0.01	< 0.005	—	280
Dust From Material Movement	—	—	—	—	—	—	0.43	0.43	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.8	38.8	< 0.005	< 0.005	0.03	39.0

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2032) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.74	4.68	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619

Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	0.19	1.20	9.05	0.02	0.04	—	0.04	0.04	—	0.04	—	1,688	1,688	0.07	0.01	—	1,694
Dust From Material Movement	—	—	—	—	—	—	2.36	2.36	—	0.94	0.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.22	1.65	< 0.005	0.01	—	0.01	0.01	—	0.01	—	280	280	0.01	< 0.005	—	280
Dust From Material Movement	—	—	—	—	—	—	0.43	0.43	—	0.17	0.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.65	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	164	164	< 0.005	< 0.005	0.30	164
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.04	0.51	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	148	148	< 0.005	< 0.005	0.01	149
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.13	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.8	38.8	< 0.005	< 0.005	0.03	39.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	0.01	6.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2033) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.97	2.50	18.5	25.2	0.06	0.73	—	0.73	0.68	—	0.68	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.55	2.14	15.9	21.6	0.05	0.63	—	0.63	0.58	—	0.58	—	5,654	5,654	0.23	0.05	—	5,673
Dust From Material Movement	—	—	—	—	—	—	7.89	7.89	—	3.13	3.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	0.39	2.90	3.95	0.01	0.11	—	0.11	0.11	—	0.11	—	936	936	0.04	0.01	—	939
Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.57	0.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	128	128	< 0.005	< 0.005	0.10	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.02	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2033) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	0.73	4.67	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.65	0.63	4.01	30.3	0.05	0.12	—	0.12	0.12	—	0.12	—	5,654	5,654	0.23	0.05	—	5,673
Dust From Material Movement	—	—	—	—	—	—	7.89	7.89	—	3.13	3.13	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.11	0.73	5.53	0.01	0.02	—	0.02	0.02	—	0.02	—	936	936	0.04	0.01	—	939

Dust From Material Movement	—	—	—	—	—	—	1.44	1.44	—	0.57	0.57	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.02	0.62	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.26	162
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	146	146	< 0.005	< 0.005	0.01	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.43	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	128	128	< 0.005	< 0.005	0.10	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.08	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	21.2	21.2	< 0.005	< 0.005	0.02	21.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Grading (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.90	2.44	17.8	25.1	0.06	0.68	—	0.68	0.62	—	0.62	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.03	0.25	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	92.9	92.9	< 0.005	< 0.005	—	93.3
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.05	0.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.4

Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Grading (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.73	4.66	35.4	0.06	0.14	—	0.14	0.14	—	0.14	—	6,596	6,596	0.27	0.05	—	6,619
Dust From Material Movement	—	—	—	—	—	—	9.20	9.20	—	3.65	3.65	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.50	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	92.9	92.9	< 0.005	< 0.005	—	93.3
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.4	15.4	< 0.005	< 0.005	—	15.4
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.03	0.46	0.00	0.00	0.17	0.17	0.00	0.04	0.04	—	144	144	< 0.005	< 0.005	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.08	2.08	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2034) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	0.86	7.52	12.8	0.02	0.19	—	0.19	0.18	—	0.18	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.34	10.8	0.02	0.16	—	0.16	0.15	—	0.15	—	2,021	2,021	0.08	0.02	—	2,028
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.16	1.96	< 0.005	0.03	—	0.03	0.03	—	0.03	—	335	335	0.01	< 0.005	—	336
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.54	4.46	2.34	56.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,219	15,219	0.17	0.13	21.7	15,283
Vendor	0.48	0.30	11.7	4.26	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,431	10,431	0.16	1.59	9.83	10,918

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	3.06	43.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,774	13,774	0.25	0.13	0.56	13,819
Vendor	0.44	0.27	12.5	4.40	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,444	10,444	0.16	1.59	0.25	10,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	38.0	0.00	0.00	13.5	13.5	0.00	3.16	3.16	—	11,900	11,900	0.18	0.11	7.91	11,944
Vendor	0.39	0.24	10.2	3.65	0.08	0.08	3.03	3.11	0.08	0.84	0.92	—	8,799	8,799	0.13	1.34	3.57	9,204
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.94	0.00	0.00	2.46	2.46	0.00	0.58	0.58	—	1,970	1,970	0.03	0.02	1.31	1,977
Vendor	0.07	0.04	1.87	0.67	0.01	0.01	0.55	0.57	0.01	0.15	0.17	—	1,457	1,457	0.02	0.22	0.59	1,524
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2034) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.96	14.9	0.02	0.08	—	0.08	0.08	—	0.08	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.35	2.49	12.6	0.02	0.07	—	0.07	0.06	—	0.06	—	2,021	2,021	0.08	0.02	—	2,028
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	335	335	0.01	< 0.005	—	336
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.54	4.46	2.34	56.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,219	15,219	0.17	0.13	21.7	15,283
Vendor	0.48	0.30	11.7	4.26	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,431	10,431	0.16	1.59	9.83	10,918
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	3.06	43.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,774	13,774	0.25	0.13	0.56	13,819

Vendor	0.44	0.27	12.5	4.40	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,444	10,444	0.16	1.59	0.25	10,921
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	38.0	0.00	0.00	13.5	13.5	0.00	3.16	3.16	—	11,900	11,900	0.18	0.11	7.91	11,944
Vendor	0.39	0.24	10.2	3.65	0.08	0.08	3.03	3.11	0.08	0.84	0.92	—	8,799	8,799	0.13	1.34	3.57	9,204
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.94	0.00	0.00	2.46	2.46	0.00	0.58	0.58	—	1,970	1,970	0.03	0.02	1.31	1,977
Vendor	0.07	0.04	1.87	0.67	0.01	0.01	0.55	0.57	0.01	0.15	0.17	—	1,457	1,457	0.02	0.22	0.59	1,524
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2035) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.34	12.7	0.02	0.18	—	0.18	0.17	—	0.17	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.87	0.73	6.29	10.9	0.02	0.15	—	0.15	0.14	—	0.14	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.15	1.98	< 0.005	0.03	—	0.03	0.03	—	0.03	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.42	2.34	54.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,048	15,048	0.17	0.13	18.6	15,108
Vendor	0.48	0.30	11.3	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,124	10,124	0.16	1.49	8.15	10,581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.25	4.16	3.01	42.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,619	13,619	0.25	0.13	0.48	13,664
Vendor	0.44	0.27	12.1	4.30	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,136	10,136	0.16	1.49	0.21	10,586
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.64	3.53	2.08	37.3	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,963	11,963	0.18	0.11	6.87	12,006
Vendor	0.39	0.24	10.1	3.62	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,682	8,682	0.13	1.28	3.02	9,070

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.64	0.38	6.81	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,981	1,981	0.03	0.02	1.14	1,988
Vendor	0.07	0.04	1.85	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,437	1,437	0.02	0.21	0.50	1,502
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2035) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.46	4.42	2.34	54.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	15,048	15,048	0.17	0.13	18.6	15,108
Vendor	0.48	0.30	11.3	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,124	10,124	0.16	1.49	8.15	10,581
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.25	4.16	3.01	42.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,619	13,619	0.25	0.13	0.48	13,664
Vendor	0.44	0.27	12.1	4.30	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	10,136	10,136	0.16	1.49	0.21	10,586
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.64	3.53	2.08	37.3	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,963	11,963	0.18	0.11	6.87	12,006
Vendor	0.39	0.24	10.1	3.62	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,682	8,682	0.13	1.28	3.02	9,070
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.66	0.64	0.38	6.81	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,981	1,981	0.03	0.02	1.14	1,988
Vendor	0.07	0.04	1.85	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,437	1,437	0.02	0.21	0.50	1,502
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2036) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	0.83	7.12	12.6	0.02	0.17	—	0.17	0.16	—	0.16	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.85	0.71	6.12	10.8	0.02	0.14	—	0.14	0.13	—	0.13	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.13	1.12	1.98	< 0.005	0.03	—	0.03	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.33	4.25	2.30	51.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,894	14,894	0.17	0.13	15.8	14,951
Vendor	0.47	0.29	11.1	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,847	9,847	0.16	1.49	6.69	10,302
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.16	4.08	2.47	40.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,480	13,480	0.21	0.13	0.41	13,523
Vendor	0.44	0.27	11.8	4.29	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,859	9,859	0.16	1.49	0.17	10,308
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	35.7	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,873	11,873	0.18	0.11	5.88	11,916
Vendor	0.40	0.24	9.87	3.63	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	8,468	8,468	0.14	1.28	2.48	8,856
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.51	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,966	1,966	0.03	0.02	0.97	1,973
Vendor	0.07	0.04	1.80	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,402	1,402	0.02	0.21	0.41	1,466
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2036) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.95	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.53	12.8	0.02	0.07	—	0.07	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.33	4.25	2.30	51.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,894	14,894	0.17	0.13	15.8	14,951
Vendor	0.47	0.29	11.1	4.16	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,847	9,847	0.16	1.49	6.69	10,302
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.16	4.08	2.47	40.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,480	13,480	0.21	0.13	0.41	13,523
Vendor	0.44	0.27	11.8	4.29	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,859	9,859	0.16	1.49	0.17	10,308
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.58	3.51	2.05	35.7	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,873	11,873	0.18	0.11	5.88	11,916
Vendor	0.40	0.24	9.87	3.63	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	8,468	8,468	0.14	1.28	2.48	8,856
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.65	0.64	0.37	6.51	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,966	1,966	0.03	0.02	0.97	1,973
Vendor	0.07	0.04	1.80	0.66	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,402	1,402	0.02	0.21	0.41	1,466
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Building Construction (2037) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.98	0.82	6.99	12.5	0.02	0.16	—	0.16	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.84	0.70	5.99	10.7	0.02	0.14	—	0.14	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.09	1.96	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.12	4.04	1.80	50.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,759	14,759	0.17	0.13	13.4	14,814
Vendor	0.47	0.29	10.8	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,600	9,600	0.16	1.49	5.40	10,054
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	4.00	3.91	2.43	38.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,359	13,359	0.21	0.13	0.35	13,402
Vendor	0.44	0.27	11.5	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,613	9,613	0.16	1.49	0.14	10,062
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.39	3.32	2.01	34.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,734	11,734	0.18	0.11	4.96	11,775
Vendor	0.39	0.24	9.63	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,233	8,233	0.13	1.28	2.00	8,620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.61	0.37	6.27	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,943	1,943	0.03	0.02	0.82	1,950
Vendor	0.07	0.04	1.76	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,363	1,363	0.02	0.21	0.33	1,427
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Building Construction (2037) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.12	4.04	1.80	50.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,759	14,759	0.17	0.13	13.4	14,814
Vendor	0.47	0.29	10.8	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,600	9,600	0.16	1.49	5.40	10,054
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	2.43	38.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,359	13,359	0.21	0.13	0.35	13,402
Vendor	0.44	0.27	11.5	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,613	9,613	0.16	1.49	0.14	10,062
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.39	3.32	2.01	34.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,734	11,734	0.18	0.11	4.96	11,775
Vendor	0.39	0.24	9.63	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,233	8,233	0.13	1.28	2.00	8,620
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.62	0.61	0.37	6.27	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,943	1,943	0.03	0.02	0.82	1,950
Vendor	0.07	0.04	1.76	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,363	1,363	0.02	0.21	0.33	1,427
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Building Construction (2038) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	0.81	6.89	12.5	0.02	0.15	—	0.15	0.14	—	0.14	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.83	0.70	5.91	10.7	0.02	0.13	—	0.13	0.12	—	0.12	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.08	1.95	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	1.76	49.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,584	14,584	0.17	0.13	11.3	14,637
Vendor	0.47	0.29	10.6	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,378	9,378	0.16	1.40	4.32	9,803
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	2.43	37.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,199	13,199	0.21	0.13	0.29	13,242
Vendor	0.44	0.27	11.3	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,391	9,391	0.15	1.40	0.11	9,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	3.17	2.01	33.6	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,594	11,594	0.14	0.11	4.18	11,634
Vendor	0.39	0.24	9.44	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,043	8,043	0.13	1.20	1.60	8,405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.59	0.58	0.37	6.13	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,919	1,919	0.02	0.02	0.69	1,926
Vendor	0.07	0.04	1.72	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,332	1,332	0.02	0.20	0.27	1,392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Building Construction (2038) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.94	14.9	0.02	0.08	—	0.08	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	4.00	3.91	1.76	49.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,584	14,584	0.17	0.13	11.3	14,637
Vendor	0.47	0.29	10.6	4.07	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,378	9,378	0.16	1.40	4.32	9,803
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	2.43	37.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,199	13,199	0.21	0.13	0.29	13,242
Vendor	0.44	0.27	11.3	4.19	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,391	9,391	0.15	1.40	0.11	9,811
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	3.17	2.01	33.6	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,594	11,594	0.14	0.11	4.18	11,634
Vendor	0.39	0.24	9.44	3.54	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	8,043	8,043	0.13	1.20	1.60	8,405
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.58	0.37	6.13	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,919	1,919	0.02	0.02	0.69	1,926
Vendor	0.07	0.04	1.72	0.65	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,332	1,332	0.02	0.20	0.27	1,392
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Building Construction (2039) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.78	12.4	0.02	0.15	—	0.15	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.82	0.69	5.81	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	1.06	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	1.76	47.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,482	14,482	0.17	0.13	9.45	14,533
Vendor	0.47	0.29	10.4	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,180	9,180	0.15	1.40	3.41	9,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.70	3.12	2.39	36.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,106	13,106	0.21	0.13	0.25	13,149
Vendor	0.44	0.27	11.1	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,193	9,193	0.15	1.40	0.09	9,613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.14	2.63	1.97	32.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,513	11,513	0.14	0.11	3.50	11,552
Vendor	0.39	0.24	9.24	3.46	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,873	7,873	0.13	1.20	1.26	8,235
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.48	0.36	5.92	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,906	1,906	0.02	0.02	0.58	1,913
Vendor	0.07	0.04	1.69	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,304	1,304	0.02	0.20	0.21	1,363
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Building Construction (2039) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.78	3.20	1.76	47.8	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,482	14,482	0.17	0.13	9.45	14,533
Vendor	0.47	0.29	10.4	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,180	9,180	0.15	1.40	3.41	9,604
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.70	3.12	2.39	36.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,106	13,106	0.21	0.13	0.25	13,149
Vendor	0.44	0.27	11.1	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,193	9,193	0.15	1.40	0.09	9,613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.14	2.63	1.97	32.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,513	11,513	0.14	0.11	3.50	11,552
Vendor	0.39	0.24	9.24	3.46	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,873	7,873	0.13	1.20	1.26	8,235
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.57	0.48	0.36	5.92	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,906	1,906	0.02	0.02	0.58	1,913
Vendor	0.07	0.04	1.69	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,304	1,304	0.02	0.20	0.21	1,363
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Building Construction (2040) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.96	0.80	6.71	12.4	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.82	0.69	5.76	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.15	0.13	1.05	1.94	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.57	3.03	1.72	46.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,393	14,393	0.13	0.13	7.87	14,442
Vendor	0.47	0.30	10.2	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,003	9,003	0.15	1.40	2.67	9,426
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.91	2.39	35.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,027	13,027	0.21	0.13	0.20	13,070
Vendor	0.44	0.27	10.9	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,015	9,015	0.15	1.40	0.07	9,436
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	3.00	2.53	1.55	31.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,474	11,474	0.14	0.11	2.93	11,513
Vendor	0.40	0.25	9.15	3.47	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,742	7,742	0.13	1.20	0.99	8,105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.46	0.28	5.82	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,900	1,900	0.02	0.02	0.48	1,906
Vendor	0.07	0.05	1.67	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,282	1,282	0.02	0.20	0.16	1,342
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Building Construction (2040) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.57	3.03	1.72	46.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,393	14,393	0.13	0.13	7.87	14,442
Vendor	0.47	0.30	10.2	3.97	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,003	9,003	0.15	1.40	2.67	9,426
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.91	2.39	35.7	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	13,027	13,027	0.21	0.13	0.20	13,070
Vendor	0.44	0.27	10.9	4.11	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	9,015	9,015	0.15	1.40	0.07	9,436
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.00	2.53	1.55	31.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,474	11,474	0.14	0.11	2.93	11,513
Vendor	0.40	0.25	9.15	3.47	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,742	7,742	0.13	1.20	0.99	8,105
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.55	0.46	0.28	5.82	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,900	1,900	0.02	0.02	0.48	1,906
Vendor	0.07	0.05	1.67	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,282	1,282	0.02	0.20	0.16	1,342

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Building Construction (2041) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.80	6.65	12.3	0.02	0.14	—	0.14	0.13	—	0.13	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.70	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.15	0.12	1.04	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.95	1.72	45.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,317	14,317	0.13	0.13	6.56	14,365
Vendor	0.47	0.30	10.0	3.98	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,844	8,844	0.15	1.40	2.06	9,266
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	2.34	34.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,958	12,958	0.17	0.13	0.17	13,000
Vendor	0.44	0.27	10.8	4.12	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,857	8,857	0.15	1.40	0.05	9,277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.85	2.38	1.54	31.1	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,382	11,382	0.14	0.11	2.43	11,420
Vendor	0.39	0.25	8.94	3.47	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,585	7,585	0.13	1.20	0.76	7,946
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.28	5.68	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,884	1,884	0.02	0.02	0.40	1,891
Vendor	0.07	0.05	1.63	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,256	1,256	0.02	0.20	0.13	1,316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Building Construction (2041) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.49	2.95	1.72	45.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,317	14,317	0.13	0.13	6.56	14,365
Vendor	0.47	0.30	10.0	3.98	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,844	8,844	0.15	1.40	2.06	9,266
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	2.34	34.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,958	12,958	0.17	0.13	0.17	13,000
Vendor	0.44	0.27	10.8	4.12	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,857	8,857	0.15	1.40	0.05	9,277
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.85	2.38	1.54	31.1	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,382	11,382	0.14	0.11	2.43	11,420
Vendor	0.39	0.25	8.94	3.47	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,585	7,585	0.13	1.20	0.76	7,946
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.52	0.43	0.28	5.68	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,884	1,884	0.02	0.02	0.40	1,891
Vendor	0.07	0.05	1.63	0.63	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,256	1,256	0.02	0.20	0.13	1,316
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Building Construction (2042) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	0.79	6.60	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.81	0.68	5.66	10.6	0.02	0.12	—	0.12	0.11	—	0.11	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.03	1.93	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	1.72	45.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,251	14,251	0.13	0.13	5.43	14,297
Vendor	0.47	0.30	9.90	3.89	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,702	8,702	0.15	1.30	1.58	9,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.32	2.74	1.84	34.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,898	12,898	0.17	0.13	0.14	12,940
Vendor	0.44	0.27	10.6	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,715	8,715	0.15	1.30	0.04	9,108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.77	2.31	1.51	30.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,329	11,329	0.14	0.11	2.01	11,367
Vendor	0.39	0.25	8.83	3.39	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,464	7,464	0.13	1.12	0.59	7,801
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.42	0.28	5.57	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,876	1,876	0.02	0.02	0.33	1,882
Vendor	0.07	0.05	1.61	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,236	1,236	0.02	0.18	0.10	1,291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Building Construction (2042) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.36	2.78	1.72	45.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,251	14,251	0.13	0.13	5.43	14,297
Vendor	0.47	0.30	9.90	3.89	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,702	8,702	0.15	1.30	1.58	9,096
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.32	2.74	1.84	34.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,898	12,898	0.17	0.13	0.14	12,940
Vendor	0.44	0.27	10.6	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,715	8,715	0.15	1.30	0.04	9,108
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.77	2.31	1.51	30.5	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,329	11,329	0.14	0.11	2.01	11,367
Vendor	0.39	0.25	8.83	3.39	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,464	7,464	0.13	1.12	0.59	7,801
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.51	0.42	0.28	5.57	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,876	1,876	0.02	0.02	0.33	1,882
Vendor	0.07	0.05	1.61	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,236	1,236	0.02	0.18	0.10	1,291
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Building Construction (2043) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.94	0.79	6.55	12.3	0.02	0.13	—	0.13	0.12	—	0.12	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.81	0.67	5.61	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.67	44.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,193	14,193	0.13	0.13	4.46	14,238
Vendor	0.47	0.29	9.78	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,579	8,579	0.15	1.30	1.21	8,972
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.84	34.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,846	12,846	0.17	0.13	0.12	12,888
Vendor	0.44	0.27	10.5	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,592	8,592	0.15	1.30	0.03	8,984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.74	2.24	1.51	30.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,284	11,284	0.14	0.11	1.65	11,321
Vendor	0.39	0.25	8.73	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,358	7,358	0.13	1.12	0.45	7,695
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.41	0.28	5.54	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,868	1,868	0.02	0.02	0.27	1,874
Vendor	0.07	0.05	1.59	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,218	1,218	0.02	0.18	0.07	1,274

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Building Construction (2043) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.67	44.6	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,193	14,193	0.13	0.13	4.46	14,238
Vendor	0.47	0.29	9.78	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,579	8,579	0.15	1.30	1.21	8,972
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.24	2.69	1.84	34.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,846	12,846	0.17	0.13	0.12	12,888
Vendor	0.44	0.27	10.5	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,592	8,592	0.15	1.30	0.03	8,984
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.74	2.24	1.51	30.4	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,284	11,284	0.14	0.11	1.65	11,321
Vendor	0.39	0.25	8.73	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,358	7,358	0.13	1.12	0.45	7,695
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.41	0.28	5.54	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,868	1,868	0.02	0.02	0.27	1,874
Vendor	0.07	0.05	1.59	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,218	1,218	0.02	0.18	0.07	1,274
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Building Construction (2044) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.93	0.78	6.48	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	0.67	5.57	10.5	0.02	0.11	—	0.11	0.10	—	0.10	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	1.02	1.92	< 0.005	0.02	—	0.02	0.02	—	0.02	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.61	1.67	44.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,146	14,146	0.13	0.08	3.67	14,178
Vendor	0.37	0.29	9.66	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,471	8,471	0.15	1.30	0.92	8,864
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.80	33.3	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,803	12,803	0.17	0.13	0.10	12,845
Vendor	0.34	0.27	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,484	8,484	0.15	1.30	0.02	8,876
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.21	1.51	29.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,277	11,277	0.14	0.11	1.36	11,314
Vendor	0.31	0.24	8.65	3.41	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,286	7,286	0.13	1.12	0.34	7,623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.40	0.28	5.46	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,867	1,867	0.02	0.02	0.23	1,873
Vendor	0.06	0.04	1.58	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,206	1,206	0.02	0.19	0.06	1,262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Building Construction (2044) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.52	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,060	2,060	0.08	0.02	—	2,067
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	341	341	0.01	< 0.005	—	342
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.20	2.61	1.67	44.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,146	14,146	0.13	0.08	3.67	14,178
Vendor	0.37	0.29	9.66	3.90	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,471	8,471	0.15	1.30	0.92	8,864
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.80	33.3	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,803	12,803	0.17	0.13	0.10	12,845
Vendor	0.34	0.27	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,484	8,484	0.15	1.30	0.02	8,876
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.67	2.21	1.51	29.9	0.00	0.00	13.7	13.7	0.00	3.22	3.22	—	11,277	11,277	0.14	0.11	1.36	11,314
Vendor	0.31	0.24	8.65	3.41	0.08	0.08	3.09	3.17	0.08	0.85	0.93	—	7,286	7,286	0.13	1.12	0.34	7,623
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.49	0.40	0.28	5.46	0.00	0.00	2.51	2.51	0.00	0.59	0.59	—	1,867	1,867	0.02	0.02	0.23	1,873
Vendor	0.06	0.04	1.58	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,206	1,206	0.02	0.19	0.06	1,262
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.33. Building Construction (2045) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.92	0.77	6.42	12.2	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.79	0.66	5.50	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.67	43.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,104	14,104	0.13	0.08	3.01	14,136
Vendor	0.37	0.29	9.54	3.91	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,378	8,378	0.15	1.30	0.68	8,771
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.57	2.53	1.80	33.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,765	12,765	0.17	0.13	0.08	12,807
Vendor	0.34	0.26	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,391	8,391	0.15	1.30	0.02	8,783
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	2.63	2.13	1.47	29.8	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,213	11,213	0.11	0.11	1.11	11,249
Vendor	0.31	0.24	8.53	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,186	7,186	0.13	1.12	0.25	7,522
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.39	0.27	5.43	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,856	1,856	0.02	0.02	0.18	1,862
Vendor	0.06	0.04	1.56	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,190	1,190	0.02	0.18	0.04	1,245
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.34. Building Construction (2045) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.11	2.57	1.67	43.9	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,104	14,104	0.13	0.08	3.01	14,136
Vendor	0.37	0.29	9.54	3.91	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,378	8,378	0.15	1.30	0.68	8,771
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.57	2.53	1.80	33.2	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,765	12,765	0.17	0.13	0.08	12,807
Vendor	0.34	0.26	10.3	4.02	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,391	8,391	0.15	1.30	0.02	8,783
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.63	2.13	1.47	29.8	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,213	11,213	0.11	0.11	1.11	11,249
Vendor	0.31	0.24	8.53	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,186	7,186	0.13	1.12	0.25	7,522
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.39	0.27	5.43	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,856	1,856	0.02	0.02	0.18	1,862
Vendor	0.06	0.04	1.56	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,190	1,190	0.02	0.18	0.04	1,245

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.35. Building Construction (2046) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.92	0.77	6.38	12.1	0.02	0.12	—	0.12	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.79	0.66	5.47	10.4	0.02	0.10	—	0.10	0.09	—	0.09	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.14	0.12	1.00	1.90	< 0.005	0.02	—	0.02	0.02	—	0.02	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.07	2.53	1.67	43.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,069	14,069	0.13	0.08	2.46	14,100
Vendor	0.37	0.29	9.53	3.92	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,297	8,297	0.15	1.30	0.50	8,690
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.53	2.44	1.80	33.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,734	12,734	0.17	0.13	0.06	12,776
Vendor	0.34	0.27	10.2	4.03	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,310	8,310	0.15	1.30	0.01	8,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.52	2.06	1.47	29.7	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,186	11,186	0.11	0.11	0.91	11,222
Vendor	0.30	0.24	8.52	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,117	7,117	0.13	1.12	0.18	7,453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.38	0.27	5.42	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,852	1,852	0.02	0.02	0.15	1,858
Vendor	0.06	0.04	1.55	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,178	1,178	0.02	0.18	0.03	1,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.36. Building Construction (2046) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	0.36	2.51	12.8	0.02	0.06	—	0.06	0.06	—	0.06	—	2,054	2,054	0.08	0.02	—	2,061
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.07	0.46	2.33	< 0.005	0.01	—	0.01	0.01	—	0.01	—	340	340	0.01	< 0.005	—	341
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	3.07	2.53	1.67	43.4	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	14,069	14,069	0.13	0.08	2.46	14,100
Vendor	0.37	0.29	9.53	3.92	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,297	8,297	0.15	1.30	0.50	8,690
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.53	2.44	1.80	33.1	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,734	12,734	0.17	0.13	0.06	12,776
Vendor	0.34	0.27	10.2	4.03	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,310	8,310	0.15	1.30	0.01	8,703
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.52	2.06	1.47	29.7	0.00	0.00	13.7	13.7	0.00	3.21	3.21	—	11,186	11,186	0.11	0.11	0.91	11,222
Vendor	0.30	0.24	8.52	3.40	0.08	0.08	3.08	3.16	0.08	0.85	0.93	—	7,117	7,117	0.13	1.12	0.18	7,453
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.46	0.38	0.27	5.42	0.00	0.00	2.50	2.50	0.00	0.59	0.59	—	1,852	1,852	0.02	0.02	0.15	1,858
Vendor	0.06	0.04	1.55	0.62	0.01	0.01	0.56	0.58	0.01	0.16	0.17	—	1,178	1,178	0.02	0.18	0.03	1,234
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.37. Building Construction (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.91	0.76	6.33	12.1	0.02	0.11	—	0.11	0.11	—	0.11	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.04	0.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	16.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.80	2.80	< 0.005	< 0.005	—	2.81
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.44	1.80	33.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,708	12,708	0.17	0.13	0.05	12,750
Vendor	0.33	0.27	10.1	3.95	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,241	8,241	0.15	1.30	0.01	8,633
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	91.8	91.8	< 0.005	< 0.005	0.01	92.0
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	58.0	58.0	< 0.005	0.01	< 0.005	60.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	< 0.005	15.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.60	9.60	< 0.005	< 0.005	< 0.005	10.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.38. Building Construction (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	0.42	2.93	14.9	0.02	0.07	—	0.07	0.07	—	0.07	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.9	16.9	< 0.005	< 0.005	—	16.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	< 0.005	< 0.005	< 0.005	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.80	2.80	< 0.005	< 0.005	—	2.81
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	2.48	2.44	1.80	33.0	0.00	0.00	16.0	16.0	0.00	3.76	3.76	—	12,708	12,708	0.17	0.13	0.05	12,750
Vendor	0.33	0.27	10.1	3.95	0.09	0.09	3.60	3.70	0.09	1.00	1.09	—	8,241	8,241	0.15	1.30	0.01	8,633
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.24	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	91.8	91.8	< 0.005	< 0.005	0.01	92.0
Vendor	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	58.0	58.0	< 0.005	0.01	< 0.005	60.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.2	15.2	< 0.005	< 0.005	< 0.005	15.2
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	9.60	9.60	< 0.005	< 0.005	< 0.005	10.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.39. Paving (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Roa Equipment	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.53	0.44	5.00	9.71	0.01	0.07	—	0.07	0.07	—	0.07	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.44	0.37	4.14	8.03	0.01	0.06	—	0.06	0.05	—	0.05	—	1,250	1,250	0.05	0.01	—	1,254
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Roa d Equipm ent	0.08	0.07	0.76	1.47	< 0.005	0.01	—	0.01	0.01	—	0.01	—	207	207	0.01	< 0.005	—	208
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.6	84.6	< 0.005	< 0.005	0.01	84.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	< 0.005	14.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.40. Paving (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.24	2.08	10.5	0.01	0.04	—	0.04	0.04	—	0.04	—	1,511	1,511	0.06	0.01	—	1,516
Paving	0.15	0.15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.20	1.72	8.65	0.01	0.03	—	0.03	0.03	—	0.03	—	1,250	1,250	0.05	0.01	—	1,254
Paving	0.12	0.12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.31	1.58	< 0.005	0.01	—	0.01	0.01	—	0.01	—	207	207	0.01	< 0.005	—	208
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.34	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	110	110	< 0.005	< 0.005	0.02	111
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.26	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	99.8	99.8	< 0.005	< 0.005	< 0.005	100
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.22	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	84.6	84.6	< 0.005	< 0.005	0.01	84.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	14.0	14.0	< 0.005	< 0.005	< 0.005	14.1
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.41. Architectural Coating (2047) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.82	2.82	< 0.005	< 0.005	—	2.83
Architectural Coatings	1.18	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.47	0.47	< 0.005	< 0.005	—	0.47
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.60	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,542	2,542	0.03	0.03	0.01	2,550
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	55.1	55.1	< 0.005	< 0.005	< 0.005	55.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	< 0.005	9.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.42. Architectural Coating (2047) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.82	2.82	< 0.005	< 0.005	—	2.83
Architectural Coatings	1.18	1.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.47	0.47	< 0.005	< 0.005	—	0.47
Architectural Coatings	0.22	0.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.60	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,542	2,542	0.03	0.03	0.01	2,550
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.14	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	55.1	55.1	< 0.005	< 0.005	< 0.005	55.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.11	9.11	< 0.005	< 0.005	< 0.005	9.14
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.43. Architectural Coating (2048) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.60	0.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Architectural Coatings	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.8	17.8	< 0.005	< 0.005	—	17.9
Architectural Coatings	8.20	8.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.50	0.33	8.65	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,804	2,804	0.03	0.02	0.34	2,810
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.58	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,537	2,537	0.03	0.03	0.01	2,546
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.39	0.28	5.48	0.00	0.00	2.57	2.57	0.00	0.60	0.60	—	2,095	2,095	0.02	0.02	0.12	2,101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.00	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.44. Architectural Coating (2048) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.74	1.09	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	55.8	55.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.60	0.88	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	108	108	< 0.005	< 0.005	—	108
Architectural Coatings	44.9	44.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.11	0.16	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.8	17.8	< 0.005	< 0.005	—	17.9

Architect Coatings	8.20	8.20	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.61	0.50	0.33	8.65	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,804	2,804	0.03	0.02	0.34	2,810
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.50	0.49	0.36	6.58	0.00	0.00	3.21	3.21	0.00	0.75	0.75	—	2,537	2,537	0.03	0.03	0.01	2,546
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.39	0.39	0.28	5.48	0.00	0.00	2.57	2.57	0.00	0.60	0.60	—	2,095	2,095	0.02	0.02	0.12	2,101
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.05	1.00	0.00	0.00	0.47	0.47	0.00	0.11	0.11	—	347	347	< 0.005	< 0.005	0.02	348
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/1/2032	3/4/2032	6.00	55.0	—
Site Preparation	Site Preparation	3/5/2032	9/13/2032	6.00	165	—
Grading	Grading	9/14/2032	1/6/2034	6.00	412	—
Building Construction	Building Construction	1/7/2034	1/3/2047	6.00	4,067	—
Paving	Paving	1/4/2047	12/22/2047	6.00	302	—
Architectural Coating	Architectural Coating	12/23/2047	12/8/2048	6.00	302	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40

Site Preparation	Tractors/Loaders/Back	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38

Grading	Tractors/Loaders/Back	Diesel	Tier 4 Final	2.00	8.00	84.0	0.37
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Back hoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	8.73	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—

Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,910	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	472	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	382	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	11.9	LDA,LDT1,LDT2
Demolition	Vendor	—	9.10	HHDT,MHDT
Demolition	Hauling	8.73	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—

Site Preparation	Worker	17.5	11.9	LDA,LDT1,LDT2
Site Preparation	Vendor	—	9.10	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	20.0	11.9	LDA,LDT1,LDT2
Grading	Vendor	—	9.10	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	1,910	11.9	LDA,LDT1,LDT2
Building Construction	Vendor	472	9.10	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.9	LDA,LDT1,LDT2
Paving	Vendor	—	9.10	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	382	11.9	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	9.10	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	3,110,400	1,036,800	2,232,286	743,398	71,613

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	41,713	—
Site Preparation	—	—	248	0.00	—
Grading	—	—	1,236	0.00	—
Paving	0.00	0.00	0.00	0.00	27.4

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Office Park	0.00	0%
Strip Mall	0.00	0%
Parking Lot	7.70	100%
University/College (4yr)	0.00	0%
Apartments Mid Rise	—	0%
Other Asphalt Surfaces	7.70	100%
Unenclosed Parking with Elevator	1.60	100%
Other Non-Asphalt Surfaces	10.4	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2032	0.00	204	0.03	< 0.005
2033	0.00	204	0.03	< 0.005
2034	0.00	204	0.03	< 0.005
2035	0.00	204	0.03	< 0.005
2036	0.00	204	0.03	< 0.005
2037	0.00	204	0.03	< 0.005
2038	0.00	204	0.03	< 0.005
2039	0.00	204	0.03	< 0.005
2040	0.00	204	0.03	< 0.005
2041	0.00	204	0.03	< 0.005
2042	0.00	204	0.03	< 0.005
2043	0.00	204	0.03	< 0.005
2044	0.00	204	0.03	< 0.005
2045	0.00	204	0.03	< 0.005
2046	0.00	204	0.03	< 0.005
2047	0.00	204	0.03	< 0.005
2048	0.00	204	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—

CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—

Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5

Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—

2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Land uses are based on Project-specific information.
Construction: Construction Phases	Project-specific schedule.

Pacific Gateway (Initial Phase Operation - Auto) Detailed Report

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7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Operation - Auto)
Operational Year	2032
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	116	110	54.2	569	1.44	3.38	128	132	3.26	32.5	35.8	4,555	173,173	177,727	473	7.92	1,273	193,177
Mit.	80.8	77.5	52.7	390	1.43	3.06	128	131	3.02	32.5	35.5	4,555	172,443	176,998	473	7.91	1,273	192,446
% Reduced	30%	30%	3%	31%	1%	9%	—	< 0.5%	7%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	83.7	80.4	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Mit.	80.1	76.9	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
% Reduced	4%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	99.4	94.9	55.8	392	1.36	3.22	128	131	3.14	32.4	35.5	4,555	164,522	169,077	473	8.10	1,136	184,444
Mit.	80.1	76.8	55.0	304	1.35	3.06	128	131	3.02	32.4	35.4	4,555	164,163	168,717	473	8.09	1,136	184,083
% Reduced	19%	19%	1%	23%	< 0.5%	5%	—	< 0.5%	4%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	18.1	17.3	10.2	71.5	0.25	0.59	23.3	23.9	0.57	5.91	6.48	754	27,239	27,993	78.3	1.34	188	30,537
Mit.	14.6	14.0	10.0	55.4	0.25	0.56	23.3	23.8	0.55	5.91	6.46	754	27,179	27,933	78.3	1.34	188	30,477
% Reduced	19%	19%	1%	23%	< 0.5%	5%	—	< 0.5%	4%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Area	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	116	110	54.2	569	1.44	3.38	128	132	3.26	32.5	35.8	4,555	173,173	177,727	473	7.92	1,273	193,177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Area	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	83.7	80.4	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	23.1	277	1.16	0.64	128	128	0.60	32.4	33.0	—	117,497	117,497	1.31	2.64	104	118,422
Area	82.6	81.4	0.74	88.2	0.01	0.16	—	0.16	0.12	—	0.12	—	363	363	0.02	< 0.005	—	364
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	99.4	94.9	55.8	392	1.36	3.22	128	131	3.14	32.4	35.5	4,555	164,522	169,077	473	8.10	1,136	184,444
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606
Area	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,025	7,025	1.85	0.17	—	7,122

Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	18.1	17.3	10.2	71.5	0.25	0.59	23.3	23.9	0.57	5.91	6.48	754	27,239	27,993	78.3	1.34	188	30,537

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,439	42,439	11.2	1.02	—	43,024
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.8	77.5	52.7	390	1.43	3.06	128	131	3.02	32.5	35.5	4,555	172,443	176,998	473	7.91	1,273	192,446
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.1	76.9	56.9	284	1.33	3.06	128	131	3.02	32.5	35.5	4,555	161,588	166,143	473	8.24	1,038	181,455
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.3	11.8	23.1	277	1.16	0.64	128	128	0.60	32.4	33.0	—	117,497	117,497	1.31	2.64	104	118,422
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,436	42,436	11.2	1.02	—	43,021
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	80.1	76.8	55.0	304	1.35	3.06	128	131	3.02	32.4	35.4	4,555	164,163	168,717	473	8.09	1,136	184,083
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606
Area	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,026	7,026	1.86	0.17	—	7,123
Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	14.6	14.0	10.0	55.4	0.25	0.56	23.3	23.8	0.55	5.91	6.46	754	27,179	27,933	78.3	1.34	188	30,477

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.67	0.63	0.52	8.34	0.03	0.01	2.61	2.63	0.01	0.66	0.68	—	2,597	2,597	0.05	0.06	4.93	2,622
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.34	1.25	1.27	21.0	0.07	0.04	6.90	6.94	0.03	1.75	1.79	—	6,826	6,826	0.10	0.15	13.0	6,887
Industrial Park	11.9	10.6	18.9	334	1.15	0.59	119	119	0.55	30.1	30.7	—	116,351	116,351	1.13	2.24	224	117,272
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.64	0.60	0.63	6.62	0.02	0.01	2.61	2.63	0.01	0.66	0.68	—	2,377	2,377	0.06	0.07	0.13	2,400
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.29	1.19	1.53	16.0	0.06	0.04	6.90	6.94	0.03	1.75	1.79	—	6,243	6,243	0.12	0.17	0.34	6,298
Industrial Park	11.4	10.0	22.8	235	1.05	0.59	119	119	0.55	30.1	30.7	—	106,306	106,306	1.19	2.54	5.80	107,099
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.12	0.11	0.11	1.24	< 0.005	< 0.005	0.47	0.48	< 0.005	0.12	0.12	—	402	402	0.01	0.01	0.35	406
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	0.23	0.22	0.26	3.04	0.01	0.01	1.25	1.26	0.01	0.32	0.32	—	1,056	1,056	0.02	0.03	0.93	1,066
Industrial Park	2.07	1.83	3.86	46.2	0.20	0.11	21.6	21.7	0.10	5.47	5.57	—	17,994	17,994	0.19	0.40	16.0	18,134
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.67	0.63	0.52	8.34	0.03	0.01	2.61	2.63	0.01	0.66	0.68	—	2,597	2,597	0.05	0.06	4.93	2,622
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	1.34	1.25	1.27	21.0	0.07	0.04	6.90	6.94	0.03	1.75	1.79	—	6,826	6,826	0.10	0.15	13.0	6,887
Industrial Park	11.9	10.6	18.9	334	1.15	0.59	119	119	0.55	30.1	30.7	—	116,351	116,351	1.13	2.24	224	117,272
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	14.0	12.4	20.7	363	1.24	0.64	128	129	0.60	32.5	33.1	—	125,775	125,775	1.28	2.46	242	126,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.64	0.60	0.63	6.62	0.02	0.01	2.61	2.63	0.01	0.66	0.68	—	2,377	2,377	0.06	0.07	0.13	2,400
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	1.29	1.19	1.53	16.0	0.06	0.04	6.90	6.94	0.03	1.75	1.79	—	6,243	6,243	0.12	0.17	0.34	6,298
Industrial Park	11.4	10.0	22.8	235	1.05	0.59	119	119	0.55	30.1	30.7	—	106,306	106,306	1.19	2.54	5.80	107,099

Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	13.3	11.8	25.0	257	1.13	0.64	128	129	0.60	32.5	33.1	—	114,926	114,926	1.37	2.79	6.26	115,797
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.12	0.11	0.11	1.24	< 0.005	< 0.005	0.47	0.48	< 0.005	0.12	0.12	—	402	402	0.01	0.01	0.35	406
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.23	0.22	0.26	3.04	0.01	0.01	1.25	1.26	0.01	0.32	0.32	—	1,056	1,056	0.02	0.03	0.93	1,066
Industrial Park	2.07	1.83	3.86	46.2	0.20	0.11	21.6	21.7	0.10	5.47	5.57	—	17,994	17,994	0.19	0.40	16.0	18,134
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.42	2.15	4.22	50.5	0.21	0.12	23.3	23.4	0.11	5.91	6.02	—	19,453	19,453	0.22	0.44	17.3	19,606

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.21	1.21	< 0.005	< 0.005	—	1.35
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	688	688	1.24	0.15	—	764
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.6	19.6	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	798

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.37	7.37	0.01	< 0.005	—	8.18

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	4,163	4,163	7.51	0.91	—	4,622
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,348	4,348	7.84	0.95	—	4,828
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22	< 0.005	< 0.005	—	1.35
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	689	689	1.24	0.15	—	765
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.7	19.7	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	799

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086

Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758

Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	31.8	29.4	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Total	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.02	1.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	2.87	2.65	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Total	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699

Govern Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138

Industrial	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,031	1,031
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,032	1,032
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

University/College	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	171	171

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Croplan	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Croplan d	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadlef Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadlef Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Broadleaf	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	330	330	330	120,450	3,696	3,696	3,696	1,349,040
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	622	622	622	227,030	9,765	9,765	9,765	3,564,226
Industrial Park	4,240	4,240	4,240	1,547,605	167,773	167,773	167,773	61,237,072
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	330	330	330	120,450	3,696	3,696	3,696	1,349,040
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	622	622	622	227,030	9,765	9,765	9,765	3,564,226
Industrial Park	4,240	4,240	4,240	1,547,605	167,773	167,773	167,773	61,237,072
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,167,400	2,055,800	303,700

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419
Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419

Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced

General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3

Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—

Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8

Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2032 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.

Operations: Fleet Mix	Fleet mix is based on auto-specific vehicle types.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Initial Phase Operation - Truck) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Initial Phase Operation - Truck)
Operational Year	2032
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Other Non-Asphalt Surfaces	1,071	1000sqft	24.6	0.00	0.00	—	—	—
Parking Lot	1,039	1000sqft	24.6	0.00	34,549	—	—	—
University/College (4yr)	400	Student	4.00	25,000	141,239	141,239	—	—
Industrial Park	3,962	1000sqft	82.2	3,962,000	1,296,227	—	—	—
Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Other Asphalt Surfaces	2,917	1000sqft	67.0	0.00	0.00	—	—	—
City Park	20.3	Acre	20.3	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	109	101	270	251	2.27	7.05	69.9	77.0	6.78	18.8	25.6	4,555	268,626	273,180	475	40.4	1,432	298,525
Mit.	73.6	68.4	269	72.5	2.26	6.73	69.9	76.7	6.54	18.8	25.4	4,555	267,896	272,451	474	40.4	1,432	297,794
% Reduced	32%	33%	1%	71%	< 0.5%	5%	—	< 0.5%	4%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	76.9	71.8	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Mit.	73.4	68.2	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
% Reduced	5%	5%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	92.8	86.4	280	161	2.27	6.89	69.7	76.6	6.66	18.8	25.4	4,555	268,284	272,839	474	40.4	1,234	297,987
Mit.	73.5	68.3	280	72.7	2.26	6.73	69.7	76.4	6.55	18.8	25.3	4,555	267,925	272,479	474	40.4	1,234	297,626
% Reduced	21%	21%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.9	15.8	51.2	29.4	0.41	1.26	12.7	14.0	1.22	3.42	4.64	754	44,418	45,172	78.6	6.70	204	49,335
Mit.	13.4	12.5	51.0	13.3	0.41	1.23	12.7	14.0	1.19	3.42	4.62	754	44,358	45,112	78.6	6.69	204	49,275
% Reduced	21%	21%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	2%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Area	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	109	101	270	251	2.27	7.05	69.9	77.0	6.78	18.8	25.6	4,555	268,626	273,180	475	40.4	1,432	298,525
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Area	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	76.9	71.8	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.68	3.28	248	45.9	2.07	4.31	69.7	74.0	4.12	18.8	22.9	—	221,259	221,259	3.09	35.0	150	231,912
Area	82.6	81.4	0.74	88.2	0.01	0.16	—	0.16	0.12	—	0.12	—	363	363	0.02	< 0.005	—	364
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	92.8	86.4	280	161	2.27	6.89	69.7	76.6	6.66	18.8	25.4	4,555	268,284	272,839	474	40.4	1,234	297,987
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396
Area	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,025	7,025	1.85	0.17	—	7,122

Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	16.9	15.8	51.2	29.4	0.41	1.26	12.7	14.0	1.22	3.42	4.64	754	44,418	45,172	78.6	6.70	204	49,335

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,439	42,439	11.2	1.02	—	43,024
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.6	68.4	269	72.5	2.26	6.73	69.9	76.7	6.54	18.8	25.4	4,555	267,896	272,451	474	40.4	1,432	297,794
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,433	42,433	11.2	1.02	—	43,018
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.4	68.2	285	73.1	2.26	6.73	69.9	76.7	6.55	18.8	25.4	4,555	267,965	272,520	474	40.4	1,094	297,527
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.68	3.28	248	45.9	2.07	4.31	69.7	74.0	4.12	18.8	22.9	—	221,259	221,259	3.09	35.0	150	231,912
Area	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	42,436	42,436	11.2	1.02	—	43,021
Water	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Waste	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,073	4,073	—	—	—	4,073
Total	73.5	68.3	280	72.7	2.26	6.73	69.7	76.4	6.55	18.8	25.3	4,555	267,925	272,479	474	40.4	1,234	297,626
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396
Area	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	7,026	7,026	1.86	0.17	—	7,123
Water	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310
Waste	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	674	674	—	—	—	674
Total	13.4	12.5	51.0	13.3	0.41	1.23	12.7	14.0	1.19	3.42	4.62	754	44,358	45,112	78.6	6.69	204	49,275

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.27	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.39	260
Industrial Park	6.76	3.35	237	45.6	2.07	4.30	69.9	74.2	4.11	18.8	22.9	—	220,980	220,980	3.09	34.9	347	231,816
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.28	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.01	260
Industrial Park	6.56	3.17	252	46.2	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,055	221,055	3.08	35.0	8.99	231,557
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	41.1	41.1	< 0.005	0.01	0.03	43.0
Industrial Park	1.22	0.60	45.2	8.37	0.38	0.78	12.7	13.5	0.75	3.42	4.17	—	36,591	36,591	0.51	5.79	24.8	38,353
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

University/College (4yr)	0.01	< 0.005	0.27	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.39	260
Industrial Park	6.76	3.35	237	45.6	2.07	4.30	69.9	74.2	4.11	18.8	22.9	—	220,980	220,980	3.09	34.9	347	231,816
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.77	3.35	237	45.6	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,228	221,228	3.09	35.0	347	232,076
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	0.01	< 0.005	0.28	0.05	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	248	248	< 0.005	0.04	0.01	260
Industrial Park	6.56	3.17	252	46.2	2.07	4.30	69.9	74.2	4.12	18.8	22.9	—	221,055	221,055	3.08	35.0	8.99	231,557

Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	6.57	3.17	253	46.2	2.07	4.31	69.9	74.2	4.12	18.8	22.9	—	221,303	221,303	3.08	35.0	9.00	231,817
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	< 0.005	< 0.005	0.05	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	41.1	41.1	< 0.005	0.01	0.03	43.0
Industrial Park	1.22	0.60	45.2	8.37	0.38	0.78	12.7	13.5	0.75	3.42	4.17	—	36,591	36,591	0.51	5.79	24.8	38,353
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.22	0.60	45.2	8.37	0.38	0.79	12.7	13.5	0.75	3.42	4.17	—	36,632	36,632	0.51	5.79	24.8	38,396

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.21	1.21	< 0.005	< 0.005	—	1.35
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	688	688	1.24	0.15	—	764
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.6	19.6	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	798

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.37	7.37	0.01	< 0.005	—	8.18

Industrial	—	—	—	—	—	—	—	—	—	—	—	—	4,163	4,163	7.51	0.91	—	4,622
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,348	4,348	7.84	0.95	—	4,828
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	12.1	12.1	0.02	< 0.005	—	13.4
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	47.1	47.1	0.08	0.01	—	52.3
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	7.33	7.33	0.01	< 0.005	—	8.14
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	4,157	4,157	7.50	0.91	—	4,616
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	119	119	0.21	0.03	—	132
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,343	4,343	7.83	0.95	—	4,821
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2.00	2.00	< 0.005	< 0.005	—	2.22
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	7.79	7.79	0.01	< 0.005	—	8.65
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	1.22	1.22	< 0.005	< 0.005	—	1.35
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	689	689	1.24	0.15	—	765
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	19.7	19.7	0.04	< 0.005	—	21.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	719	719	1.30	0.16	—	799

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086

Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758

Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	0.03	0.01	0.24	0.20	< 0.005	0.02	—	0.02	0.02	—	0.02	—	281	281	0.02	< 0.005	—	282
Industrial Park	3.38	1.69	30.7	25.8	0.18	2.33	—	2.33	2.33	—	2.33	—	36,657	36,657	3.24	0.07	—	36,758
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Total	3.51	1.76	31.9	26.8	0.19	2.43	—	2.43	2.43	—	2.43	—	38,091	38,091	3.37	0.07	—	38,196
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	46.5	46.5	< 0.005	< 0.005	—	46.7
Industrial Park	0.62	0.31	5.61	4.71	0.03	0.43	—	0.43	0.43	—	0.43	—	6,069	6,069	0.54	0.01	—	6,086
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.64	0.32	5.83	4.89	0.03	0.44	—	0.44	0.44	—	0.44	—	6,306	6,306	0.56	0.01	—	6,324

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	31.8	29.4	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Total	98.7	96.2	1.50	179	0.01	0.32	—	0.32	0.24	—	0.24	—	735	735	0.03	0.01	—	738
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	5.61	5.61	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	66.9	66.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	1.02	1.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape	2.87	2.65	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3
Total	15.1	14.8	0.14	16.1	< 0.005	0.03	—	0.03	0.02	—	0.02	—	60.0	60.0	< 0.005	< 0.005	—	60.3

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	61.2	61.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.06	2.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	63.3	63.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	11.2	11.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.38	0.38	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	11.6	11.6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.33	4.25	0.40	0.01	—	17.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.04	0.04	< 0.005	< 0.005	—	0.05
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	1.64	0.52	2.17	0.17	< 0.005	—	7.62
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,756	151	1,907	180	4.31	—	7,699

Govern Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	3.67	46.7	4.42	0.11	—	189
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	1,804	156	1,960	185	4.43	—	7,913
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.06	0.70	0.07	< 0.005	—	2.84
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.01	0.01	< 0.005	< 0.005	—	0.01
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	0.27	0.09	0.36	0.03	< 0.005	—	1.26
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	291	25.1	316	29.9	0.71	—	1,275
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.61	7.74	0.73	0.02	—	31.3
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	299	25.8	325	30.7	0.73	—	1,310

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138

Industrial	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	39.3	0.00	39.3	3.93	0.00	—	138
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,648	0.00	2,648	265	0.00	—	9,264
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.94	0.00	0.94	0.09	0.00	—	3.29
Total	—	—	—	—	—	—	—	—	—	—	—	2,750	0.00	2,750	275	0.00	—	9,623
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	6.51	0.00	6.51	0.65	0.00	—	22.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	438	0.00	438	43.8	0.00	—	1,534
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.16	0.00	0.16	0.02	0.00	—	0.54
Total	—	—	—	—	—	—	—	—	—	—	—	455	0.00	455	45.5	0.00	—	1,593

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084

Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	179	179
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Universit y/Colleg e (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Industria l Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,084	1,084
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,085	1,085
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005

University/College	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.02	0.02
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	179	179
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	180	180

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipm Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Croplan	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Croplan d	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	—	1,119	1,119	—	—	—	1,119
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	185	185	—	—	—	185

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,044	3,044	—	—	—	3,044
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-90.4	-90.4	—	—	—	-90.4
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	2,954	2,954	—	—	—	2,954
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Broadleaf	—	—	—	—	—	—	—	—	—	—	—	—	504	504	—	—	—	504
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-15.0	-15.0	—	—	—	-15.0
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	489	489	—	—	—	489

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	2.00	2.00	2.00	730	85.8	85.8	85.8	31,317
Industrial Park	1,782	1,782	1,782	650,426	76,447	76,447	76,447	27,903,271
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
University/College (4yr)	2.00	2.00	2.00	730	85.8	85.8	85.8	31,317
Industrial Park	1,782	1,782	1,782	650,426	76,447	76,447	76,447	27,903,271
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	6,167,400	2,055,800	303,700

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)

General Office Building	240,687	18.3	0.0330	0.0040	331,994
Other Non-Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
Parking Lot	938,701	18.3	0.0330	0.0040	0.00
University/College (4yr)	146,225	18.3	0.0330	0.0040	877,271
Industrial Park	82,922,031	18.3	0.0330	0.0040	114,379,059
Government Office Building	2,367,108	18.3	0.0330	0.0040	3,265,086
Other Asphalt Surfaces	0.00	18.3	0.0330	0.0040	0.00
City Park	0.00	18.3	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419
Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	484,932
University/College (4yr)	856,440	4,405,419

Industrial Park	916,212,500	18,193,914
Government Office Building	22,468,410	0.00
Other Asphalt Surfaces	0.00	0.00
City Park	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Other Non-Asphalt Surfaces	0.00	—
Parking Lot	0.00	—
University/College (4yr)	73.0	—
Industrial Park	4,913	—
Government Office Building	105	—
Other Asphalt Surfaces	0.00	—
City Park	1.75	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00
Urban	Inceptisols	0.00	226

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	226	0.00

Urban	Inceptisols	0.00	226

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	226	0.00
Grassland	0.00	34.0
Urban	0.00	192

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1

Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—
Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689

Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632
Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9

Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2032 RPS
Land Use	Land uses are based on Project-specific information.

Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Fleet mix is based on truck-specific vehicle types.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Project Operation - Auto) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Project Operation - Auto)
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Industrial Park	24,675	1000sqft	705	24,675,000	5,994,592	—	—	—
Parking Lot	6,685	1000sqft	154	0.00	34,549	—	—	—
City Park	197	Acre	197	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	15,155	1000sqft	348	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	4,959	1000sqft	114	0.00	0.00	—	—	—
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
University/College (4yr)	5,000	Student	39.8	1,379,200	1,268,091	1,268,091	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Hotel	120	Room	0.60	60,000	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	43.9	1000sqft	2.20	43,900	52,991	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	905	831	302	3,604	8.92	72.6	740	813	70.0	188	258	37,900	943,070	980,971	3,017	38.5	8,628	1,076,520
Mit.	667	609	291	2,348	8.84	70.5	740	811	68.4	188	256	37,900	938,036	975,937	3,017	38.5	8,628	1,071,468
% Reduced	26%	27%	4%	35%	1%	3%	—	< 0.5%	2%	—	1%	—	1%	1%	< 0.5%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	688	630	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Mit.	666	608	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
% Reduced	3%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	731	696	289	2,262	7.47	30.7	737	768	29.9	187	217	31,158	883,599	914,758	2,986	39.4	8,595	1,009,74
Mit.	602	576	284	1,642	7.43	29.7	737	767	29.1	187	216	31,158	881,117	912,275	2,986	39.4	8,595	1,007,25 1
% Reduced	18%	17%	2%	27%	< 0.5%	3%	—	< 0.5%	3%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	133	127	52.8	413	1.36	5.60	134	140	5.46	34.1	39.5	5,159	146,290	151,449	494	6.52	1,423	167,174
Mit.	110	105	51.9	300	1.36	5.41	134	140	5.31	34.1	39.4	5,159	145,879	151,038	494	6.52	1,423	166,762
% Reduced	18%	17%	2%	27%	< 0.5%	3%	—	< 0.5%	3%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Area	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	905	831	302	3,604	8.92	72.6	740	813	70.0	188	258	37,900	943,070	980,971	3,017	38.5	8,628	1,076,52 0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688

Area	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	688	630	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.2	61.1	66.3	1,383	5.86	1.58	737	738	1.47	187	188	—	593,469	593,469	6.07	11.6	24.6	597,112
Area	641	623	9.55	702	0.32	12.9	—	12.9	12.2	—	12.2	1,953	6,267	8,220	9.31	0.03	—	8,461
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	731	696	289	2,262	7.47	30.7	737	768	29.9	187	217	31,158	883,599	914,758	2,986	39.4	8,595	1,009,743
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859
Area	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	133	127	52.8	413	1.36	5.60	134	140	5.46	34.1	39.5	5,159	146,290	151,449	494	6.52	1,423	167,174

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	667	609	291	2,348	8.84	70.5	740	811	68.4	188	256	37,900	938,036	975,937	3,017	38.5	8,628	1,071,468
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	666	608	306	1,839	8.27	70.5	740	811	68.4	188	256	37,900	880,544	918,444	3,018	40.2	8,572	1,014,431
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	66.2	61.1	66.3	1,383	5.86	1.58	737	738	1.47	187	188	—	593,469	593,469	6.07	11.6	24.6	597,112
Area	512	503	4.30	82.4	0.28	11.8	—	11.8	11.4	—	11.4	1,953	3,784	5,738	9.20	0.01	—	5,970
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	602	576	284	1,642	7.43	29.7	737	767	29.1	187	216	31,158	881,117	912,275	2,986	39.4	8,595	1,007,251
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859
Area	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	110	105	51.9	300	1.36	5.41	134	140	5.31	34.1	39.4	5,159	145,879	151,038	494	6.52	1,423	166,762

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.40	0.28	7.55	0.03	0.01	2.93	2.94	0.01	0.74	0.75	—	2,540	2,540	0.03	0.05	0.23	2,556
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	40.2	36.5	41.2	1,357	4.83	1.20	570	571	1.11	144	145	—	489,192	489,192	3.77	7.69	43.8	491,621
Parking Lot	0.09	0.08	0.03	0.25	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.2	19.2	< 0.005	< 0.005	< 0.005	20.5
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.52	1.39	1.51	49.3	0.18	0.04	20.6	20.7	0.04	5.23	5.27	—	17,738	17,738	0.14	0.28	1.59	17,828
University/College (4yr)	9.65	9.05	7.05	204	0.70	0.18	81.5	81.6	0.16	20.6	20.8	—	70,397	70,397	0.75	1.28	6.27	70,804
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.16	1.11	0.58	13.3	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	4,085	4,085	0.07	0.10	0.36	4,117

Gasolin Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Conveni ence Market (24 hour)	3.33	3.20	1.68	38.1	0.12	0.03	13.4	13.4	0.03	3.39	3.42	—	11,752	11,752	0.22	0.29	1.03	11,846
Fast Food Restaura nt with Drive Thru	7.66	7.36	3.86	87.6	0.27	0.07	30.7	30.8	0.07	7.78	7.85	—	27,001	27,001	0.50	0.67	2.36	27,216
High Turnover (Sit Down Restaura nt)	1.03	0.99	0.52	11.8	0.04	0.01	4.15	4.16	0.01	1.05	1.06	—	3,645	3,645	0.07	0.09	0.32	3,674
Fast Food Restaura nt w/o Drive Thru	0.47	0.45	0.24	5.38	0.02	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,657	1,657	0.03	0.04	0.15	1,671
Bank (with Drive-Through)	0.61	0.58	0.31	6.93	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	2,137	2,137	0.04	0.05	0.19	2,154
Strip Mall	1.86	1.78	0.97	22.8	0.07	0.02	8.17	8.19	0.02	2.07	2.09	—	7,164	7,164	0.12	0.17	0.63	7,218
Total	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.39	0.35	5.73	0.02	0.01	2.93	2.94	0.01	0.74	0.75	—	2,313	2,313	0.04	0.06	0.01	2,331
Govern ment Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	39.3	35.7	52.0	950	4.39	1.20	570	571	1.11	144	145	—	444,911	444,911	4.08	8.89	1.14	447,664
Parking Lot	0.09	0.08	0.03	0.35	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	0.01	< 0.005	< 0.005	20.1
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.49	1.36	1.91	34.7	0.16	0.04	20.6	20.7	0.04	5.23	5.27	—	16,134	16,134	0.15	0.33	0.04	16,235
University/College (4yr)	9.51	8.89	8.84	151	0.63	0.18	81.5	81.6	0.16	20.6	20.8	—	64,074	64,074	0.86	1.48	0.16	64,535
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.15	1.10	0.72	11.0	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	3,726	3,726	0.09	0.12	0.01	3,763
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.31	3.16	2.08	31.5	0.11	0.03	13.4	13.4	0.03	3.39	3.42	—	10,718	10,718	0.27	0.33	0.03	10,825

Fast Food Restaurant with Drive Thru	7.60	7.25	4.78	72.5	0.24	0.07	30.7	30.8	0.07	7.78	7.85	—	24,626	24,626	0.61	0.77	0.06	24,870
High Turnover (Sit Down Restaurant)	1.02	0.98	0.65	9.78	0.03	0.01	4.15	4.16	0.01	1.05	1.06	—	3,324	3,324	0.08	0.10	0.01	3,357
Fast Food Restaurant w/o Drive Thru	0.47	0.44	0.29	4.45	0.01	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,512	1,512	0.04	0.05	< 0.005	1,527
Bank (with Drive-Through)	0.60	0.57	0.38	5.74	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,949	1,949	0.05	0.06	< 0.005	1,968
Strip Mall	1.84	1.75	1.21	18.6	0.06	0.02	8.17	8.19	0.02	2.07	2.09	—	6,532	6,532	0.15	0.19	0.02	6,593
Total	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.08	0.07	0.06	1.09	< 0.005	< 0.005	0.53	0.53	< 0.005	0.13	0.14	—	392	392	0.01	0.01	0.02	395
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	7.12	6.47	8.58	187	0.82	0.22	104	104	0.20	26.2	26.4	—	75,400	75,400	0.65	1.38	3.13	75,831
Parking Lot	0.02	0.02	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.32
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.27	0.25	0.32	6.82	0.03	0.01	3.75	3.76	0.01	0.95	0.96	—	2,734	2,734	0.02	0.05	0.11	2,750
University/College (4yr)	1.72	1.61	1.46	29.1	0.12	0.03	14.8	14.8	0.03	3.75	3.78	—	10,856	10,856	0.13	0.23	0.45	10,928
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.21	0.20	0.12	2.02	0.01	< 0.005	0.84	0.85	< 0.005	0.21	0.22	—	631	631	0.01	0.02	0.03	637
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	0.59	0.57	0.34	5.80	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,815	1,815	0.04	0.05	0.07	1,831
Fast Food Restaurant with Drive Thru	1.37	1.31	0.79	13.3	0.05	0.01	5.58	5.59	0.01	1.41	1.43	—	4,170	4,170	0.09	0.12	0.17	4,208

High Turnover (Sit Down Restaurant)	0.18	0.18	0.11	1.80	0.01	< 0.005	0.75	0.76	< 0.005	0.19	0.19	—	563	563	0.01	0.02	0.02	568
Fast Food Restaurant w/o Drive Thru	0.08	0.08	0.05	0.82	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	256	256	0.01	0.01	0.01	258
Bank (with Drive-Through)	0.11	0.10	0.06	1.05	< 0.005	< 0.005	0.44	0.44	< 0.005	0.11	0.11	—	330	330	0.01	0.01	0.01	333
Strip Mall	0.33	0.32	0.20	3.44	0.01	< 0.005	1.49	1.49	< 0.005	0.38	0.38	—	1,106	1,106	0.02	0.03	0.04	1,116
Total	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.40	0.28	7.55	0.03	0.01	2.93	2.94	0.01	0.74	0.75	—	2,540	2,540	0.03	0.05	0.23	2,556
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	40.2	36.5	41.2	1,357	4.83	1.20	570	571	1.11	144	145	—	489,192	489,192	3.77	7.69	43.8	491,621
Parking Lot	0.09	0.08	0.03	0.25	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	19.2	19.2	< 0.005	< 0.005	< 0.005	20.5

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.52	1.39	1.51	49.3	0.18	0.04	20.6	20.7	0.04	5.23	5.27	—	17,738	17,738	0.14	0.28	1.59	17,828
University/College (4yr)	9.65	9.05	7.05	204	0.70	0.18	81.5	81.6	0.16	20.6	20.8	—	70,397	70,397	0.75	1.28	6.27	70,804
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.16	1.11	0.58	13.3	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	4,085	4,085	0.07	0.10	0.36	4,117
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.33	3.20	1.68	38.1	0.12	0.03	13.4	13.4	0.03	3.39	3.42	—	11,752	11,752	0.22	0.29	1.03	11,846
Fast Food Restaurant with Drive Thru	7.66	7.36	3.86	87.6	0.27	0.07	30.7	30.8	0.07	7.78	7.85	—	27,001	27,001	0.50	0.67	2.36	27,216

High Turnover (Sit Down Restaurant)	1.03	0.99	0.52	11.8	0.04	0.01	4.15	4.16	0.01	1.05	1.06	—	3,645	3,645	0.07	0.09	0.32	3,674
Fast Food Restaurant w/o Drive Thru	0.47	0.45	0.24	5.38	0.02	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,657	1,657	0.03	0.04	0.15	1,671
Bank (with Drive-Through)	0.61	0.58	0.31	6.93	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	2,137	2,137	0.04	0.05	0.19	2,154
Strip Mall	1.86	1.78	0.97	22.8	0.07	0.02	8.17	8.19	0.02	2.07	2.09	—	7,164	7,164	0.12	0.17	0.63	7,218
Total	68.0	62.9	58.2	1,804	6.30	1.58	740	742	1.47	188	189	—	637,328	637,328	5.74	10.7	56.9	640,725
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.42	0.39	0.35	5.73	0.02	0.01	2.93	2.94	0.01	0.74	0.75	—	2,313	2,313	0.04	0.06	0.01	2,331
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	39.3	35.7	52.0	950	4.39	1.20	570	571	1.11	144	145	—	444,911	444,911	4.08	8.89	1.14	447,664
Parking Lot	0.09	0.08	0.03	0.35	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	18.5	18.5	0.01	< 0.005	< 0.005	20.1
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1.49	1.36	1.91	34.7	0.16	0.04	20.6	20.7	0.04	5.23	5.27	—	16,134	16,134	0.15	0.33	0.04	16,235
University/College (4yr)	9.51	8.89	8.84	151	0.63	0.18	81.5	81.6	0.16	20.6	20.8	—	64,074	64,074	0.86	1.48	0.16	64,535
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	1.15	1.10	0.72	11.0	0.04	0.01	4.65	4.66	0.01	1.18	1.19	—	3,726	3,726	0.09	0.12	0.01	3,763
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	3.31	3.16	2.08	31.5	0.11	0.03	13.4	13.4	0.03	3.39	3.42	—	10,718	10,718	0.27	0.33	0.03	10,825
Fast Food Restaurant with Drive Thru	7.60	7.25	4.78	72.5	0.24	0.07	30.7	30.8	0.07	7.78	7.85	—	24,626	24,626	0.61	0.77	0.06	24,870
High Turnover (Sit Down Restaurant)	1.02	0.98	0.65	9.78	0.03	0.01	4.15	4.16	0.01	1.05	1.06	—	3,324	3,324	0.08	0.10	0.01	3,357

Fast Food Restaurant w/o Drive Thru	0.47	0.44	0.29	4.45	0.01	< 0.005	1.89	1.89	< 0.005	0.48	0.48	—	1,512	1,512	0.04	0.05	< 0.005	1,527
Bank (with Drive-Through)	0.60	0.57	0.38	5.74	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,949	1,949	0.05	0.06	< 0.005	1,968
Strip Mall	1.84	1.75	1.21	18.6	0.06	0.02	8.17	8.19	0.02	2.07	2.09	—	6,532	6,532	0.15	0.19	0.02	6,593
Total	66.8	61.7	73.3	1,295	5.73	1.58	740	742	1.47	188	189	—	579,836	579,836	6.42	12.4	1.48	583,688
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.08	0.07	0.06	1.09	< 0.005	< 0.005	0.53	0.53	< 0.005	0.13	0.14	—	392	392	0.01	0.01	0.02	395
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	7.12	6.47	8.58	187	0.82	0.22	104	104	0.20	26.2	26.4	—	75,400	75,400	0.65	1.38	3.13	75,831
Parking Lot	0.02	0.02	0.01	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.09	3.09	< 0.005	< 0.005	< 0.005	3.32
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.27	0.25	0.32	6.82	0.03	0.01	3.75	3.76	0.01	0.95	0.96	—	2,734	2,734	0.02	0.05	0.11	2,750

University/College	1.72	1.61	1.46	29.1	0.12	0.03	14.8	14.8	0.03	3.75	3.78	—	10,856	10,856	0.13	0.23	0.45	10,928
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.21	0.20	0.12	2.02	0.01	< 0.005	0.84	0.85	< 0.005	0.21	0.22	—	631	631	0.01	0.02	0.03	637
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	0.59	0.57	0.34	5.80	0.02	0.01	2.43	2.44	0.01	0.62	0.62	—	1,815	1,815	0.04	0.05	0.07	1,831
Fast Food Restaurant with Drive Thru	1.37	1.31	0.79	13.3	0.05	0.01	5.58	5.59	0.01	1.41	1.43	—	4,170	4,170	0.09	0.12	0.17	4,208
High Turnover (Sit Down Restaurant)	0.18	0.18	0.11	1.80	0.01	< 0.005	0.75	0.76	< 0.005	0.19	0.19	—	563	563	0.01	0.02	0.02	568
Fast Food Restaurant w/o Drive Thru	0.08	0.08	0.05	0.82	< 0.005	< 0.005	0.34	0.34	< 0.005	0.09	0.09	—	256	256	0.01	0.01	0.01	258
Bank (with Drive-Through)	0.11	0.10	0.06	1.05	< 0.005	< 0.005	0.44	0.44	< 0.005	0.11	0.11	—	330	330	0.01	0.01	0.01	333

Strip Mall	0.33	0.32	0.20	3.44	0.01	< 0.005	1.49	1.49	< 0.005	0.38	0.38	—	1,106	1,106	0.02	0.03	0.04	1,116
Total	12.1	11.2	12.1	252	1.07	0.29	134	135	0.27	34.1	34.4	—	98,256	98,256	1.00	1.93	4.07	98,859

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533

High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548

Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143

University/College	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0

Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863

University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6

Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092

Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102

Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	216	199	10.6	1,256	0.07	2.11	—	2.11	1.60	—	1.60	—	5,034	5,034	0.21	0.04	—	5,052
Total	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	19.4	17.9	0.96	113	0.01	0.19	—	0.19	0.14	—	0.14	—	411	411	0.02	< 0.005	—	412
Total	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.94	2.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5

University/College	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198

Industria Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0

University/College	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassla	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	331	331	331	120,815	4,158	4,158	4,158	1,517,670
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	26,402	26,402	26,402	9,636,731	808,575	808,575	808,575	295,129,807
Parking Lot	77.0	77.0	77.0	28,110	15.7	15.7	15.7	5,732
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1,017	1,017	1,017	371,205	29,307	29,307	29,307	10,697,022
University/College (4yr)	7,272	7,272	7,272	2,654,280	115,625	115,625	115,625	42,203,052
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	960	960	960	350,400	6,596	6,596	6,596	2,407,539
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	2,762	2,762	2,762	1,008,130	18,976	18,976	18,976	6,926,317
Fast Food Restaurant with Drive Thru	6,348	6,348	6,348	2,317,020	43,597	43,597	43,597	15,913,015
High Turnover (Sit Down Restaurant)	856	856	856	312,440	5,886	5,886	5,886	2,148,244

Fast Food Restaurant w/o Drive Thru	389	389	389	141,985	2,676	2,676	2,676	976,887
Bank (with Drive-Through)	502	502	502	183,230	3,450	3,450	3,450	1,259,323
Strip Mall	1,526	1,526	1,526	556,889	11,601	11,601	11,601	4,234,325

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	331	331	331	120,815	4,158	4,158	4,158	1,517,670
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	26,402	26,402	26,402	9,636,731	808,575	808,575	808,575	295,129,807
Parking Lot	77.0	77.0	77.0	28,110	15.7	15.7	15.7	5,732
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	1,017	1,017	1,017	371,205	29,307	29,307	29,307	10,697,022
University/College (4yr)	7,272	7,272	7,272	2,654,280	115,625	115,625	115,625	42,203,052
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	960	960	960	350,400	6,596	6,596	6,596	2,407,539
Gasoline/Service Station	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Convenience Market (24 hour)	2,762	2,762	2,762	1,008,130	18,976	18,976	18,976	6,926,317

Fast Food Restaurant with Drive Thru	6,348	6,348	6,348	2,317,020	43,597	43,597	43,597	15,913,015
High Turnover (Sit Down Restaurant)	856	856	856	312,440	5,886	5,886	5,886	2,148,244
Fast Food Restaurant w/o Drive Thru	389	389	389	141,985	2,676	2,676	2,676	976,887
Bank (with Drive-Through)	502	502	502	183,230	3,450	3,450	3,450	1,259,323
Strip Mall	1,526	1,526	1,526	556,889	11,601	11,601	11,601	4,234,325

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3110400	1,036,800	39,663,586	13,220,498	1,614,159

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425
Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425

Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—

Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—
Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—

Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00

Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2057 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Auto-specific fleet mix
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

Pacific Gateway (Project Operation - Truck) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Gateway (Project Operation - Truck)
Operational Year	2050
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.40
Precipitation (days)	6.60
Location	37.649944, -121.397722
County	San Joaquin
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2114
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	11.5	1000sqft	0.50	11,500	0.00	—	—	—

Government Office Building	113	1000sqft	2.60	113,100	0.00	—	—	—
Industrial Park	24,675	1000sqft	705	24,675,000	5,994,592	—	—	—
Parking Lot	6,685	1000sqft	154	0.00	34,549	—	—	—
City Park	197	Acre	197	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	15,155	1000sqft	348	0.00	0.00	—	—	—
Other Non-Asphalt Surfaces	4,959	1000sqft	114	0.00	0.00	—	—	—
Office Park	93.0	1000sqft	2.70	93,000	25,225	—	—	—
University/College (4yr)	5,000	Student	39.8	1,379,200	1,268,091	1,268,091	—	—
Apartments Mid Rise	1,600	Dwelling Unit	4.80	1,536,000	0.00	—	5,168	—
Unenclosed Parking with Elevator	874	Space	1.60	349,600	0.00	—	—	—
Hotel	120	Room	0.60	60,000	15,554	—	—	—
Gasoline/Service Station	8.00	Pump	0.60	20,000	7,402	—	—	—
Convenience Market (24 hour)	8.00	1000sqft	0.70	8,000	21,113	—	—	—
Fast Food Restaurant with Drive Thru	13.6	1000sqft	1.20	13,600	35,892	—	—	—
High Turnover (Sit Down Restaurant)	14.0	1000sqft	1.20	14,000	36,948	—	—	—
Fast Food Restaurant w/o Drive Thru	4.00	1000sqft	0.30	4,000	10,556	—	—	—
Bank (with Drive-Through)	5.00	1000sqft	0.40	5,000	13,196	—	—	—
Strip Mall	43.9	1000sqft	2.20	43,900	52,991	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Area Sources	LL-1	Replace Gas Powered Landscape Equipment with Zero-Emission Landscape Equipment
Area Sources	AS-2	Use Low-VOC Paints

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	869	789	1,549	2,053	14.0	96.4	460	556	92.9	124	216	37,900	1,520,189	1,558,089	3,021	220	8,740	1,707,815
Mit.	631	567	1,539	797	13.9	94.3	460	554	91.3	124	215	37,900	1,515,155	1,553,055	3,020	220	8,740	1,702,763
% Reduced	27%	28%	1%	61%	1%	2%	—	< 0.5%	2%	—	1%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	652	588	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Mit.	630	566	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
% Reduced	3%	4%	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	696	656	1,589	1,134	13.0	54.6	458	513	52.8	123	176	31,158	1,504,82	1,535,97	2,989	220	8,644	1,684,80
Mit.	567	535	1,584	514	13.0	53.5	458	512	52.0	123	175	31,158	1,502,33 7	1,533,49 6	2,989	220	8,644	1,682,31 6
% Reduced	18%	18%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	127	120	290	207	2.37	9.96	83.6	93.6	9.63	22.5	32.1	5,159	249,140	254,299	495	36.4	1,431	278,939
Mit.	103	97.6	289	93.8	2.36	9.77	83.6	93.4	9.49	22.5	32.0	5,159	248,729	253,888	495	36.4	1,431	278,527
% Reduced	18%	18%	< 0.5%	55%	< 0.5%	2%	—	< 0.5%	1%	—	< 0.5%	—	< 0.5%	< 0.5%	< 0.5%	< 0.5%	—	< 0.5%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,44 7	1,214,44 7	8.98	192	170	1,272,02 0
Area	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	869	789	1,549	2,053	14.0	96.4	460	556	92.9	124	216	37,900	1,520,18 9	1,558,08 9	3,021	220	8,740	1,707,81 5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Mobile	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,02	1,215,02	8.91	192	4.40	1,272,45
Area	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	652	588	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.2	20.3	1,366	255	11.4	25.4	458	484	24.3	123	148	—	1,214,690	1,214,690	8.95	192	73.3	1,272,177
Area	641	623	9.55	702	0.32	12.9	—	12.9	12.2	—	12.2	1,953	6,267	8,220	9.31	0.03	—	8,461
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	696	656	1,589	1,134	13.0	54.6	458	513	52.8	123	176	31,158	1,504,820	1,535,978	2,989	220	8,644	1,684,808
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623
Area	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	127	120	290	207	2.37	9.96	83.6	93.6	9.63	22.5	32.1	5,159	249,140	254,299	495	36.4	1,431	278,939

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	631	567	1,539	797	13.9	94.3	460	554	91.3	124	215	37,900	1,515,155	1,553,055	3,020	220	8,740	1,702,763
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Area	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Vegetati	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	630	566	1,628	801	13.9	94.3	460	554	91.3	124	215	37,900	1,515,733	1,553,633	3,020	220	8,575	1,703,201
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	31.2	20.3	1,366	255	11.4	25.4	458	484	24.3	123	148	—	1,214,690	1,214,690	8.95	192	73.3	1,272,177
Area	512	503	4.30	82.4	0.28	11.8	—	11.8	11.4	—	11.4	1,953	3,784	5,738	9.20	0.01	—	5,970
Energy	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Water	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Waste	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	28,592	28,592	—	—	—	28,592
Total	567	535	1,584	514	13.0	53.5	458	512	52.0	123	175	31,158	1,502,337	1,533,496	2,989	220	8,644	1,682,316
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623
Area	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Energy	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380
Water	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947
Waste	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419
Vegetation	—	—	—	—	—	—	—	—	—	—	—	—	4,734	4,734	—	—	—	4,734
Total	103	97.6	289	93.8	2.36	9.77	83.6	93.4	9.49	22.5	32.0	5,159	248,729	253,888	495	36.4	1,431	278,527

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	29.4	19.1	1,246	229	11.0	24.6	445	470	23.6	120	143	—	1,173,780	1,173,780	8.50	185	164	1,229,421
Parking Lot	0.76	0.50	32.3	5.93	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,446	30,446	0.22	4.81	4.26	31,889
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.90	0.16	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	0.12	886
University/College (4yr)	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Unenclo Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Gasolin e/Servic e Station	1.49	1.17	19.6	16.7	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,820	2,820	0.21	0.45	0.10	2,959
Conveni ence Market (24 hour)	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Fast Food Restaura nt with Drive Thru	0.03	0.02	1.12	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,057	1,057	0.01	0.17	0.15	1,107
High Turnover (Sit Down Restaura nt)	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Fast Food Restaura nt w/o Drive Thru	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,214
Total	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	28.0	17.9	1,331	233	11.0	24.6	445	470	23.6	120	143	—	1,174,278	1,174,278	8.44	186	4.26	1,229,780
Parking Lot	0.73	0.46	34.5	6.03	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,459	30,459	0.22	4.81	0.11	31,899
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.96	0.17	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	< 0.005	886
University/College (4yr)	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443

Gasoline/Service Station	1.31	1.01	21.1	17.2	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,885	2,885	0.20	0.46	< 0.005	3,027
Convenience Market (24 hour)	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Fast Food Restaurant with Drive Thru	0.03	0.02	1.20	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,058	1,058	0.01	0.17	< 0.005	1,108
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Total	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	5.26	3.40	238	42.0	2.01	4.50	81.0	85.5	4.30	21.8	26.1	—	194,367	194,367	1.40	30.7	11.8	203,565
Parking Lot	0.14	0.09	6.17	1.09	0.05	0.12	2.10	2.22	0.11	0.56	0.68	—	5,042	5,042	0.04	0.80	0.30	5,280
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	140	140	< 0.005	0.02	0.01	147
University/College (4yr)	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Gasoline/Service Station	0.26	0.20	3.69	3.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	471	471	0.03	0.07	0.01	495
Convenience Market (24 hour)	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3

Fast Food Restaurant with Drive Thru	< 0.005	< 0.005	0.21	0.04	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	175	175	< 0.005	0.03	0.01	183
High Turnover (Sit Down Restaurant)	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Total	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Industria Park	29.4	19.1	1,246	229	11.0	24.6	445	470	23.6	120	143	—	1,173,78	1,173,78	8.50	185	164	1,229,42
Parking Lot	0.76	0.50	32.3	5.93	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,446	30,446	0.22	4.81	4.26	31,889
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.90	0.16	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	0.12	886
University/College (4yr)	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443
Gasoline/Service Station	1.49	1.17	19.6	16.7	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,820	2,820	0.21	0.45	0.10	2,959
Convenience Market (24 hour)	0.01	0.01	0.45	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	0.06	443

Fast Food Restaurant with Drive Thru	0.03	0.02	1.12	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,057	1,057	0.01	0.17	0.15	1,107
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.22	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	211	211	< 0.005	0.03	0.03	221
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.24	0.41	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,114	2,114	0.02	0.33	0.30	2,214
Total	31.8	20.9	1,306	253	11.4	25.4	460	485	24.3	124	148	—	1,214,447	1,214,447	8.98	192	170	1,272,020
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	28.0	17.9	1,331	233	11.0	24.6	445	470	23.6	120	143	—	1,174,278	1,174,278	8.44	186	4.26	1,229,780
Parking Lot	0.73	0.46	34.5	6.03	0.29	0.64	11.5	12.2	0.61	3.10	3.71	—	30,459	30,459	0.22	4.81	0.11	31,899

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	0.02	0.01	0.96	0.17	0.01	0.02	0.32	0.34	0.02	0.09	0.10	—	846	846	0.01	0.13	< 0.005	886
University/College (4yr)	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Gasoline/Service Station	1.31	1.01	21.1	17.2	0.03	0.02	0.26	0.28	0.02	0.07	0.09	—	2,885	2,885	0.20	0.46	< 0.005	3,027
Convenience Market (24 hour)	0.01	0.01	0.48	0.08	< 0.005	0.01	0.16	0.17	0.01	0.04	0.05	—	423	423	< 0.005	0.07	< 0.005	443
Fast Food Restaurant with Drive Thru	0.03	0.02	1.20	0.21	0.01	0.02	0.40	0.42	0.02	0.11	0.13	—	1,058	1,058	0.01	0.17	< 0.005	1,108

High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Fast Food Restaurant w/o Drive Thru	0.01	< 0.005	0.24	0.04	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	212	212	< 0.005	0.03	< 0.005	222
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.05	0.03	2.40	0.42	0.02	0.04	0.80	0.85	0.04	0.22	0.26	—	2,115	2,115	0.02	0.33	0.01	2,215
Total	30.3	19.5	1,395	257	11.4	25.5	460	485	24.4	124	148	—	1,215,025	1,215,025	8.91	192	4.40	1,272,458
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	5.26	3.40	238	42.0	2.01	4.50	81.0	85.5	4.30	21.8	26.1	—	194,367	194,367	1.40	30.7	11.8	203,565
Parking Lot	0.14	0.09	6.17	1.09	0.05	0.12	2.10	2.22	0.11	0.56	0.68	—	5,042	5,042	0.04	0.80	0.30	5,280
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Office Park	< 0.005	< 0.005	0.17	0.03	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	140	140	< 0.005	0.02	0.01	147
University/College (4yr)	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Gasoline/Service Station	0.26	0.20	3.69	3.09	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	471	471	0.03	0.07	0.01	495
Convenience Market (24 hour)	< 0.005	< 0.005	0.09	0.02	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	70.0	70.0	< 0.005	0.01	< 0.005	73.3
Fast Food Restaurant with Drive Thru	< 0.005	< 0.005	0.21	0.04	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	175	175	< 0.005	0.03	0.01	183
High Turnover (Sit Down Restaurant)	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	35.0	35.0	< 0.005	0.01	< 0.005	36.7

Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	0.01	0.01	0.43	0.08	< 0.005	0.01	0.15	0.15	0.01	0.04	0.05	—	350	350	< 0.005	0.06	0.02	367
Total	5.69	3.71	249	46.5	2.08	4.64	83.6	88.3	4.44	22.5	26.9	—	201,106	201,106	1.48	31.8	12.1	210,623

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Universit (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049

Industria Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7

Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533

High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102
Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9

Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863

Universit (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6

Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	0.01	< 0.005	0.09	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	106	106	0.01	< 0.005	—	107
Government Office Building	0.10	0.05	0.88	0.74	0.01	0.07	—	0.07	0.07	—	0.07	—	1,046	1,046	0.09	< 0.005	—	1,049
Industrial Park	21.0	10.5	191	161	1.15	14.5	—	14.5	14.5	—	14.5	—	228,295	228,295	20.2	0.43	—	228,929
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.08	0.04	0.72	0.61	< 0.005	0.05	—	0.05	0.05	—	0.05	—	860	860	0.08	< 0.005	—	863
University/College (4yr)	1.43	0.71	13.0	10.9	0.08	0.99	—	0.99	0.99	—	0.99	—	15,511	15,511	1.37	0.03	—	15,554
Apartments Mid Rise	0.65	0.33	5.57	2.37	0.04	0.45	—	0.45	0.45	—	0.45	—	7,072	7,072	0.63	0.01	—	7,092

Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.06	0.03	0.52	0.43	< 0.005	0.04	—	0.04	0.04	—	0.04	—	615	615	0.05	< 0.005	—	616
Gasoline/Service Station	0.02	0.01	0.22	0.19	< 0.005	0.02	—	0.02	0.02	—	0.02	—	266	266	0.02	< 0.005	—	266
Convenience Market (24 hour)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	77.5	77.5	0.01	< 0.005	—	77.7
Fast Food Restaurant with Drive Thru	0.05	0.02	0.45	0.37	< 0.005	0.03	—	0.03	0.03	—	0.03	—	531	531	0.05	< 0.005	—	533
High Turnover (Sit Down Restaurant)	0.05	0.03	0.46	0.38	< 0.005	0.03	—	0.03	0.03	—	0.03	—	547	547	0.05	< 0.005	—	548
Fast Food Restaurant w/o Drive Thru	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	156	156	0.01	< 0.005	—	157
Bank (with Drive-Through)	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	66.4	66.4	0.01	< 0.005	—	66.6
Strip Mall	0.01	0.01	0.10	0.09	< 0.005	0.01	—	0.01	0.01	—	0.01	—	121	121	0.01	< 0.005	—	122
Total	23.5	11.8	214	177	1.28	16.3	—	16.3	16.3	—	16.3	—	255,271	255,271	22.6	0.48	—	255,979
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.6	17.6	< 0.005	< 0.005	—	17.7
Government Office Building	0.02	0.01	0.16	0.13	< 0.005	0.01	—	0.01	0.01	—	0.01	—	173	173	0.02	< 0.005	—	174
Industrial Park	3.84	1.92	34.9	29.3	0.21	2.65	—	2.65	2.65	—	2.65	—	37,797	37,797	3.35	0.07	—	37,902
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Office Park	0.01	0.01	0.13	0.11	< 0.005	0.01	—	0.01	0.01	—	0.01	—	142	142	0.01	< 0.005	—	143
University/College (4yr)	0.26	0.13	2.37	1.99	0.01	0.18	—	0.18	0.18	—	0.18	—	2,568	2,568	0.23	< 0.005	—	2,575
Apartments Mid Rise	0.12	0.06	1.02	0.43	0.01	0.08	—	0.08	0.08	—	0.08	—	1,171	1,171	0.10	< 0.005	—	1,174
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Hotel	0.01	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	102	102	0.01	< 0.005	—	102

Gasoline/Service Station	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	44.0	44.0	< 0.005	< 0.005	—	44.1
Convenience Market (24 hour)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.8	12.8	< 0.005	< 0.005	—	12.9
Fast Food Restaurant with Drive Thru	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	87.9	87.9	0.01	< 0.005	—	88.2
High Turnover (Sit Down Restaurant)	0.01	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	90.5	90.5	0.01	< 0.005	—	90.8
Fast Food Restaurant w/o Drive Thru	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	25.9	25.9	< 0.005	< 0.005	—	25.9
Bank (with Drive-Through)	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.0	11.0	< 0.005	< 0.005	—	11.0
Strip Mall	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.1	20.1	< 0.005	< 0.005	—	20.1
Total	4.29	2.15	39.0	32.3	0.23	2.97	—	2.97	2.97	—	2.97	—	42,263	42,263	3.74	0.08	—	42,380

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	216	199	10.6	1,256	0.07	2.11	—	2.11	1.60	—	1.60	—	5,034	5,034	0.21	0.04	—	5,052
Total	814	756	29.8	1,623	1.34	54.7	—	54.7	52.3	—	52.3	8,695	21,879	30,574	41.2	0.07	—	31,626
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	38.3	38.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	598	557	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	6.98	6.98	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	19.4	17.9	0.96	113	0.01	0.19	—	0.19	0.14	—	0.14	—	411	411	0.02	< 0.005	—	412
Total	117	114	1.74	128	0.06	2.35	—	2.35	2.22	—	2.22	323	1,038	1,361	1.54	< 0.005	—	1,401

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	82.0	40.5	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Consumer Products	478	478	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	16.1	16.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	576	534	19.2	367	1.26	52.6	—	52.6	50.7	—	50.7	8,695	16,845	25,540	41.0	0.03	—	26,574
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	3.36	1.66	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988
Consumer Products	87.2	87.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	2.94	2.94	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	93.5	91.8	0.79	15.0	0.05	2.16	—	2.16	2.08	—	2.08	323	627	950	1.52	< 0.005	—	988

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5

University/College	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	3.92	0.00	3.92	0.40	0.01	—	16.8
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	43.1	0.00	43.1	4.41	0.10	—	185
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	10,934	0.00	10,934	1,121	26.6	—	46,902
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	31.7	0.00	31.7	3.25	0.08	—	136
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	20.5	0.00	20.5	2.10	0.05	—	88.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	125	0.00	125	12.8	0.30	—	535

Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.83	0.00	5.83	0.60	0.01	—	25.0
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.20	0.00	0.20	0.02	< 0.005	—	0.87
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	1.14	0.00	1.14	0.12	< 0.005	—	4.87
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	7.91	0.00	7.91	0.81	0.02	—	33.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	8.14	0.00	8.14	0.83	0.02	—	34.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	2.33	0.00	2.33	0.24	0.01	—	9.98
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	< 0.005	—	1.63
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	6.23	0.00	6.23	0.64	0.02	—	26.7
Total	—	—	—	—	—	—	—	—	—	—	—	11,190	0.00	11,190	1,147	27.3	—	48,000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.65	0.00	0.65	0.07	< 0.005	—	2.78
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	7.13	0.00	7.13	0.73	0.02	—	30.6
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	1,810	0.00	1,810	186	4.41	—	7,765
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	5.24	0.00	5.24	0.54	0.01	—	22.5
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	3.40	0.00	3.40	0.35	0.01	—	14.6
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	20.6	0.00	20.6	2.12	0.05	—	88.6
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	0.97	0.00	0.97	0.10	< 0.005	—	4.14

Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.03	0.00	0.03	< 0.005	< 0.005	—	0.14
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	< 0.005	—	0.81
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	1.31	0.00	1.31	0.13	< 0.005	—	5.62
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	1.35	0.00	1.35	0.14	< 0.005	—	5.78
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	0.39	0.00	0.39	0.04	< 0.005	—	1.65
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.06	0.00	0.06	0.01	< 0.005	—	0.27
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1.03	0.00	1.03	0.11	< 0.005	—	4.43
Total	—	—	—	—	—	—	—	—	—	—	—	1,853	0.00	1,853	190	4.51	—	7,947

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124

Gasolin Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Conveni ence Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaura nt with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaura nt)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaura nt w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Govern ment Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198

Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3

Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	5.76	0.00	5.76	0.58	0.00	—	20.2
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	56.7	0.00	56.7	5.67	0.00	—	198
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	16,490	0.00	16,490	1,648	0.00	—	57,693
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	9.11	0.00	9.11	0.91	0.00	—	31.9
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	46.6	0.00	46.6	4.66	0.00	—	163
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	492	0.00	492	49.2	0.00	—	1,721
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	638	0.00	638	63.7	0.00	—	2,231
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	35.4	0.00	35.4	3.54	0.00	—	124
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	2.32	0.00	2.32	0.23	0.00	—	8.13
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	13.0	0.00	13.0	1.30	0.00	—	45.3
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	84.4	0.00	84.4	8.44	0.00	—	295
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	89.8	0.00	89.8	8.97	0.00	—	314

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	2.51	0.00	2.51	0.25	0.00	—	8.80
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	24.8	0.00	24.8	2.48	0.00	—	86.9
Total	—	—	—	—	—	—	—	—	—	—	—	18,015	0.00	18,015	1,800	0.00	—	63,027
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	0.95	0.00	0.95	0.10	0.00	—	3.34
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	9.39	0.00	9.39	0.94	0.00	—	32.8
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	2,730	0.00	2,730	273	0.00	—	9,552
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
City Park	—	—	—	—	—	—	—	—	—	—	—	1.51	0.00	1.51	0.15	0.00	—	5.28
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Non-Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	7.72	0.00	7.72	0.77	0.00	—	27.0

University/College	—	—	—	—	—	—	—	—	—	—	—	81.4	0.00	81.4	8.14	0.00	—	285
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	106	0.00	106	10.6	0.00	—	369
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Hotel	—	—	—	—	—	—	—	—	—	—	—	5.86	0.00	5.86	0.59	0.00	—	20.5
Gasoline/Service Station	—	—	—	—	—	—	—	—	—	—	—	0.38	0.00	0.38	0.04	0.00	—	1.35
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	2.15	0.00	2.15	0.21	0.00	—	7.51
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	14.0	0.00	14.0	1.40	0.00	—	48.9
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	14.9	0.00	14.9	1.49	0.00	—	52.0
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	0.42	0.00	0.42	0.04	0.00	—	1.46

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	4.11	0.00	4.11	0.41	0.00	—	14.4
Total	—	—	—	—	—	—	—	—	—	—	—	2,983	0.00	2,983	298	0.00	—	10,435

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752

City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23

University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.28	0.28
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6,752	6,752
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.23	0.23
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5.33	5.33
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.0	11.0
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	93.8	93.8
Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,659	1,659
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.3	21.3
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	21.9	21.9

Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6.25	6.25
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.27	0.27
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	8,571	8,571
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Government Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Industrial Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,118	1,118
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Office Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
University/College (4yr)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.88	0.88
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.82	1.82
Hotel	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15.5	15.5

Convenience Market (24 hour)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	275	275
Fast Food Restaurant with Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.52	3.52
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.62	3.62
Fast Food Restaurant w/o Drive Thru	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04	1.04
Bank (with Drive-Through)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.05	0.05
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1,419	1,419

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassla	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadle af Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassla nd	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	7,811	7,811	—	—	—	7,811
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cropland	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,293	1,293	—	—	—	1,293

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241

Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	21,241	21,241	—	—	—	21,241
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-460	-460	—	—	—	-460
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	20,781	20,781	—	—	—	20,781
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Broadleaf Forest	—	—	—	—	—	—	—	—	—	—	—	—	3,517	3,517	—	—	—	3,517
Grassland	—	—	—	—	—	—	—	—	—	—	—	—	-76.1	-76.1	—	—	—	-76.1
Urban	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	3,441	3,441	—	—	—	3,441

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	11,103	11,103	11,103	4,052,599	488,532	488,532	488,532	178,314,337
Parking Lot	288	288	288	105,118	12,672	12,672	12,672	4,625,185
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	8.00	8.00	8.00	2,920	352	352	352	128,478
University/College (4yr)	20.0	20.0	20.0	7,300	880	880	880	321,200
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	4.00	4.00	4.00	1,460	176	176	176	64,234
Gasoline/Service Station	1,440	1,440	1,440	525,600	288	288	288	105,120
Convenience Market (24 hour)	4.00	4.00	4.00	1,460	176	176	176	64,240
Fast Food Restaurant with Drive Thru	10.00	10.00	10.00	3,650	440	440	440	160,599
High Turnover (Sit Down Restaurant)	2.00	2.00	2.00	730	88.0	88.0	88.0	32,121

Fast Food Restaurant w/o Drive Thru	2.00	2.00	2.00	730	88.0	88.0	88.0	32,120
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	20.0	20.0	20.0	7,299	880	880	880	321,143

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Government Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Industrial Park	11,103	11,103	11,103	4,052,599	488,532	488,532	488,532	178,314,337
Parking Lot	288	288	288	105,118	12,672	12,672	12,672	4,625,185
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Park	8.00	8.00	8.00	2,920	352	352	352	128,478
University/College (4yr)	20.0	20.0	20.0	7,300	880	880	880	321,200
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hotel	4.00	4.00	4.00	1,460	176	176	176	64,234
Gasoline/Service Station	1,440	1,440	1,440	525,600	288	288	288	105,120
Convenience Market (24 hour)	4.00	4.00	4.00	1,460	176	176	176	64,240

Fast Food Restaurant with Drive Thru	10.00	10.00	10.00	3,650	440	440	440	160,599
High Turnover (Sit Down Restaurant)	2.00	2.00	2.00	730	88.0	88.0	88.0	32,121
Fast Food Restaurant w/o Drive Thru	2.00	2.00	2.00	730	88.0	88.0	88.0	32,120
Bank (with Drive-Through)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Strip Mall	20.0	20.0	20.0	7,299	880	880	880	321,143

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	800
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	800
Conventional Wood Stoves	0
Catalytic Wood Stoves	80
Non-Catalytic Wood Stoves	80
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
3110400	1,036,800	39,663,586	13,220,498	1,614,159

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	240,687	0.00	0.0000	0.0000	331,994
Government Office Building	2,367,108	0.00	0.0000	0.0000	3,265,086
Industrial Park	516,431,380	0.00	0.0000	0.0000	712,343,077
Parking Lot	5,887,866	0.00	0.0000	0.0000	0.00
City Park	0.00	0.00	0.0000	0.0000	0.00
Other Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Other Non-Asphalt Surfaces	0.00	0.00	0.0000	0.0000	0.00
Office Park	1,946,428	0.00	0.0000	0.0000	2,684,819
University/College (4yr)	8,066,932	0.00	0.0000	0.0000	48,397,263
Apartments Mid Rise	7,228,498	0.00	0.0000	0.0000	22,067,987
Unenclosed Parking with Elevator	985,173	0.00	0.0000	0.0000	0.00
Hotel	367,683	0.00	0.0000	0.0000	1,917,419
Gasoline/Service Station	206,599	0.00	0.0000	0.0000	829,172
Convenience Market (24 hour)	409,734	0.00	0.0000	0.0000	241,901
Fast Food Restaurant with Drive Thru	546,089	0.00	0.0000	0.0000	1,657,172
High Turnover (Sit Down Restaurant)	562,151	0.00	0.0000	0.0000	1,705,912
Fast Food Restaurant w/o Drive Thru	160,614	0.00	0.0000	0.0000	487,403
Bank (with Drive-Through)	51,650	0.00	0.0000	0.0000	207,293
Strip Mall	382,460	0.00	0.0000	0.0000	378,664

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425
Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	2,043,938	0.00
Government Office Building	22,468,410	0.00
Industrial Park	5,706,093,750	84,140,425

Parking Lot	0.00	484,932
City Park	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Other Non-Asphalt Surfaces	0.00	0.00
Office Park	16,529,239	354,059
University/College (4yr)	10,705,500	39,553,323
Apartments Mid Rise	65,078,040	0.00
Unenclosed Parking with Elevator	0.00	0.00
Hotel	3,044,012	218,317
Gasoline/Service Station	106,255	103,895
Convenience Market (24 hour)	592,580	296,343
Fast Food Restaurant with Drive Thru	4,128,058	503,782
High Turnover (Sit Down Restaurant)	4,249,472	518,604
Fast Food Restaurant w/o Drive Thru	1,214,135	148,165
Bank (with Drive-Through)	198,115	185,220
Strip Mall	3,251,784	743,785

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—

Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—
Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	10.7	—
Government Office Building	105	—
Industrial Park	30,597	—
Parking Lot	0.00	—
City Park	16.9	—
Other Asphalt Surfaces	0.00	—
Other Non-Asphalt Surfaces	0.00	—
Office Park	86.5	—
University/College (4yr)	913	—
Apartments Mid Rise	1,183	—
Unenclosed Parking with Elevator	0.00	—
Hotel	65.7	—
Gasoline/Service Station	4.31	—

Convenience Market (24 hour)	24.0	—
Fast Food Restaurant with Drive Thru	157	—
High Turnover (Sit Down Restaurant)	167	—
Fast Food Restaurant w/o Drive Thru	46.1	—
Bank (with Drive-Through)	4.67	—
Strip Mall	46.1	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Government Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Industrial Park	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Office Park	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Office Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
University/College (4yr)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
University/College (4yr)	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
University/College (4yr)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
Hotel	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00

Hotel	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Hotel	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Convenience Market (24 hour)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Convenience Market (24 hour)	Supermarket refrigeration and condensing units	R-404A	3,922	26.5	16.5	16.5	18.0
Fast Food Restaurant with Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant with Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant with Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Fast Food Restaurant w/o Drive Thru	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
Fast Food Restaurant w/o Drive Thru	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
Fast Food Restaurant w/o Drive Thru	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Bank (with Drive-Through)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Bank (with Drive-Through)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Industrial Park	Cold storage	R-404A	3,922	0.38	0.07	0.07	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
Cropland	Inceptisols	1,577	0.00
Urban	Inceptisols	0.00	1,577

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres
Broadleaf Forest	1,577	0.00
Grassland	0.00	173
Urban	0.00	1,404

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	22.1	annual days of extreme heat
Extreme Precipitation	0.15	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	19.7	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	61.0
AQ-PM	26.8
AQ-DPM	15.7
Drinking Water	60.1
Lead Risk Housing	17.3
Pesticides	83.8
Toxic Releases	18.1
Traffic	25.4
Effect Indicators	—
CleanUp Sites	89.4
Groundwater	97.2
Haz Waste Facilities/Generators	99.4
Impaired Water Bodies	93.4
Solid Waste	93.2
Sensitive Population	—
Asthma	25.2
Cardio-vascular	50.6
Low Birth Weights	52.4
Socioeconomic Factor Indicators	—

Education	68.6
Housing	5.48
Linguistic	31.3
Poverty	21.3
Unemployment	45.8

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	76.83818812
Employed	76.27357885
Median HI	87.89939689
Education	—
Bachelor's or higher	55.29321186
High school enrollment	100
Preschool enrollment	5.222635699
Transportation	—
Auto Access	78.96830489
Active commuting	55.15205954
Social	—
2-parent households	47.76081098
Voting	78.15988708
Neighborhood	—
Alcohol availability	84.49890928
Park access	5.902733222
Retail density	2.746054151
Supermarket access	10.85589632

Tree canopy	64.58360067
Housing	—
Homeownership	65.75131528
Housing habitability	87.28345951
Low-inc homeowner severe housing cost burden	75.25984858
Low-inc renter severe housing cost burden	88.64365456
Uncrowded housing	49.60862312
Health Outcomes	—
Insured adults	73.18105993
Arthritis	0.0
Asthma ER Admissions	60.1
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.5
Cognitively Disabled	82.5
Physically Disabled	52.4
Heart Attack ER Admissions	58.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—

Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	53.3
Elderly	75.9
English Speaking	47.9
Foreign-born	13.3
Outdoor Workers	22.9
Climate Change Adaptive Capacity	—
Impervious Surface Cover	93.9
Traffic Density	13.8
Traffic Access	0.0
Other Indices	—
Hardship	42.3
Other Decision Support	—
2016 Voting	72.2

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	55.0
Healthy Places Index Score for Project Location (b)	70.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	2057 RPS
Land Use	Land uses are based on Project-specific information.
Operations: Vehicle Data	Project trip lengths and rates derived from traffic study conducted by Fehr & Peers.
Operations: Fleet Mix	Truck-specific fleet mix.
Operations: Energy Use	—
Operations: Refrigerants	Refrigerant usage for Industrial Park based on Project-specific data.
Operations: Consumer Products	Refined consumer product emission factor based on San Joaquin County-specific consumer product usage and population projections.

APPENDIX B
STATE AND LOCAL CONSISTENCY ANALYSES

Table B-1. Consistency with Applicable State Renewable Energy and Energy Efficiency Strategies
Pacific Gateway
San Joaquin County, California

#	Plan	Category Description	Consistency Analysis
1	California Renewables Portfolio Standard (RPS) and SB 100	As most recently amended by SB 100 (2018), California's RPS increases the proportion of electricity from renewable sources to 33 percent renewable power by 2020; 50 percent renewable power by 2026; and, 60 percent renewable power by 2030. SB 350 (2015) also requires the State Energy Resources Conservation and Development Commission to double (by 2030) the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.	**Consistent.** The Project would be consistent with and not impair implementation of the state's RPS. The electricity for the operation of the Project would be supplied by Pacific Gas & Electric, which is composed of 33% renewable resources, and 100% greenhouse gas-free resources as of 2023.[1]
2	California Code of Regulations, Title 24, Part 6	Title 24, Part 6 of the California Code of Regulations establishes energy and water efficiency requirements for residential and non-residential new construction, additions to existing buildings, and alterations to existing buildings. Standards include requirements for water heating, HVAC, lighting, electrical systems, and solar design.	**Consistent.** The Project would meet or exceed the Title 24 energy efficiency standards in effect at the time of building permit application.
3	Assembly Bill 1109	The Lighting Efficiency And Toxics Reduction Act (AB 1109) requires a reduction in average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018.	**Consistent.** The Project would meet the applicable requirements from AB 1109.
4	California Green (CalGreen) Building Standards Code Requirements	CalGreen establishes green building standards to meet the goals of AB 32. CalGreen includes standards for residential and nonresidential structures such as new buildings or portions of new buildings, additions and alterations, and all occupancies where no other state agency has the authority to adopt green building standards applicable to those occupancies. Standards include requirements for site development, indoor and outdoor water use, construction waste reduction, disposal and recycling and building maintenance and operation.	**Consistent.** To the extent applicable to the Project, the Project would meet the CalGreen Building Standards Code in effect at the time of building permit application.
Mobile Sources			
5	AB 1493 (Pavley Regulations)	Reduces GHG emissions in new passenger vehicles from model years 2012-2016 (Phase I) and model years 2017–2025 (Phase II). Also reduces gasoline consumption to a rate of 31 percent of 1990 gasoline consumption (and associated GHG emissions) by 2020.	**Consistent.** The Project would not impair implementation of the AB 1493 regulations.
6	Low Carbon Fuel Standard (LCFS)	Establishes protocols for measuring and reducing the life-cycle carbon intensity of transportation fuels and helps to establish use of alternative fuels.	**Consistent.** The Project would not conflict with implementation of the LCFS.
7	Advanced Clean Cars (ACC) Program	In 2012, the California Air Resources Board (CARB) adopted the ACC program to reduce criteria pollutant emissions and GHG emissions for model year vehicles 2015 through 2025. ACC includes the Low-Emission Vehicle (LEV) regulations that reduce criteria pollutants and GHG emissions from light- and medium-duty vehicles, and the Zero-Emission Vehicle (ZEV) regulations that require manufacturers to produce an increasing number of pure ZEVs (meaning battery electric and fuel cell electric vehicles), with provisions to also produce plug-in hybrid electric vehicles (PHEV) in the 2018 through 2025 model years. The final phase of ACC includes requirements for 2026 model years and beyond. This phase extends the existing manufacturer requirements to sell a certain number of vehicles as ZEVs and PHEVs, with 100% of sales in 2035 and beyond required to be made from ZEVs and PHEVs.	**Consistent.** The Project would not conflict with implementation of the ACC program.
8	SB 375	SB 375 establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions. Under SB 375, CARB is required, in consultation with the state's Metropolitan Planning Organizations, to set regional GHG reduction targets for the passenger vehicle and light-duty truck sector for 2020 and 2035.	**Consistent**. The Project would not conflict with the implementation of SB 375. Furthermore, the Project would be consistent with the goals of the San Joaquin Valley Council of Government's (SJV COG's) Regional Transportation Plan/Sustainable Communities Strategy, which demonstrates how the SJV region under SJV COG's jurisdiction will meet the emission reduction targets of SB 375.

References:
[1] Pacific Gas & Electric 2024 Corporate Sustainability Report. Available at: https://www.pgecorp.com/assets/pgecorp/csr/csr_2024/assets/pge-csr-2024.pdf. Accessed: January 2025.

Abbreviations:
AB - Assembly Bill
CalGreen - California Green Building Standards Code
RPS - Renewable Portfolio Standard
SB - Senate Bill
SJV COG - San Joaquin Valley Council of Government

Table B-2. Consistency with San Joaquin County General Plan
Pacific Gateway
San Joaquin County, California

#	General Plan Policy Name	General Plan Policy Description	Consistency Analysis
LU-1.1	Compact Growth and Development	The County shall discourage urban sprawl and promote compact development patterns, mixed-use development, and higher development intensities that conserve agricultural land resources, protect habitat, support transit, reduce vehicle trips, improve air quality, make efficient use of existing infrastructure, encourage healthful, active living, conserve energy and water, and diversify San Joaquin County's housing stock.	**Consistent.** The Project will include mixed-use development, including a number of land uses including but not limited to: Business Park, University, Commercial Retail Uses, and Parks/Open Spaces. The Proposed Project will attract a wide variety of development that will generate construction and permanent jobs and provide for workforce and business development within San Joaquin County and the surrounding communities. This will in turn contribute to a vibrant workplace in the San Joaquin Valley. Additionally, transit service is not currently provided to the area, the project plans to extend public transit service to the project site. This will include expanding San Joaquin RTD fixed-route bus service to the project site. Additionally, an Altamont Commuter Express (ACE) train station is situated on Tracy Boulevard at Linne Road (two miles north of the project).
LU-2.2	Sustainable Building Practices	The County shall promote and, where appropriate, require sustainable building practices that incorporate a "whole system" approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable.	**Consistent.** The Project will implement strategies and build infrastructure to promote the efficient use of resources, which includes but is not limited to: - Consistency with CalGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements. - Design of the site will reduce the mass grading to the extent feasible and decrease the use of earth moving equipment needed to grade the site, which leads to a reduction i total emissions from construction equipment and dust. - Site planning and building design should consider building orientation, window placements, and materials selection to assist in minimizing energy use - Energy efficient LED lighting and control systems will be utilized for buildings, traffic, street, and any other outdoor lighting. - Buildings shall be designed to accept roof-mounted solar panels affording tenants/users the opportunity to utilize solar energy. - Where warehouse spaces are required to be climate controlled, install insulated dock doors and dock door seals to reduce energy loss. - Section warehouse spaces by temperature and group cool and warm temperature spaces together to decrease energy usage. - Lighting levels for outdoor illumination will be required to meet the minimum standards required for safety. All exterior lighting will be required to be LED and controlled by timers, and unless otherwise required, only lighting required for parking lot security and safety will be provided at night. - The use of daylight or clerestory windows and roof skylights will be utilized as a means of providing natural light and reducing the need for lighting during daytime. - Light colored "cool" roofs will be required for all new buildings, which helps to reduce heat gain and conserve energy use. - Canopies, awnings, and architectural shade structures will also be encouraged on the south and west elevations to minimize heat gain. - Tree species will be chosen based on their large canopy characteristics at maturity and will be strategically placed on the west and east portions of the site to shade paving areas and building elevations to reduce sun exposure and minimize heat gain.
LU-3.11	Solar Access	The County shall encourage new residential subdivisions and new commercial, office, industrial, and public buildings to be oriented and landscaped to enhance natural lighting and solar access in order to maximize energy efficiency.	**Consistent.** The Project will implement the use of daylight or clerestory windows and roof skylights will be utilized as a means of providing natural light and reducing the need for lighting during daytime.
LU-6.8	Sustainable Technologies	The County shall encourage all employment and industrial projects to incorporate sustainable technologies including energy and water efficient practices.	**Consistent.** The Project will use sustainable technologies, including energy and water efficient practices where available. This includes the use of high-efficiency irrigation systems and designing buildings to include energy efficient appliances, building systems, and HVAC control systems.
ED-2.4	Green Economy	The County shall encourage the development and expansion of industries and businesses that rely on environmentally-sustainable products and services, such as renewable energy, green building, clean transportation, water conservation, waste management and recycling, and sustainable land management.	**Consistent.** The Project will implement strategies and build infrastructure to promote the efficient use of resources, including the use of recycled water generated from the treated wastewater for landscape irrigation, consideration of locally sourced, salvaged, and recycled materials for use throughout the landscape and hardscape design, and design of buildings to accept roof-mounted solar allowing tenants/users the opportunity to utilize solar energy.
PHS-5.14	Energy Consumption Reduction	The County shall encourage new development to incorporate green building practices and reduce air quality impacts from energy consumption.	**Consistent.** As noted for **NCR-5.11**, the Project will meet the CalGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements.

Table B-2. Consistency with San Joaquin County General Plan
Pacific Gateway
San Joaquin County, California

#	General Plan Policy Name	General Plan Policy Description	Consistency Analysis
NCR-5.1	Nonrenewable Energy and Energy Efficiency	The County shall support the efforts of residents, businesses, and energy providers to reduce the consumption of nonrenewable energy and shall promote energy providers' programs to increase energy efficiency and implement demand response programs.	**Consistent.** The Project would support reduced energy consumption and increased energy efficiency through green building practices, as discussed in **PHS-5.14, LU-2.2, and NCR-5.11.**
NCR-5.11	Green Building Practices	The County shall encourage green building practices in new construction.	**Consistent.** The Project will comply with the applicable requirements in the Green Building Code, which include the following: • Reducing water consumption by 20 percent • Diverting 50 percent of construction waste from landfills • Installation of low pollutant-emitting materials • Installation of separate water meters for nonresidential buildings' indoor and outdoor water use • Moisture-sensing irrigation systems for larger landscape projects • Mandatory inspections of energy systems (e.g., heat furnace, air conditioner and mechanical equipment) for nonresidential buildings over 10,000 square feet to ensure that all are working at their maximum capacity and design efficiencies. In addition, the Project buildings will be LEED compliant and encouraged to become certified.
NCR-5.14	Natural Daylighting in Commercial Operations	The County shall encourage commercial and employment operations to incorporate natural daylighting by the use of windows and skylights to reduce energy demand for lighting.	**Consistent.** The Project would use daylight or clerestory windows and roof skylights as a means of providing natural light and reducing the need for lighting during daytime.
NCR-5.2	Alternative Energy	The County shall encourage residents, businesses, and energy providers to develop and use alternative, renewable energy sources, including but not limited to, biomass, solar, wind, and geothermal.	**Consistent.** The Project buildings shall be designed to accept roof-mounted solar panels affording tenants/users the opportunity to utilize solar energy, with a mitigation measure requiring the installation of solar to cover base building needs at industrial zoned buildings.

References:

San Joaquin County. County Wide General Plan 2035. Available here: https://www.sjgov.org/commdev/cgi-bin/cdyn.exe?grp=planning&htm=gp2035. Accessed: January 2025.

Abbreviations:

ACE - Altamont Commuter Express
HVAC - heating, ventilation, and air conditioning
LED - light emitting diode
LEED - Leadership in Energy and Environmental Design
RTD - Regional Transportation District

Table B-3. Consistency with San Joaquin County Regional Transportation Plan/Sustainable Communities Strategy
Pacific Gateway
San Joaquin County, California

#	Goal	Strategy	Consistency Analysis
1	Enhance the environment for existing and future generations and conserve energy.	Strategy No. 1: Encourage efficient development patterns that maintain agricultural viability and natural resources.	**Consistent.** The Project will include parks and open spaces throughout the Project area. In addition, the Project will include sustainable design practices for landscape, which will include the use of native and climate adapted plant species, high efficiency weather-based irrigation systems, locally sourced and recycled materials, and stormwater best management practices. Water use for landscape irrigation is also in the forefront of current design practices and guidelines have been included to address water conservation. This approach to the design will create a contemporary landscape that is attractive, yet resource-efficient and relatively low-maintenance.
		Strategy No. 2: Encourage preservation of natural resources.	**Consistent.** The Project will include parks and open spaces throughout the Project area and will be well-connected via pedestrian and bicycle networks. Typically, these areas will include exercise stations, picnic areas, sitting areas, concession/food truck service areas, natural areas, and trails.
		Strategy No. 3: Enhance the connection between land use and transportation choices through projects supporting energy and water efficiency.	**Consistent.** The Project will implement strategies and build infrastructure to promote the efficient use of resources, including the use of recycled water generated from the treated wastewater for landscape irrigation, consideration of locally sourced, salvaged, and recycled materials for use throughout the landscape and hardscape design, and design of buildings to accomodate the installation of roof-mounted solar. The Project has also committed to incorporating solar photo voltaic (PV) panels sized to accomodate "base building" energy needs for limited industrial zoned buildings, as described in Section 1.3 of the Greenhouse Gas Emissions Technical Report. Additionally, the Project will meet the CalGreen Building Standards Code in effect at the time of building permit application, which would include a number of energy saving requirements.
		Strategy No. 4: Improve air quality by reducing transportation-related emissions.	**Consistent.** The Project will implement of a Voluntary Commute Trip Reduction (CTR) program. Required elements of the program include: • Commute Trip Reduction Marketing - implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program). • Ridesharing Program - implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers. • Subsidized or Discounted Transit Program - provides subsidized or discounted, or free transit passes for employees. • End-of-Trip Bicycle Facilities - installs and maintains end-of-trip facilities (including bike parking, bike lockers, showers, and personal lockers) for employee use. • Employer-Sponsored Vanpool - implements an employer-sponsored vanpool service for employee groups of 5 to 15 people. Additionally, the Project will establish pedestrian and bicycle circulation system within the Project site to encourage employee wellness and provide non-vehicle alternatives.
4	Preserve the efficiency of the existing transportation system.	Strategy No. 12: Prioritize projects that make more efficient use of the existing road network.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 13: Support the continued maintenance and preservation of the existing transportation system.	**Consistent**. While specific off-site improvements have not been identified, the following upgrades are anticipated: • Improved California State Route 132/Chrisman Road interchange • New Interstate 580/Tracy Boulevard interchange (potential improvement)
		Strategy No. 14: Promote electric power, alternative fuels and autonomous technologies for freight and agriculture.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.
		Strategy No. 15: Manage the adoption of electric vehicles and private connected and autonomous vehicles.	**Consistent.** The Project will provide preferential parking space locations for electric vehicles and other clean air vehicles in all parking structures and lots to encourage energy-efficient vehicular use.
		Strategy No. 16: Promote electric power, alternative fuels, and autonomous technologies for public transit.	**Consistent.** While the strategy does not specifically pertain to this project, the Project would not impede implementation of this strategy.

Notes:
San Joaquin Council of Governments. 2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). Available here: https://www.sjcog.org/608/Adopted-2022-RTPSCS-Plan. Accessed: January 2025.

Abbreviations:
ACE - Altamont Commuter Express
COG - Council of Governments
CTR - Commute Trip Reduction
SCS - Sustainable Communities Strategy
SJV - San Joaquin Valley
RTD - Regional Transportation District
RTP - Regional Transportation Plan

APPENDIX G

BARGAS
A Decade of Excellence

February 28, 2025

Nick Pappani
Raney Planning & Management, Inc.
1501 Sports Drive, Suite A
Sacramento, CA 95834
Phone: 916-372-6100
Email: npappani@raneymanagement.com

Subject: Biological resources letter report for the Pacific Gateway Specific Plan Project off-site areas at Chrisman Road in San Joaquin County, California

Dear Nick Pappani:

Bargas Environmental Consulting (Bargas) prepared this biological resources letter report (report) for the approximately seven (7) miles of road widening work, which is associated with the Pacific Gateway Specific Plan in San Joaquin County, California. A Biological Resources Assessment report was prepared for the Project by Bargas, dated February 2025. The purpose of this letter report is to understand the existing conditions of the proposed road widening work (i.e., Project) areas and quantify the biological resources identified on-site through literature reviews and field surveys. This data is used to determine the occurrence potential for special-status species, examine the suitability of potential habitat, and anticipate the local, state, or federal regulations potentially applicable to the Project.

Project Location & Description

The Project site consists of approximately 248.94 acres of existing roadways, intersections, and nearby land spanning approximately seven (7) miles in an unincorporated region of San Joaquin County (**Figure 1**). The roadways within the Project site consist of segments of South Chrisman Road, South MacArthur Drive, and West Linne Road, with intersections at Vernalis Road, South Bird Road, South Tracy Boulevard, South Corral Hollow Road, West Schulte Road, and West 11th street. The approximate center point is 37° 41' 46.2" North 121° 23' 53.1" West. The Project is located in Township 2S, Range 5 and 6 East, Sections 2, 3, 4, 5,6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 21, 22, 23, 25, 26, 27, 30, 31, 34, 35, and 36 on the U.S. Geological Survey (USGS) Tracy, Vernalis, and Lathrop 7.5-minute Quadrangles. The Regional Area is a part of the Jan Joaquin Delta watershed, Hydrologic Unit Code-8 18040003. The Project is located within the boundaries of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP). Specifically, with the SJMSCP the Project site is located within the Central, Central/Southwest Transition, and Southwest Zones. In addition, one road segment of South Bird Road just north of the Delta Mendota Canal is located within U.S. Fish and Wildlife Service designated critical habitat for Delta Smelt (*Hypomesus transpacificus*).

The proposed Project consists of planned road widening of: Chrisman Road from Interstate 580 to 11th Street, a segment of South MacArthur Drive between two unnamed dirt roads, and West Linne Road from South Corral Hollow Road to South Chrisman Road. Additionally, the Project includes improvements to ten (10) intersections (**Figure 2**).

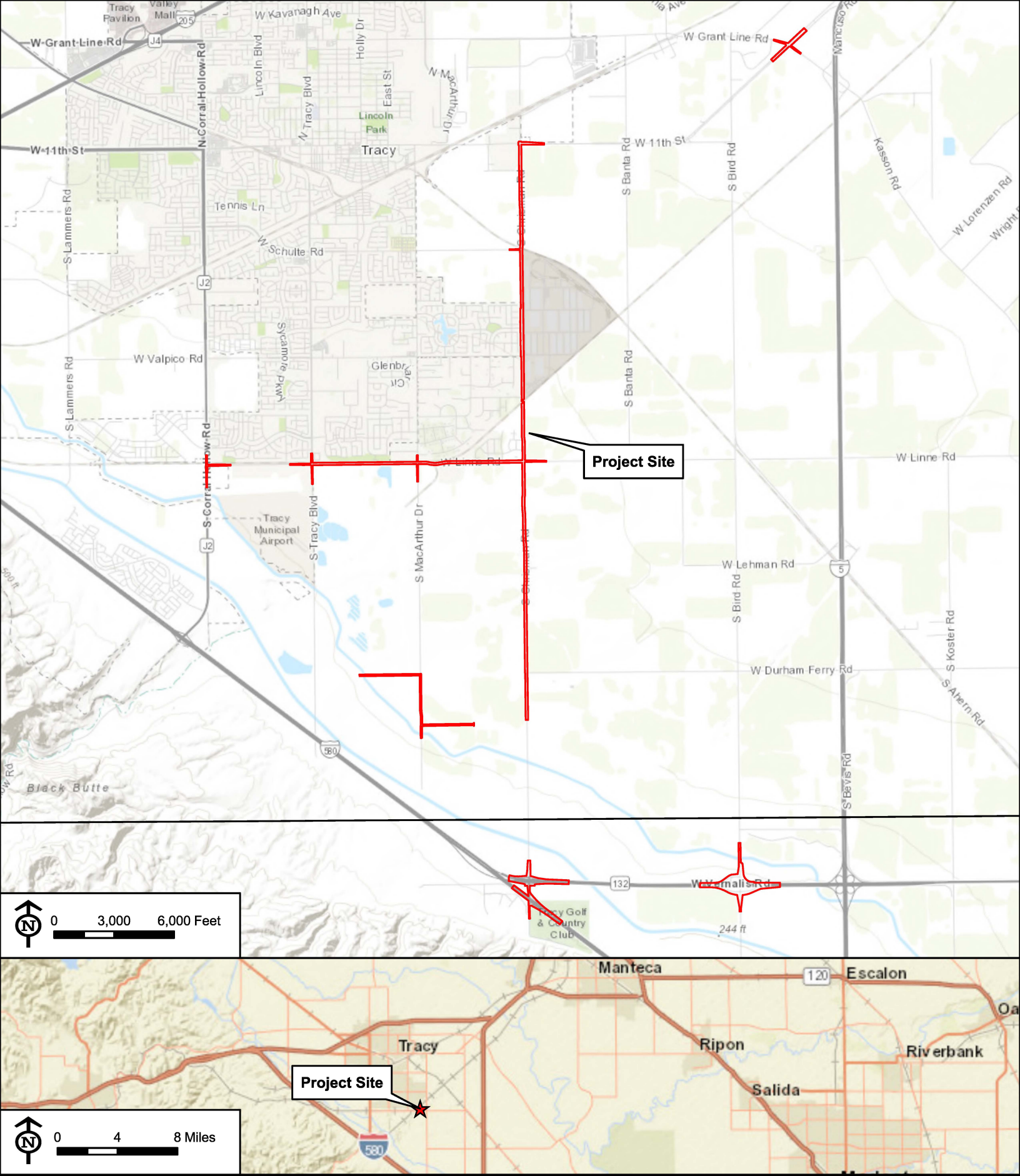
Methods

This report is informed by data from a desktop analysis of pertinent literature and several resource databases, as well as the field surveys, the methods for which are described below.

Definitions

This report will use the following definitions for areas referred to herein:

- **Project site:** The 7-miles of South Chrisman Road, segments of South MacArthur Drive and West Linne Road, and ten intersections.
- **Biological Study Area:** The Project site and a 250-foot buffer.
- **Regional Area:** The Project site and a 5-mile buffer. The Regional Area was used as the basis for generating lists of special-status species and other biological resources considered in this report.



Source: ESRI ArcGIS Online Basemap - World Topographic Map, World Street Map

Public Land Survey System (PLSS):
Mount Diablo, Township 2S, 3S, Range 5E, 6E, Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 18, 19, 21, 22, 23, 25, 26, 27, 30, 31, 34, 35, 36

USGS Quad(s): Tracy (n.d.), Vernalis (n.d.), Lathrop (n.d.)

Project Site Coordinates: 121°24'2"W 37°41'38"N

Project Site and Vicinity

Pacific Gateway Specific Plan Project - Chrisman Road

BARGAS Environmental Consulting

Map Created: 2/10/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

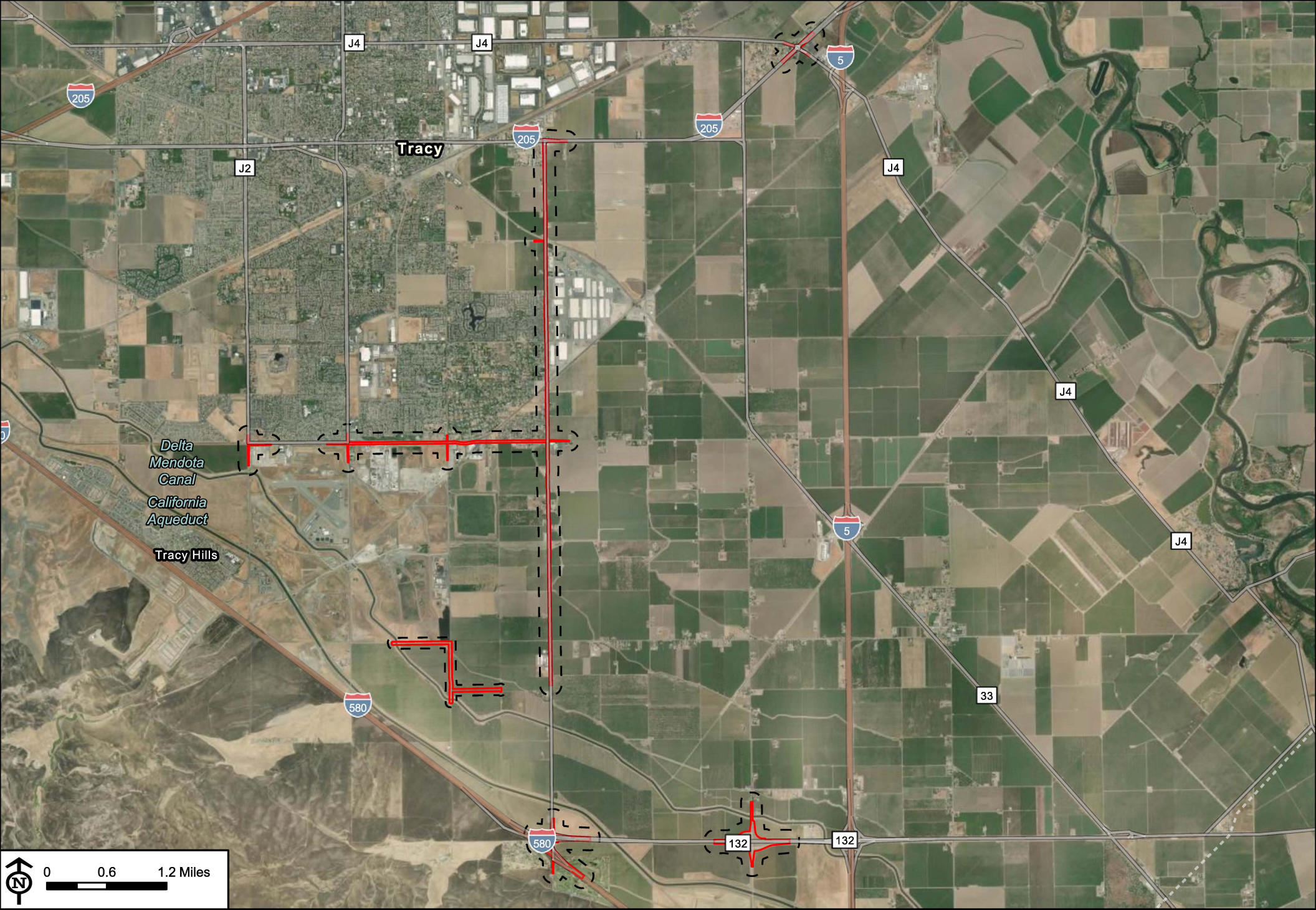
Project Site

Study Area

Figure 2 Study Area Context

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/12/2024, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site

Study Area

Figure 2 Study Area Context

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/12/2024, Map Revised: N/A, Bargas Project Number: 1644-22

Desktop Review

Prior to conducting the field survey, Bargas conducted an initial review of literature and data sources to characterize the biological conditions and to compile records of sensitive biological resources that could potentially occur in the Biological Study Area (Study Area). The methods used for this analysis are described below.

Biological Setting

The biological setting includes terrain, hydrology, soils, land uses, and other features that support or inhibit biological resources in an area. To better understand the biological setting of the Project, the following resources were reviewed in detail:

- US Fish and Wildlife Service's *National Wetlands Inventory* to determine if surface waters and wetlands have been mapped on or adjacent to the Study Area.
- US Geological Survey's *National Hydrography Dataset* to determine if hydrological features have been mapped on or adjacent to the Study Area.
- San Francisco Estuary Institute (SFEI) *California Aquatic Resources Inventory* (CARI), 2024, to determine if hydrological features have been mapped on or adjacent to the Study Area.
- US Department of Agriculture National Resource Conservation Service *Web Soil Survey* to map and describe soil(s) within the Study Area.
- Google Earth Pro (2025) aerial map images of the Study Area, including historical aerial images.

Special-Status Species & Habitats

It is important to create a well-defined list of habitats and species that could reasonably be expected to occur on the Project site in order to analyze potential Project effects on biological resources effectively. The following describes how the list of potentially-occurring special-status biological resources was assembled.

Data Sources

Species and habitat occurrences were queried from the following resources:

- The San Joaquin County's *Multi-Species Habitat Conservation and Open Space Plan* (SJMSCP 2000) for a list of species covered under the Plan, or "SJMSCP Covered Species". Covered species were considered for their potential to occur within the Project site based on Preserve (habitat) types within the Central Zone, the Central/Southwest Transition Zone, and the Southwest Zone. The SJMSCP Covered Species reasonably expected to occur were primarily associated with the Row and Field Crop/Riparian Preserve habitats of the Central Zone (not including those associated only with the Stanislaus, San Joaquin, or Mokelumne Rivers).
- US Fish and Wildlife Service *Information for Planning and Consultation* portal (IPaC, 2025) for a list of federally listed species and designated critical habitat recommended for impact analysis consideration, based on an upload of the Study Area limits.
- California Department of Fish and Wildlife *California Natural Diversity Database* (CNDDB, 2025) for special-status species records and sensitive habitats/vegetation within the Regional Area.
- California Native Plant Society *Inventory of Rare and Endangered Plants* (CNPS, 2025) for a list of special-status plant species occurrences within the USGS 7.5-minute quadrangles that overlap the Regional Area.

Special-Status Designations Considered

A variety of agencies and respected non-profit organizations assess the conservation status of plant and wildlife species; however, not all are applicable to this report. The following special-status designations were considered when determining special-status species to be discussed in this report:

- **Federal Status:** Species listed as Endangered (FE) or Threatened (FT), as well as species Proposed as Endangered (FPE), Proposed as Threatened (FPT), Proposed for Delisting (FPD), and Candidates (FC) for listing under the Federal Endangered Species Act (FESA).
- **California Status:** Species listed as Endangered (CE) or Threatened (CT), as well as species that are Candidates for Endangered (CCE) status, Threatened (CCT) status, or Delisting (CCD) under the California Endangered Species Act. Also considered are species listed as Fully Protected (FP) and Species of Special Concern (SSC).
- **CNPS Status:** All California Rare Plant Ranks (CRPR) maintained by the CNPS *Inventory of Rare and Endangered Plants*.

Occurrence Potential

Based on the desktop review, field surveys, and habitat analyses, Bargas generated a list of special-status species for evaluation and assessed the potential for each special-status species likelihood of occurrence on-site. Biological conditions (e.g., vegetation communities, habitats, disturbances, etc.) on-site as well as the habitat and life cycle requirements of special-status species identified for the potential to occur analysis were considered. “Recent” occurrences are defined as observed within the past 30 years. Based on these considerations, each species was assigned a level of potential to occur, using the following categories:

- **Present:** Species was detected during biological surveys conducted for the Project by Bargas.
- **High**: Species with recorded occurrence(s) within or near the Study Area and suitable habitat (e.g., appropriate elevation, hydrology, soils, cover, habitat type, food resources, and etc.) exists in the Study Area; however, the species was not observed during biological surveys for the Project.
- **Moderate:** Species with no known recorded occurrence(s) within or near the Study Area and the species was not observed during biological surveys for the Project. However, habitat within the Study Area is suitable to support the species.
- **Not Expected:** Species with no known recorded occurrence(s) within or near the Study Area. No suitable habitat present on-site; or habitat is within the Project, but habitat on-site is substantially disturbed, fragmented, or is small in extent such that is very unlikely to support the species.
- **Presumed Absent:** There are no records of the species occurring within or near the Study Area, the Study Area is not within the known geographic range for the species, and/or suitable habitat (e.g., soil, vegetation, elevational range, etc.) was not found during the field surveys conducted for the Project. This species is detectable year-round and would have been detected during surveys, but was not, or focused surveys were conducted for the species and the species was not detected.

The potential for bird species were further distinguished into those that may: 1) nest within or near the Study Area; 2) forage within or near the Study Area; and/or 3) occur on or near the Study Area only as transients during migratory flights or other dispersal events.

Field Surveys

Bargas Biologist Anthony Hartman performed a reconnaissance-level biological survey on September 28 and October 2, 2023. Weather was typical for the season with temperatures ranging from 66 °Fahrenheit (°F) to 75 °F, partly cloudy skies, and no substantial wind or precipitation on either day. On January 21, 2025, Bargas Biologist Corey Clapp conducted another reconnaissance-level field survey for biological resources to survey additional areas of the Project site that were not previously surveyed in 2023. The biological resources mapping was also updated and refined as appropriate. The weather was typical for the season with the temperature ranging from 54°F to 61°F and mostly clear skies with a light breeze.

These field surveys primarily consisted of walking meandering transects throughout the publicly accessible road rights-of-way (ROW) within the Project site. Other areas, outside of the ROW, were surveyed visually through the windshield/windows of the surveyor vehicle. Binoculars were used to assist in the survey as applicable. The Project site was evaluated for the presence of habitat components that could support special-status wildlife and plant species identified during the Literature and Database Review described above. Habitats that were determined to be potential habitat for a special-status species were further assessed for suitability.

The biologists conducted vegetation mapping, classifying vegetation communities and land cover types generally following the Manual of California Vegetation (MCV): Second Edition (CNPS 2022a), where applicable. The MCV provides standard classifications based on community composition and structure, with further definitions based on dominant species cover. Additionally, identified vegetation communities were also classified as outlined in Section 2.2.1 of the SJMSCP. The biological surveys conducted were comprehensive but do not equate to protocol–level surveys or focused surveys defined by the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), CNPS, Regional Water Quality Control Board (RWQCB), or other local resource protection agencies. To assist with the classification of observed aquatic resources, California Aquatic Resources Inventory (CARI) GIS database was used. Throughout the surveys, plant and animal species detected on site were recorded **(Appendix A)**.

One relatively small portion of the Project site, located in the southwest corner (i.e., a segment of South MacArthur Drive and two unnamed dirt roads), was not included within the field surveys. Biological resources mapping of this area was completed using aerial imagery as well as comparing other mapped areas of the Project that were surveyed in the field.

Seasonal and temporal factors may have influenced species detection during the surveys. The surveys were conducted in September and January and may have missed potentially occurring migrant bird/insect species or plant species outside of their blooming period. In addition, the surveys were performed during the day and were limited to diurnal wildlife species. The surveys performed were not protocol-level focused surveys. Dates, times, personnel, and weather conditions for the surveys are summarized in **Table 1** below.

Table 1. Survey Summary Table

Date	Biologist	Time	Start Conditions			End Conditions		
			Temperature	Clouds	Wind	Temperature	Clouds	Wind
9/28/2023	Anthony Hartman	0930 - 1530	66° Fahrenheit (F)	Partly cloudy	Calm	77°F	Partly cloudy	Calm
10/02/2023	Anthony Hartman	1100 – 1230	73°F	Partly cloudy	Calm	75°F	Partly cloudy	Calm
1/22/2025	Corey Clapp	1100-1515	52°F	Clear skies	Calm	65°F	Clear skies	Calm

Results

This section discusses what is known about biological resources in the Study Area based on information from the field surveys, 288 CNDDB records, 8 CNPS records, 14 IPaC records, and 1 critical habitat for Delta Smelt determination in the Regional Area.

Existing Conditions and Land Use

When viewing the Project site and surrounding Regional Area in its entirety on aerial photography, the primary land use of the region is agriculture. Natural habitats are present, consisting of interspersed annual grasslands. The Delta Mendota canal and the Edmund G. Brown California Aqueduct transect the Regional Area. There are no substantial terrain features present in the Regional Area and elevations within the Project site range from approximately 50 to 325 feet above mean sea level (AMSL).

Soils

Nine soil types are mapped within the Project site (NRCS 2025), as summarized in **Table 2** below with the types, parent material, drainage class, and hydric rating. A map showing soils on-site is provided as (**Figure 3**).

Table 2. Soil Series within the Project Site

Soil Series	Map Unit Number	Map Unit Symbol	Parent Material	Drainage Class	Hydric Rating
Capay clay, 0 to 1 percent slopes, MLRA 17	118	2xc8q	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
Capay-Urban land complex, 0 percent slopes, MLRA 17	122	2y0dy	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
El Solyo clay loam, 0 to 2 percent slopes	156	Hhss	Alluvium derived from sedimentary rock	Well drained	No
Pits, gravel	214	N/A	N/A	N/A	No
Stomar clay loam, 0 to 2 percent slopes	252	Hhww	Alluvium derived from sedimentary rock	Well drained	No
Vernalis clay loam, 0 to 2 percent slopes	268	hhxd	Alluvium derived from mixed rock sources	Well drained	No
Willows clay, partially drained, 0 to 2 percent slopes	274	hhxl	Alluvium derived from mixed sources	Poorly drained	Yes
Zacharias clay loam, 0 to 2 percent slopes	281	hhxt	Alluvium derived from mixed rock sources	Well drained	No
Zacharias gravelly clay loam, 0 to 2 percent slopes	282	hhxv	Alluvium derived from mixed rock sources	Well drained	No



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

- Project Site
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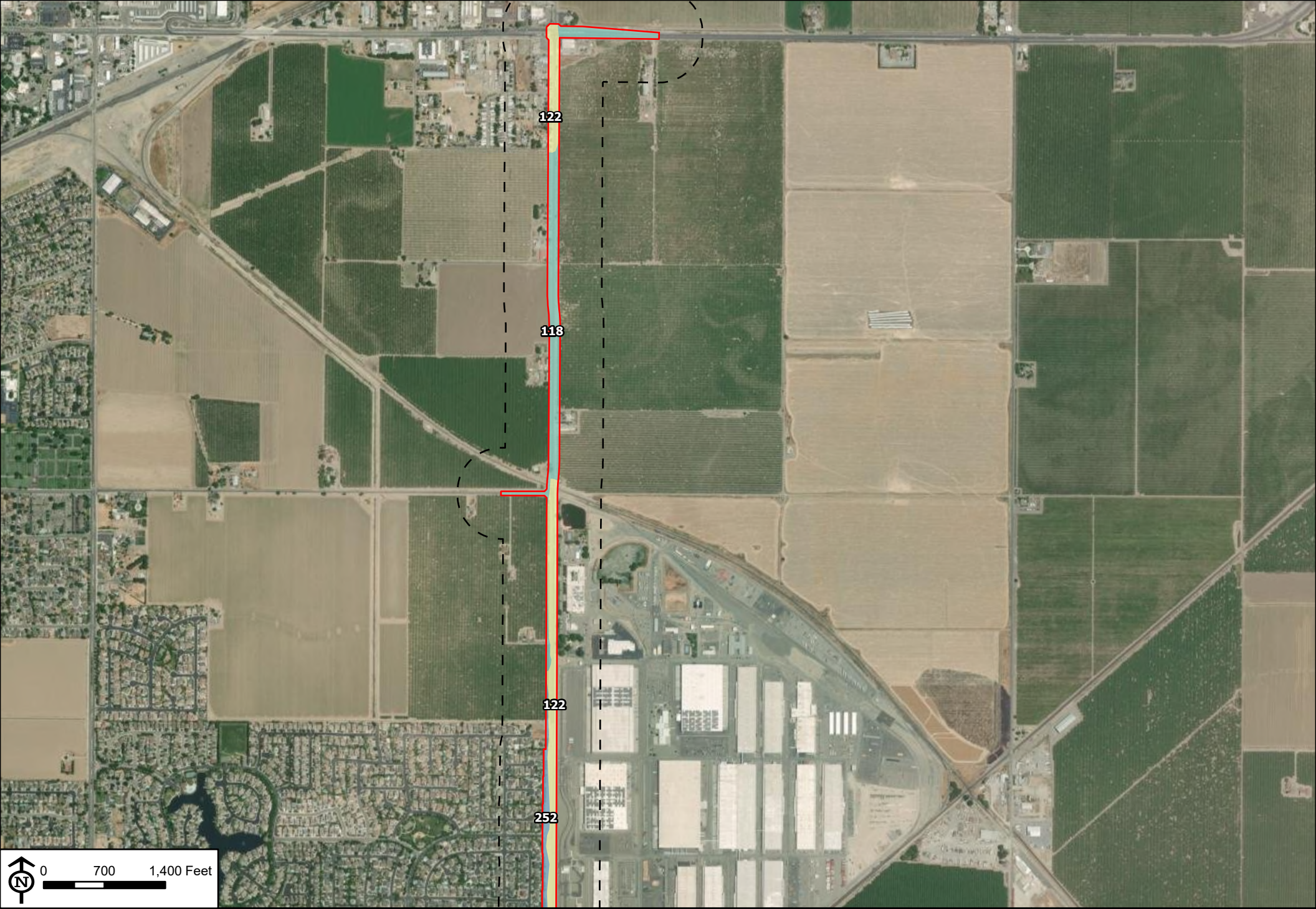
- 156 - El Solyo clay loam, 0 to 2 percent slopes
- 214 - Pits, grave
- 252 - Stomar clay loam, 0 to 2 percent slopes
- 268- Vernalis clay loam, 0 to 2 percent slopes
- 274 - Willows clay, partially drained, 0 to 2 percent slopes
- 281 - Zacharias clay loam, 0 to 2 percent slope
- 282 - Zacharias gravelly clay loam, 0 to 2 percent slopes
- W - Water

Figure 3 Soils Map

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



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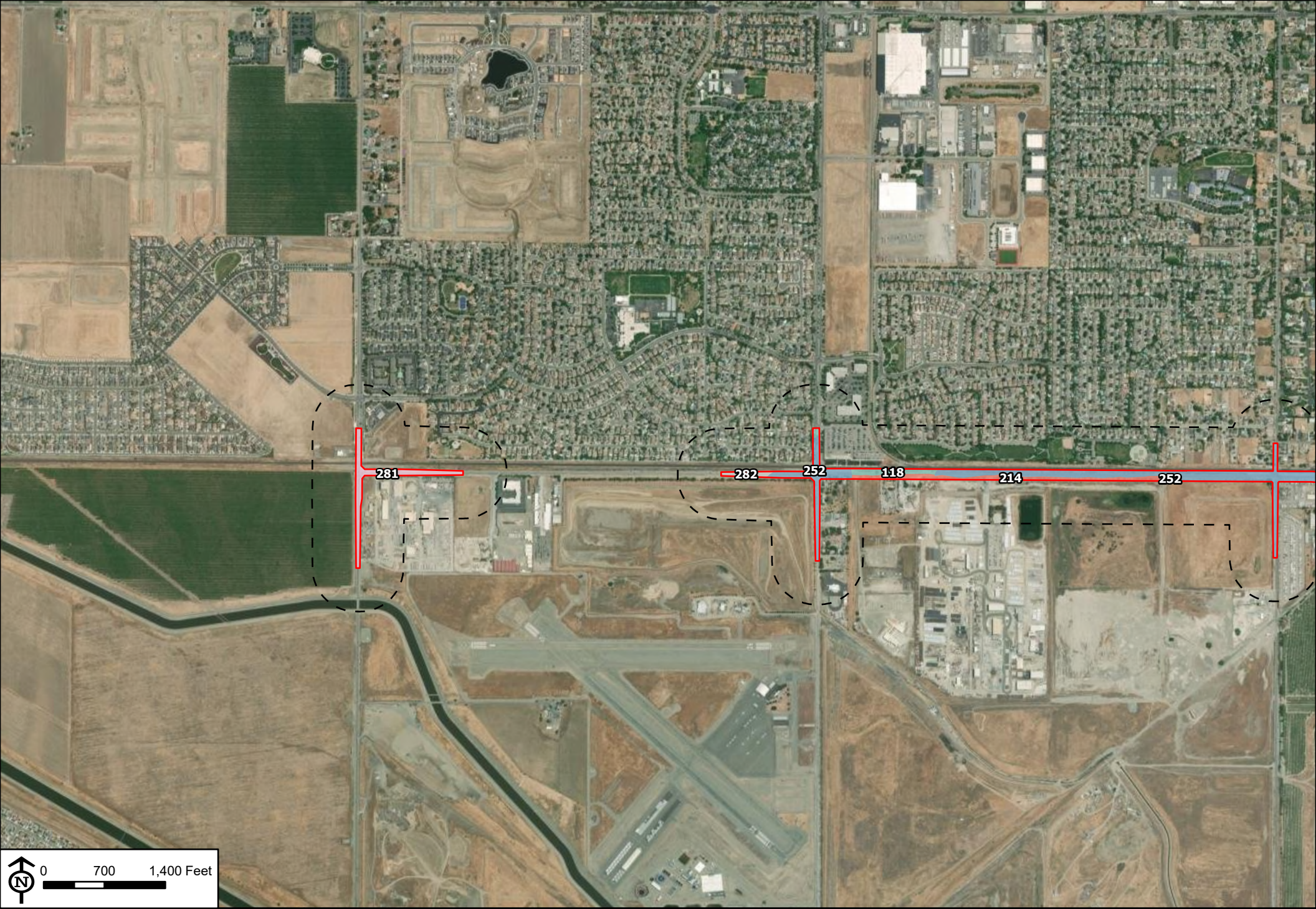

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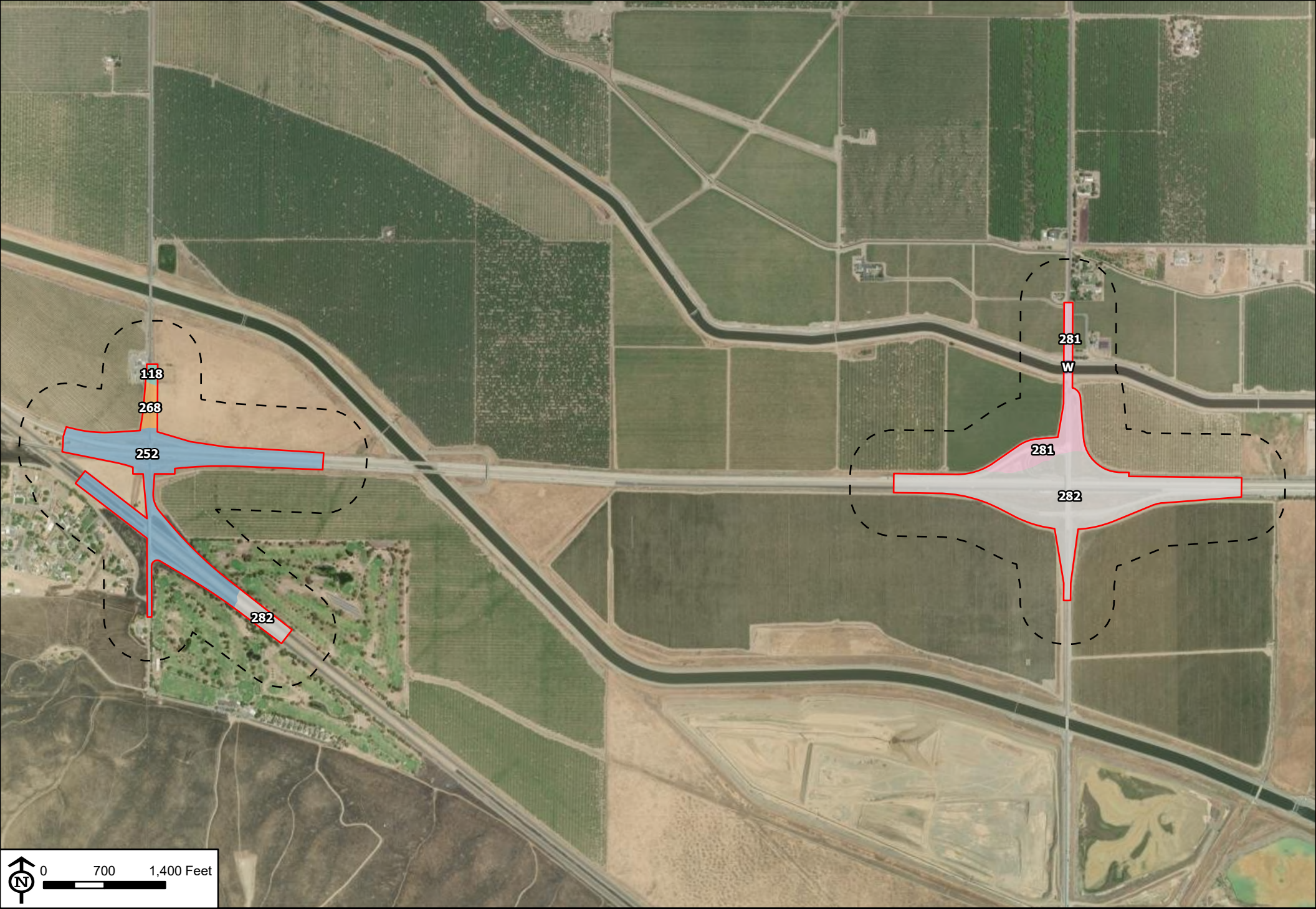

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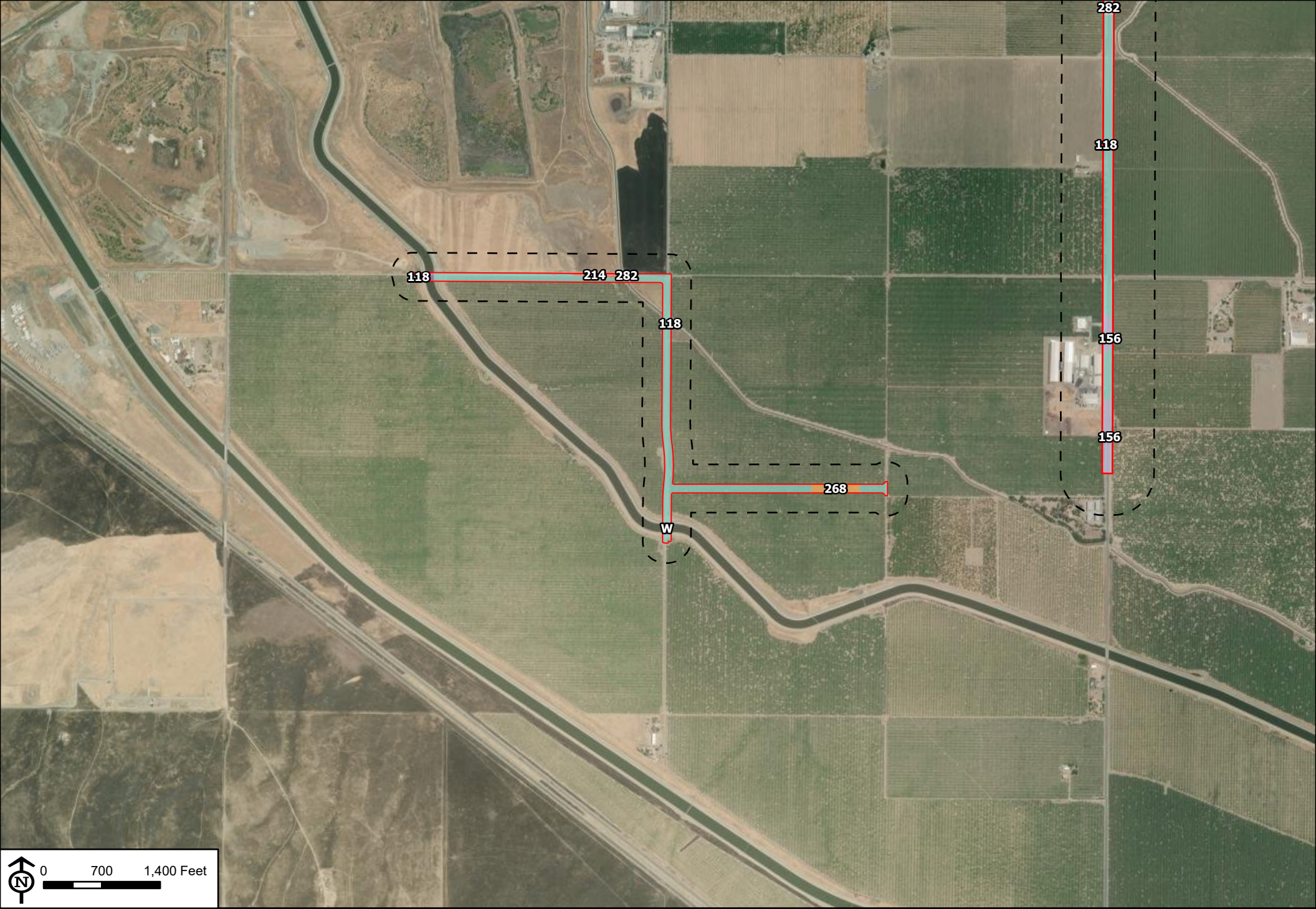

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Figure 3 Soils Map

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Vegetation Communities and Land Cover Types

The Project site was found to support six vegetation communities and land cover types as classified by CNPS MCV alliance definitions. These include Deciduous Orchards, Wild Oats and Annual Brome Grassland, Disturbed/Developed, Cultivated/Landscaped, Wetlands, and Canal. Considering these classifications, a crosswalk to vegetation communities described by SJMSCP was completed, correlating to: Orchards and Vineyards (C2), Valley Grasslands (G), Scraped/Paved Areas (U2), Cultivated/Landscaped (U3), and Freshwater Emergent Wetlands (W7), respectively. The Delta-Mendota Canal, the Lateral Five East Canal, and an unnamed concrete-lined canal bisect the Project site and are classified as Canal (W9) by the SJMSCP (**Figure 4**).

Disturbed/Developed

The majority of the Project site is comprised of disturbed roadside areas, paved and unpaved roads, as well as developed retail, residential, industrial, and agriculture lots. This landcover type is classified as "Scraped/Paved Areas (U2)" in the SJMSCP. The main paved roads within the Project site include South Chrisman Road, West Linne Road, and South Macarthur Drive along with various intersections and Western Pacific Railroad. These areas are mapped as the Disturbed/Developed.

Cultivated/Landscaped

In residential areas along South Chrisman Road and West Linne Road, typical residential landscaping such as sod grass and ornamental trees were observed. Additional plantings along manufacturer lots included species such as oleander (*Nerium oleander*), and Toyon (*Heteromeles arbutifolia*). This landcover type is classified as "Golf Courses/Cultivated Parks (U3)" in the SJMSCP. These communities are mapped as Cultivated/Landscaped and appear to be maintained by regular trimming.

Deciduous Orchards

The areas surrounding the Project site primarily used for agriculture are mapped as Deciduous Orchards. This landcover type is classified as "Orchards and Vineyards (C2)" in the SJMSCP. The primary crops grown within this vegetation community consist of almonds (*Prunus dulcis*) and peaches (*Prunus persica).* The orchards have been developed for weed control resulting in limited plant growth. Some areas have been treated with a layer of straw for an additional level of weed suppression. Non-orchard agricultural fields were observed on-site, on either side of South Chrisman Road, that are included within the Orchard classification as well.

Annual Grassland

An open, non-cultivated, roadside field immediately north of Highway 132 near the intersection of South Chrisman Road is comprised of the Valley Grassland vegetation community and is consistent with the *Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance (wild oats and annual brome grasslands; CNPS 2025). This vegetation community is classified as "Valley Grassland (G)" in the SJMSCP. This community is also found in two areas west of South Chrisman Road where the Project site overlaps open fields. Vegetation consists of non-native annual grasses.

Wetlands

The Project site also contains freshwater emergent wetlands, located where Corral Hollow Creek bisects South Chrisman Road, and at the Vernalis Road and South Bird Road intersection. This vegetation community is classified as "Freshwater Emergent Wetlands (W7)" in the SJMSCP. These features, mapped as Wetlands, lacked vegetation and showed signs of heavy anthropogenic disturbance.

Canal

Open water in the form of the Delta Mendota Canal, the Lateral Five East Canal, and an unnamed concrete-lined canal were found on the Project site and mapped accordingly as Canals. The Delta Mendota Canal was observed to be inundated and flowing, predominantly lacking vegetation cover.

Sensitive Vegetation Communities

CDFW identifies sensitive communities according to rarity, trends, and other ecological threats and assigns natural vegetation communities a global (G) and state (S) sensitivity rank (CNPS 2022b). Surveys across the Project site found the site does not contain vegetation community alliances identified by CDFW and CNPS as a sensitive natural community (CNPS 2022b). Additionally, no sensitive vegetation communities were mapped by the CNDDB within the Project site.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

Vegetation Communities and Landcover Types

Canal (W9)
Cultivated/Landscaped (U3)
Deciduous Orchard (C2)
Disturbed/Developed (U2)
Wetland (W7)
Wild Oat and Annual Brome Grassland (G)

Figure 4 Vegetation and Land Cover

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22

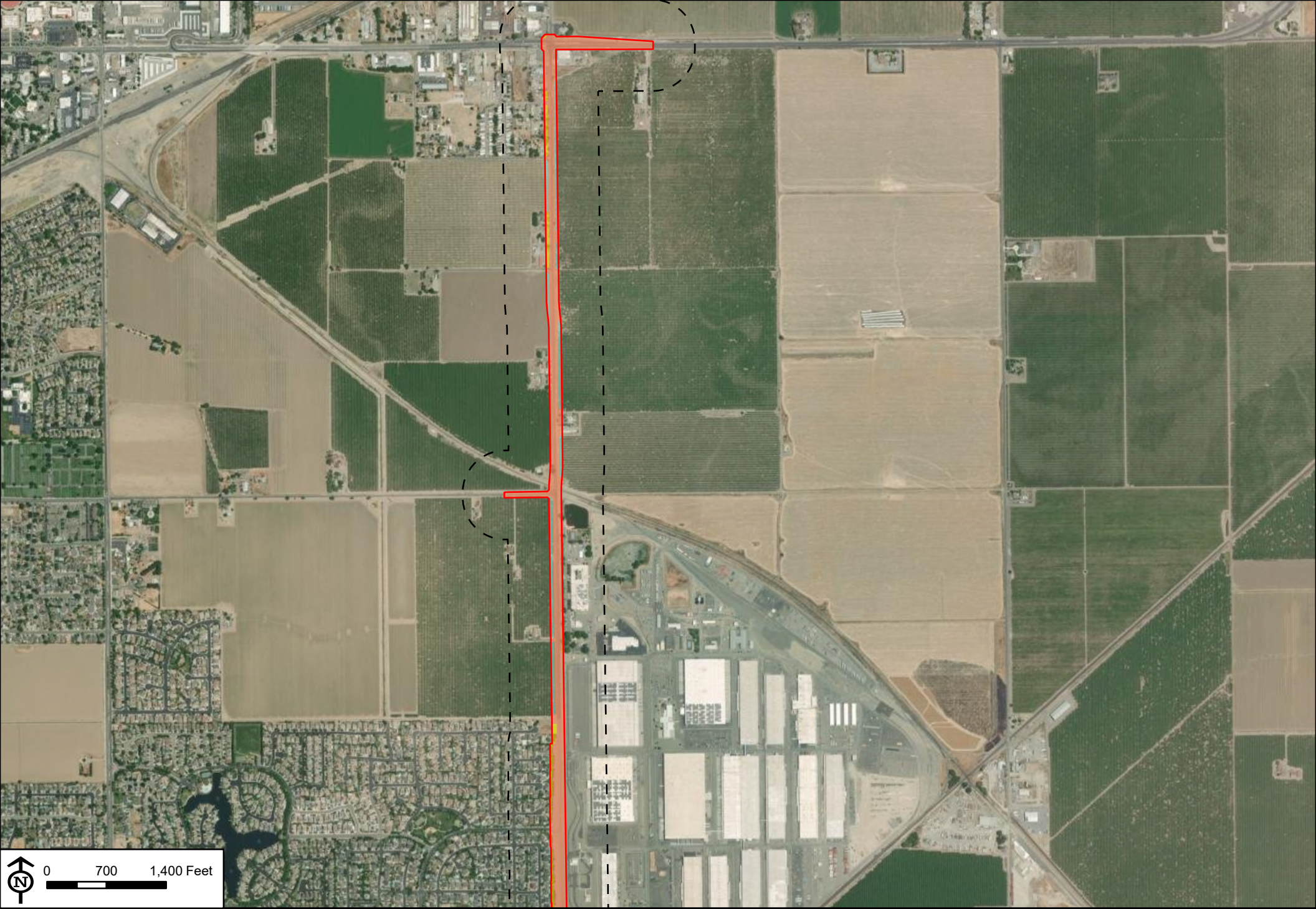

Figure 4 Vegetation and Land Cover

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

Vegetation Communities and Landcover Types

Canal (W9)
Cultivated/Landscaped (U3)
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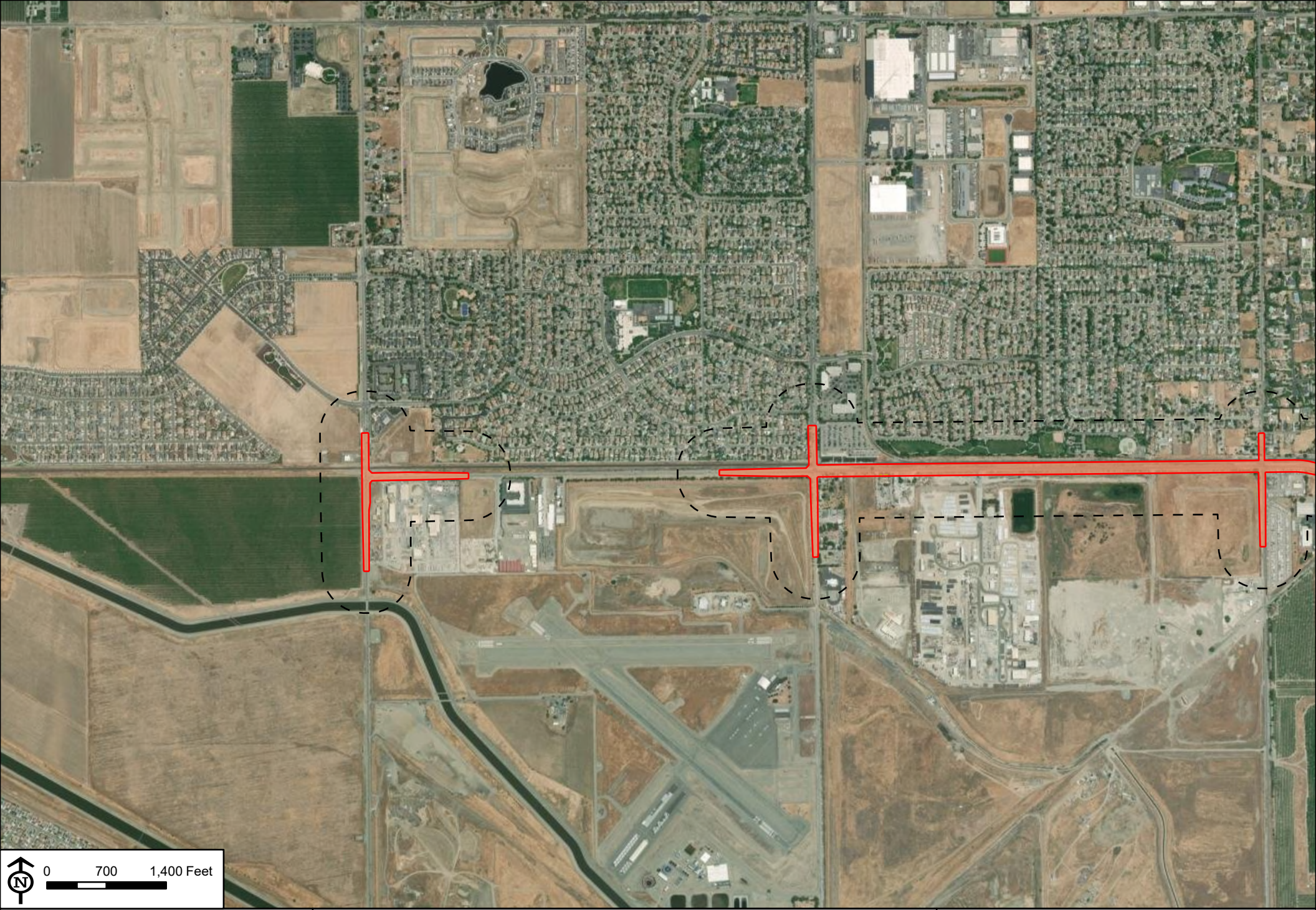

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BARGAS Environmental Consulting

Project Site
Study Area

Vegetation Communities and Landcover Types

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Figure 4 Vegetation and Land Cover

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BARGAS Environmental Consulting

Project Site
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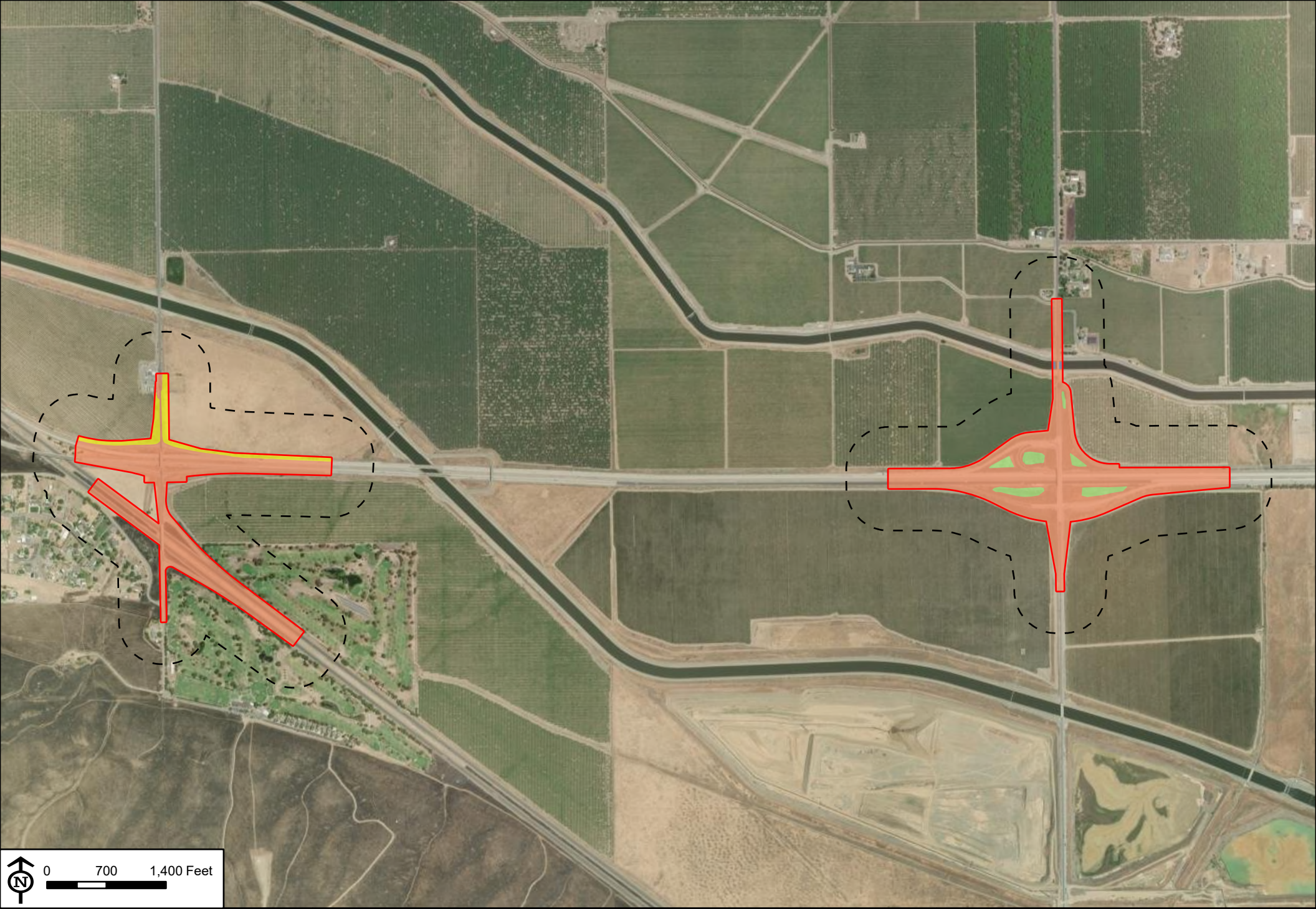

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Figure 4 Vegetation and Land Cover

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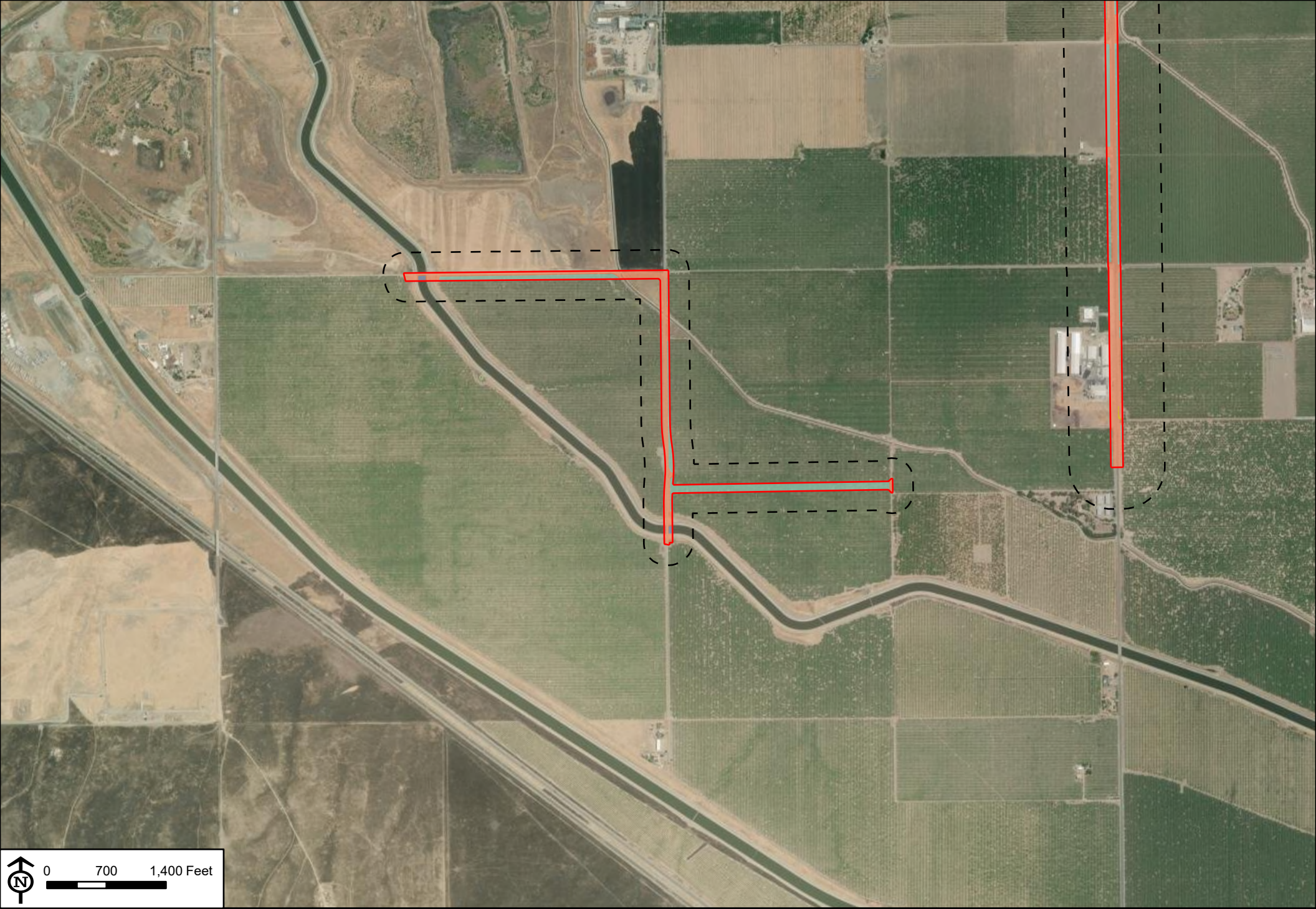

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BARGAS Environmental Consulting

Project Site
Study Area

Vegetation Communities and Landcover Types

Canal (W9)
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Figure 4 Vegetation and Land Cover

Pacific Gateway Specific Plan Project - Chrisman Road

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Aquatic Resources

Aquatic features were observed on-site and consisted of concrete-lined canals, Corral Hollow Creek, a biological swale, wetlands, and roadside ditches. These features have been broadly classified as Canals, Wetlands, and Roadside Ditches (**Figure 5**). Multiple segments of concrete-lined canals intersect the Project site along South Chrisman Road, West Linne Road, South Bird Road, South MacArthur Drive, and an unnamed, unpaved farm road. These segments are components of the Delta-Mendota Canal, the Lateral Five East Canal, and an unnamed concrete-lined canal. Additionally, although the proposed Project does not currently include roadwork at/over the California Aqueduct, South Chrisman Road bridge widening over the California Aqueduct is expected, which would be completed at a later date; thus, the California Aqueduct is also discussed in this report.

Corral Hollow Creek also intersects the Project site at South Chrisman Road and is classified as a Canal for mapping purposes in this report. Corral Hollow creek, a freshwater tributary of the San Joaquin River, as well as the Delta Mendota Canal and the California Aqueduct are identified by the USACE Sacramento District as a Traditionally Navigable Water (TNW); thus, they are potentially subject to regulation within Section 10 of the Rivers and Harbors Act under the jurisdiction of USACE. Waters subject to Section 10 of the Rivers and Harbors Act are also considered waters of the U.S. subject to regulation by USACE under Section 404 of the Clean Water Act (CWA). Based on a review of aerial imagery and CARI, the Lateral Five East Canal and the unnamed concrete-lined canal were not presumed to have a hydrologic connection to any TNWs; as a result, these features are not subject to regulation by USACE under Section 404 of the CWA. Further, the Delta-Mendota Canal, the California Aqueduct, the Lateral Five East Canal, Corral Hollow Creek, and the unnamed concrete-lined canal may also be considered waters of the State, regulated by the Central Valley Regional Water Quality Control Board (CVRWQCB). Additionally, because these features contain a bed and bank, they would be subject to potential regulation by CDFW under Section 1600 of CDFW California Fish and Game Code (CFGC).

Other aquatic resources found on-site consist of freshwater emergent wetlands. Although a formal jurisdictional delineation was not performed for these areas, due to the conditions observed on-site, it was assumed that these wetlands had similar soils, hydrology, and vegetation to Water Basin 2 (WO2), which was determined to be a potential water of the State due to the presence of hydric soils and hydrology within the basin during a jurisdictional delineation performed by Bargas in 2023 for the Pacific Gateway Specific Plan Project (Bargas 2023). Thus, for purposes of this report these freshwater emergent wetlands found at the Project site were considered to be wetland waters of the State. Located alongside Highway 132, these substantially disturbed emergent wetlands serve as roadside detention basins, which are isolated (i.e., not connected) to other aquatic features and serve to collect stormwater runoff from the adjacent roadways. Trash and other debris were observed on-site within and around these basins. Given their isolated position in the landscape and the similarity to other aquatic features, such as Water Basin 2 (WO2), that met wetland criteria, these areas are considered potentially jurisdictional by the CVRWQCB per the Porter-Cologne Water Quality Act (Bargas 2023). Because these features do not contain a bed or bank, they would not be subject to potential regulation under Section 1600 of the CFGC by CDFW.

In addition to the wetlands features found on-site, eight roadside ditch features were also identified during the surveys. Four roadside ditches are interspersed on the east and west sides of South Chrisman Road, and one roadside ditch runs along the south side of West Linne Road, east of the South Tracy Boulevard intersection. Another roadside ditch on-site flows between the northwest- and southeast-bound West 11th Street, passing through three culverts and under Kasson Road. Where Chrisman Road intersects Vernalis Road and Interstate 580, there are two additional roadside drainages, connected by culverts. Additionally, a swale feature was observed on the east side of Chrisman Road, south of the intersection with West Linne Road, in the Jefferson School parking lot. This swale was also classified as roadside ditch for mapping purposes. All roadside ditches observed on-site as well as the swale feature were considered isolated; due to the lack of hydrologic surface connectivity to nearby or downstream aquatic features, such as the canal/creeks or wetlands features discussed above. Therefore, these features are potentially subject to CVRWQCB jurisdiction only per the Porter-

Cologne Water Quality Act. Because these ditch features do contain a bed and bank, they would be subject to potential CDFW jurisdiction and regulation under Section 1600 of the CFGC.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

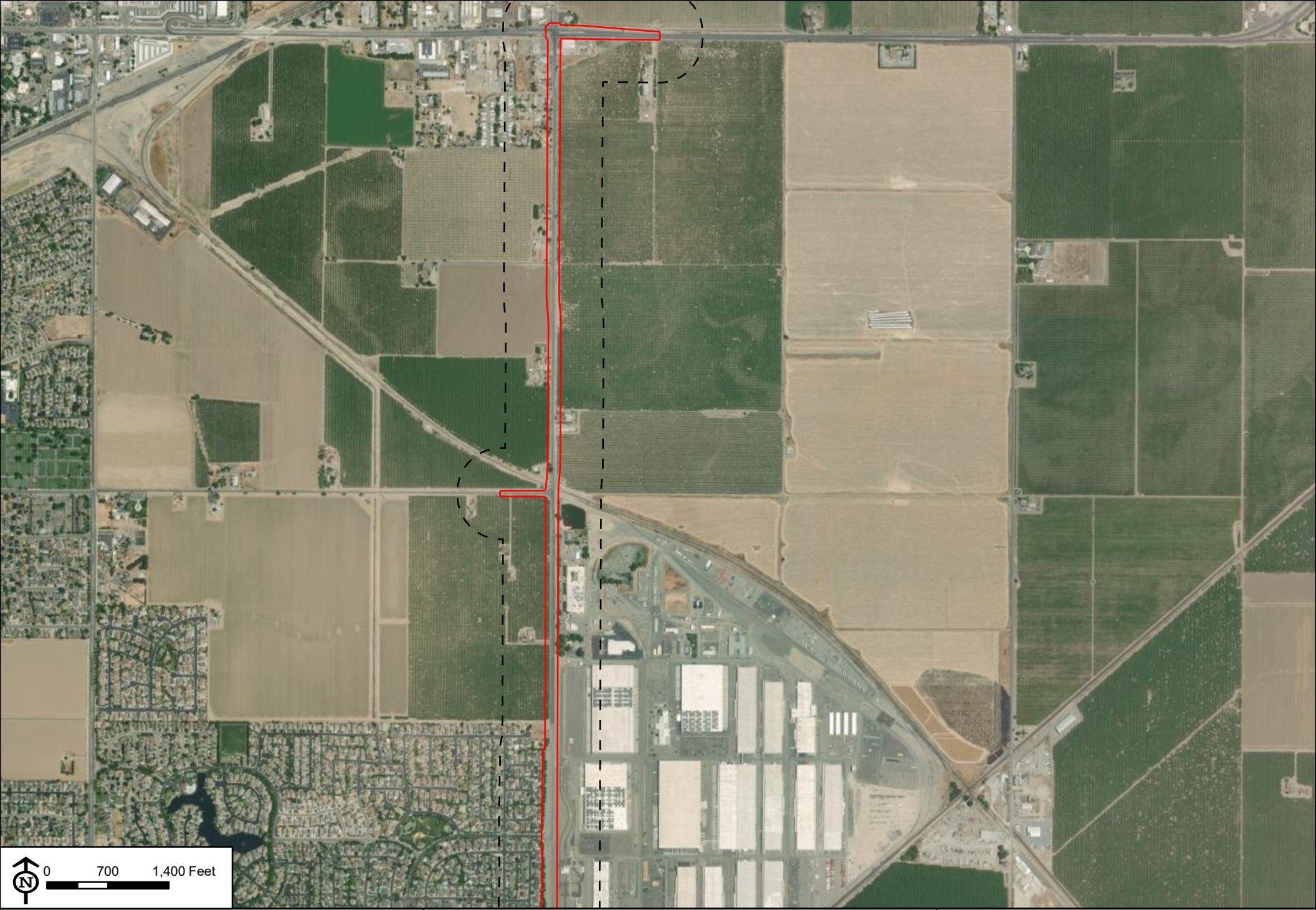
Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

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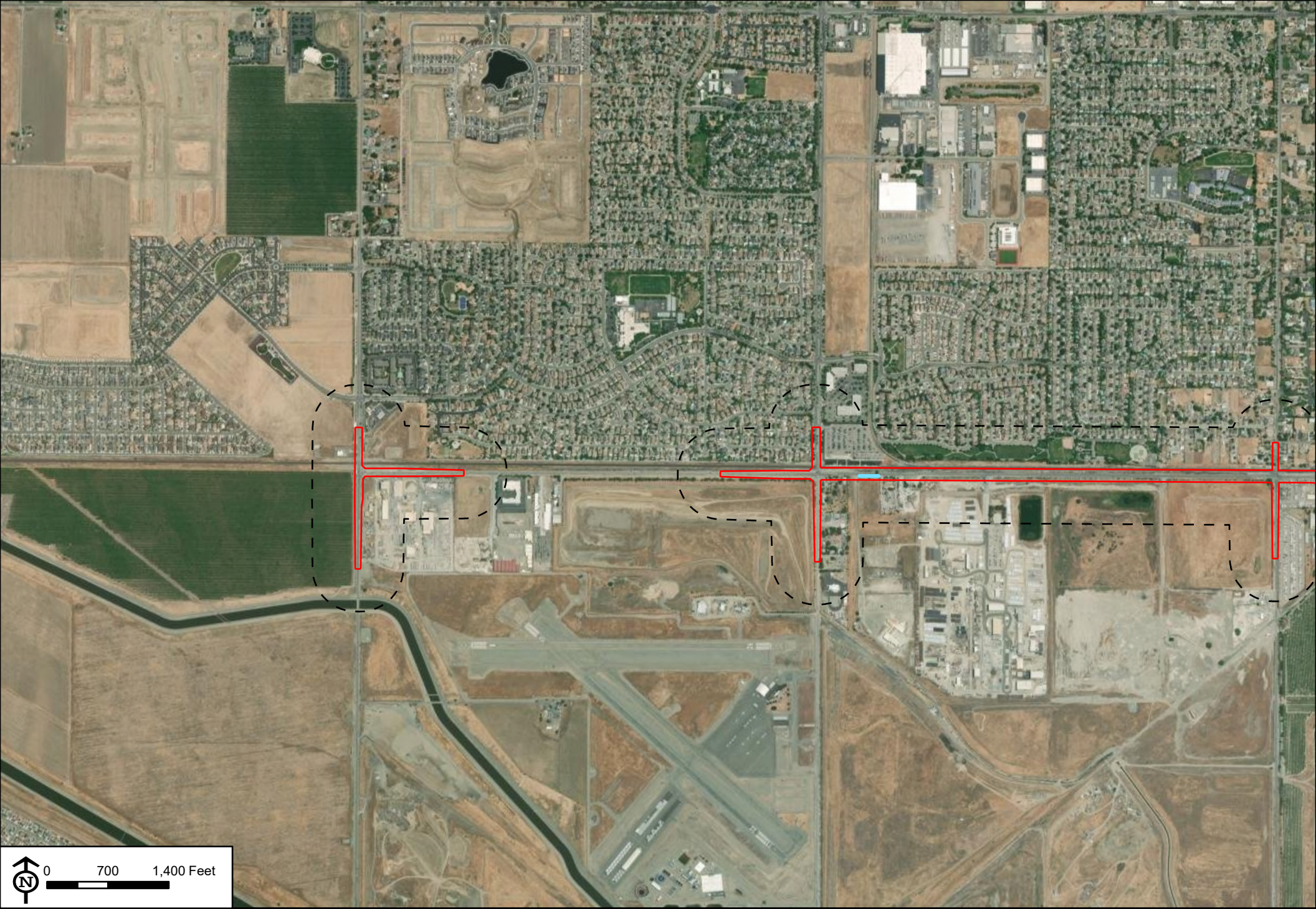

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BARGAS Environmental Consulting

Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
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Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

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BARGAS Environmental Consulting

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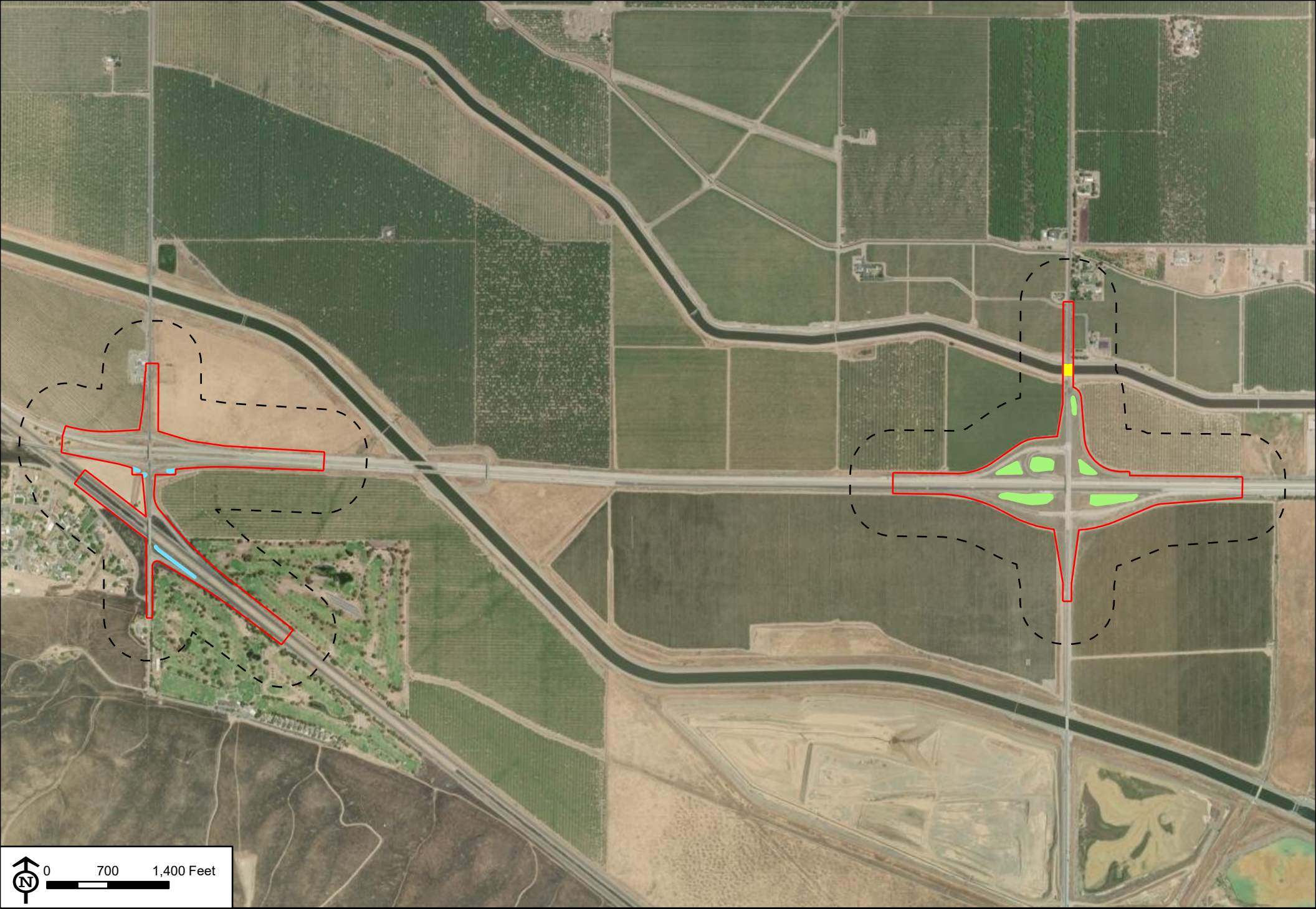

Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
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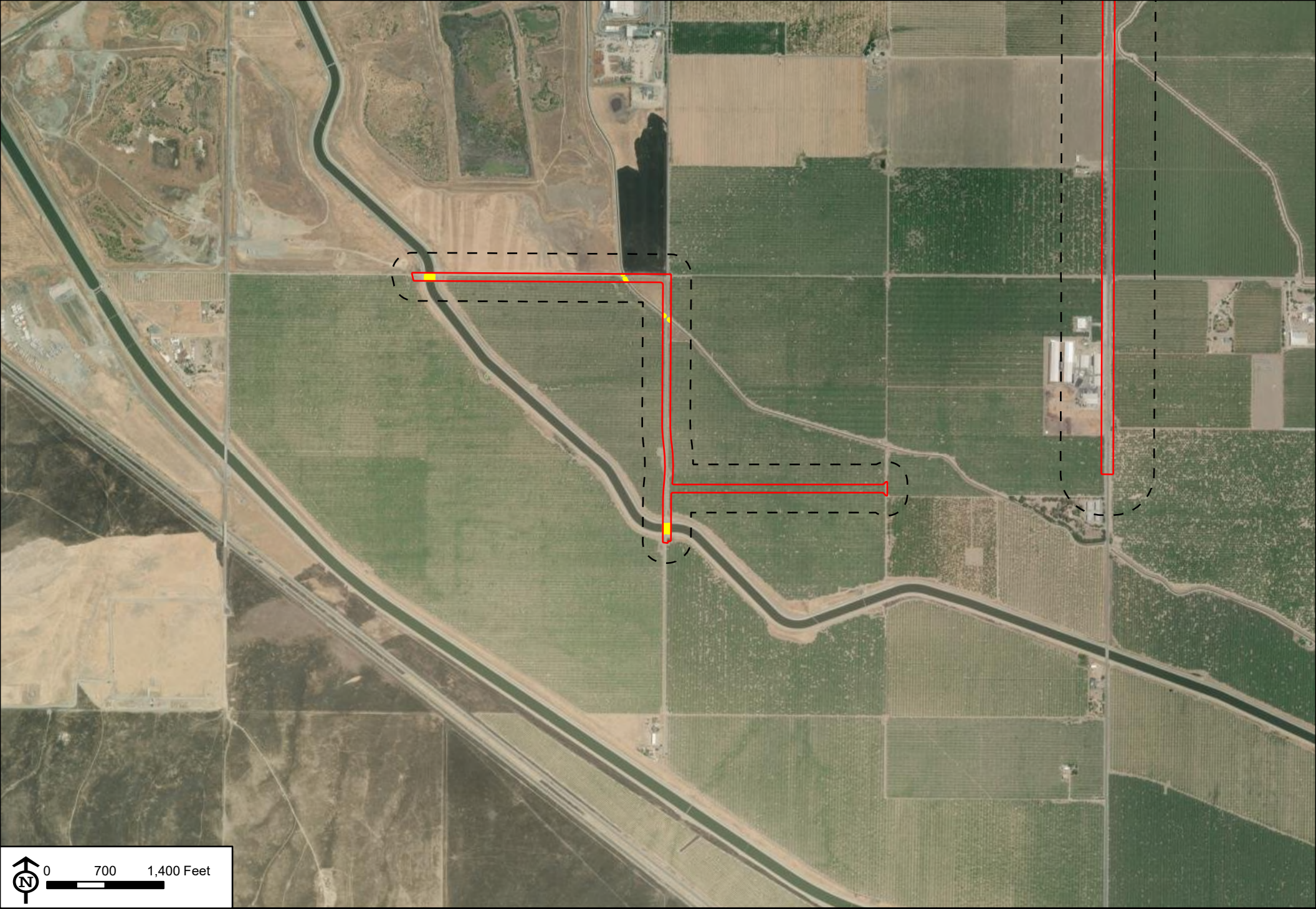

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BARGAS Environmental Consulting

Project Site
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Potentially Jurisdictional Aquatic Resources
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Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

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Plants

A total of 59 plant taxa were detected during the field surveys. A list of all plant taxa detected during the field surveys is provided in **Appendix B**.

The desktop review found that 13 plant taxa with special-status had been documented as occurring within the Regional Area. These taxa and their potential for occurrence on-site are summarized below and presented in **Appendix C**.

- No special-status plant taxa from desktop analysis were determined to be **Present** in the Study Area.
- No special-status plant taxa from desktop analysis were determined to have **High** potential for occurrence in the
- No special-status plant taxa from desktop analysis were determined to have **Moderate** potential for occurrence in the Study Area.
- Five special-status plant taxa from desktop analysis were determined to be **Not Expected to Occur** in the Study Area, which are presented below.

Delta Button Celery

Apiaceae > *Eryngium racemosum*

FESA: None, CESA: Yes, CRPR 1B.1, SJMSCP Covered Species

California Endemic:	True
Growth Habit:	Annual herb, which blooms June-October
Habitat Requirements:	Freshwater wetlands and vernally mesic clay depressions, often associated with riparian scrub at elevations ranging from 10 to 100 feet AMSL.
Inclusion Source(s):	CNPS, SJMSCP
Nearest CNDDB Record:	None
Habitat Present:	Low Quality
Soils Present:	Unknown
Determination Reason:	The Project site contains wetland areas however, this habitat is unlikely to support this species due to substantial disturbance associated with the proximity to Highway 132. Given the isolated areas where this species might occur, this species would have been detected during the survey, if present. However, no individual plants were observed during either site visit, one of which was conducted within the blooming period. This species is considered locally extirpated.

Diamond-petaled California poppy

Papaveraceae > *Eschsholzia rhombipetala*

FESA: None, CESA: None, CRPR 1B.1, SJMSCP Covered Species

California Endemic:	True
Growth Habit:	Annual herb blooms March-April
Habitat Requirements:	Valley grassland at elevations ranging from 0 to 3200 feet AMSL.
Inclusion Source(s):	CNPS
Nearest CNDDB Record:	None
Habitat Present:	Low Quality
Soils Present:	Yes. Clay soils are present in the Study Area.

Determination Reason: The Project site contains annual grassland with clay soils along South Chrisman and Vernalis Road, but the grassland area is minimal and heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Additionally, the closest records are greater than five miles from the Project site.

Caper-fruited tropidocarpum

Brassicaceae > *Tropidocarpum capparideum*

FESA: None, CESA: None, CRPR 1B.1

California Endemic: True
Growth Habit: Annual herb blooms March-April
Habitat Requirements: Valley and foothill grassland at elevations ranging from 5 to 1,495 feet AMSL.
Inclusion Source(s): CNPS
Nearest CNDDB Record: 0.51 miles west
Habitat Present: Low Quality
Soils Present: Unknown
Determination Reason: The Project site contains annual grassland along South Chrisman and Vernalis Road however, this habitat is minimal and heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Additionally, there are no recent records of this species within five miles of the Project site.

Big Tarplant

Asteraceae > *Blepharizonia plumosa*

FESA: None, CESA: None, CRPR 1B.1

California Endemic: True
Growth Habit: Annual herb blooms July-October
Habitat Requirements: Valley and foothill grassland at elevations ranging from 100 to 1,655 feet AMSL.
Microhabitat: Clay (usually)
Inclusion Source(s): CNDDB, CNPS
Nearest CNDDB Record: 0.5 miles west
Habitat Present: Low Quality
Soils Present: Unknown
Determination Reason: The Project site contains annual grassland with clay soils, but the grassland area along South Chrisman and Vernalis Road is minimal, heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Unmanaged grassland areas are not large enough to support a potential population. Big tarplant occurs only in a few highly restricted populations.

Showy Golden Madia

Asteraceae > *Madia radiata*

FESA: None, CESA: None, CRPR 1B.1

California Endemic: True
Growth Habit: Annual herb blooms March-May

Habitat Requirements:	Cismontane woodland, Valley and foothill grassland at elevations ranging from 80 to 3,985 feet AMSL.
Inclusion Source(s):	CNDDB, CNPS
Nearest CNDDB Record:	3.95 miles west
Habitat Present:	Low Quality
Soils Present:	Unknown
Determination Reason:	This species is known to inhabit grasslands and oak woodlands with clay soils. Oak woodlands are not present within the Project site to support this species. Although the Project site contains annual grassland along South Chrisman and Vernalis Road, the grassland area is minimal, heavily disturbed, and the species may be outcompeted for space by non-native grassland species.

- The following four (4) special-status plant taxa from desktop analysis were determined to have **No** potential for occurrence and are **Presumed Absent** in the Study Area.

Slough Thistle

Asteraceae > *Cirsium crassicaule*

FESA: None, CESA: None, CRPR 1B.1

California Endemic:	True
Growth Habit:	Annual/perennial herb blooms May-August
Habitat Requirements:	Chenopod scrub, Marshes and swamps, Riparian scrub at elevations ranging from 10 to 330 feet AMSL.
Inclusion Source(s):	CNPS, SJMSCP
Nearest CNDDB Record:	None
Habitat Present:	Not Present
Soils Present:	No
Determination Reason:	The Project site does not contain chenopod or riparian scrub wetlands to support this species. Although wetlands were present, they were dry during the time of the survey and lacked wet soils necessary to support the species. Additionally, there are no recent records of this species within five miles of the Project site.

Mt. Hamilton Coreopsis

Asteraceae > *Leptosyne hamiltonii*

FESA: None, CESA: None, CRPR 1B.2

California Endemic:	True
Growth Habit:	Annual herb blooms March-May
Habitat Requirements:	Cismontane woodland at elevations ranging from 1,805 to 4,265 feet AMSL.
Inclusion Source(s):	CNPS, SJMSCP
Nearest CNDDB Record:	None
Habitat Present:	Not Present
Soils Present:	Unknown
Determination Reason:	This species is known to grow on slopes on dry, rocky soils within foothill woodlands. The Project site lacks the elevation and foothill woodlands present to support this

species. Additionally, there are no recent records of this species within five miles of the Project site.

Large-flowered Fiddleneck

Boraginaceae > *Amsinckia grandiflora*

FESA: Federal Endangered, CESA: California Endangered, CRPR 1B.1

California Endemic:	True
Growth Habit:	Annual herb blooms (March)April-May
Habitat Requirements:	Cismontane woodland, Valley and foothill grassland at elevations ranging from 885 to 1,805 feet AMSL.
Inclusion Source(s):	CNDDB, CNPS, IPaC
CNDDB Records:	1
Nearest CNDDB Record:	3.93 miles west
Habitat Present:	Not Present
Soils Present:	Unknown
Determination Reason:	The Project site lacks cismontane woodland, and the annual grassland on-site is minimal, heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Additionally, the Project site is located at elevations below the minimum 885 feet to support this species.

Wright's trichocoronis

Asteraceae > *Trichocoronis wrightii var. wrightii*

FESA: None, CESA: None, CRPR 2B.1

California Endemic:	True
Growth Habit:	Perennial herb blooms April-June
Habitat Requirements:	Marshes and swamps, Meadows and seeps, riparian forest, vernal pools at elevations ranging from 15 to 1,425 feet AMSL.
Microhabitat	Alkaline
Inclusion Source(s):	CNPS
Nearest CNDDB Record:	None
Habitat Present:	Not Present
Soils Present:	Unknown
Determination Reason:	Project site lacks suitable meadows and seeps, riparian forest, vernal pools to support this species. The Project site contains freshwater emergent wetlands however, this habitat is unlikely to support this species due to substantial disturbance associated with the proximity to Highway 132. This species is considered locally extirpated.

Wildlife

A total of 16 wildlife taxa were detected during the field surveys. A list of all wildlife taxa detected during the field surveys is provided in **Appendix B**.

The desktop review determined that 41 wildlife taxa with special-status had been documented as occurring within the Regional Area. These taxa and their occurrence potential are discussed below and summarized in **Appendix C**.

- No special-status wildlife taxa from desktop analysis were determined to be **Present** in the Study Area.
- No special-status wildlife taxa from desktop analysis were determined to have **High** potential for occurrence in the Study Area.
- No special-status wildlife taxon from desktop analysis was determined to have **Moderate** potential for occurrence in the Study Area.
- The following 8 special-status wildlife taxa from the desktop analysis were determined to be **Not Expected to Occur** in the Study Area.

California Glossy Snake

Colubridae > *Arizona elegans occidentalis*

FESA: None, CESA: Species of Special Concern

Life History:	This snake is common throughout southern California especially in desert regions. Less common to the north, Glossy Snakes occur in the interior Coast Ranges as far as Mount Diablo in Contra Costa County. Glossy Snakes are most common in desert habitats but also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass. Elevation from below sea level to 1,830 meters (6,000 feet AMSL). *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.53 miles southwest
Habitat Present:	Low Quality
Determination Reason:	The Project Site lacks desert environments preferred by this snake. However, the Project site does contain annual grassland habitat along South Chrisman and Vernalis Road, but the grassland area is marginal and heavily disturbed. Preferred foraging is typically limited to mostly desert lizard species and thus, the Project site is unlikely to provide suitable foraging habitat.

San Joaquin Coachwhip

Colubridae > *Coluber flagellum ruddocki*

FESA: None, CESA: Species of Special Concern

Life History:	San Joaquin coachwhip snakes are diurnal animals and prefer warm temperatures. As a result, they emerge from estivation late in the season (April - May). This species prefers dry, open, treeless habitats including valley grassland and salt scrub. They are known to avoid dense vegetation that restricts movement such as mixed oak chaparral woodland. Small mammal burrows are used for overwintering. *Source: Thomson, Robert C., Amber N. Wright, and H. Bradley Shaffer. (2016). California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife. University of California Press.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.12 miles west
Habitat Present:	Low Quality

Determination Reason: The Project site contains annual grassland along South Chrisman and Vernalis Road, but the grassland area is marginal, heavily disturbed, and does not contain the preferred open habitat to support this species. The Project site is primarily comprised of disturbed roadways and lacks natural open habitat preferred by this species.

Great Blue Heron

Ardeidae > *Ardea herodias*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: The Great Blue Heron is fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. Common July to October in salt ponds where fish are numerous. Locally common near rookeries February to June or July. Few rookeries are found in southern California, but many are scattered throughout northern California; knowledge of their locations is incomplete. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: >5 miles

Habitat Present: Low Quality

Determination Reason: The Project site contains small, heavily disturbed wetland areas at the intersection of Vernalis Road and South Bird Road that are unlikely to support the insects, reptiles, and small mammals relied upon by this species for foraging. Additionally, these wetlands are fed from stormwater runoff from the surrounding roadways resulting in insufficient water quality; however, during the survey, these areas were observed to be dry, further limiting the potential for foraging. Nesting habitat in the form of isolated islands, channel markers, or artificial nest structures are not present within the Project site and thus, nesting is unlikely. Additionally, the nearest record is greater than five miles from the Project site.

Great Egret

Ardeidae > *Ardea alba*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: The Great Egret is a common yearlong resident throughout California, except for high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures. Nests in large trees, and roosts in trees. In southern California, common all year, and breeds at Salton Sea and Colorado River. Fairly common in coastal lowlands September to April, rare in summer, and breeds in Riverside County (one small colony). Rare to uncommon in deserts, occurring mainly as a spring migrant. In northern California, fairly common to common yearlong in coastal lowlands, inland valleys, and the Central Valley. Locally abundant March to July near the larger nesting colonies. Uncommon to fairly common March to August on the northeastern plateau, and nests locally. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: >5 miles

Habitat Present: Low Quality

Determination Reason: The Project site contains small, heavily disturbed wetland areas at the intersection of Vernalis Road and South Bird Road that are unlikely to support the insects, reptiles, and small mammals relied upon by this species for foraging. Additionally, these wetlands are fed from stormwater runoff from the surrounding roadways resulting in insufficient water quality; however, during the survey, these areas were observed to be dry, further limiting the potential for foraging. Nesting habitat in the form of isolated islands, channel markers, or artificial nest structures are not present within the Project site and thus, nesting is unlikely. Additionally, the nearest record is greater than five miles from the Project site.

Sharp-shinned Hawk

Accipitridae > *Accipiter striatus*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: Fairly common migrant and winter resident throughout California, except in areas with deep snow. Breeding distribution poorly documented. Very few breeding records for Cascades/Sierra Nevada. Probably breeds south in Coast Ranges to about 35 degrees latitude, and at scattered locations in the Transverse and Peninsular Ranges. May no longer breed in the southern Sierra Nevada. Uncommon winter migrant to Channel Islands. Uncommon permanent resident and breeder in mid-elevation habitats. Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert used in winter. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: None

Habitat Present: Low Quality

Determination Reason: This species prefers wooded areas throughout their range but may also forage within agricultural fields. The Project site contains marginal strips of agricultural fields adjacent to South Chrisman Road that may provide marginal foraging habitat to support this species. Tall, densely populated trees within woodlands are required for nesting and are not present within the Project site thus, nesting is unlikely. Additionally, the nearest record is located greater than five miles from the Project site.

Cooper's Hawk

Accipitridae > *Accipiter cooperii*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: A breeding resident throughout most of the wooded portion of the state. Breeds in southern Sierra Nevada foothills, New York Mountains, Owens Valley, and other local areas in southern California. Ranges from sea level to above 2,700 meters (0-9,000 feet AMSL). Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. *Source: California Department of Fish*

and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: None

Habitat Present: Low Quality

Determination Reason: The Project site is adjacent to marginally suitable foraging habitat, but lacks the tall trees preferred for nesting.

Burrowing Owl

Strigidae > *Athene cunicularia*

FESA: None, CESA: Species of Special Concern, SJMSCP Covered Species

Life History: A yearlong resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of Pinyon-Juniper and Ponderosa Pine habitats. Formerly common in appropriate habitats throughout the state, excluding the humid northwest coastal forests and high mountains. Numbers markedly reduced in recent decades. Present on the larger offshore islands. Found as high as 1,600 meters (5,300 feet AMSL) in Lassen County. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

Nearest CNDDB Record: One adult owl was observed utilizing a previous ground squirrel burrow approximately 0.3 mile from the Project site, located adjacent to agricultural fields and railroad tracks.

Habitat Present: Low Quality

Determination Reason: Suitable habitat occurs in the southwest corner of the Project site at the corner of Highway 132 and Chrisman Road in grasslands where small mammal burrows are present. The potential habitat is a small (approximately 100-foot wide) disturbed strip of grassland along the paved roadway. While burrowing owls are known to occupy small areas surrounded by development, there are several more suitable options (open undisturbed grasslands) outside of the Project site.

San Joaquin Kit Fox

Canidae > *Vulpes macrotis mutica*

FESA: Endangered, CESA: Threatened, SJMSCP Covered Species

Life History: The San Joaquin kit fox (*Vulpes macrotis mutica*) is the smallest fox in North America, with an average body length of 20 inches and weight of about 5 pounds. Kit Foxes start breeding when they are one year old. In the fall, females begin to clean and enlarge their pupping dens. The foxes mate between December and March. Females give birth to from two to six pups in February or March. The Kit Fox's range in the San Joaquin Valley extends from southern Kern County north to Contra Costa, Alameda, and San Joaquin counties on the western side of the valley; and to the La Grange area of Stanislaus County on the eastern side of the valley. The Kit Fox's range also includes valleys along the Coast Range including the Panoche and Cuyama valleys and the Carrizo Plain in San Luis Obispo County. Threats include habitat modification and destruction, energy development, drought, disease or pathogens, rodenticides, and predation. *Source: https://www.fws.gov/species/san-joaquin-kit-fox-vulpes-macrotis-mutica*

Inclusion Source(s):	CNDDB; IPaC; SJMSCP
Nearest CNDDB Record:	One record is located within the Project site near the Wesern Pacific Railroad along West Linne Road.
Habitat Present:	Low Quality
Determination Reason:	Suitable habitat occurs in the southwest corner of the Project site at the corner of Highway 132 and Chrisman Road in a disturbed grassland area where small mammal burrows are present. However, the Project site lacks the habitat to support foraging by this species. No sign of the presence of this species was observed during the field visits. This species may occur as a transient.

- The following 33 special-status wildlife taxa from desktop analysis were determined to be **Presumed Absent** from the Project site. These species are listed in **Appendix C**.

Loggerhead Shrike

Laniidae > *Lanius ludovicianus*

FESA: None, CESA: Species of Special Concern

Life History:	A common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua Tree habitats. In the Great Basin, from Inyo County north, population declines markedly from November through March. Rare on coastal slope north of Mendocino County, occurring only in winter. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Sometimes uses edges of denser habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP, CNDDB
Nearest CNDDB Record:	4.25 miles northeast
Habitat Present:	Not Present
Determination Reason:	The Project site does not contain scattered vegetation with open canopy that is preferred by this species. Additionally, thorny vegetation is not present within the Project site to support nesting for this species. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Valley Elderberry Longhorn Beetle

Cerambycidae > Desmocerus californicus dimorphus

FESA: Threatened, CESA: None

Life History:	Valley elderberry longhorn beetle is a medium sized beetle that is endemic to the Central Valley of California. The beetle is found only in association with its host plant, elderberry (*Sambucus spp*.) and originally occurred in elderberry thickets in moist valley oak woodland along the margins of the Sacramento and San Joaquin Rivers in the Central Valley of California. The habitat of this insect has now largely disappeared throughout much of its former range due to agricultural conversion, levee construction, and stream channelization. The clearing of undergrowth (including elderberry) and planting of lawns has

	resulted in further habitat degradation. *Source: https://ecos.fws.gov/ecp/species/7850*
Inclusion Source(s):	CNDDB, IPaC; SJMSCP
Nearest CNDDB Record:	4.17 miles southwest
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the valley elderberry plants to support this species. Additionally, the Project site is located outside of the range for this species due to the Project site being located upland from the San Joaquin River.

Monarch - California Overwintering Population

Nymphalidae > *Danaus plexippus pop. 1*

FESA: Candidate, CESA: None

Life History:	The iconic black and orange Monarch butterfly is known for its astonishing long-distance annual migration and reliance on milkweed as its obligate larval host plant. Though genetically similar, there are two subpopulations of Monarchs in North America, with the eastern population overwintering in Mexico and breeding in the midwestern states, and the western population overwintering in coastal California and fanning out across the west from Arizona to Idaho. Both North American migratory populations have declined over the past twenty years due to a suite of interrelated factors including habitat loss in breeding and overwintering sites, habitat degradation, disease, pesticide exposure, and climate change. Recently the western population has experienced dramatic swings, for a low of less than 2,000 in 2020-21 to over 200,000 in 2021-22. While it is unclear which of the many factors are driving these dynamics, insect population commonly fluctuate from year to year. Though more research is needed, a stable population for western monarchs is likely closer to the historic averages in the 1980's, which are estimated to have ranged between one to four million overwintering butterflies. *Source: https://wildlife.ca.gov/Conservation/Invertebrates/Monarch-Butterfly*
Inclusion Source(s):	IPaC
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Low Quality
Determination Reason:	As a migratory species with flight capability, this species has potential to occur anywhere during movements. There is low potential to be resident on-site due to agricultural land uses and lack of suitable milkweed host plants. The Project site is also not located in roosting habitat for this species. The nearest record is located greater than five miles from the Project site.

Foothill Yellow-legged Frog

Ranidae > *Rana draytonii*

FESA: Threatened, CESA: None, California Species of Special Concern

Life History:	The foothill yellow-legged frog occurs in the Coast Ranges from the Oregon border south to the Transverse Mountains in Los Angeles County, in most of northern California west of the Cascade crest, and along the western flank of the Sierra south to Kern County. Livezey reported an isolated population in San

Joaquin County. on the floor of the Central Valley. Isolated populations are also known from the mountains of Los Angeles County. Its elevation range extends from near sea level to 1940 m (6370 ft) in the Sierra. The foothill yellow-legged frog is found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: >5 miles

Habitat Present: Not Present

Determination Reason: Project site lacks rocky streams, forested riparian areas, and ponds preferred by this species for breeding. Although the Project site does contain small heavily disturbed wetlands, all were observed to be dry during the survey and would not support this species. There are no recent record of this species within five miles from the Project site.

California Red-legged Frog

Ranidae > *Rana draytonii*

FESA: Threatened, CESA: Species of Special Concern

Life History: The California red-legged frog inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 1200 m (3936 ft). This species was once a subspecies of Rana aurora, then known as the Red-legged Frog, and has been elevated to species-level status. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 4.20 Miles west

Habitat Present: Not Present

Determination Reason: Although the Project site does contain small heavily disturbed wetlands, all were observed to be dry during the survey and would not support this species. Additionally, the wetlands are located along noisy Vernalis Road and South Bird Road, fed from stormwater runoff from resulting in insufficient water quality

Western Spadefoot

Scaphiopodidae > *Spea hammondii*

FESA: None, CESA: Species of Special Concern

Life History:	The Western Spadefoot ranges throughout the Central Valley and adjacent foothills, and is usually quite common where it occurs. In the Coast Ranges it is found from Point Conception, Santa Barbara County, south to the Mexican border. Elevations of occurrence extend from near sea level to 1363 m (4460 ft) in the southern Sierra foothills. This species occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands. Some populations persist for a few years in orchard or vineyard habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	4.71 miles west
Habitat Present:	Not Present
Determination Reason:	The Project site contains annual grassland along South Chrisman and Vernalis Road, but the grassland area is marginal, heavily disturbed, and contains dense vegetation that is not suitable for western spadefoot. Additionally, the orchards and vineyards are regularly maintained, and human disturbance is common within these areas. The Project site is not an identified breeding site for western spadefoot.

California Tiger Salamander

Ambystomatidae > *Ambystoma californiense*

FESA: Endangered, CESA: Endangered

Life History:	Most commonly found in Annual Grassland habitat, but also occurs in the grassy understory of Valley-Foothill Hardwood habitats, and uncommonly along stream courses in Valley-Foothill Riparian habitats. The species occurs from near Petaluma, Sonoma County, east through the Central Valley to Yolo and Sacramento counties and south to Tulare County; and from the vicinity of San Francisco Bay south to Santa Barbara County. They occur at elevations from 3 meters up to 1,054 meters (3,200 feet AMSL). *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB, IPaC
Nearest CNDDB Record:	2.49 miles southwest
Habitat Present:	Not Present
Determination Reason:	The Project site contains annual grassland along South Chrisman and Vernalis Road, but the grassland area is marginal and heavily disturbed. The Project site is more than two miles from known breeding ponds. With the exception of one paved intersection, Interstate 580 serves a barrier between the Project site and known breeding sites to the west.

Coast Horned Lizard

Phrynosomatidae > *Phrynosoma blainvillii*

FESA: None, CESA: Species of Special Concern

Life History:	Blainville's Horned Lizard is uncommon to common in suitable habitat. Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Occurs in the Sierra Nevada foothills from Butte County to Kern County and throughout the central and southern California coast. Its elevational range extends up to 1200 m (4000 ft) in the Sierra Nevada foothills and up to 1800 m (6000 ft) in the mountains of southern California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the riparian and forested habitat preferred by this species for breeding and foraging. This species may also forage in open grassland areas with sandy soils and, although grassland habitat occurs within the Project site, this area lacks bare ground and sandy soils required to support this species.

Northwestern Pond Turtle

Emydidae > *Actinemys marmorata*

FESA: Proposed Threatened, CESA: Species of Special Concern

Life History:	Actinemys species are uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Elevation range extends from near sea level to 1,430 meters (4,690 feet AMSL). Associated with permanent or nearly permanent water in a wide variety of habitat types. Western Pond Turtle was split into two species in 2014, with A. marmorata ranging from the Central Valley north. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB; IPaC
Nearest CNDDB Record:	3.00 miles southwest
Habitat Present:	Not Present
Determination Reason:	The Project site lacks suitable aquatic habitat to support this species. The existing wetland areas surveyed on the Project site are heavily disturbed, located alongside busy roadways, and lack a consistent source of water to support this species. Additionally, upland refugia necessary to support nesting is lacking within the surrounding areas. Canals flowing through the Project site are concrete-lined with steep sides that could not be utilized by this species.

Yellow-billed Cuckoo

Cuculidae > *Coccyzus americanus*
FESA: None, CESA: None, SJMSCP Covered Species

Life History: An uncommon to rare summer resident of valley foothill and desert riparian habitats in scattered locations in California. Along the Colorado River, breeding population on California side was estimated at 180 pairs in 1977. Additional pairs reside in the Sacramento and Owens valleys; along the South Fork of the Kern River, Kern County; along the Santa Ana River, Riverside County; and along the Amargosa River, Inyo and San Bernardino counties. Also may nest along San Luis Rey River, San Diego County. Formerly much more common and widespread throughout lowland California, but numbers drastically reduced by habitat loss. Current population estimations show about 50 pairs existing in California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riverine habitat to support nesting or foraging for this species. The Project site is also not located along any of the rivers where this species is known to occur. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Long-Billed Curlew

Scolopacidae > *Numenius americanus*
FESA: None, CESA: None, SJMSCP Covered Species

Life History: An uncommon to fairly common breeder from April to September in wet meadow habitat in northeastern California in Siskiyou, Modoc, and Lassen counties. One recent nesting record for Owens Valley, Inyo County. Uncommon to locally very common as a winter visitant from early July to early April along most of the California coast, and in the Central and Imperial valleys, where the largest flocks occur. Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats. Small numbers of nonbreeders remain on coast in summer, and larger numbers remain in some years in the Central Valley. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the wet meadow, coastal estuary, or inter-tidal mudflat habitat preferred by this species for nesting and foraging. Additionally, the nearest record for this species is located

greater than five miles from the Project site and it is not expected to occur.

California Condor

Cathartidae > *Gymnogyps californianus*

FESA: Endangered, Protected, CESA: Endangered

Life History: Endangered, permanent resident of the semi-arid, rugged mountain ranges surrounding the southern San Joaquin Valley, including the Coast Ranges from Santa Clara County south to Los Angeles County, the Transverse Ranges, Tehachapi Mountains, and southern Sierra Nevada. Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags. Occurs mostly between sea-level and 2700 m (0-9000 ft), and nests from 610-1372 m (2000-6500 ft). Nonbreeding individuals move north to Kern and Tulare counties in April, often returning south in September to winter in Tehachapi Mountains, Mount Pinos, and Ventura and Santa Barbara counties. Total population in early 1980's estimated to be fewer than 20, and declining. Occurrence in the wild now in question. Two U.S. Forest Service sanctuaries set aside within the Los Padres National Forest, primarily for nesting and roosting protection. *California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the open rangelands and rugged mountain habitats preferred by this species for foraging. The Project site is below the preferred elevations for nesting and thus, is not expected to occur. The nearest record for this species is located greater than five miles from the Project site and is not expected to occur.

Osprey

Pandionidae > *Pandion haliaetus*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: Breeds in northern California from Cascade Ranges south to Lake Tahoe, and along the coast south to Marin County. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems. Breeding population estimated in 1975 at 350-400 pairs in northern California; numbers apparently increasing in recent years. An uncommon breeder along southern Colorado River, and uncommon winter visitor along the coast of southern California. Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the proximity to lacustrine, riverine, or pelagic habitats preferred by this species for foraging. Additionally, the Project site also lacks the tall trees preferred by this species for nesting. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Northern Harrier

Accipitridae > *Circus hudsonius*

FESA: None, CESA: Species of Special Concern

Life History:	Occurs from annual grassland up to lodgepole pine and alpine meadow habitats, as high as 3,000 m (10,000 ft). Breeds from sea level to 1,700 m (0-5,700 ft) in the Central Valley and Sierra Nevada, and up to 800 m (3,600 ft) in northeastern California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Permanent resident of the northeastern plateau and coastal areas; less common resident of the Central Valley. Widespread winter resident and migrant in suitable habitat. California population has decreased in recent decades but can be locally abundant where suitable habitat remains free of disturbance, especially from intensive agriculture. Breeding population much reduced, especially in southern coastal district. Destruction of wetland habitat, native grassland, and moist meadows, and burning and plowing of nesting areas during early stages of breeding cycle, are major reasons for the decline. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site contains minimal foraging habitat in the form of marginal grasslands and agricultural fields along the edges of the Project site. Nesting habitat is located around the isolated wetlands and grasslands, but these habitats are only marginally suitable within the Project site due to the small extent and extensive human disturbance in these areas. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Swainson's Hawk

Accipitridae > *Buteo swainsoni*

FESA: None, CESA: Threatened, SJMSCP Covered Species

Life History:	Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, and Antelope Valley. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the

Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. In southern California, now mostly limited to spring and fall transient. Formerly abundant in California with wider breeding range. Decline resulted in part from loss of nesting habitat. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP
Nearest CNDDB Record: 0.39 miles east
Habitat Present: Not Present
Determination Reason: The Project site contains marginal open foraging habitat in agricultural fields along the edges of the Project site that could support this species however, no trees of suitable height or riparian areas are present within the Project site to support nesting for this species.

Merlin

Falconidae > *Falco columbarius*
FESA: None, CESA: None, SJMSCP Covered Species

Life History: Uncommon winter migrant from September to May. Seldom found in heavily wooded areas, or open deserts. Frequents coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, and early successional stages. Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats. Occurs in most of the western half of the state below 1500 m (3900 ft). A rare winter migrant in the Mojave Desert; a few records from the Channel Islands. Numbers have declined markedly in California in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP
Nearest CNDDB Record: > 5 miles
Habitat Present: Not Present
Determination Reason: The Project site lacks the forested openings and riverine habitats preferred by this species for foraging. Additionally, the Project site also lacks the tall trees preferred by this species for nesting. The nearest record for this species is located greater than five miles from the Project site and is not expected to occur.

Least Bell's Vireo

Vireonidae > *Vireo bellii pusillus*
FESA: Endangered, CESA: Endangered

Life History: Formerly a common and widespread summer resident below about 600 m (2000 ft) in western Sierra Nevada, throughout Sacramento and San Joaquin valleys, and in the coastal valleys and foothills from Santa Clara County south. Also was common in coastal southern California from Santa Barbara County south, below about 1200 m (4000 ft) east of the Sierra Nevada, in Owens and Benton valleys, along Mojave River and other streams at western edge of southeastern deserts, and along entire length of Colorado River. Has declined drastically or vanished entirely throughout California range in recent

decades, apparently from cowbird parasitism and habitat destruction and degradation. Now a rare, local, summer resident below about 600 m (2000 ft) in willows and other low, dense valley foothill riparian habitat and lower portions of canyons mostly in San Benito and Monterey counties; in coastal southern California from Santa Barbara County south; and along the western edge of the deserts in desert riparian habitat. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB
Nearest CNDDB Record: 4.62 miles west
Habitat Present: Not Present
Determination Reason: The Project site lacks suitable dense riparian habitat and streams to support this species. This species is considered locally extirpated.

Horned Lark

Alaudidae > *Eremophila alpestris*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: The Horned Lark is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. Found from grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline. Less common in mountain regions, on the North Coast, and in coniferous or chaparral habitats. Mostly leaves mountains in winter, but small flocks may remain to winter on windswept, snow-free areas at high elevations in the Sierra Nevada. In winter, flocks in desert lowlands and other areas augmented by winter visitants, many migrating from outside the state. Resident on the Channel Islands. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP
Nearest CNDDB Record: > 5 miles
Habitat Present: Not Present
Determination Reason: The Horned Lark prefers grassland areas with vegetation less than two inches in height or bare ground for nesting and foraging habitat, which is lacking within the Project site. Therefore, nesting and foraging by this species is not expected to occur in the Project site. Additionally, the nearest record is located greater than five miles from the Project site and is not expected to occur.

Yellow-breasted Chat

Icteriidae > *Icteria virens*

FESA: None, CESA: Species of Special Concern; SJMSCP Covered Species

Life History: An uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada. Found up to about 1,450 meters (4,800 feet AMSL) in valley foothill riparian, and up to 2,050 meters (6,500 feet AMSL)

east of the Sierra Nevada in desert riparian habitats. Uncommon along coast of northern California east to Cascades and occurs only locally south of Mendocino County. In southern California, breeds locally on the coast and very locally inland. In migration, may be found in lower elevations of mountains in riparian habitat. Numbers much reduced in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

CNDDB Records: 0

Nearest CNDDB Record: None

Habitat Present: Not Present

Determination Reason: The Project site does not contain valley foothill or desert riparian habitat to support this species. The wetland areas present on the Project site do not contain adequate vegetation to support yellow-breasted chat. Additionally, the nearest record is located greater than five miles from the Project site.

Tricolored Blackbird

Icteridae > Agelaius tricolor

FESA: None, CESA: Threatened, Species of Special Concern; SJMSCP Covered Species

Life History: Mostly a resident in California. Common locally throughout Central Valley and in coastal districts from Sonoma County south. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. Feeds in grassland and cropland habitats. Breeds locally in northeastern California. In winter, becomes more widespread along central coast and San Francisco Bay area and is found in portions of the Colorado Desert. Numbers appear to be declining in California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

CNDDB Records: 1

Nearest CNDDB Record: One record is located within the Project site along the intersection of South Chrisman Road and West 11th street.

Habitat Present: Not Present

Determination Reason: The Project site contains small, marginally suitable wetlands along Vernalis Road and South Bird Road to support this species; however, these areas in close proximity to the roadways are heavily disturbed. Tricolored blackbirds are not expected to occur due to the lack of tall, undisturbed cattails or tules. Additionally, the wetlands present on-site were observed to be dry during the field observations and are unlikely to support this species.

Yuma Myotis

Vespertilionidae > *Myotis yumanensis*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: The Yuma Myotis is common and widespread in California. It is uncommon in the Mojave and Colorado Desert regions,

except for the mountain ranges bordering the Colorado River Valley. Found in a wide variety of habitats ranging from sea level to 3300 m (11,000 ft), but it is uncommon to rare above 2560 m (8000 ft). Optimal habitats are open forests and woodlands with sources of water over which to feed. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the open forest and woodland habitats preferred by this species for foraging. Additionally, there were few manmade structures present within the Project site that would support this species, but regular human disturbance around these buildings may preclude bats from these structures. Roosting sites are not expected to occur within the Project site. The nearest record of this species is located greater than five miles from the Project site and it is not expected to occur.

Western Red Bat

Vespertilionidae > *Lasiurus blossevillii*

FESA: None, CESA: Species of Special Concern; SJMSCP Covered Species

Life History: The Western Red Bat is locally common in some areas of California, occurring from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. The winter range includes western lowlands and coastal regions south of San Francisco Bay. There is migration between summer and winter ranges, and migrants may be found outside the normal range. Day-roost habitat is primarily among the foliage of trees such as willows, cottonwoods, and sycamores in forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Forages on a variety of insects. Not found in desert areas. During warm months, sexes occupy different portions of the range. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Western Bat Working Group. 2005. Western Bat Species Accounts, http://wbwg.org/western-bat-species/

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the forested and woodland areas required for roosting habitat for this species. The western red bat feeds over open grassland area, which exists within the Project site along South Chrisman Road, but is marginal and disturbed. There were no visible signs of bats

(i.e. scat or insect carcasses) observed during the surveys. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Riparian Brush Rabbit

Leporidae > *Sylvilagus bachmani riparius*

FESA: Endangered, CESA: Endangered

Life History:	The riparian brush rabbit is a subspecies of the common brush rabbit. There are three known population centers for this species: Caswell Memorial Park, Lathrop, and the San Joaquin River National Wildlife Refuge, all in San Joaquin County. The riparian brush rabbit prefers riverine habitats with thickets of willow (*Salix spp.*), blackberry (*Rubus vitifolius*), wild rose (*Rosa californica*), wild grape (*Vitis calfornica*), Douglas' coyote bush (*Baccharis douglasii*), and grasses for foraging and sheltering. *Source: https://www.fws.gov/species/riparian-brush-rabbit-sylvilagus-bachmani-riparius*
Inclusion Source(s):	CNDDB, IPaC
Nearest CNDDB Record:	1.36 miles east
Habitat Present:	Not Present
Determination Reason:	The Project site lacks suitable riparian riverine habitats to support this species. Additionally, the Project site does not occur in the Caswell Memorial Park, Lathrop, or the San Joaquin River National Wildlife Refuge and is, therefore, not expected to occur.

Riparian Woodrat

Cricetidae > *Neotoma fuscipes riparia*

FESA: Threatened, CESA: Species of Special Concern

Life History:	The riparian woodrat is a subspecies of the dusky footed woodrat (*N. fuscipes*). As the name suggests, they prefer to build stick nests near rivers and streams in riparian woodland habitats. Historically, they were distributed along the San Joaquin, Stanislaus and Tuolumne rivers. Today, there are only two known population centers: Caswell Memorial Park and the San Joaquin River National Wildlife Refuge, both in San Joaquin County. *Source: https://www.fws.gov/species/riparian-woodrat-san-joaquin-valley-neotoma-fuscipes-riparia*
Inclusion Source(s):	IPaC
Habitat Present:	Not Present
Determination Reason:	The Project site lacks suitable riparian woodland habitat to support this species. Additionally, the Project site is located upland from the San Joaquin River and is not within either the Caswell Memorial Park or the San Joaquin River National Wildlife Refuge. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Ringtail

Procyonidae > *Bassariscus astutus*

FESA: None, CESA: None, SJMSCP Covered Species

Life History:	Widely distributed, common to uncommon permanent resident. Occurs in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations. Little information available on distribution and relative abundance among habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the riparian and forested habitat preferred by this species for nesting or foraging. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Green sturgeon - southern DPS

Acipenseridae > *Acipenser medirostris pop. 1*

FESA: Threatened, CESA: Species of Special Concern

Life History:	The Green Sturgeon (*Acipenser medirostris*) is an anadromous fish species that is long-lived and among the most marine oriented sturgeon species in the family Acipenseridae. NMFS has determined green sturgeon are comprised of at least two distinct population segments (DPSs): (1) A Northern DPS consisting of populations originating from coastal watersheds northward of and including the Eel River; and (2) a southern DPS consisting of populations originating from coastal watersheds south of the Eel River, with the only known spawning population in the Sacramento River. Adult Green Sturgeon spawn every 2-4 years. Adult Green Sturgeon begin spawning migrations in late February. Spawning occurs from March to July, with peak activity from mid-April to mid-June. Threats include loss of habitat and spawning grounds due to dams and diversions; habitat degradation from pollution, agricultural runoff, and dredging; and the loss of prey species from pesticide application. *Source: https://www.federalregister.gov/documents/2009/10/09/E9-24067/endangered-and-threatened-wildlife-and-plants-final-rulemaking-to-designate-critical-habitat.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.26 miles east
Habitat Present:	Not Present
Determination Reason:	The Project site lacks open water in the form of rivers to support this species.

Steelhead - Central Valley DPS

Salmonidae > *Oncorhynchus mykiss irideus pop. 11*

FESA: Threatened, CESA: Species of Special Concern

Life History:	Steelhead and rainbow trout are the same species. In general, steelhead refers to the anadromous form of the species. Steelhead typically migrate to marine waters after spending two years in fresh water. They reside in marine waters for typically two or three years prior to returning to their natal stream to spawn as four- or five-yearolds. The Central Valley Distinct Population Segment, or DPS, includes naturally spawned anadromous O. mykiss (steelhead) originating below natural and manmade impassable barriers from the Sacramento and San Joaquin Rivers and their tributaries; excludes such fish originating from San Francisco and San Pablo Bays and their tributaries. Main threats to this DPS include habitat degradation and destruction, blockage of freshwater habitats, water allocation problems, the pervasive opportunity for genetic introgression resulting from widespread production of hatchery steelhead and the potential ecological interaction between introduced stocks and native stocks.. *Source: https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/sacramento-river-winter-run-chinook-salmon*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.05 miles east
Habitat Present:	Not Present
Determination Reason:	The Project site lacks open water in the form of rivers to support this species.

Longfin Smelt

Osmeridae > *Spirinchus thaleichthys pop. 2*

FESA: Threatened, CESA: Endangered, Federal Threatened; California Endangered

Life History:	Longfin Smelt Spirinchus thaleichthys is a small fish in the family Osmeridae found along the Pacific coast of the United States from Alaska to California. In California, Longfin Smelt is historically found in the San Francisco Estuary and the Sacramento/San Joaquin Delta (Bay-Delta), Humboldt Bay, and the estuaries of the Eel River and Klamath River. Spawning occurs from November through May, with a peak from February through April. The causes of decline from northern estuaries are not clearly known, but they are probably similar to those of the Bay-Delta, which include: reduction in freshwater outflows, entrainment losses to water diversion, changes in food organisms, toxic substances, disease, competition, introduced species, and loss of genetic integrity.. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	3.27 miles northeast
Habitat Present:	Not Present
Determination Reason:	The Project site lacks open water in the form of rivers to support this species.

Yellow Warbler

Parulidae > *Dendroica petechia brewsteri*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Breeding distribution includes from the coast range in Del Norte county, east to Modoc plateau, south along coast range to Santa Barbara and Ventura counties and along western slope of Sierra Nevada south to Kern county. Also breeds along eastern side of California from the Lake Tahoe area south through Inyo county. Also breeds in several southern California mountain ranges and throughout most of San Diego county. Winters in Imperial and Colorado river valleys. Breeds in riparian woodlands from coastal and desert lowlands up to 2500 m (8000 ft) in Sierra Nevada. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. Numbers of breeding pairs have declined dramatically in recent decades in many lowland areas (southern coast, Colorado River, San Joaquin and Sacramento valleys). Now rare to uncommon in many lowland areas where formerly common. A common migrant on Channel and Farallon Islands in spring and fall. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain forested or riparian breeding habitat suitable to support this species thus, this species is not expected to occur on-site. Nesting sites occur within riparian vegetation as well and is not expected to occur within the Project site. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Black-crowned Night Heron

Ardeidae> *Nycticorax nycticorax*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Black-crowned Night-Heron is a fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and, rarely, on kelp beds in marine subtidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands. Common nesting species on northeastern plateau from April to August. Uncommon in northwestern, and rare in northeastern, California in midwinter. Uncommon transient and rare in winter in southern deserts, and rare on Channel Islands. Seldom seen in mountains, but formerly nested at Big Bear Lake in San Bernardino Mountains. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain suitable foraging habitat such as, large riverine and emergent habitat, and densely vegetated Marshes. Nesting habitat in trees or in dense cattails is also not present on the Project site and thus, nesting is not likely to occur. The nearest record for this species is located greater than five miles from the Project site and is not expected.

Western Red Bat

Vespertilionidae > *Lasiurus blossevillii*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Western Red Bat is locally common in some areas of California, occurring from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. The winter range includes western lowlands and coastal regions south of San Francisco Bay. There is migration between summer and winter ranges, and migrants may be found outside the normal range. Day-roost habitat is primarily among the foliage of trees such as willows, cottonwoods, and sycamores in forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Forages on a variety of insects. Not found in desert areas. During warm months, sexes occupy different portions of the range. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Western Bat Working Group. 2005. Western Bat Species Accounts, http://wbwg.org/western-bat-species/

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the forested and woodland areas required for roosting habitat for this species. The western red bat feeds over open grassland area, which exists within the Project site to the north of Highway 132 and south of the California Aqueduct but is small in extent and no visible signs of bats (i.e. scat or insect carcasses) were observed during the surveys. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Vernal Pool Fairy Shrimp

Branchinectidae > *Branchinecta lynchi*

FESA: Threatened, CESA: None

Life History: The Vernal Pool Fairy Shrimp inhabits ephemeral pools with clear to tea- colored water. This species has been most commonly observed in grass or mud bottomed swales, earth sump, or basalt flow depression pools in unplowed grasslands. The Vernal Pool Fairy Shrimp has been collected from early December to early May. The water in pools inhabited by this species has a pH averaging 7.0; and low TDS, conductivity, alkalinity, and chloride. Although the Vernal Pool Fairy Shrimp is found at a number of sites, it is not abundant at any of them. It often occurs with other fairy shrimp species, but is never the numerically dominant one. *Source:*

https://www.govinfo.gov/content/pkg/FR-1992-05-08/pdf/FR-1992-05-08.pdf#page=76

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the vernal pool habitat to support this species. Ponded areas consist of heavily disturbed wetlands on-site, irregularly inundated and artificially drained. Given these non-natural conditions, these areas are unlikely to support this species, and this species is not expected to occur.

Vernal Pool Tadpole Shrimp

Triopsidae > *Lepidurus packardi*

FESA: Endangered, CESA: None

Life History: Vernal Pool Tadpole Shrimp inhabits vernal pools and swales containing clear to highly turbid water. The Vernal Pool Tadpole Shrimp is found at 14 vernal pool complexes in the Sacramento Valley from the Vina Plains in Butte County south of the Sacramento area in Sacramento County and west to the Jepson Prairie region of Salano County. The pools inhabited by the Vernal Pool Tadpole Shrimp range in size from 5 square meters (16.4 square ft) in the Mather Air Force Base area of Sacramento County to the 38 hectare (89 acre) Olcott Lake at Jepson Prairie. The pools at Jepson Prairie and Vina Plains have a neutral pH, and very low conductivity, TDS, and alkalinity. These pools are most commonly located in grass bottomed swales of unplowed grasslands in old alluvial soils underlain by hardpan, or in mud- bottomed pools containing highly turbid water. All pools known to be inhabited by this species are filled by winter and spring rains and may last until June. *Source: https://www.govinfo.gov/content/pkg/FR-1992-05-08/pdf/FR-1992-05-08.pdf#page=76*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the vernal pool habitat to support this species. Ponded areas consist of heavily disturbed wetlands on-site, irregularly inundated and artificially drained. Given these non-natural conditions, these areas are unlikely to support this species, and this species is not expected to occur.

Other Considerations

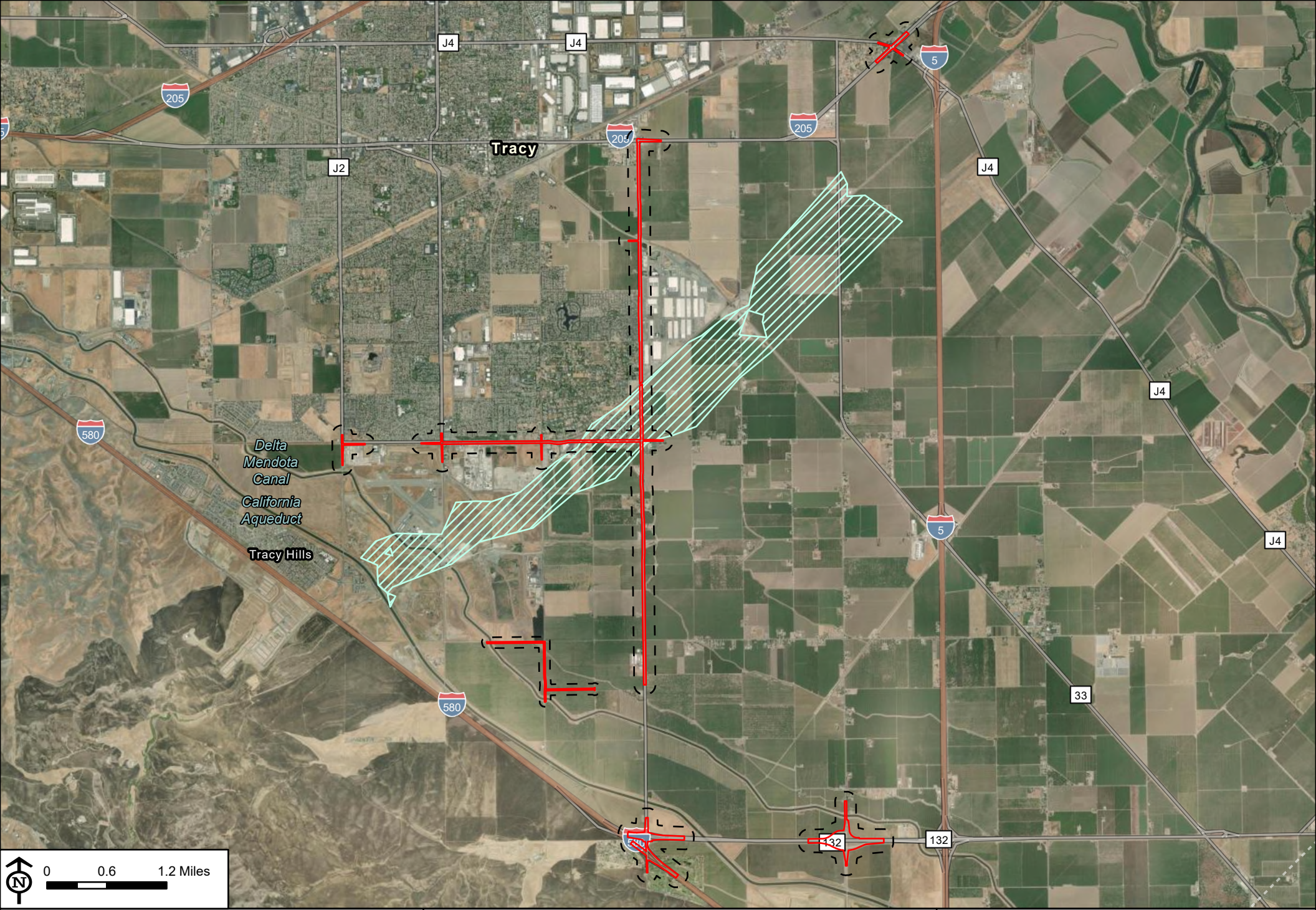
Wildlife Movement

The Project site is identified by the SJMSCP as part of the Central/Southwest Transition Zone, which was created to recognize historical records of the San Joaquin kit fox as a transient along the boundary between the Southwest Zone and the Central zone. The term “wildlife movement corridor” means an area of habitat that is important for the movement of wildlife between larger habitat areas. A known wildlife corridor, the Corral-Lower San Joaquin Wildlife Corridor, runs from the Corral Hollow Pass through the Southwest/Central Transition Zone, overlapping the Project site at the intersection of South Chrisman Road and West Linne Road (**Figure 6**). Although there is some slight overlap, the Project site itself does

not function as a movement corridor for terrestrial wildlife because it is primarily comprised of paved roadways and intersections which functionally serve as barriers to the movement of terrestrial wildlife outside of birds.

Nesting Birds

Birds, including native species protected by the Migratory Bird Treaty Act (MBTA) and CFGC, have the potential to nest in nearly any environment, including those altered by anthropogenic activity. With respect to the Project site, the trees, grasslands, and shrubs on-site provide ample locations for potential nesting. The Project site lacks sufficiently tall trees but does contain manmade structures such as utility poles that provide potentially suitable nesting habitat for raptors or other large birds identified in the desktop and literature review. The aquatic features present within the Project site are heavily disturbed and are unlikely to support nesting, as the areas surrounding the aquatic features do not contain riparian vegetation and do not support the mature canopies that would provide suitable nesting habitat for larger wetland birds. No active nests or nesting behavior (e.g., carrying nest building material, carrying food to feed nestlings, territorial displays, etc.) was observed during the surveys; however, the biological surveys for the Project were conducted outside of nesting bird season (February 15 - August 31).



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (06/2024)

BARGAS Environmental Consulting

Project Site

Study Area

Corral-Lower San Joaquin Wildlife Corridor

Figure 6 San Joaquin Wildlife Corridors

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/12/2025, Map Revised: N/A, Bargas Project Number: 1644-22

Critical Habitat

The review of pertinent literature and data sources for the Project identified approximately 1.5 acres of critical habitat for Delta Smelt in the northeastern corner of the Project site. Due to the high-level and broad nature of these assessments and critical habitat mapping, the areas classified as critical habitat must be considered for their suitability to support the species. Because the portion of the Project site overlapping the Delta Smelt critical habitat is developed land that does not contain any open water or other aquatic features that could support Delta Smelt, there is no reasonable possibility that Delta Smelt would occur within the Project site.

Conclusion

The proposed Project would occur primarily on developed land consisting of roadways and disturbed roadside areas, as well as commercial, industrial, and residential properties. Along these roadways and intersections, the Project site contains marginal agricultural land, disturbed grassland, and ornamental vegetation in residential areas. The Project site does not contain any sensitive vegetation communities therefore, the Project is not expected to impact sensitive vegetation communities.

No special-status species were detected on-site during biological surveys for the Project. Furthermore, based on vegetation and habitats found on-site, no special-status plants or animals were determined to have at least moderate potential to occur. All special-status plants and animals evaluated for potential to occur in this report were determined to be “Not Expected” or “Presumed Absent”; thus, implementation of the Project is not anticipated to impact special-status plant or animal species.

The Project crosses multiple aquatic resources, including the Delta Mendota Canal, the California Aqueduct, the Lateral Five East Canal, an unnamed concrete-lined canal, and Corral Hollow Creek. Unlike the Lateral Five East Canal and the unnamed concrete-lined canal, which are not recognized by USACE, Corral Hollow creek, the California Aqueduct, and the Delta Mendota Canal are identified by the USACE Sacramento District as TNWs; thus, are considered potentially subject to regulation by USACE under Section 10 of the Rivers and Harbors Act as well as Section 404 of the CWA. Although not recognized as a TNW, the Lateral Five East Canal and the unnamed concrete-lined canal are presumed to not have a surface hydrologic connection to any downstream TNWs based on a review of aerial imagery and CARI (SFEI 2024); thus, are not considered waters of the U.S. and are not potentially subject to USACE jurisdiction under Section 404 of the CWA. In addition to these canals and creek, roadside ditches, seasonal wetland features, and a wetland swale feature were also observed at the Project site; however, these aquatic resource features were found to be isolated features and considered non-jurisdictional by USACE per current regulatory guidance defining waters of the U.S. Given that USACE makes the final determination on their jurisdictional authority, consultation with the USACE via submittal of an Approved Jurisdictional Determination request is recommended and may be required by the County to obtain concurrence as to the aquatic features identified on-site which would not be subject to USACE jurisdiction.

All of the aquatic resource features identified on-site were considered waters of the State, potentially regulated by the CVRWQCB. The CVRWQCB oversees water rights and regulates activities within waters of the State in the Central Valley per the Porter-Cologne Water Quality Control Act when waters/wetlands are isolated; whereas, under Section 401 of the Clean Water Act wetlands or waters of the State are also considered wetlands/waters of the U.S. by the USACE. For regulatory compliance with the Porter Cologne Act and Clean Water Act, the Project proponent/applicant would be required to apply for an individual Waste Discharge Permit with the CVRWQCB if the Project would impact isolated waters of the State, including wetlands. If the Project would impact aquatic resource features considered waters of the U.S under USACE regulation, consultation with the CVRWQCB for compliance with Section 401 of the Clean Water Act via application for a 401 Certification would also be required.

Irrespective of permitting with the CVRWQCB or USACE, because a formal jurisdictional delineation was not conducted

for the Project, a formal jurisdictional delineation is recommended and may be required by these agencies, following USACE procedures and guidance, to confirm whether the aquatic features are considered wetland or non-wetland waters jurisdictional resources.

Additionally, all of the features identified on-site (except for the freshwater emergent wetlands) were found to contain a bed and bank. As a result, these features would be potentially subject to regulation by CDFW under Section 1600 of CFGC. To comply with this regulation, CDFW shall be notified via CDFW Lake and Streambed Alteration (LSA) notification procedures if the Project would alter the streambed or banks, impact riparian vegetation, disturb the natural flow, or deposit material into these features.

Project compliance with the CWA, Rivers and Harbors Act, Porter-Cologne Act, and CFGC would be required. Thus, prior to implementation of the Project and impacts to aquatic resources on-site, consultations with these USACE, CVRWQCB, and or CDFW would be needed, which may require one or more of the following permits and regulatory approvals:

- **USACE Section 10 Rivers and Harbors Act Permitting and CWA 404 Permit:** Authorization for the dredge or fill of jurisdictional waters of the U.S., including wetlands, must be secured prior to activities in jurisdictional waters or wetlands from the USACE through the CWA Section 404 permitting process. The USACE may select to process a joint 404/10 permit.
- **CVRWQCB CWA Section 401 Water Quality Certification:** A water quality certification pursuant to Section 401 of the CWA would be required by the CVRWQCB for impacts to any areas containing wetlands or waters of the State, which are also considered wetlands or waters of the U.S.
- **CVRWQCB Waste Discharge Requirements**: An Individual Order for Waste Discharge Permit from the CVRWQCB would be required for Project activities affecting wetlands or waters of the State, which are not under USACE jurisdiction (i.e., “isolated” features).
- **CDFW Section 1602 LSAA**: A Notification of Streambed Alteration Agreement under Section 1600 of CFGC for impacts to streambed, bank, or associated habitat as defined under Section 1602 of the CFGC.

The Project site falls within the boundaries of the SJMSCP, overlapping the Central Zone, the Central-Southwest Transition Zone, and the Southwest Zone; as a result, the Project shall adhere to the provisions of this adopted habitat conservation plan. To demonstrate consistency with the goals of the SJMSCP, avoidance, minimization, or mitigation measures for burrowing owl and the San Joaquin Kit Fox are suggested for this Project.

- The Project site contains ground squirrel (*Otospermophilus beecheyi*) burrows that have the potential to support burrowing owl, thus within 14-days prior to any of Project activities on-site, a single pre-construction clearance survey for burrowing owl should be conducted within the Project work areas and surrounding 300-foot buffer, as accessible and as feasible, to confirm absence or presence of burrowing owl. The survey shall be conducted by a qualified biologist with experience in surveying for burrowing owl, including identification of burrowing owl sign and burrowing owl individuals. Furthermore, Subsection 5.2.4.15 of the SJMSCP provides guidelines for avoiding impacts and protecting burrowing owl. These guidelines state that burrowing owls may be discouraged from entering a potential construction site by preventing ground squirrels from creating these burrows. This can be achieved through planting or maintaining vegetation entirely covering the site at a height of approximately 36" above the ground, discing or plowing the entire project site to destroy any burrows, and removing ground squirrels. The SJMCP states that if the discouraging methods are insufficient, burrowing owls occupying the Project site should be evicted from the Project site during the non-breeding season (September 1 through January 31) by passive relocation as described in the CDFW’s Fish and Game Staff Report on Burrowing Owls (CDFW 2012). During the breeding season (February 1 through August 31) a 75-meter protective buffer shall be established around

occupied burrows until a qualified biologist approved by the Permitting Agencies verifies that the burrow can be destroyed.

- Because the Project site is located within the Southwest/Central Transition Zone, surveys for San Joaquin kit fox must be conducted prior to any ground-disturbing work even if the species is not expected to occur within the Project site. Guidelines provided in Subsection 5.2.4.25 of the SJMSCP state that pre-construction surveys for San Joaquin kit fox and/or their dens should be conducted by a qualified biologist between two calendar weeks to thirty calendar days prior to any ground-disturbing activities. If individual kit foxes are observed during the survey, then an additional protocol level survey would be conducted as outlined in the USFWS *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* protocol dated January 2011 (USFWS 2011). Additionally, if dens with openings of a diameter of four inches and that open within two feet inside of the den are observed within the Project site then a biologist would dust the opening of the den for three calendar days to determine if the den is occupied. If it is discovered that the den is occupied by a single adult kit fox then the den may be destroyed as soon as the fox either moves or leaves the den, whereas if the den is discovered to be a natal den, then a 250-foot buffer shall be maintained around the den until it is determined to be vacant by a qualified biologist.
- The Project is required to establish concurrence with the SJMSCP Technical Advisory Committee (TAC) and Permitting Agencies that all potential suitable habitat for other SJMSCP Covered Species would be fully avoided pursuant to Section 5.5.9 of the SJMSCP. Should concurrence be established, pre-construction surveys may be waived and further Avoidance and Minimization measures would not be required. Additionally, to compensate for the loss of habitat of the SJMSCP Covered Species, several Mitigation Measures may be required by the County for the Project, consistent with the SJMSCP:
    - Pay the appropriate fee, in this case, $1,500 per acre for Conversion of Agricultural Habitat Lands and Natural Lands
    - Establish Preserves, enhanced by the Joint Powers Authority (JPA), upon which SJMSCP Covered Species rely, through the purchase of easements from landowners willing to sell urban development rights.
    - Purchase approved mitigation bank credits as specified in Section 5.3.2.4. D. of the SJMSCP
    - Propose an alternative mitigation plan, consistent with the goals of the SJMSCP and equivalent in biological value to the options above, subject to approval by the JPA with the concurrence of the Permitting Agencies' representatives on the TAC.

The Project would be required to comply with the MBTA and CFGC to protect nesting bird species. Thus, the following avoidance and minimization measures shall be implemented prior to site disturbance to avoid impacts to nesting raptors and other birds in the Project site or immediately adjacent areas.

- A nesting bird survey shall be conducted by a qualified biologist within the Project site (raptors and non-raptors) and a 500-foot buffer (raptors only) as feasible prior to commencing construction activities for each phase of the Project, if this work would begin during the typical nesting season (between February 1 and August 31).
- If nesting birds are identified during the pre-construction survey, the qualified biologist should determine an appropriate disturbance-free (i.e., no-work-zone) avoidance buffer (typically between 100 and 500 feet) depending on the species and as described in Subsections 5.2.4.16 through 5.2.4.22 in the SJMSCP. Buffer zones shall be clearly demarcated in the field for avoidance by construction activities.
- The size of an established buffer may be altered if the qualified biologist conducts behavioral observations and determines the nesting birds are well acclimated to disturbance. If this occurs, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting birds. If the

buffer is reduced, the qualified biologist shall remain on-site to monitor the behavior of the nesting birds during construction in order to ensure that the reduced buffer does not result in take of eggs or nestlings.

- No construction or earth-moving activity shall occur within the established nest avoidance no-work-zone buffer until it is determined by the qualified biologist that the young have fledged (are no longer dependent on the nest or the adults for feeding) and have attained sufficient flight skills to avoid project construction zones. If a qualified biologist is not hired by the Project Applicant or the Contractor to monitor the active nesting birds/raptors, then the full buffer(s) shall be maintained in place from February 1 to August 31. The buffer may be removed, and work may proceed as otherwise planned within the buffer on September 1.

With the implementation of the Project's proposed avoidance and minimization measures, as well as compliance with State and Federal regulations, the Project would not have a substantial adverse effect on sensitive vegetation communities, special-status species, state or federally protected aquatic resources, or nesting birds. Additionally, by following guidelines outlined in this report, this Project would not conflict with the provisions of the SJMSCP.

We thank you for the opportunity to prepare the Biological Resources Letter Report for this Project. Should you have any questions or comments regarding this letter, please do not hesitate to contact me at dbaumbach@bargasconsulting.com or Thomas Liddicoat at tliddicoat@bargasconsulting.com.

Sincerely,

Dustin Baumbach

Dustin Baumbach
Biologist

Appendices:

- Appendix A. Site Photographs
- Appendix B. Floral & Faunal Compendia
- Appendix C. Special-Status Biological Resource Summary

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Appendix A. Site Photographs



Photo 1. West side of Chrisman Road and Highway 132, facing south.



Photo 2. East side of Chrisman Road and Highway 132, facing south.



Photo 3. California ground squirrel burrows suitable for use by Burrowing Owl.

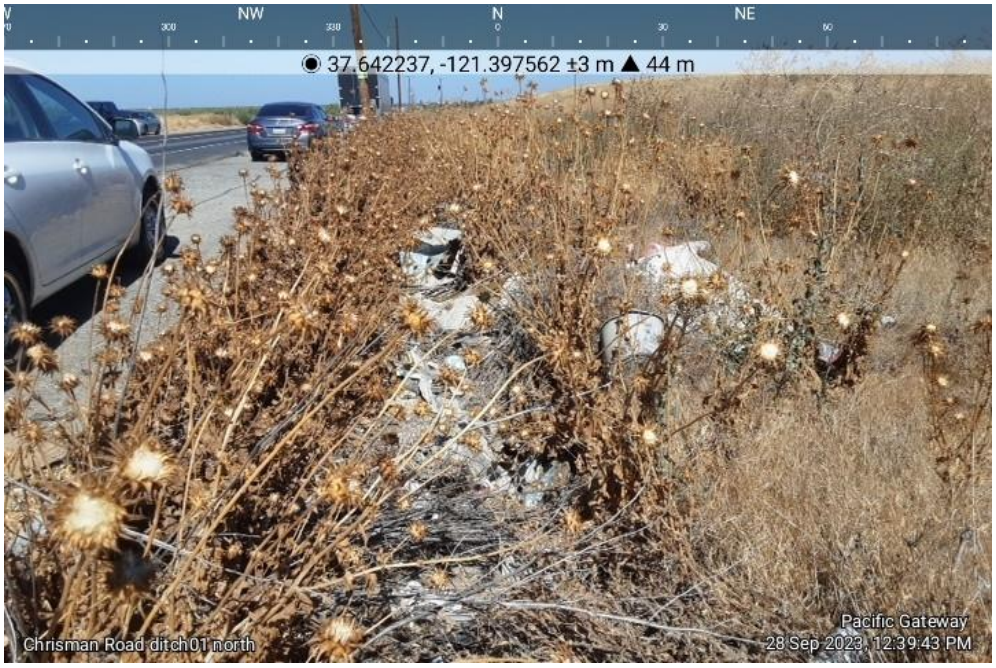

Photo 4. Roadside drainage ditch on the east side of Chrisman Road, north of Highway 132.

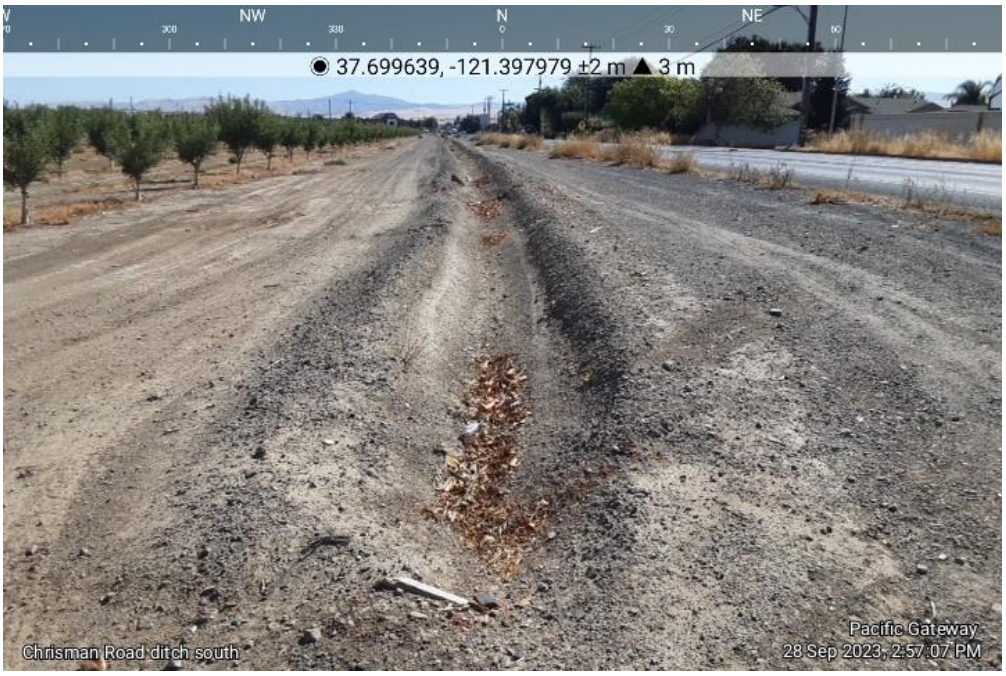

Photo 5. Isolated ditch at Chrisman Road, facing south.

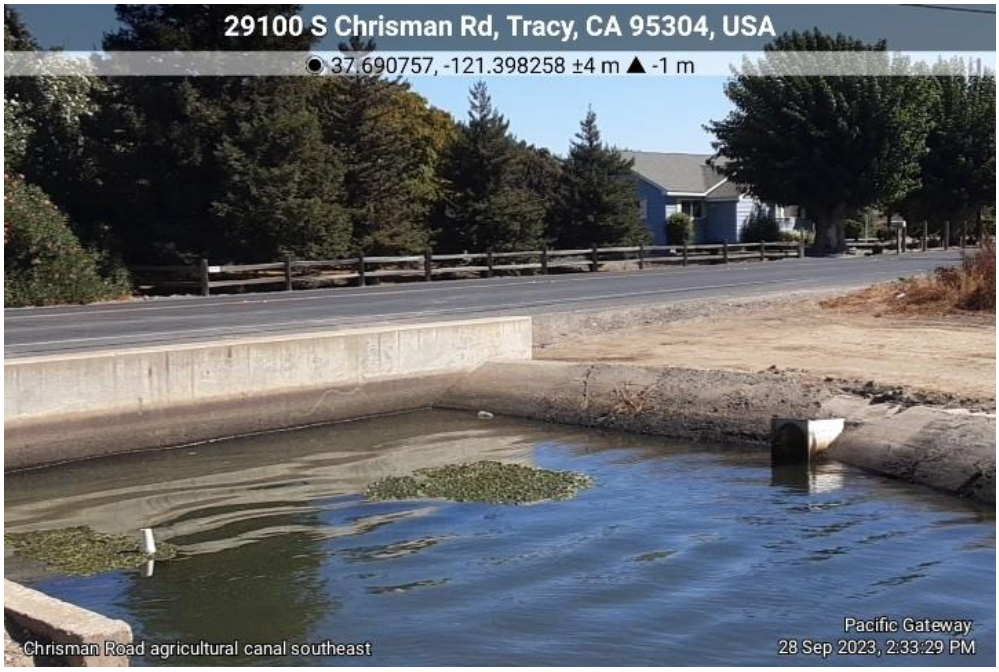

Photo 6. Agricultural canal at Chrisman Road, facing southeast.



Photo 7. Biological swale at Chrisman Road, facing north.



Photo 8. Roadside drainage along Vernalis Road, facing west.

Appendix B. Floral & Faunal Compendia

Bargas has documented the presence of 59 plant taxa and 16 wildlife taxa. Taxa are presented in taxonomic order.

Plants

Common Name	Scientific Name	Family	Major Clade	Native/Non-Native
Cattail	*Typha sp.*	Typhaceae	Monocots	—
Common Sunflower	*Helianthus annuus*	Asteraceae	Eudicots	Native
Bristly Ox-Tongue	*Helminthotheca echioides*	Asteraceae	Eudicots	Naturalized
Perennial Pepperweed	*Lepidium latifolium*	Brassicaceae	Eudicots	Naturalized
Tumbleweed	*Amaranthus albus*	Amaranthaceae	Eudicots	Naturalized
Lamb's Quarters	*Chenopodium album*	Chenopodiaceae	Eudicots	Naturalized
Doveweed, Turkey-Mullein	*Croton setiger*	Euphorbiaceae	Eudicots	Native
Little Mallow	*Malva parviflora*	Malvaceae	Eudicots	Naturalized
Common Devil's Claw	*Proboscidea louisianica subsp. louisianica*	Martyniaceae	Eudicots	Naturalized
Mule Fat	*Baccharis salicifolia subsp. salicifolia*	Asteraceae	Eudicots	Native
Desert Almond	*Prunus fasciculata*	Rosaceae	Eudicots	Native
Peach	*Prunus persica*	Rosaceae	Eudicots	Naturalized
Narrow-Leaved Willow, Coyote Willow	*Salix exigua var. exigua*	Salicaceae	Eudicots	Native
Tree Tobacco	*Nicotiana glauca*	Solanaceae	Eudicots	Naturalized
American Black Nightshade	*Solanum americanum*	Solanaceae	Eudicots	Native
Yellow Star-Thistle	*Centaurea solstitialis*	Asteraceae	Eudicots	Naturalized
Tall Flatsedge	*Cyperus eragrostis*	Cyperaceae	Monocots	Native
False Nutsedge	*Cyperus strigosus*	Cyperaceae	Monocots	Native
Wild Oat	*Avena fatua*	Poaceae	Monocots	Naturalized
Rescue Grass	*Bromus catharticus*	Poaceae	Monocots	Naturalized
Jungle Rice	*Echinochloa colona*	Poaceae	Monocots	Naturalized
Barnyard Grass, Japanese Millet, Watergrass	*Echinochloa crus-galli*	Poaceae	Monocots	Naturalized
Wall Barley	*Hordeum murinum*	Poaceae	Monocots	Naturalized

Bull Thistle	*Cirsium vulgare*	Asteraceae	Eudicots	Naturalized
Rough Blue Grass	*Poa trivialis*	Poaceae	Monocots	Naturalized
Mustard sp.	*Brassica sp.*	Brassicaceae	Eudicots	—
Prickly-pear sp.	*Opuntia sp.*	Cactaceae	Eudicots	—
Salsola sp.	*Salsola sp.*	Chenopodiaceae	Eudicots	—
Horseweed	*Erigeron canadensis*	Asteraceae	Eudicots	Native
California Black Walnut	*Juglans californica*	Juglandaceae	Dicot	Native
Great Brome	*Bromus diandrus*	Poaceae	Monocot	Invasive
Red Brome	*Bromus rubens*	Poaceae	Monocot	Invasive
Lop Grass	*Bromus hordeaceus*	Poaceae	Monocot	Invasive
Gumweed	*Grindelia hirsutula*	Asteraceae	Dicot	Native
Interior Live Oak	*Quercus wislizeni*	Fagaceae	Dicot	Native
Oleander	*Nerium oleander*	Apocynaceae	Dicot	Introduced
Clover	*Trifolium* spp.	Fabaceae	Dicot	–
Common Rush	*Juncus effusus*	Juncaceae	Monocot	Native
Western Redbud	*Cercis canadensis*	Fabaceae	Dicot	Native
Mule Fat	*Baccharis salicifolia*	Asteraceae	Dicot	Native
Small Geranium	*Geranium pusillum*	Geraniaceae	Dicot	Naturalized
Alkali Sacaton	*Sporobolus airoides*	Poaceae	Monocot	Native
Elm	*Ulmus* spp.	Ulmaceae	Dicot	Introduced
Field Bindweed	*Convolvulus arvensis*	Convolvulaceae	Dicot	Introduced
Bermuda Grass	*Cynodon dactylon*	Poaceae	Monocot	Invasive
Dandelion	*Taraxacum officinale*	Asteraceae	Dicot	Naturalized
Alfalfa	*Medicago sativa*	Fabaceae	Dicot	Introduced
Mexican Fan Palm	*Washingtonia robustus*	Arecaceae	Monocot	Naturalized
Chinese Hackberry	*Celtis sinensis*	Cannabaceae	Dicot	Introduced
Stone fruit species	*Prunus* sp.	Rosaceae	Dicot	Introduced

Spanish Clover	*Acmispon americanus*	Fabaceae	Dicot	Native
Sweet viburnum	*Viburnum odoratissimum*	Viburnaceae	Dicot	Introduced
Coast Redwood	*Sequoia sempervirens*	Cupressaceae	Dicot	Native
Black Locust	*Robinia pseudoacacia*	Fabaceae	Dicot	Introduced
Oleander	*Nerium oleander*	Apocynaceae	Dicot	Introduced
Toyon	*Heteromeles arbutifolia*	Rosaceae	Dicot	Native
Carolina Horsenettle	*Solanum carolinense*	Solanaceae	Dicot	Native
California Buckwheat	*Eriogonum fasciculatum*	Polygonaceae	Dicot	Native
Russian Thistle	*Salsola tragus*	Amaranthaceae	Dicot	Introduced

Wildlife

Common Name	Scientific Name	Family	Native/Non-Native
Rock Pigeon	*Columba livia*	Columbidae (Pigeons and Doves)	Non-native
Mourning Dove	*Zenaida macroura*	Columbidae (Pigeons and Doves)	Native
Red-shouldered Hawk	*Buteo lineatus*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
California Scrub Jay	*Aphelocoma californica*	Corvidae (Crows and Jays)	Native
Common Raven	*Corvus corax*	Corvidae (Crows and Jays)	Native
Northern Mockingbird	*Mimus polyglottos*	Mimidae (Mockingbirds and Thrashers)	Native
Song Sparrow	*Melospiza melodia*	Passerellidae (New World Sparrows)	Native
Red-winged Blackbird	*Agelaius phoeniceus*	Icteridae (Blackbirds)	Native
Red-Tailed Hawk	*Buteo jamaicensis*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
American Crow	*Corvus brachyrhynchos*	Corvidae (Crows and Jays)	Native
European Starling	*Sturnus vulgaris*	Sturnidae (Starlings)	Non-native
Brown-Headed Cowbird	*Molothrus ater*	Icteridae (Troupials and Allies)	Native
House Finch	*Haemorhous mexicanus*	Fringillidae (Finches, Euphonias, and Allies)	Native
Brewer's Blackbird	*Euphagus cyanocephalus*	Icteridae (Troupials and Allies)	Native
Turkey Vulture	*Cathartes aura*	Cathartidae (New World Vultures)	Native

Canada goose	*Branta canadensis*	Anatidae (Ducks, Geese, and Waterfowl)	Native

Appendix C. Special-Status Biological Resource Summary

The research conducted for this report included a desktop review of numerous resource databases in order to determine a list of special-status biological resources, including 12 plant taxa and 41 wildlife taxa to be analyzed for potential occurrence. The result of this analysis is summarized in the tables below. Table column definitions:

- **Common Name:** The most widely-accepted English common name for the taxon.
- **Scientific Name:** The most widely-accepted scientific name for the taxon.
- **Source(s):** The desktop review source(s) that contained this taxon.
- **Sensitivity Status:** The legal protected status of the taxon. These terms are described in detail in the Methods section of this report.
- **Habitat:** The quality of the habitat on the Project site for supporting the taxon. Classification of habitats is described in detail in the Methods section of this report.
- **Soils:** The suitability of soils on the Project site to support the taxon, if known. Classification of soils is described in detail in the Methods section of this report.
- **Potential:** The potential for the taxon to be found on the Project site. Ranking of potential is described in detail in the Methods section of this report.

Plants

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Soils	Occurrence Potential
Delta Button Celery	*Eryngium racemosum*	CNPS, SJMSCP	CE, CRPR 1B.1,	Low Quality	Unknown	Not Expected
Diamond-petaled California Poppy	*Eschsholzia rhombipetala*	CNPS, SJMSCP	CRPR 1B.1,	Low Quality	Yes	Not Expected
Caper-fruited Tropidocarpum	*Tropidocarpum capparideum*	CNPS, SJMSCP	CRPR 1B.1,	Low Quality	Unknown	Not Expected
Big Tarplant	*Blepharizonia plumosa*	CNPS, CNPS, CNDDB	CRPR 1B.1	Low Quality	Unknown	Not Expected
Slough Thistle	*Cirsium crassicaule*	CNPS, SJMSCP	CRPR 1B.1,	Not Present	No	None
Mt. Hamilton Coreopsis	*Leptosyne hamiltonii*	SJMSCP	CRPR 1B.2,	Not Present	Unknown	None
Showy Golden Madia	*Madia radiata*	CNPS, CNDDB	CRPR 1B.1	Low Quality	Unknown	Not Expected
Large-flowered Fiddleneck	*Amsinckia grandiflora*	CNPS, IPaC, CNDDB	FE, CE, CRPR 1B.1	Not Present	Unknown	None
Wright's trichocoronis	*Trichocoronis wrightii var. wrightii*	CNPS, SJMSCP	CRPR 2B.1,	Not Present	Unknown	None

Wildlife

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Potential
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	IPaC	FT	Not Present	Presumed Absent
Vernal Pool Tadpole Shrimp	*Lepidurus packardi*	IPaC	FE	Not Present	Presumed Absent
Valley Elderberry Longhorn Beetle	*Desmocerus californicus dimorphus*	CNDDB, IPaC; SJMSCP	FT	Not Present	Presumed Absent
Monarch - California Overwintering Population	*Danaus plexippus*	IPaC	FC	Low Quality	Not Expected
Foothill Yellow-legged Frog	*Rana boylii*	CNDDB	CE, SSC	Not Present	Presumed Absent
California Red-legged Frog	*Rana draytonii*	IPaC	FT, SSC	Not Present	Presumed Absent
Western Spadefoot	*Spea hammondii*	CNDDB; IPaC; SJMSCP	SSC	Not Present	Presumed Absent
California Tiger Salamander	*Ambystoma californiense*	CNDDB; IPaC	FE, CE	Not Present	Presumed Absent
Coast Horned Lizard	*Phrynosoma blainvillii*	CNDDB	SSC	Not Present	Presumed Absent
California Glossy Snake	*Arizona elegans occidentalis*	CNDDB	SSC	Low Quality	Not Expected
San Joaquin Coachwhip	*Coluber flagellum ruddocki*	CNDDB	SSC	Low Quality	Not Expected
Northwestern Pond Turtle	*Actinemys marmorata*	CNDDB; IPaC	SSC	Not Present	Presumed Absent
Yellow-billed Cuckoo	*Coccyzus americanus*	IPaC	SJMSCP Covered Species	Not Present	Presumed Absent
Long-billed Curlew	*Numenius americanus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Great Blue Heron	*Ardea herodias*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Great Egret	*Ardea alba*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
California Condor	*Gymnogyps californianus*	IPaC	FE, CE, FP	Not Present	Presumed Absent
Osprey	*Pandion haliaetus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Northern Harrier	*Circus hudsonius*	SJMSCP	SSC	Not Present	Presumed Absent
Sharp-shinned Hawk	*Accipiter striatus*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Cooper's Hawk	*Accipiter cooperii*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Swainson's Hawk	*Buteo swainsoni*	CNDDB; SJMSCP	CT	Not Present	Presumed Absent
Burrowing Owl	*Athene cunicularia*	CNDDB; SJMSCP	SSC	Low Quality	Not Expected
Merlin	*Falco columbarius*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Least Bell's Vireo	*Vireo bellii pusillus*	CNDDB	FE, CE	Not Present	Presumed Absent
Horned Lark	*Eremophila alpestris*	CNDDB; SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent

Yellow-breasted Chat	*Icteria virens*	SJMSCP	SSC	Not Present	Presumed Absent
Tricolored Blackbird	*Agelaius tricolor*	CNDDB; SJMSCP	CT, SSC	Not Present	Presumed Absent
Yuma Myotis	*Myotis yumanensis*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Western Red Bat	*Lasiurus blossevillii*	SJMSCP	SSC	Not Present	Presumed Absent
Riparian Brush Rabbit	*Sylvilagus bachmani riparius*	CNDDB; IPaC	FE, CE	Not Present	Presumed Absent
Riparian Woodrat	*Neotoma fuscipes riparia*	IPaC	FE, SSC	Not Present	Presumed Absent
San Joaquin Kit Fox	*Vulpes macrotis mutica*	CNDDB; IPaC; SJMSCP	FE, CT	Low Quality	Not Expected
Ringtail	*Bassariscus astutus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Loggerhead Shrike	*Lanius ludovicianus*	CNDDB, SJMSCP	SSC	Not Present	Presumed Absent
Green sturgeon - Southern DPS	*Acipenser medirostris pop. 1*	CNDDB	FT, SSC	Not Present	Presumed Absent
Steelhead - Central Valley DPS	*Oncorhynchus mykiss irideus pop. 11*	CNDDB	FT, SSC	Not Present	Presumed Absent
Longfin Smelt	*Spirinchus thaleichthys pop. 2*	CNDDB	FE, CT	Not Present	Presumed Absent
Yellow Warbler	*Dendroica petechia brewsteri*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Black-Crowned Night Heron	*Nycticorax nycticorax*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Eastern Red Bat	*Lasiurus borealis*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent

APPENDIX H

Biological Resources Assessment

Pacific Gateway Specific Plan Project
Tracy, San Joaquin County, California



Prepared For: Raney Planning & Management, Inc.
1501 Sports Drive, Suite A
Sacramento, CA 95834

Report Date: September 2025

BARGAS

Sacramento Valley • Inland Empire • Greater Los Angeles • San Diego • San Francisco Bay Area

www.Bargas.com

Project Team

Report Author(s):	Dustin Baumbach, Gregory Garcia, Jamie Jackson, Thomas Liddicoat, and Vivian Lowe
Field Surveyor(s):	Corey Clapp and Vivian Lowe
GIS:	Vivian Lowe
Project Manager:	Dustin Baumbach
Reviewer:	Thomas Liddicoat
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1 Introduction

Bargas Environmental Consulting, LLC (Bargas) prepared this Biological Resources Assessment (hereafter, Assessment) on behalf of Raney Planning & Management, Inc for the proposed Pacific Gateway Specific Plan Project (Project), which generally proposes new university-focused development of an agricultural area for an industrial, commercial, and recreational use. This Assessment documents the existing biological conditions on-site and evaluates potential impacts to sensitive biological resources with respect to federal, state, and local policies. This Assessment provides the biological resources technical documentation necessary for project review under the California Environmental Quality Act (CEQA) by the Lead Agency.

1.1 Project Location

The Project site consists of approximately 1,561.80 acres bordered by Durham Ferry Road to the north; an unnamed, unimproved road and the California Aqueduct to the south; South Tracy Boulevard to the west; and an unnamed, unimproved road 0.5 miles west of South Bird Road to the east, in an unincorporated region of San Joaquin County, 0.85 miles south of the City of Tracy (**Figure 1**). The Project site is within Sections 15, 21-23, 25-28, 30, 31, 35, and 36 of Township 3 South, Range 5 and 6 East of the Mount Diablo Prime Meridian of the U.S. Geological Survey's 7.5-minute Tracy and Vernalis Quadrangle. The site consists of forty-nine parcels; County Assessor's Parcel Numbers (APNs) 253-140-01, -09, -11, -13, -14, -15, -16, -17, -19, -20, -21, -22, -23, -24, -25, 253-150-06, 253-180-02, -06, -11, 253-190-04, -05, -07, -08, -09, -10, -11, -19, -21, -22, 253-260-05, -09, -12, -13, -14, 253-280-06, -07, 253-290-02, -05, -09, -10, 253-200-06, -11, -12, -13, -19, -20, 255-070-01, 255-060-14, and 255-060-39. The Project is located within the boundaries of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).

1.2 Project Description

The proposed Pacific Gateway Specific Plan Project and related entitlements will establish the land uses, zoning, development standards, and development regulations for the Project site. The Project consists of the development of 24,675,000 square feet (sf) of Limited Industrial use, 160,000 sf of General commercial use, 93,000 sf of Industrial Park use, 66.5 acres of University Campus, plus 9.87 acres for future expansion, a Veterans of Foreign Wars (VFW) post, a new fire station, pedestrian and bicycle facilities, and various open space parks including a 11.87-acre Central Park. The Project also includes infrastructure improvements associated with the future development including water, wastewater, stormwater, and additional roadways.

The open space, park, and pedestrian and bike facilities proposed will provide outdoor spaces for both passive outdoor areas and recreation as well as provide accessibility for both the workforce and the community. Furthermore, a network of public streets to be constructed as part of the Project will provide access to each part of the development including on-site private interior site circulation and the necessary vehicle and truck and trailer courts.

The Project would be developed in two phases: an Initial Phase Development followed by Programmatic-Level long-term buildout phases based on market demand. The subsequent Programmatic-Level development would expand upon the Initial Phase Development. The Initial Phase includes the development of four Class "A" facilities for a total of approximately 4,000,000 sf situated on 181.26 net acres immediately east of Chrisman Road. The Initial Phase Development also includes the development of 25,000 sf for the University facility that would serve as Phase 1 of the University Campus. The VFW facility would also be developed in the Initial Phase as well as a new building and associated parking for the new home of Tracy Post 1537. The Initial Phase would also include the construction of the

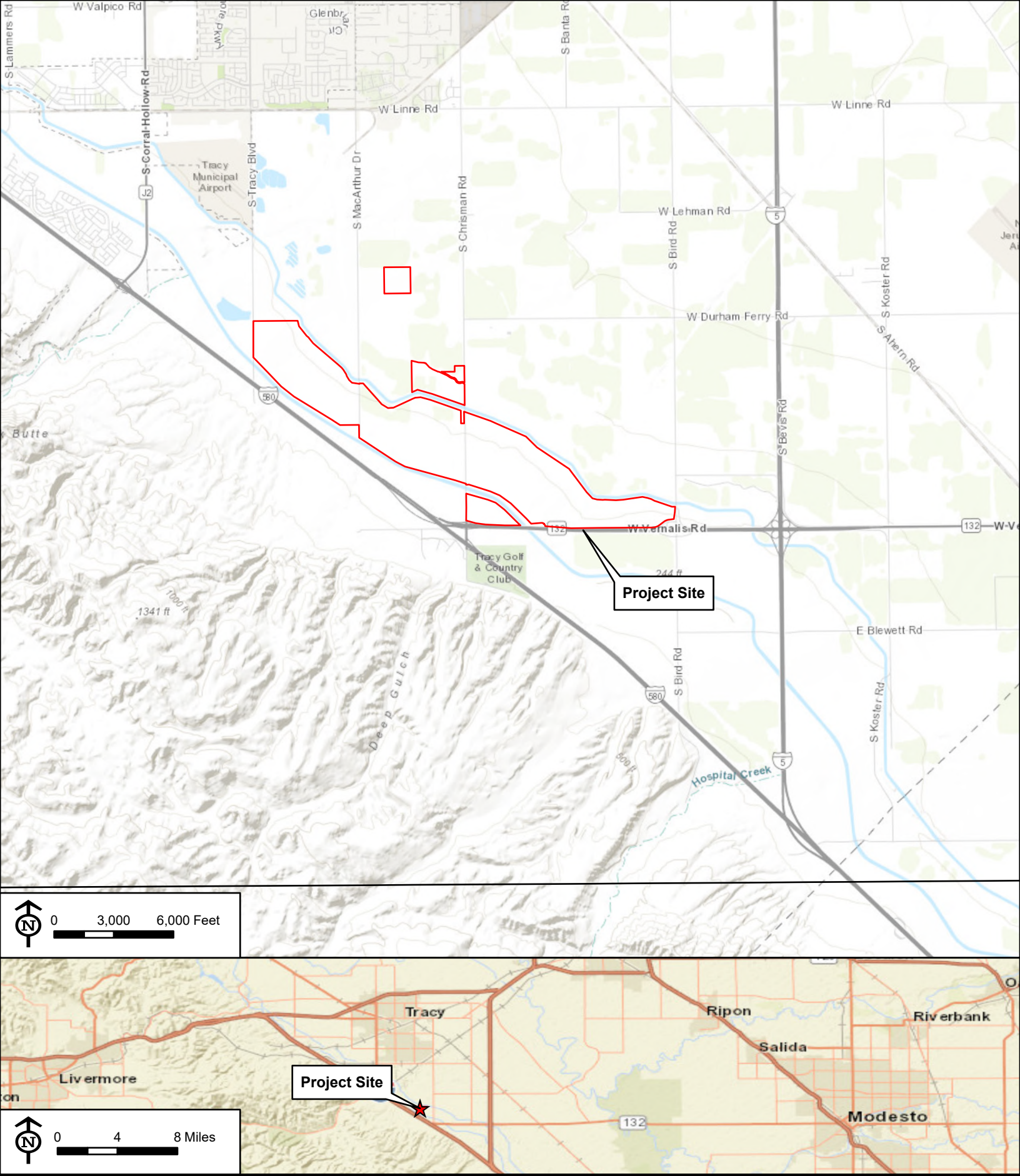
necessary backbone infrastructure to serve the Initial Phase development; this includes improvements to Chrisman Road as well as utilities improvements including the installation of a groundwater well and treatment facilities, construction of a pre-packaged WWTP, and construction of a large stormwater retention basin. The Initial Phase is anticipated to be developed over five to six years while the subsequent Programmatic-Level development would occur over a 25 to 30-year period.

1.3 Definitions

The following terms and definitions reflect areas of the Project will be followed throughout this Assessment. These areas are presented on **Figure 2**.

- **Project site:** The Project site is defined as the approximately [1]1,561.80-acre Pacific Gateway Specific Plan Project area. The Project site includes both the Initial Phase and surrounding Programmatic-Level long-term buildout areas.
- **Initial Phase:** The Initial Phase reflects approximately 249.33 acres being analyzed for the first stage of development (**Figure 3**).
- **Biological Study Area:** The Biological Study Area consists of the Project Site and a surrounding 250-foot buffer. This is the area for which biological resources were analyzed for this Assessment, consisting of approximately 1,990.93 acres.
- **Regional Area:** The Regional Area consists of the Project site and a 5-mile surrounding buffer. The Regional Area was used as a basis for generating lists of special-status species and other biological resources considered in this report.

[1] The total Project acreage of 1,576 provided in the environmental impact report includes North Street, MacArthur Drive, and an unnamed road that are not included in this report. Information regarding these roads will be provided in the off-site report.



Source: ESRI ArcGIS Online Basemap - World Topographic Map, World Street Map

Public Land Survey System (PLSS):
Mount Diablo,Township 3S, Range 5E, 6E, Section 15, 21, 22, 23, 25, 26, 27, 28, 30, 35, 36

USGS Quad(s): Tracy (n.d.), Vernalis (n.d.)

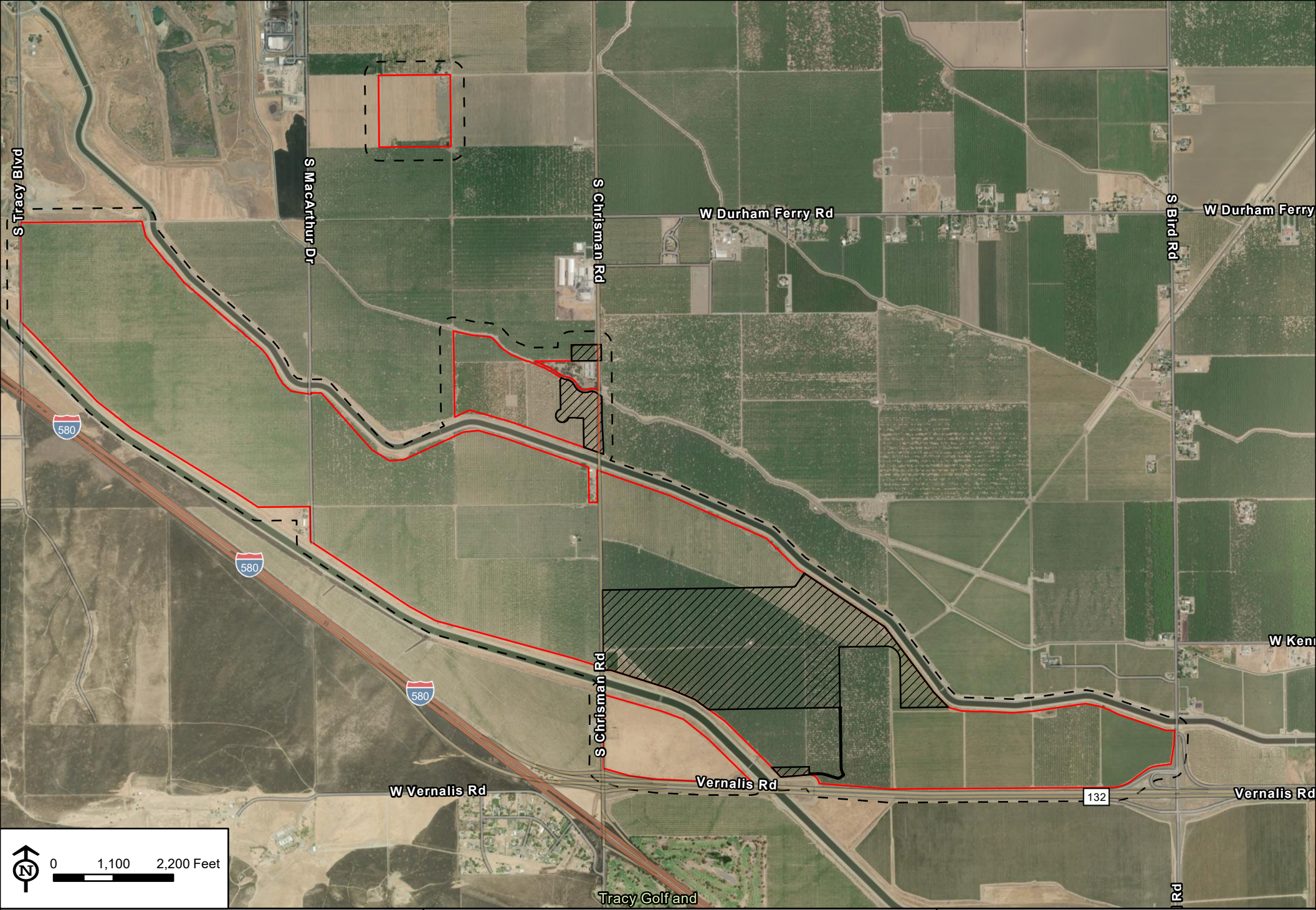
Project Site Coordinates: 121°23'24"W 37°38'42"N

Figure 1
Project Site and Vicinity

Pacific Gateway Specific Plan Project

BARGAS Environmental Consulting

Map Created: 1/31/2025, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

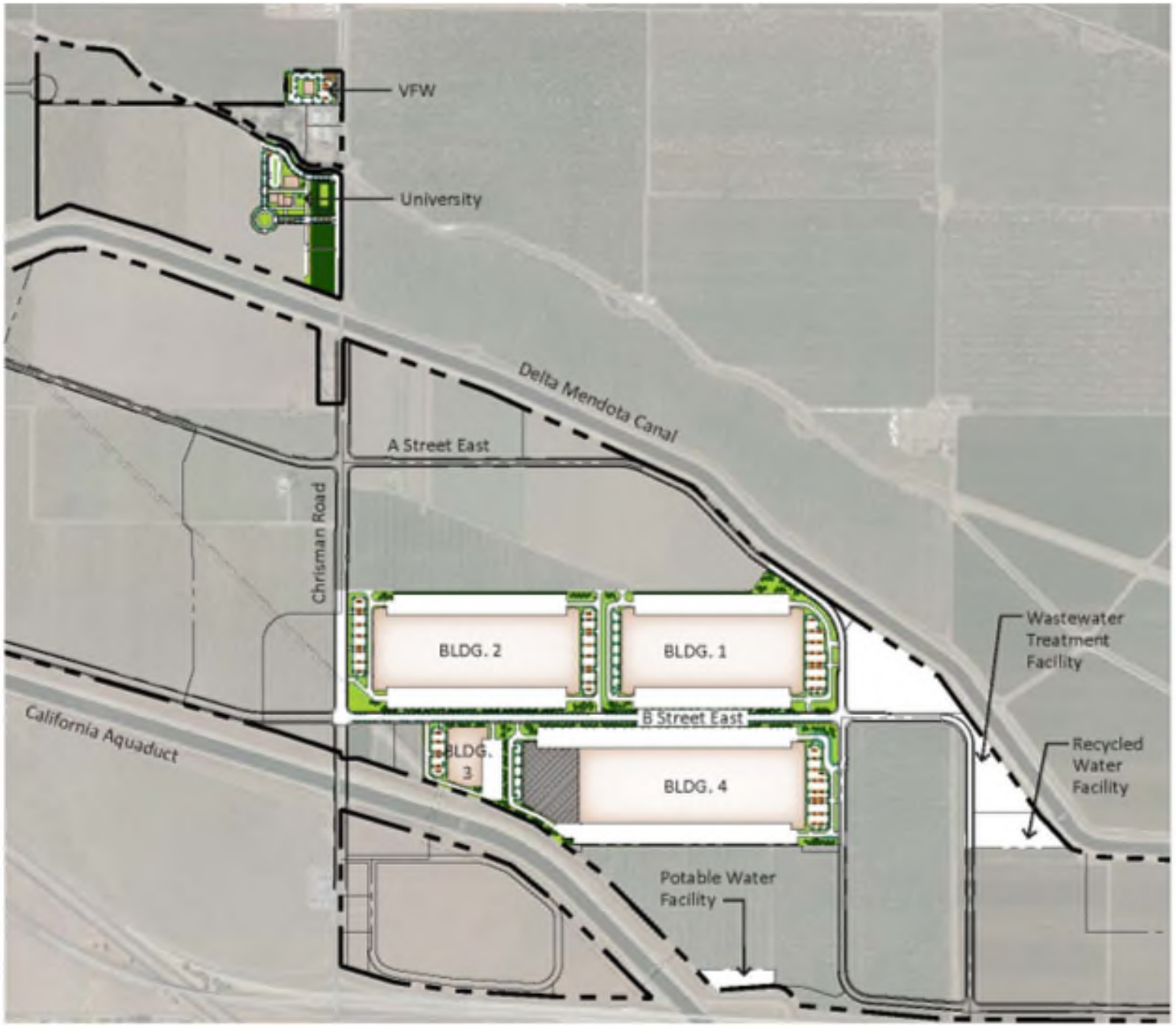
BARGAS Environmental Consulting

Initial Phase
Biological Study Area
Project Site

Figure 2 Study Area Context

Pacific Gateway Specific Plan Project

Map Created: 1/31/2025, Bargas Project Number: 1644-22



Source: Raney Planning Group, 3. Project Description, 2024

BARGAS Environmental Consulting

Figure 3
Initial Phase Conceptual Plan

Pacific Gateway Specific Plan Project

Map Created: 1/22/2024, Bargas Project Number: 1644-22

2 Regulatory Setting

The Project could be subject to the federal, state, and local regulations discussed below.

2.1 Federal

2.1.1 Endangered Species Act

The Federal Endangered Species Act (ESA) is the federal government's regulations protecting rare and declining plant and wildlife species. FESA is jointly implemented by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS, marine resources only). FESA protects species using the following status designations:

- A federally **endangered** species is a species of invertebrate, plant, or wildlife formally listed by the USFWS under FESA as facing extinction throughout all or a significant portion of its geographic range.
- A federally **threatened** species is one formally listed by the USFWS as likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
- A **proposed** threatened or endangered species is one officially proposed by the USFWS for addition to the federal threatened or endangered species lists.
- **Candidate** species are "plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under FESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities."

"Take" of a federally endangered or threatened species or its habitat is prohibited by federal law without a special permit. The term "take," under FESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. "Harm" is defined by the USFWS to encompass "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3).

Section 10(a)(1)(B) of the FESA allows for take of a threatened or endangered species incidental to development activities once a Habitat Conservation Plan (HCP) has been prepared to the satisfaction of the USFWS and a Section 10(a) incidental take permit has been issued to an applicant. For federal projects (including those involving federal funding), Section 7 of the FESA allows for consultation between the affected agency and the USFWS to determine what measures may be necessary to compensate for the incidental take of a listed species. A federal project is any project that is proposed by a federal agency or is at least partially funded or authorized by a federal agency. Additionally, if the listed species or its habitat occurs in a portion of the project subject to federal jurisdiction (such as Waters of the United States by the United States Army Corps of Engineers under Section 404 of the Clean Water Act), then consultation under Section 7 of the FESA is usually permissible and may be required.

FESA also requires the USFWS to consider whether there are areas of habitat essential to conservation for each listed species. Critical habitat designations protect these areas, including habitat that is currently unoccupied but may be essential to the recovery of a species. An area is designated as critical habitat after the USFWS publishes a proposed Federal regulation in the Federal Register and then receives and considers public comments on the proposal. The final boundaries of critical habitat are officially designated when published in the Federal Register.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) is a federal law governing the taking, killing, possession, transportation, and importation of various birds, their eggs, parts, and nests. The take of any number of a bird species listed as protected on any one of four treaty lists is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent over utilization. The MBTA also prohibits taking, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, certain bird species, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11).

2.1.3 Clean Water Act and Rivers and Harbors Act

The regulatory setting with regards to aquatic resources is framed by current enabling legislation and case law. Under Section 404 of the Clean Water Act (CWA), the US Army Corps of Engineers (USACE) regulates the discharge of dredged and fill materials into "waters of the U.S." Jurisdictional waters of the U.S. include "territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide; tributaries; lakes and ponds, and impoundments of jurisdictional waters; and adjacent wetlands" (33 Code of Federal Regulations [CFR] § 328.3). Certain waters of the U.S. are considered "special aquatic sites" because they are generally recognized as having ecological value; such sites include sanctuaries and refuges, wetlands, mudflats, vegetated shallows, and riffle and pool complexes (40 CFR § 230). Special aquatic sites are defined by the U.S. Environmental Protection Agency (USEPA) and may be afforded additional consideration in a project's permit process. The USACE also regulates navigable waters under Section 10 of the Rivers and Harbors Act of 1899. Navigable waters are defined as "… those waters of the U.S. that… are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce" (33 CFR § 322.2).

Recent federal rulemaking has modified how the USACE defines certain waters of the U.S. As a result of the Supreme Court's May 25, 2023 decision in Sackett v. Environmental Protection Agency, the USACE is now interpreting waters of the U.S. consistent with the Supreme Court's decision, which ruled that the federal Clean Water Act extends to only those "wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right," so that they are "indistinguishable" from those waters.

Projects that propose to place fill in jurisdictional wetlands and non-wetland waters of the U.S. is regulated by the USACE under Section 404 of the CWA. The USACE issues nationwide permits for specific types of activities with minimal individual or cumulative adverse environmental impacts. Individual permits are required for large complex projects or projects that exceed the impact thresholds for nationwide permits.

2.2 State

2.2.1 California Environmental Quality Act

CEQA is a public disclosure process codified by California Public Resources Code 21000, requiring decision-makers to analyze the environmental impacts of a project, disclose those impacts to the public, and mitigate environmental impacts to the extent feasible. The state or local lead agency provides an evaluation of project effects on biological resources; determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect effects on

adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

- Substantial adverse effects on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the CDFW or the USFWS (these effects could be either direct or via habitat modification);
- Substantial adverse impacts to species designated by the CDFW as Species of Special Concern (SSC);
- Substantial adverse effects on riparian habitat or other sensitive habitat identified in local or regional plans, policies, or regulations or by CDFW and USFWS;
- Substantial adverse effects on federally protected wetlands defined under Section 404 of the CWA (these effects include direct removal, filling, or hydrologic interruption of marshes, vernal pools, coastal wetlands, or other wetland types);
- Substantial interference with movements of native resident or migratory fish or wildlife species population, or with use of native wildlife nursery sites;
- Conflicts with local policies or ordinances protecting biological resources (e.g., tree preservation policies); and;
- Conflict with provisions of an adopted HCP, NCCP, or another approved local, regional, or state habitat conservation plan.

2.2.2 California Endangered Species Act

The California Endangered Species Act (CESA) prohibits the take of state-listed threatened and endangered species. Under CESA, state agencies are required to consult with CDFW when preparing CEQA documents. Under CESA, CDFW is responsible for maintaining a list of rare, threatened, and endangered species designated under state law (California Fish and Game Code § 2070-2079). CDFW also maintains lists of candidate species, SSC, and fully-protected species. Candidate species are those taxa that have been formally recognized by the CDFW and are under review for addition to the state threatened and endangered list. Species of special concern are those taxa that are considered sensitive, and this list serves as a "watch list." The CDFW can authorize "take" if an incidental take permit is issued by the Secretary of the Interior or Commerce in compliance with FESA, or if the director of the CDFW issues a permit under Section 2080 in those cases where it is demonstrated that the impacts are minimized and mitigated.

2.2.3 California Fish and Game Code

Section 1600 et seq. – Lake and Streambed Alteration Agreement. Section 1600 provides provisions for protecting riparian systems, including the bed, banks, and riparian habitat of lakes, seasonal and perennial streams, and rivers. This section requires an applicant to notify CDFW and obtain a Lake and Streambed Alteration Agreement (LSAA) if their project would divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; or deposit or dispose of material into any river, stream, or lake.

Section 2050 et seq. – California Endangered Species Act. CESA establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA is administered by CDFW and prohibits the take of any species that the California Fish and Game Commission (CFGC) determines to be a threatened or endangered species. CESA also mandates that "state agencies should not approve projects as proposed which

would jeopardize the continued existence of any endangered species or threatened species" if reasonable and prudent alternatives are available that would avoid jeopardy. CDFW administers CESA and authorizes take through California Fish and Game Code Section 2081 Incidental Take Permits or through Section 2080.1 (for species also listed under FESA, consistency determination with a USFWS Biological Opinion).

Section 3511 – Fully Protected Species. The legislature of the State of California designated certain species as "fully protected" prior to the creation of CESA. Section 3511 states that "fully protected" birds or parts thereof may not be taken or possessed at any time. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, mammals, amphibians and reptiles, and birds. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA.

Sections 3503, 3503.5, 3505, 3513 — Birds. These California Fish and Game Code sections protect all birds, birds of prey, and all nongame birds, as well as their eggs and nests, for species that are not already listed as fully protected and that occur naturally within the state. Sections 3503 and 3503.5 of the CFGC stipulate the following regarding eggs and nests: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by CFGC or any regulation made pursuant thereto; and Section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by CFGC or any regulation adopted pursuant thereto. Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

2.2.4 California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code § 1900-1913) affords the CDFW Commission the authority to designate native plants as endangered or rare and protect them from "take." The California Native Plant Society (CNPS) maintains a list of sensitive plant species native to California and assigns each a rank in the California Rare Plant Rank (CRPR) system:

- 1A: Plants presumed extirpated in California and either rare or extinct elsewhere;
- 1B: Plants are rare, threatened, or endangered in California and elsewhere;
- 2A: Plants presumed extirpated in California, but more common elsewhere;
- 2B: Plant are rare, threatened, or endangered in California, but more common elsewhere;
- 3: Plants about which more information is needed (on a review list);
- 4: Plants of limited distribution (on a watch list).

This CRPR system is further defined:

- 0.1: Seriously threatened in California, meaning there is a high degree (over 80% of occurrences) and immediacy of threat;
- 0.2: Moderately threatened in California, meaning there is a moderate degree (20-80% of occurrences) and immediacy of threat;

- 0.3: Not very threatened in California, meaning there is a low degree (less than 20% of occurrences) and immediacy of threat.

All plants with a CRPR of 1 and 2 meet the standards for state listing under the CEQA Guidelines (14 CCR § 15380). CNPS recommends that plants of a CRPR of 3 and 4 also be evaluated for consideration under CEQA.

2.2.5 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 established the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCB), collectively referred to as the Water Boards, and authorized them to provide oversight for water rights and water quality. It uses the National Pollutant Discharge Elimination System (NPDES) to monitor point source discharges into the waters of the State to prevent water quality degradation. It also protects wetlands, surface waters, and groundwater from both point and nonpoint sources of pollution.

2.2.6 State Wetland Definition and Procedures

The SWRCB adopted the State Wetland Definition and Procedures for Discharges or Fill Material to Waters of the State in 2019 and completed revisions to this set of procedures in 2021 (SWRCB 2021). Four major elements are included in these procedures as described below, in addition to procedures for the submittal, review and approval of CWA Section 401 permits not described in this report.

1. Wetland definition:

   An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration such saturation is sufficient to cause anaerobic conditions in the upper substrate; and 3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

2. Framework for determining waters of the state:

   Waters of the state are broadly defined by the Porter-Cologne Water Quality Control Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The 2021 procedures expand upon this definition to clearly include natural wetlands, wetlands created by modification of a surface water of the state, and artificial wetlands meeting specific criteria.

   The criteria for an artificial wetland include wetlands created for agency-approved compensatory mitigation; those identified in a water quality control plan; and those greater than or equal to one acre in size unless they are constructed and maintained for wastewater treatment or disposal, sediment settling, stormwater permitting program pollutant or runoff management, surface water treatment, agricultural crop irrigation or stock watering, fire suppression, industrial processing and cooling, active surface mining, log storage, recycled water management, maximizing groundwater recharge, and rice paddies.

3. Wetland delineation procedures:

   USACE-defined procedures for aquatic resources delineation used to assess the presence or absence of hydrophytic vegetation, hydric soils, and wetland hydrology are required by the SWRCB to delineate waters of the state, with one modification being that "the lack of vegetation does not preclude the determination of such an area that meets the definition of wetland."

2.3 Local Policies and Ordinances

2.3.1 San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

A habitat conservation plan (HCP) is a planning document required as part of an application for an incidental take permit under Section 10(a)(1)(B) of FESA. Such permits are issued by the USFWS when take is not the intention of, and is incidental to, otherwise legal activities. An application for an incidental take permit under Section 10 of FESA must be accompanied by an HCP. HCPs describe the impacts of the proposed action that may result in take of federally listed species; how those impacts will be minimized or mitigated; and how the HCP is to be funded. HCPs can apply to both listed and non-listed species, including those that are candidates or have been proposed for listing. Conserving species before they are in danger of extinction or are likely to become so can also provide early benefits and prevent the need for listing.

The Project is within the boundaries of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), which encompasses San Joaquin County's 1,400+ square miles and 900,000+ acres. The SJMSCP is the county's strategy for balancing conservation with the needs of development while safeguarding agriculture; protecting land-owner rights; providing and maintaining multiple-use Open Spaces, and managing biological resources, especially special-status species under state and federal regulation. The SJMSCP contains numerous goals, policies, and strategies to protect and/or preserve biological resources. The SJMSCP covers 97 special-status plant, fish, and wildlife species in 52 vegetative communities scattered throughout San Joaquin County.

2.3.2 San Joaquin County General Plan

The San Joaquin County General Plan (General Plan) is a set of goals, objectives, policies, implementation measures, and maps that form a blueprint for physical development within the County. The General Plan contains numerous goals, policies, and strategies to protect and/or preserve environmental resources (San Joaquin County 2016).

The Land Use Section of the General Plan includes policies to help develop the unincorporated areas within the County's jurisdiction. This section encourages land development while establishing land use designators to identify the type and intensity of uses on unincorporated land. These designations will help guide development while simultaneously preserving farmland and protecting natural habitats within the County. The Natural and Cultural Resources Element includes policies to guide development and infrastructure practices with goals of preserving environmental resources and promoting cleaner air and water quality. Preservation and protection of the County's natural habitats are highlighted in this element, including its network of rivers, streams, and tributaries that flow into the San Joaquin Delta. Avoiding impacts to the San Joaquin Delta, wherever possible, is of particular concern as it supports wildlife habitat and the agriculture industry.

2.3.3 San Joaquin County Code Division 15: Natural Resources Regulations Code

2.3.3.1 Title 9-1505 Trees

The County has adopted a tree ordinance "to preserve the County's tree resources." Title 9-1505 of the San Joaquin County Natural Resources Regulations Code regulates the removal of Native Oak Trees, Heritage Oak Trees, or Historic Trees. The ordinance requires the applicant to submit an approved Improvement Plan application subject to staff review prior to the removal of any Native Oak Tree, Heritage Oak Tree, or Historic Tree.

2.3.3.2 Title 9-1510 Riparian Habitat

Title 9-1510 of the San Joaquin County Natural Resources Regulations Code seeks to preserve the County's riparian habitat. The ordinance requires applicants to submit a Riparian Habitat Mitigation Plan prior to the destruction, elimination, or degradation of riparian habitat.

3 Methods

This Assessment is informed by data gathered from a comprehensive desktop analysis of literature, maps, numerous resource databases pertaining biological resources, and multiple field surveys at the Project site.

3.1 Desktop Review

Prior to conducting field surveys, Bargas conducted an initial review of literature and data sources to characterize biological conditions and to compile records of sensitive biological resources that could potentially occur in the Biological Study Area (Study Area).

3.1.1 Biological Setting

The biological setting includes terrain, hydrology, soils, land uses, and other features that support or inhibit biological resources in an area. The following resources were reviewed in detail to better understand the biological setting of the Project site.

- US Geological Survey's *National Hydrography Dataset* (USGS 2024);
- US Department of Agriculture National Resource Conservation Service *Web Soil Survey* (NRCS 2024);
- Google Earth Pro aerial map images, including historical aerial images to determine how habitat within the Project site has changed over time (Google 2024).

3.1.2 Special-Status Species & Habitats

It is important to create a well-defined list of habitats and species that could reasonably be expected to occur at the Project site to analyze potential Project effects on such species and their suitable habitats. The following summarizes how the list of potentially occurring special-status species and other sensitive biological resources was assembled.

3.1.2.1 Data Sources

Records of special-status species occurrences were queried from the following resources:

- US Fish and Wildlife Service's *Information for Planning and Consultation* portal (IPaC) (USFWS 2024) for a list of federally listed species and designated critical habitat recommended for impact analysis consideration, based on an upload of the Study Area.
- California Department of Fish and Wildlife's *California Natural Diversity Database* (CNDDB) (CDFW 2024) for special-status species records within the Regional Area.
- California Native Plant Society's *Inventory of Rare and Endangered Plants* (CNPSa 2024) for a list of special-status plant species occurrences within the USGS 7.5-minute quadrangles that overlap the Regional Area.
- San Joaquin County's *Multi-species Habitat Conservation and Open Space Plan* (SJMSCP 2000) for a list of species covered under the Plan, or "SJMSCP Covered Species", occurring within the Central-Southwest Transition Zone. These species can also be considered to occur in the Row and Field Crop/Riparian Preserve

habitats of the Central Zone, except for those associated only with the Stanislaus, San Joaquin, or Mokelumne Rivers.

3.1.2.2 Special-Status Designations Considered

A variety of agencies and respected non-profit organizations assess the conservation status of plant and wildlife species; however, not all are applicable to this Assessment. The following special-status designations were considered when determining special-status species to be discussed in this Assessment:

- **Federal Status:** Species listed as Endangered (FE) or Threatened (FT), as well as species Proposed as Endangered (FPE), Proposed as Threatened (FPT), Proposed for Delisting (FPD), and Candidates (FC) for listing under the Federal Endangered Species Act.
- **California Status:** Species listed as Endangered (CE) or Threatened (CT), as well as species that are Candidates for Endangered (CCE) status, Threatened (CCT) status, or Delisting (CCD) under the California Endangered Species Act. Also considered are species listed as Fully Protected (FP) and Species of Special Concern (SSC).
- **CNPS Status:** All plants listed with a California Rare Plant Rank (CRPR) maintained by the CNPS *Inventory of Rare and Endangered Plants*.

3.1.3 Occurrence Potential

Based on the desktop review, field surveys, and habitat analyses, Bargas generated a list of special-status species for evaluation and assessed the potential for each special-status species likelihood of occurrence on-site. Biological conditions (e.g., vegetation communities, habitats, disturbances, etc.) on-site as well as the habitat and life cycle requirements of special-status species identified for the potential to occur analysis were considered. "Recent" occurrences are defined as observed within the past 30 years. Based on these considerations, each species was assigned a level of potential to occur, using the following categories:

- **Present:** Species was detected during biological surveys conducted for the Project by Bargas.
- **High**: Species with recorded occurrence(s) within or near the Study Area and suitable habitat (e.g., appropriate elevation, hydrology, soils, cover, habitat type, food resources, and etc.) exists in the Study Area; however, the species was not observed during biological surveys for the Project.
- **Moderate:** Species with no known recorded occurrence(s) within or near the Study Area and the species was not observed during biological surveys for the Project. However, habitat within the Study Area is suitable to support the species.
- **Not Expected:** Species with no known recorded occurrence(s) within or near the Study Area. No suitable habitat present on-site; or habitat is within the Project, but habitat on-site is substantially disturbed, fragmented, or is small in extent such that is very unlikely to support the species.
- **Presumed Absent:** There are no records of the species occurring within or near the Study Area. The Study Area is not within the known geographic range for the species, and/or suitable habitat (e.g., soil, vegetation, elevational range, etc.) was not found during the field surveys conducted for the Project. This species is detectable year-round and would have been detected during surveys, but was not, or focused surveys were conducted for the species and the species was not detected.

The potential for bird species to occur were further distinguished into those that may: 1) nest within or near the Study Area; 2) forage within or near the Study Area; and/or 3) occur on or near the Study Area as transients during migratory flights or other dispersal events.

3.2 Field Surveys

Bargas biologists conducted three surveys of the site between June 2023 to November 2024. On June 13 and 14, 2023, Bargas biologist Anthony Hartman conducted a reconnaissance-level field survey for biological resources. Weather was typical for the season with temperatures ranging from 77 to 80 degrees Fahrenheit (°F), partly cloudy skies, and no substantial wind or precipitation on either day. On Tuesday, July 25, 2023, Bargas biologists Jinnah Benn, Anthony Hartman, and Dustin Baumbach conducted the aquatic resources delineation. Weather conditions were typical for the season with temperatures ranging from 80 to 96 °F, low wind speeds, and no precipitation. On November 20, 2024, Bargas Biologists Vivian Lowe and Corey Clapp conducted an additional reconnaissance-level field survey for biological resources and to verify the current conditions of the entire site remained relatively consistent with observations from the prior surveys conducted by Bargas in 2023. Bargas biologists also updated and refined biological resources mapping as appropriate. The weather was typical for the season with the temperature being 52°F and mostly cloudy skies with a light breeze.

The pedestrian surveys consisted of walking transects throughout the Project site and scanning adjacent areas within the Biological Study Area with binoculars. The entirety of the Project site and some areas within the Biological Study Area were accessible via public rights-of-way. The Project site was evaluated for the presence of habitat components that could support special-status wildlife and plant species identified during the Literature and Database Review. Habitats that were determined to be potential habitat for a special-status species were further assessed for suitability. The biologists conducted vegetation mapping, classifying vegetation communities and land cover types generally following the Manual of California Vegetation (MCV): Second Edition (CNPS 2022a), where applicable. The MCV provides standard classifications based on community composition and structure defining inclusion based on thresholds of dominant species cover. Additionally, the identified communities reflect the vegetation community classifications outlined in Section 2.2.1 of the SJMSCP. The biological surveys conducted were comprehensive but do not equate to protocol–level surveys or focused surveys, defined by regulating and/or resource protection agencies. Throughout the survey, plant and animal species detected on site were recorded.

The surveys included a formal aquatic resources delineation following the USACE protocol for the Arid West, which was conducted by Dustin Baumbach, Jinnah Benn, and Anthony Hartman in July of 2023. The detailed USACE methodology can be found in the Aquatic Resources Delineation Report prepared for the Project (Bargas 2023). During the biological survey conducted in November 2024, Bargas reviewed the jurisdictional aquatic resources previously mapped and updated the mapping to include potentially jurisdictionally aquatic resources within the Project site. Aquatic resource boundaries were mapped by Corey Clapp and Vivian Lowe using an Eos Positioning Systems Arrow GNSS Global Positioning System (GPS) receiver paired with ESRI Field Maps application. The November 2024 survey did not include a formal jurisdictional delineation.

The initial June and July surveys occurred within the typical nesting bird season (February 15 - August 31). Additionally, the on-site surveys were performed within the blooming period of three of the plant species (big tarplant

[*Blepharizonia plumosa*], slough thistle [*Cirsium crassicaule*], and large-flowered fiddleneck [*Amsinckia grandiflora*]) identified during the Literature and Database Review. The survey dates, times, personnel, and weather conditions are summarized in **Table 1** below. The biological surveys conducted for this Assessment do not equate to protocol–level focused surveys.

Table 1. Survey Summary Table

Date	Biologist(s)	Time	Start Conditions			End Conditions		
			Temperature	Clouds	Wind	Temperature	Clouds	Wind
June 13, 2023	Anthony Hartman	0930 – 1500	77° Fahrenheit (F)	Partly Cloudy	Calm	80°F	Partly Cloudy	Calm
June 14, 2023	Anthony Hartman	0930 – 1530	77°F	Partly Cloudy	Calm	80°F	Partly Cloudy	Calm
July 25, 2023	Jinnah Benn Anthony Hartman Dustin Baumbach	0930 – 1500	80°F	Clear Skies	Calm	95°F	Clear Skies	Calm
November 20, 2024	Corey Clapp Vivian Lowe	0815 – 1345	52°F	Mostly Cloudy	Light Breeze out of the Southeast	62°F	Fully Cloudy	Light Breeze Out of the Southeast

3.3 Taxonomy and Nomenclature

Naming standards used in this Assessment are those recognized by the scientific community. Some common names used in this Assessment report may not be the same as those used by the underlying data sources for species records. Bargas maintains a yearly-updated reference species list which uses the following taxonomic sources:

- **Birds** – American Ornithological Society Check-list and Supplements (AOS 2024).
- **Mammals** – The reference list in the CDFW's California Wildlife Habitats Relationships Database (CDFW 2024), with updates based on the American Society of Mammologists Mammal Diversity Database (2024).
- **Reptiles and Amphibians** – The technical website californiaherps.com, which is regularly updated based on the latest taxonomic literature.
- **Fish** – Common and Scientific Names of Fishes from the United States, Canada, and Mexico, 8th edition (AFS 2023).
- **Invertebrates** – no naming standard was identified that was current and applicable to freshwater and terrestrial invertebrates. Names used by the underlying data sources when a species was first identified were retained.
- **Plants** – the Jepson eFlora (Jepson Flora Project 2024).

4 Results

This section describes what is known about biological resources in the Study Area based on information from field surveys, 147 CNDDB records, 7 CNPS records, 14 IPaC records, and 1 critical habitat for Delta Smelt determination in the Regional Area. Although the Regional Area was evaluated, the information, analyses, and discussions in the

following sections focus on the Project site; additional areas within the buffer surrounding the project site (i.e., Study Area and Regional Area) were reviewed for adjacency context only, are generally summarized herein as applicable, but are not discussed in detail.

4.1 Existing Conditions and Land Uses

When viewing the Project site and surrounding Regional Area in its entirety on aerial photography, the primary land use of the region is agriculture. Natural habitats are present, consisting of interspersed annual grasslands and riparian vegetation surrounding aquatic features. The Delta Mendota canal and the Edmund G. Brown California Aqueduct transect the Regional Area to the north and south side of the Project site, respectively. There are no substantial terrain features present in the Regional Area: elevations range from approximately 150 to 275 feet above mean sea level (AMSL). The Regional Area is a part of the San Joaquin Delta watershed, Hydrologic Unit Code-8 18040003. Under the SJMSCP, the Project site is identified as part of the Central/Southwest Transition Zone and the Land Use designation for the site is Agricultural.

4.2 Soils

Eight soil types are mapped within the Project site (NRCS 2024), as summarized in **Table 2** below with the types, parent material, drainage class, and hydric rating. Mapped soil types support agricultural cropland along with annual grasses and forbs where native vegetation occurs. A map showing the distribution of soils mapped on-site is provided as **Figure 4**.

Table 2. Soil Series within the Project Site

Soil Series	Map Unit Number	Map Unit Symbol	Parent Material	Drainage Class	Hydric Rating
Capay clay, 0 to 1 percent slopes, MLRA 17	118	2xc8q	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
Capay clay, 1 to 6 percent slopes, MLRA 17	119	2y0dw	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
El Solyo clay loam, 0 to 2 percent slopes	156	hhss	Alluvium derived from sedimentary rock	Well drained	No
Reiff loam, 0 to 2 percent slopes	223	hhvy	Alluvium derived from sandstone and shale	Well drained	Yes
Stomar clay loam, 0 to 2 percent slopes	252	hhww	Alluvium derived from sedimentary rock	Well drained	No
Vernalis clay loam, 0 to 2 percent slopes	268	hhxd	Alluvium derived from mixed rock sources	Well drained	No
Zacharias clay loam, 0 to 2 percent slopes	281	hhxt	Alluvium derived from mixed rock sources	Well drained	No

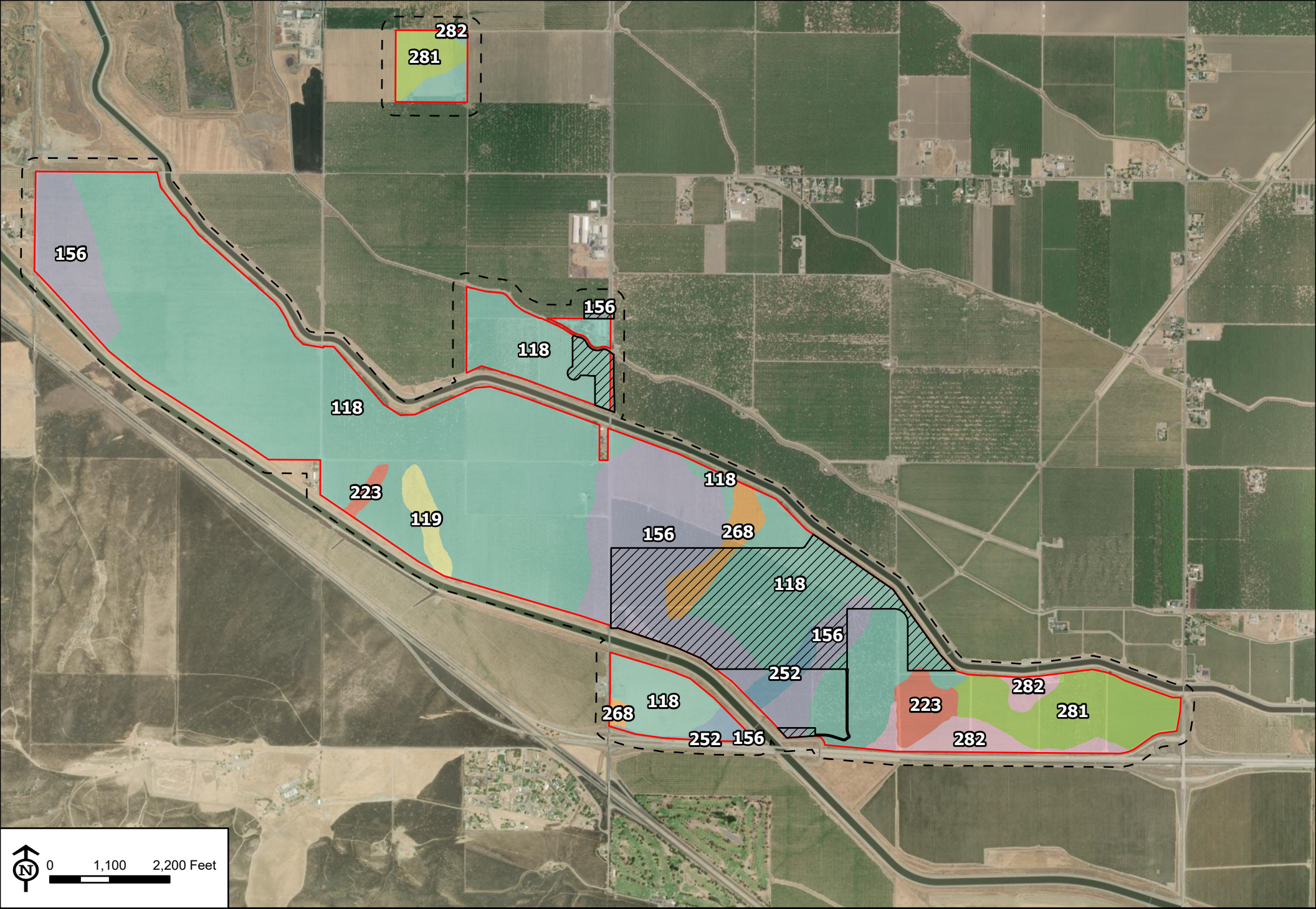
Soil Series	Map Unit Number	Map Unit Symbol	Parent Material	Drainage Class	Hydric Rating
Zacharias gravelly clay loam, 0 to 2 percent slopes	282	hhxv	Alluvium derived from mixed rock sources	Well drained	No

Source: NRCS 2024

Of these eight soil types mapped on-site, five soil types are mapped within the Initial Phase Development area (NRCS 2024), as summarized in **Table 3** below with the types, parent material, drainage class, and hydric rating. Mapped soil types support agricultural cropland along with annual grasses and forbs where native vegetation occurs. A map showing soils on-site is provided as **Figure 3**.

Table 3. Soil Series within the Initial Phase Development Area

Soil Series	Map Unit Number	Map Unit Symbol	Parent Material	Drainage Class	Hydric Rating
Capay clay, 0 to 1 percent slopes, MLRA 17	118	2xc8q	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
El Solyo clay loam, 0 to 2 percent slopes	156	hhss	Alluvium derived from sedimentary rock	Well drained	No
Reiff loam, 0 to 2 percent slopes	223	hhvy	Alluvium derived from sandstone and shale	Well drained	Yes
Stomar clay loam, 0 to 2 percent slopes	252	hhww	Alluvium derived from sedimentary rock	Well drained	No
Vernalis clay loam, 0 to 2 percent slopes	268	hhxd	Alluvium derived from mixed rock sources	Well drained	No



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

BARGAS Environmental Consulting

Initial Phase
Project Site
Biological Study Area

MUPOLYGON_V2

SSURGO Soils

- 118 - Capay clay, 0 to 1 percent slopes, MLRA 17
- Capay clay, 1 to 6 percent slopes, MLRA 17
- 156 - El Solyo clay loam, 0 to 2 percent slopes
- 223 - Reiff loam, 0 to 2 percent slopes
- 252 - Stomar clay loam, 0 to 2 percent slopes
- 268 - Vernalis clay loam, 0 to 2 percent slopes
- 281 - Zacharias clay loam, 0 to 2 percent slopes
- 282 - Zacharias gravelly clay loam, 0 to 2 percent slopes

Figure 4 Soils Map

Pacific Gateway Specific Plan Project

Map Created: 1/31/2025, Bargas Project Number: 1644-22

4.3 Vegetation Communities and Land Cover Types

The Project site was found to support five vegetation communities and land cover types defined by the CNPS MCV, which are summarized below in **Table 4** and described in Sections 4.3.1 through 4.3.5. A crosswalk between the CNPS MCV alliances and the vegetation communities described in the SJMSCP are also provided below in **Table 4**. The spatial distribution of vegetation communities and land covers mapped by Bargas of the site is presented on **Figure 5**. The Initial Phase included acres outside of the Project site along the roadways and are included in the off-site report. Photographs showing representative vegetation conditions during the field surveys are attached as an Appendix to the end of this Assessment.

Table 4. Vegetation Community and Land Cover Summary

Vegetation Community Common Name	Scientific Name and MCV Alliance	SJMSCP Vegetation Community Classification	Initial Phase Acreage	Programmatic-Level Acreage[1]
Cattail Marsh and Wetlands	*Typha* (*angustifolia, domingensis, latifolia*) Herbaceous Alliance	Freshwater Emergent Wetland (W7)	3.58	6.32
Cultivated/Landscaped	NA	Golf Courses/Cultivated Parks (U3)	0.11	4.93
Deciduous Orchards	NA	Orchards and Vineyards (C2)	234.39	1,443.89
Disturbed/Developed	NA	Scraped/Paved Areas (U2)	9.18	46.66
Wild Oats and Annual Brome Grassland	*Avena spp. – Bromus spp.* Herbaceous Semi-Natural Alliance	Valley Grassland (G)	0.00	60.0
		TOTAL:	**247.26**	**1,561.78**

[1] Program-level Area acreages includes Initial Phase Area acreages. Initial Phase Area and Programmatic-Level Area do not sum.

While not directly synonymous with the naming or acreages in Table 4 above, it should be noted that the SJMSCP also organizes its 52 vegetation types into four (4) broad categories (i.e., Natural Lands, Agricultural Lands, Multi-Purpose Open Space Lands, and Urban Lands) to help assess and quantify the conversion of Open Space areas to other land uses. The SJMSCP Habitat Technical Advisory Committee (HTAC) and San Joquin Council of Governments (SJCOG) oversee the classifications of SJMSCP vegetation into these four (4) categories, which reflect generalized mapping categories from a macro-lens and strongly considers land use, rather the micro-lens mapping of vegetation composition across the site performed by Bargas. Because the areas of Project site are “unmapped” by the SJMSCP or were mis-classified during the establishment of the SJMSCP, the HTAC conducted a recent aerial review of the Project site and applied a current mapping of categorical land use across the site (HTAC; SJCOG, 2025).

4.3.1 Cattail Marsh and Wetland

Cattail Marsh (*Typha* [*angustifolia, domingensis, latifolia*] Herbaceous Alliance) and other wetland features were found within the Project site. This vegetation community is classified as "Freshwater Emergent Wetlands (W7)" in the SJMSCP. The Cattail marsh vegetation community is dominated by cattails (*Typha* spp.), with one or more of the species Narrowleaf cattail (*Typha angustifolia)*, Southern cattail (*T. domingensis)*, or Broadleaf cattail (*T. latifolia)* typically present. This herbaceous layer has a maximum height of 5 feet, with intermittent to continuous cover (CNPS 2025). According to the MCV, this vegetation community reflects areas where Typha species comprise greater than 50 percent relative cover. This vegetation community is generally found in semi-permanently flooded freshwater or brackish marshes between 0 and 1,148 feet AMSL (CNPS 2024b).

This vegetation community on-site is associated with certain marshes located south of the Delta Mendota Canal, located between agricultural fields. These areas include one water basin and ten marshes, dominated by Cattail species, narrow-leaf willow (*Salix exigua*), duckweed (*Lemna minor*), pacific willow (*Salix lucida*), purple willow (*Salix purpurea*), and stinkwort (*Datura stramonium*). The remaining wetland areas have experienced significant disturbance and/or have been artificially irrigated to serve an agricultural purpose. These areas include two artificial agricultural water basins, characterized by short pod mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), tall flatsedge (*Cyperus eragrostis*), turkey-mullein (*Croton setiger*), stinkwort, and flax leaved horseweed (*Conyza bonariensis*).

4.3.2 Cultivated/Landscaped

One Cultivated / Landscaped area occurs along the northern edge of the Project site, west of South Chrisman road. This landcover type is classified as "Golf Courses/Cultivated Parks (U3)" in the SJMSCP. This community surrounds a manufacturing plant and a gated residential property to provide visual aesthetics and privacy. This landscaped area is primarily ornamental and appears to be maintained by regular trimming.

4.3.3 Deciduous Orchard

Deciduous orchards comprise the majority of land cover within the Project site. This landcover type is classified as "Orchards and Vineyards (C2)" in the SJMSCP. The primary crops grown within this area consist of almonds (*Prunus dulcis*) and peaches (*Prunus persica*). Multiple fields of vineyards were found east of South Chrisman Road within the Project site and are included in this classification. The orchards have been managed for weed control resulting in limited understory plant growth. Some areas have been treated with a layer of straw for an additional level of weed suppression.

4.3.4 Developed/Disturbed

Developed/disturbed land cover was found within the Project site, consisting primarily of developed industrial and residential properties, disturbed roadside areas, paved and unpaved roads. This landcover type is classified as "Scraped/Paved Areas (U2)" in the SJMSCP. The main paved roads bisecting the project site include South MacArthur Drive, South Chrisman Road, and Highway 132. Industrial buildings within the Project site are associated with agriculture harvesting, processing, and transport of agricultural products. Four residential buildings are located within the Project site.

4.3.5 Wild Oats and Annual Brome Grassland

Wild Oats and Annual Brome Grassland *(Avena spp. – Bromus spp.)* was found on the Project site. This vegetation community is classified as "Valley Grassland (G)" in the SJMSCP. This vegetation community is characterized by the

dominance of non-native annual grasses, including wild oats (*Avena* spp.) and bromes (*Bromus* spp.), which typically comprise greater than 50 percent relative cover. This herbaceous layer is generally below 4 feet tall, with cover ranging from open to continuous. Emergent shrubs and forbs may also be present at low cover. This vegetation community frequently occurs in foothills, rangelands, openings in woodlands, and disturbed areas.

This vegetation community was observed south of the California Aqueduct, bounded by Vernalis Road on the south and South Chrisman Road to the north. This area is characterized by one open, non-cultivated roadside field. Historic aerial imagery suggests the vegetation in these areas may be managed through mowing or shallow tilling for fire fuel abatement. The dominant species in this area consists of wild oat.

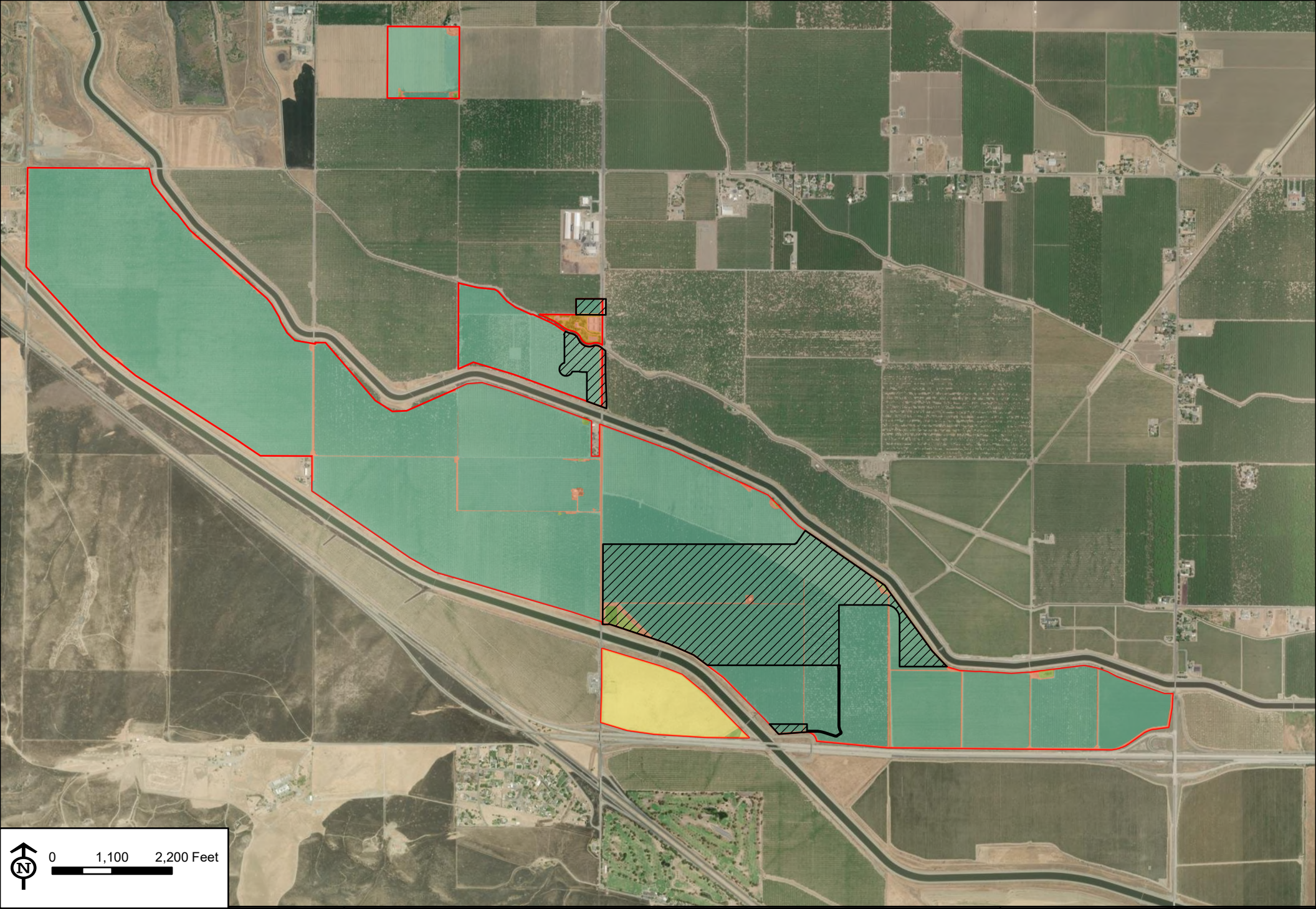
4.3.6 Sensitive Vegetation Communities

Sensitive vegetation communities reflect lands that support unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants. CDFW identifies sensitive communities according to rarity, trends, and other ecological threats and assigns natural vegetation communities a global (G) and state (S) sensitivity rank (CNPS 2022b). Sensitive vegetation communities are those assigned a rank of 1 through 5, with 1 being very rare and threatened and 5 being relatively secure. Vegetation with a ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) are considered sensitive communities. Surveys across the Project site found the site does not contain vegetation community alliances identified by CDFW and CNPS as a sensitive natural community (CNPS 2022b). Vegetation communities mapped on-site and their sensitivity ranking are presented below in **Table 5**.

Table 5. Vegetation Community and Sensitivity Ranking

Vegetation Community Common Name	Scientific Name and MCV Alliance[1]	SJMSCP Vegetation Community Classification	Sensitive Ranking[2]
Cattail Marsh	*Typha* (*angustifolia, domingensis, latifolia*) Herbaceous Alliance	Freshwater Emergent Wetland (W7)	S5
Cultivated/Landscaped	Not Applicable	Golf Courses/Cultivated Parks (U3)	None
Deciduous Orchards	Not Applicable	Orchards and Vineyards (C2)	None
Developed/Disturbed	Not Applicable	Scraped/Paved Areas (U2)	None
Wild Oats and Annual Brome Grassland	*Avena spp. – Bromus spp.* Herbaceous Semi-Natural Alliance	Valley Grassland (G)	SNA

[1] Alliance from the Manual of California Vegetation.
[2] Ranking S=State of California.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

BARGAS Environmental Consulting

Figure 5 Vegetation and Land Cover

Pacific Gateway Specific Plan Project

Map Created: 1/31/2025, Bargas Project Number: 1644-22

4.4 Aquatic Resources

Results of the jurisdictional delineation for the Project site performed by Bargas in June of 2023, updated to include additional areas of the Project site in November of 2024, found aquatic resources on-site. However, the Project site is primarily composed of agricultural land/field; thus, lacks naturally occurring aquatic resources. Aquatic features found on site consisted of Marshes and Water Basins, which were relatively similar; however, were mapped differently due to the presence of aquatic plant species found within the Marshes, whereas the Water Basins primarily supported upland weedy herbaceous plants. **Table 6** below provides a summary of the aquatic features on-site, including feature type, acreage, and length within the Initial Phase area as well as surrounding Programmatic-Level area. These features may be subject to regulatory jurisdiction by RWQCB; however, only these agencies can make the final determination on whether or not such are jurisdictional. **Figure 6** displays each feature identified at the Project site.

Table 6. Aquatic Features On-Site

Feature Type	Initial Phase Area		Programmatic-Level Area[1]	
	Acres	Length (linear feet)	Acres	Length (linear feet)
RWQCB				
Wetland Waters of the State	3.27	831	5.72	2,515
Non-Wetland Waters of the State	0.31	349	0.38	454
RWQCB Total:	**3.58**	**1,180**	**6.10**	**2,969**

[1] Program-level Area acreages and linear feet includes Initial Phase Area acreages and linear feet. Initial Phase Area and Programmatic-Level Area do not sum.

4.4.1 Waters of the U.S. – Potential USACE Jurisdiction

Aquatic resources found on-site consist of freshwater Marshes or agricultural Water Basins. These presumably are isolated features and are neither connected to Traditionally Navigable Waters (TNWs) nor have hydrologic surface connection to other USACE waters/wetlands; therefore, would not be regulated by USACE per current regulatory guidance. However, only USACE can make the final determination on their jurisdictional authority.

4.4.2 Wetland and Non-Wetland Waters of the State – Potential RWQCB Jurisdiction

Thirteen aquatic features found on-site were considered potentially jurisdictional waters of the state, including wetland and non-wetland features. A jurisdictional delineation was conducted in 2023, but not during the 2024 survey. Due to the on-site conditions observed during the 2024 field survey, which were consistent with observations in 2023, it was assumed Water Basin 2 and Marshes 3 through 10 had similar soils and hydrology to each other based on similar conditions to what was observed during the jurisdictional delineation. Given their isolated position in the landscape and the similarity to other aquatic features that met wetland criteria, these areas could be under the jurisdiction of the RWQCB per the Porter-Cologne Water Quality Act.

Wetland waters of the state consisted of ten freshwater Marshes and one artificial agricultural Water Basins. Results of the jurisdictional delineation found Marsh 1 (W01) met all three wetland criteria (i.e., vegetation, soils, and

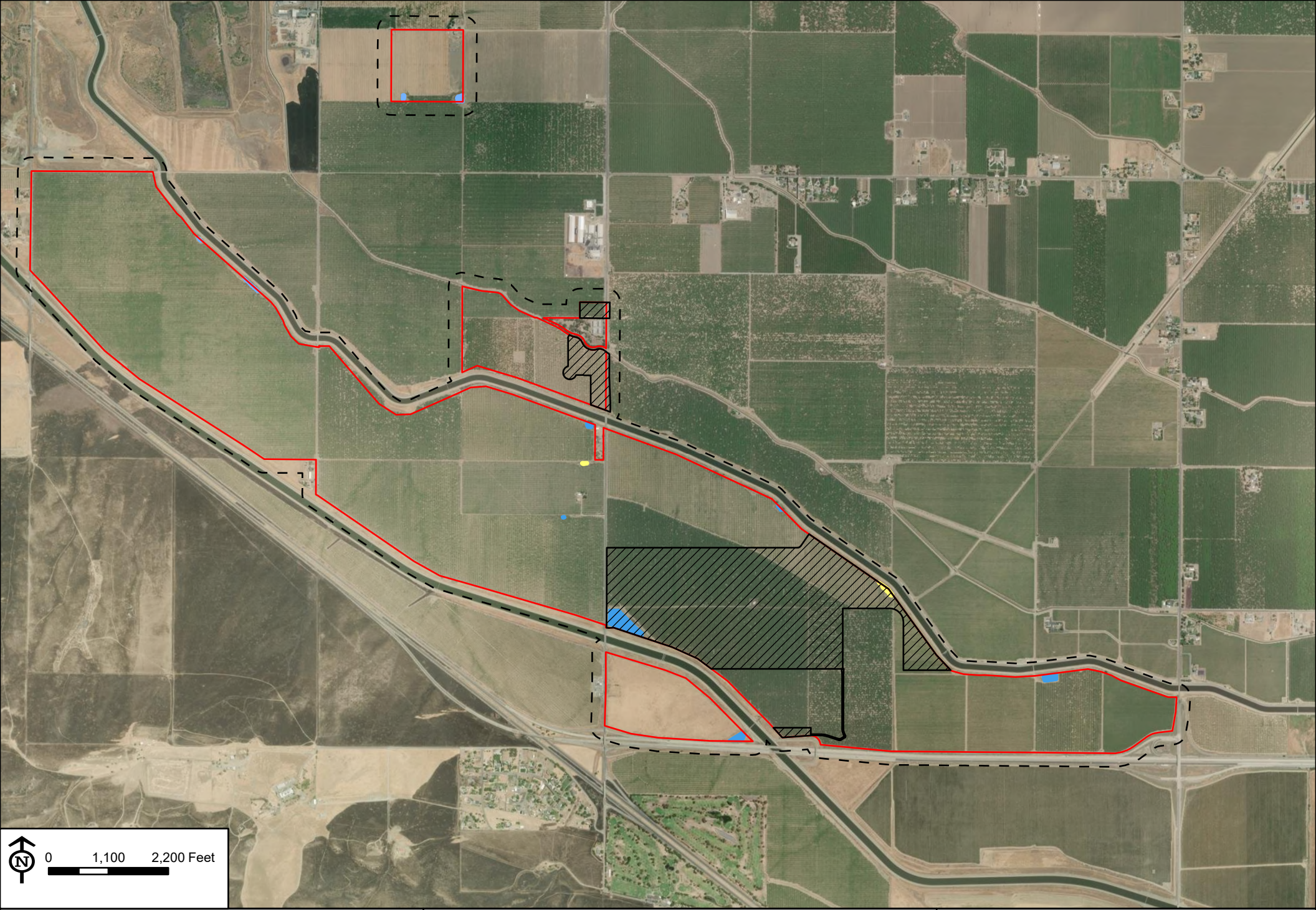
hydrology) of the Wetland Delineation Data forms; therefore, Marsh 1 is considered a wetland. Marsh 2 was observed to be under similar conditions as Marsh 1; thus, was determined to meet all three wetland criteria. Water Basin 2 (W02) was also analyzed and determined to be a potential water of the state due to the presence of hydric soils and hydrology within the basin. Marshes 3 through 10 were also determined to be wetland waters of the state based on vegetation or presence of surface water. There was evidence of dirt mounding and vegetation trimming/removal from heavy equipment within and adjacent to the marshes, suggesting that these aquatic features are highly disturbed and presumably maintained regularly as part of the agricultural practices on-site.

Non-wetland waters of the state consisted of two artificial agricultural Water Basins (Water Basins 1 and 3). These aquatic features were observed to be isolated and received water via artificial pumping. Both basins also lacked aquatic species/vegetation suggesting that these basins are used infrequently, and water is not present long enough to support growth of aquatic plant species.

Given the agricultural land use of the areas surrounding the aquatic features observed on-site, it is possible these thirteen Marshes and Water Basins receive supplemental artificial irrigation. If the application of irrigation water to these aquatic features should cease, these features could revert to uplands characteristics and may no longer be considered a wetland or waters of the state.

4.4.3 Streambed, Lake, and Riparian Habitat – Potential CDFW Jurisdiction

Aquatic resources found on-site consisted of freshwater Marshes or agricultural Water Basins. These features are presumably isolated features which also lack bed, bank, and associated riparian habitat; therefore, these features would not be regulated by CDFW. However, only CDFW can make the final determination on their jurisdictional authority.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

BARGAS Environmental Consulting

Initial Phase
Project Site
Biological Study Area

Potentially Jurisdictional Aquatic Resources

Non-Wetland - Waters of the State (Basins 1 & 3)

Wetland - Waters of the State (Marshes 1-6, Basins 2, 4-6)

Figure 6 Aquatic Resources

Pacific Gateway Specific Plan Project

Map Created: 1/31/2025, Bargas Project Number: 1644-22

4.5 Plants

4.5.1 Plant Diversity

A total of 48 plant taxa were detected during field surveys. A list of plants detected during field surveys is provided in **Appendix A**. Areas throughout the Project site have been disturbed by agriculture, as well as rural and urban development. These anthropogenic activities often result in lower floral diversity compared to areas containing intact natural plant communities and habitats. The majority of the Project site is composed of non-natural vegetation, including orchards, vineyards, and landscaped areas. The remaining vegetation throughout the site was comprised of semi-natural vegetation alliances, including Cattail Marsh and Wetlands and Wild Oats and Annual Brome Grassland.

4.5.2 Special-Status Plants

The desktop review found that seven plant taxa with special-status have been documented as occurring within the Regional Area. A total of three special-status plants found during the desktop review are listed as covered under the SJMSCP. These taxa and their occurrence potential are discussed below and summarized in **Appendix B**.

4.5.2.1 Taxa Confirmed Present

No special-status plant taxa from desktop analysis were determined to be **Present** on the Project site and none are expected to occur.

4.5.2.2 Taxa With High Potential for Occurrence

No special-status plant taxa from desktop analysis were determined to have **High** potential for occurrence on the Project site and none are expected to occur.

4.5.2.3 Taxa with Moderate Potential for Occurrence

No special-status plant taxa from desktop analysis were determined to have **Moderate** potential for occurrence on the Project site and none are expected to occur.

4.5.2.4 Taxa Not Expected to Occur

Two special-status plant taxa from desktop analysis were determined to be **Not Expected** to occur in the Project site.

- **Big Tarplant**
  Asteraceae > *Blepharizonia plumosa*
  FESA: None, CESA: None, CRPR 1B.1

Growth Habit:	Annual herb blooms July-October
Habitat Requirements:	Valley and foothill grassland elevations ranging from 100 to 1,655 feet AMSL.
Inclusion Source(s):	CNDDB, CNPS
Nearest CNDDB Record:	2.84 miles
Habitat Present:	Low Quality
Soils Present:	Yes. Clay soils are present in the Study Area.
Determination Reason:	The Project site contains a small section of annual grassland with clay soils in the southern portion of the Project site but the site is isolated among orchards and lacks hillside slopes preferred by this species.

- **Diamond-petaled California poppy**

  Papaveraceae > *Eschscholzia rhombipetala*

  FESA: None, CESA: None, CRPR 1B.1

California Endemic:	True
Growth Habit:	Annual herb blooms March-April
Habitat Requirements:	Valley and foothill grassland (alkaline, clay) at elevations ranging from 0 to 3,200 feet AMSL.
Inclusion Source(s):	CNPS
Nearest CNDDB Record:	> 5 Miles
Habitat Present:	Low Quality
Soils Present:	Yes. Clay soils are present in the Study Area.
Determination Reason:	The Project site contains a small section of annual grassland with clay soils in the southern portion of the site but the grassland area is isolated among agricultural orchards and the species may be outcompeted for space by non-native grassland species. Additionally, the closest records are greater than five miles from the Project site.

4.5.2.5 Taxa to be Presumed Absent

The following five special-status plant taxa from desktop analysis were **Presumed Absent** on the Project site. None of these five species are expected to occur.

- **Slough Thistle**

  Asteraceae > *Cirsium crassicaule*

  FESA: None, CESA: None, CRPR 1B.1; SJMSCP-covered species

California Endemic:	True
Growth Habit:	Annual/perennial herb blooms May-August
Habitat Requirements:	Chenopod scrub, marshes and swamps, and riparian scrub at elevations ranging from 10 to 330 feet AMSL.
Inclusion Source(s):	CNPS, SJMSCP
Nearest CNDDB Record:	> 5 Miles
Habitat Present:	Not Present
Soils Present:	Not Present
Determination Reason:	The Project site does not contain chenopod or riparian scrub wetlands to support these species. Although Marshes were present, most were dry during the time of the survey and lacked wet soils necessary to support the species. Those Marshes that did contain water were isolated within agricultural fields and were heavily disturbed by vegetation trimming or grading during the time of the surveys. Additionally, the closest record is greater than five miles from the Project site.

- **Mt. Hamilton Coreopsis**

  Asteraceae > *Leptosyne hamiltonii*

  FESA: None, CESA: None, CRPR 1B.2, SJMSCP-covered Species

California Endemic:	True
Growth Habit:	Annual herb blooms March-May
Habitat Requirements:	Cismontane woodland at elevations ranging from 1,805 to 4,265 feet AMSL.

Inclusion Source(s): CNPS, SJMSCP
Nearest CNDDB Record: > 5 Miles
Habitat Present: Not Present
Soils Present: Unknown
Determination Reason: This species is known to grow on slopes on dry, rocky soils within foothill woodlands. The Project site lacks the elevation and foothill woodlands present to support this species. Additionally, the closest record of this species is located greater than five miles from the Project site.

Showy Golden Madia

Asteraceae > *Madia radiata*

FESA: None, CESA: None, CRPR 1B.1, SJMSCP-covered Species

California Endemic: True
Growth Habit: Annual herb blooms March-May
Habitat Requirements: Cismontane woodland, Valley and foothill grassland at elevations ranging from 80 to 3,985 feet AMSL.
Inclusion Source(s): CNDDB, CNPS, SJMSCP
Nearest CNDDB Record: 2.52 Miles
Habitat Present: Not Present
Soils Present: Yes. Clay soils are present.
Determination Reason: This species is known to inhabit grasslands and oak woodlands with clay soils. Oak woodlands are not present within the Project site to support this species. Although grasslands with clay soils are present in the southern portion of the Project site, this area is isolated within agricultural orchards and the species may be outcompeted for space by non-native grassland species.

Large-flowered Fiddleneck

Boraginaceae > *Amsinckia grandiflora*

FESA: Endangered, CESA: Endangered, CRPR 1B.1

California Endemic: True
Growth Habit: Annual herb blooms (March) April-October
Habitat Requirements: Cismontane woodland, Valley and foothill grassland at elevations ranging from 885 to 1,805 feet AMSL.
Inclusion Source(s): CNDDB, CNPS, IPaC
Nearest CNDDB Record: > 5 Miles
Habitat Present: Not Present
Soils Present: Unknown
Determination Reason: The Project site lacks cismontane woodland and is the site is located at elevations below the minimum 885 feet to support this species. Additionally, the nearest record is located greater than five miles from the Project site.

- **Lemmon's Jewelflower**

Brassicaceae > *Caulanthus lemmonii*
FESA: None, CESA: None, CRPR 1B.2

California Endemic:	True
Growth Habit:	Annual herb blooms March-May
Habitat Requirements:	Grassland, chaparral, scrub habitats at elevations ranging from 260 to 5,185 feet AMSL.
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	3.15 miles south
Habitat Present:	Not Present
Soils Present:	Unknown
Determination Reason:	Chaparral and scrub habitats are not present to support this species within the Project site. Although grasslands are present within the southern area of the Project site, this area is isolated among agricultural orchards and the species may be outcompeted for space by non-native grassland species.

4.6 Wildlife

4.6.1 Wildlife Diversity

A total of 25 wildlife taxa were detected during field surveys, including 23 bird species and two mammal species. A list of all wildlife taxa detected during field surveys is provided in **Appendix A**.

4.6.2 Special-Status Wildlife

The desktop review found that 43 wildlife taxa with special-status have been documented as occurring within the Regional Area. A total of 34 special-status wildlife species found during the desktop review are listed as covered under the SJMSCP. These taxa and their occurrence potential are discussed below and summarized in **Appendix B**.

4.6.2.1 Taxa Confirmed Present

The following three special-status wildlife taxa was determined to be **Present** on-site from desktop analysis and biological surveys on the Project site.

- **Swainson's Hawk**

Accipitridae > *Buteo swainsoni*
FESA: None, CESA: Threatened, SJMSCP-covered Species

Life History:	Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, and Antelope Valley. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. In southern California, now mostly limited to spring and fall transient. Formerly abundant in California with wider breeding range. Decline resulted in part from loss of nesting habitat. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB; Bargas; SJMSCP

Nearest CNDDB Record: 1.52 miles east
Habitat Present: Medium Quality
Determination Reason: Observed flying over and perching on an electric pole within the Project site during November surveys. There is medium quality foraging habitat within the agricultural fields adjacent to the Project site and within the annual grassland habitat north of Highway 132 and south of the California Aqueduct within the Project site that could support this species. Tall trees to support nesting are limited in the Project site thus, nesting is unlikely and not expected.

White-tailed Kite

Accipitridae > *Elanus leucurus*

FESA: None, CESA: Fully Protected, SJMSCP-covered Species

Life History: Common to uncommon, yearlong resident in coastal and valley lowlands; rarely found away from agricultural areas. Inhabits herbaceous and open stages of most habitats mostly in cismontane California. Has extended range and increased numbers in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s): SJMSCP, Bargas
Nearest CNDDB Record: > 5 miles
Habitat Present: Medium Quality
Determination Reason: Observed flying over and perching within the Project site during the November survey. There is medium quality foraging habitat within the agricultural fields adjacent to the Project site and within annual grassland habitat north of Highway 132 and south of the California Aqueduct within the Project site that could support this species. Tall tress to supporting nesting are not present in the Project site thus, nesting is unlikely.

Song Sparrow (Modesto Population)

Passerellidae > *Melospiza melodia*

FESA: None, CESA: Fully Protected

Life History: A common resident of most of California, but avoids higher mountains and occurs only locally in southern deserts. In winter, most leave montane habitats; more abundant and widespread then in lowlands and deserts. At all seasons, prefers riparian, fresh or saline emergent wetland, and wet meadow habitats. Breeds in riparian thickets of willows, other shrubs, vines, tall herbs, and in fresh or saline emergent vegetation. Also breeds in damp thickets and coastal scrub of northern California and Channel Islands where fog drip and a moist climate compensate for a lack of surface water. In winter in much of northern California, also may be found far from water, in open habitats with thickets of shrubs or tall herbs. Usually avoids densely wooded habitats, except along forest edges. An uncommon resident in suitable habitat in southern deserts along western edge (very locally) and in Imperial and Colorado River valleys. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s): CNDDB, Bargas

Nearest CNDDB Record:	4.81 miles northeast
Habitat Present:	Medium Quality
Determination Reason:	Observed flying over and perching within the Project site during November surveys. There is medium quality foraging habitat within the agricultural fields adjacent to the Project site and within annual grassland habitat north of Highway 132 and south of the California Aqueduct within the Project site that could support this species. Nesting habitat is limited to the small grassland area at the southern portion of the Project site.

4.6.2.2 Taxa With High Potential for Occurrence

No special-status wildlife taxa from desktop analysis or site visits were determined to have **High** potential for occurrence at the Project site and none are expected to occur.

4.6.2.3 Taxa With Moderate Potential for Occurrence

The following two special-status wildlife taxa from desktop analysis or site visits were determined to have **Moderate** Potential for occurrence at the Project site.

Northern Harrier

Accipitridae > *Circus hudsonius*

FESA: None, CESA: Species of Special Concern, SJMSCP-covered Species

Life History:	Occurs from annual grassland up to lodgepole pine and alpine meadow habitats, as high as 3,000 m (10,000 ft). Breeds from sea level to 1,700 m (0-5,700 ft) in the Central Valley and Sierra Nevada, and up to 800 m (3,600 ft) in northeastern California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Permanent resident of the northeastern plateau and coastal areas; less common resident of the Central Valley. Widespread winter resident and migrant in suitable habitat. California population has decreased in recent decades but can be locally abundant where suitable habitat remains free of disturbance, especially from intensive agriculture. Breeding population much reduced, especially in southern coastal district. Destruction of wetland habitat, native grassland, and moist meadows, and burning and plowing of nesting areas during early stages of breeding cycle, are major reasons for the decline. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Medium Quality
Determination Reason:	The Project site contains medium quality foraging habitat in the form of small grasslands and adjacent agricultural fields that could support this species. Nesting habitat is located around the isolated Marshes and grasslands, but these habitats are only marginally suitable within the Project site due to the small extent and extensive human disturbance in these areas.

Crotch's Bumblebee

Apidae > *Bombus crotchii*

FESA: None, CESA: Candidate, Species of Special Concern

Life History: Crotch's Bumblebee a short-tongued bumble bee that inhabits open grasslands and scrub habitats, nesting underground. Males perch and chase moving objects to find mates. Bumble bee colonies consist of a queen, workers, and reproductive (males and new queens). The queen hibernates over winter and starts foraging in spring, seeking a nest site. Nests are often underground or in abandoned animal burrows. Initially, the queen handles foraging and care until workers emerge. Bumble bees forage from diverse plants, and are known to sonicate the flowers to vibrate the pollen loose from the anthers. *Source: Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2015. Bombus crotchii. The IUCN Red List of Threatened Species 2015: e.T44937582A46440211. https://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937582A46440211.en. Accessed on 19 December 2024. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 3.61 miles north

Habitat Present: Medium Quality

Determination Reason: The Project site contains sufficient flowering plants within the orchards and vineyards to support foraging (i.e., nectar collection) for this species. Nesting habitat is limited to the open grassland north of Highway 132 and south of the California Aqueduct within the Project site. Therefore, Crotch's bumble bee may only be present as a transient species foraging within the orchards and vineyards during the flowering period.

4.6.2.4 Taxa Not Expected to Occur

The following 15 special-status wildlife taxa from desktop analysis were determined as **Not Expected** to occur in the Project site.

- **Sharp-shinned Hawk**

  Accipitridae > *Accipiter striatus*

  FESA: None, CESA: None, SJMSCP-covered Species

  Life History: Fairly common migrant and winter resident throughout California, except in areas with deep snow. Breeding distribution poorly documented. Very few breeding records for Cascades/Sierra Nevada. Probably breeds south in Coast Ranges to about 35 degrees latitude, and at scattered locations in the Transverse and Peninsular Ranges. May no longer breed in the southern Sierra Nevada. Uncommon winter migrant to Channel Islands. Uncommon permanent resident and breeder in mid-elevation habitats. Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert used in winter. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

  Inclusion Source(s): SJMSCP

  Nearest CNDDB Record: > 5 miles

  Habitat Present: Low Quality

Determination Reason: This species prefers wooded areas throughout their range but may also forage within agricultural fields. There are agricultural fields present adjacent to the Project site that may provide marginal foraging habitat to support this species. Tall, densely populated trees within woodlands are required for nesting and are not present within the Project site thus, nesting is unlikely. Additionally, the nearest record is located greater than five miles from the Project site.

Cooper's Hawk

Accipitridae > *Accipiter cooperii*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: A breeding resident throughout most of the wooded portion of the state. Breeds in southern Sierra Nevada foothills, New York Mountains, Owens Valley, and other local areas in southern California. Ranges from sea level to above 2700 m (0-9000 ft). Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: This species prefers wooded areas throughout their range but may also forage within open fields. There is an open grassland field present north of Highway 132 and south of the California Aqueduct within the Project site that may provide marginal foraging habitat to support this species. Tall, densely populated trees within woodlands are required for nesting and are not present within the Project site thus, nesting is unlikely. Additionally, the nearest record is located greater than five miles from the Project site.

Great Blue Heron

Ardeidae > *Ardea Herodias*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Great Blue Heron is fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. Common July to October in salt ponds where fish are numerous. Locally common near rookeries February to June or July. Few rookeries are found in southern California, but many are scattered throughout northern California; knowledge of their locations is incomplete. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: The Project site contains small, marginal quality Marshes that may be used for foraging on insects, reptiles, and small mammals. Most of these Marshes were observed to be dry during the surveys, which limits the amount of foraging habitat. Nesting habitat in the form of isolated islands, channel markers, or artificial nest structures are not present within the

Project site and thus, nesting is unlikely. Additionally, the nearest record is greater than five miles from the Project site.

Great Egret

Ardeidae > Ardea alba

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Great Egret is a common yearlong resident throughout California, except for high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures. Nests in large trees, and roosts in trees. In southern California, common all year, and breeds at Salton Sea and Colorado River. Fairly common in coastal lowlands September to April, rare in summer, and breeds in Riverside County (one small colony). Rare to uncommon in deserts, occurring mainly as a spring migrant. In northern California, fairly common to common yearlong in coastal lowlands, inland valleys, and the Central Valley. Locally abundant March to July near the larger nesting colonies. Uncommon to fairly common March to August on the northeastern plateau, and nests locally. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: >5 miles

Habitat Present: Low Quality

Determination Reason: The Project site contains small, marginally suitable Marshes that this species may use as foraging sites, but most were dry during the time of the survey which limits the amount of foraging habitat within the Project site. Tall trees on-site are limited and trees suitable for nesting by this species are not present within the Project site thus, nesting for this species is unlikely. Additionally, the nearest record is located greater than five miles from the Project site.

San Joaquin Kit Fox

Canidae > *Vulpes macrotis mutica*

FESA: Endangered, CESA Endangered, SJMSCP-covered Species

Life History: The San Joaquin Kit Fox (*Vulpes macrotis mutica*) is the smallest fox in North America, with an average body length of 20 inches and weight of about 5 pounds. This species prefers to live in areas with loose soil and in open grassland with no to sparse shrubs and grasses. Kit Foxes start breeding when they're 1 year old. In the fall, females begin to clean and enlarge their pupping dens. The foxes mate between December and March. Females give birth to two to six pups in February or March. The Kit Fox's range in the San Joaquin Valley extends from southern Kern County north to Contra Costa, Alameda, and San Joaquin counties on the western side of the valley; and to the La Grange area of Stanislaus County on the eastern side of the valley. The Kit Fox's range also includes valleys along the Coast Range including the Panoche and Cuyama valleys and the Carrizo Plain in San Luis Obispo County. Threats include habitat modification and destruction, energy development, drought, disease or pathogens, rodenticides, and predation. *Source: https://www.fws.gov/species/san-joaquin-kit-fox-vulpes-macrotis-mutica*

Inclusion Source(s): CNDDB, IPaC, SJMSCP

Nearest CNDDB Record: 0.33 miles southwest

Habitat Present: Low Quality

Determination Reason: There is limited and marginal quality grassland habitat on the Project site, located north of Highway 132 and south of the California Aqueduct within the Project site to support this species; however, this grassland area was densely populated with grasses and is not preferred by San Joaquin kit foxes. Preferred habitat of open grassland with low, sparse vegetation is not located within the Project site. No scat or potential dens were observed during the field visits. The Corral-Lower San Joaquin Wildlife Corridor is located approximately 0.65 miles northwest of the Project site and thus, this species may occur as a transient through the Project site.

California Glossy Snake

Colubridae > *Arizona elegans occidentalis*

FESA: None, CESA: Species of Special Concern

Life History: This snake is common throughout southern California especially in desert regions. Less common to the north, Glossy Snakes occur in the interior Coast Ranges as far as Mount Diablo in Contra Costa County. Glossy Snakes are most common in desert habitats but also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass. Elevation from below sea level to 1830 meters (6,000 feet AMSL). *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 2.12 miles west

Habitat Present: Low Quality

Determination Reason: The Project Site lacks the typical desert environments preferred by this snake. There is a small area of annual grassland located north of Highway 132 and south of the California Aqueduct that may contain limited and marginally suitable habitat for this species; however, the preferred prey for this species is typically limited to mostly desert lizard species; thus, the Project site is unlikely to provide suitable food source.

San Joaquin Coachwhip

Colubridae > *Coluber flagellum ruddocki*

FESA: None, CESA: Species of Special Concern

Life History: San Joaquin coachwhip snakes are diurnal animals and prefer warm temperatures. As a result, they emerge from estivation late in the season (April - May). This species prefers dry, open, treeless habitats including valley grassland and saltscrub. They are known to avoid dense vegetation that restricts movement such as mixed oak chaparral woodland. Small mammal burrows are used for overwintering. *Source: Thomson, Robert C., Amber N. Wright, and H. Bradley Shaffer. (2016). California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife. University of California Press.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 2.17 Miles west

Habitat Present: Low Quality

Determination Reason: The Project site supports a relatively small area of annual grassland located north of Highway 132 and south of the California Aqueduct; however, this area is densely populated with non-native grasses and does not contain the preferred open habitat to support this species. The Project site contains mostly orchards that does not provide the open, treeless habitat preferred by this species.

Tricolored Blackbird

Icteridae > *Agelaius tricolor*

FESA: None, CESA: Threatened, SJMSCP-covered Species

Life History: Mostly a resident in California. Common locally throughout Central Valley and in coastal districts from Sonoma County south. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. Feeds in grassland and cropland habitats. Breeds locally in northeastern California. In winter, becomes more widespread along central coast and San Francisco Bay area and is found in portions of the Colorado Desert. Numbers appear to be declining in California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

Nearest CNDDB Record: 1.93 Miles south

Habitat Present: Low Quality

Determination Reason: The Project site contains small, marginally suitable Marshes to support this species; however, there was high human disturbance in the form of vegetation trimming and grading within the Marshes present in the Project site. Tricolored blackbird are not expected to occur due to the lack of tall, undisturbed cattails or tules. Additionally, most Marshes present on the Project site were observed to be dry during the field observations and are unlikely to support this species.

Yellow-breasted Chat

Icteriidae > *Icteria virens*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: An uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada. Found up to about 1450 m (4800 feet AMSL) in valley foothill riparian, and up to 2,050 meters (6,500 feet AMSL) east of the Sierra Nevada in desert riparian habitats. Uncommon along coast of northern California east to Cascades and occurs only locally south of Mendocino County. In southern California, breeds locally on the coast and very locally inland. In migration, may be found in lower elevations of mountains in riparian habitat. Numbers much reduced in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: The Project site does not contain valley foothill or desert riparian habitat to support this species. The Marshes present on the Project site do not contain adequate vegetation to support yellow-breasted chat. Additionally, the nearest record is located greater than five miles from the Project site.

Western Mastiff Bat

Molossidae > *Eumops perotis*

FESA: None, CESA: Species of Special Concern

Life History: Uncommon resident in southeastern San Joaquin Valley and Coastal Ranges from Monterey County southward through southern California, from the coast eastward to the Colorado Desert. Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands,

coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 3.49 miles west

Habitat Present: Not Present

Determination Reason: The Project site contains marginal annual grassland habitat to the north of Highway 132 and south of the California Aqueduct; however, this grassland area lacks cliffs, rocky hillsides, and urban development to support roosting within the Project site. Large water bodies, such as lakes and rivers, are required for foraging and are marginal throughout the Project site. Additionally, the nearest record is greater than three miles from the Project site and is unlikely to occur.

American Badger

Mustelidae > *Taxidea taxus*

FESA: None, CESA: Species of Special Concern, SJMSCP-covered Species

Life History: Uncommon, permanent resident found throughout most of the state, except in the northern North Coast area. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. American badgers prefer open habitat with loamy or sandy soils for digging and will feed on a variety of prey including ground burrowing mammals, lizards, earthworms, eggs, and birds. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

Nearest CNDDB Record: 1.59 miles west

Habitat Present: Low Quality

Determination Reason: The Project site is located approximately 0.65 miles southeast of the Corral-Lower San Joaquin Wildlife Corridor that this species may use; thus, it may occur as a transient through the Project site but may be precluded due to paved roads and high human disturbance between the corridor and the Project site. Soils within the grassland area on-site contain hard clay which does not provide suitable soils for digging; thus, foraging and den habitat is unlikely to occur in the Project site. No burrows, scat, or other signs were observed during the field surveys for the Project.

Monarch - California Overwintering Population

Nymphalidae > *Danaus plexippus pop. 1*

FESA: Candidate, CESA: None

Life History: The iconic black and orange Monarch butterfly is known for its astonishing long-distance annual migration and reliance on milkweed as its obligate larval host plant. Though genetically similar, there are two subpopulations of Monarchs in North America, with the eastern population overwintering in Mexico and breeding in the midwestern states, and the western population overwintering in coastal California and fanning out across the west from Arizona to Idaho. Both North American migratory populations have declined over the past twenty years due to a suite of interrelated factors including habitat loss in breeding and overwintering sites, habitat degradation, disease, pesticide exposure, and climate change. Recently the western population has experienced dramatic swings, for a low of less than 2,000 in 2020-21 to over 200,000 in 2021-22. While it is unclear which of the many factors are driving these dynamics, insect population commonly fluctuate from year to year. Though

more research is needed, a stable population for western monarchs is likely closer to the historic averages in the 1980's, which are estimated to have ranged between one to four million overwintering butterflies. *Source: https://wildlife.ca.gov/Conservation/Invertebrates/Monarch-Butterfly*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: As a migratory species with flight capability, this species has potential to occur anywhere during movements. There is low potential to be resident on-site due to agricultural land uses and lack of suitable milkweed host plants. The Project site is also not located in roosting habitat for this species. The nearest record is located greater than five miles from the Project site.

Burrowing Owl

Strigidae > *Athene cunicularia*

FESA: None, CESA: Candidate Endangered, SJMSCP-covered species

Life History: A yearlong resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of Pinyon-Juniper and Ponderosa Pine habitats. Formerly common in appropriate habitats throughout the state, excluding the humid northwest coastal forests and high mountains. Numbers markedly reduced in recent decades. Present on the larger offshore islands. Found as high as 1,600 meters (5300 feet AMSL) in Lassen County. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

Nearest CNDDB Record: 2.66 miles north

Habitat Present: Low Quality

Determination Reason: The Project site contains marginal annual grassland north of Highway 132 and south of the California Aqueduct, but vegetation in this area was observed to be tall and densely populated by non-native grasses, which is likely to preclude use by burrowing owl as burrowing owl prefers more open landscapes/habitat. Ground squirrel (*Otospermophilus beecheyi*) burrows were observed on-site. The Project site primarily consists of orchards, which is not a typical habitat associated with this species, which prefer open, treeless habitat.

Pallid Bat

Vespertilionidae > *Antrozous pallidus*

FESA: None, CESA: Species of Special Concern

Life History: The Pallid Bat is a locally common species of low elevations in California. It occurs throughout California except for the high Sierra Nevada from Shasta to Kern counties, and the northwestern corner of the state from Del Norte and western Siskiyou counties to northern Mendocino County. A wide variety of habitats are occupied, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats. Day roosts include crevices in rocky outcrops and cliffs, caves, mines, hollows / cavities and exfoliating bark of trees, and crevices and cavernous spaces of human structures such as bridges, barns, porches, and buildings (human-occupied or vacant). A yearlong resident in most of the range. *Source: California Department of Fish and Wildlife.*

California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.
Western Bat Working Group. 2005. Western Bat Species Accounts, http://wbwg.org/western-bat-species/

Inclusion Source(s): CNDDB
Nearest CNDDB Record: 3.38 miles southwest
Habitat Present: Low quality
Determination Reason: The Project site lacks the open forest and woodland habitats preferred by this species for foraging; however, annual grassland is present north of Highway 132 and south of the California Aqueduct but lacks roosting habitat. This area may provide marginal foraging habitat but is limited in size and is unlikely to be used. Additionally, there are few manmade structures that may be used for roosting but are often highly disturbed by frequent human activity. There was no evidence of bats observed during the surveys.

- **Townsend's Big-eared Bat**

Vespertilionidae > *Corynorhinus townsendii*
FESA: None, CESA: Species of Special Concern

Life History: Townsend's Big-eared Bat is found throughout California, but the details of its distribution are not well known. This species is found in all but subalpine and alpine habitats and may be found at any season throughout its range. Once considered common, Townsend's Big-eared Bat now is considered uncommon in California. It is most abundant in mesic habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s): CNDDB
Nearest CNDDB Record: 4.16 miles west
Habitat Present: Low Quality
Determination Reason: Although potential roosting habitat exists on the Project site in the form of manmade structures and open grassland habitat, there was no evidence of bats observed during the surveys. Additionally, grassland habitat is limited to a small area north of Highway 132 and south of the California Aqueduct and may only provide marginal foraging habitat. The nearest record is located approximately four miles from the Project site and thus, this species is unlikely to occur in the Project site.

4.6.2.5 Taxa to be Presumed Absent

The following 24 special-status wildlife taxa from desktop analysis were determined to be **Presumed Absent** from the Project site.

- **Horned Lark**

Alaudidae > *Eremophila alpestris*
FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Horned Lark is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. Found from grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline. Less

common in mountain regions, on the North Coast, and in coniferous or chaparral habitats. Mostly leaves mountains in winter, but small flocks may remain to winter on windswept, snow-free areas at high elevations in the Sierra Nevada. In winter, flocks in desert lowlands and other areas augmented by winter visitants, many migrating from outside the state. Resident on the Channel Islands. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Horned Lark prefers grassland areas with vegetation less than two inches in height or bare ground for nesting and foraging habitat, which is lacking within the Project site. Therefore, nesting and foraging by this species is not expected to occur in the Project site. Additionally, the nearest record is located greater than five miles from the Project site and is not expected to occur.

California Tiger Salamander

Ambystomatidae > *Ambystoma californiense*

FESA: Endangered, CESA: Endangered

Life History: Most commonly found in Annual Grassland habitat, but also occurs in the grassy understory of Valley-Foothill Hardwood habitats, and uncommonly along stream courses in Valley-Foothill Riparian habitats. The species occurs from near Petaluma, Sonoma County, east through the Central Valley to Yolo and Sacramento counties and south to Tulare County; and from the vicinity of San Francisco Bay south to Santa Barbara County. They occur at elevations from 3 meters up to 1,054 meters (3,200 feet AMSL). *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB, IPaC

Nearest CNDDB Record: 1.64 miles west

Habitat Present: Not Present

Determination Reason: The Project site is more than two miles from known breeding ponds. Interstate 580 serves a barrier between the Project site and known breeding sites to the west. In addition, the Project site lacks small mammal burrows required for sheltering.

Black-crowned Night Heron

Ardeidae> *Nycticorax nycticorax*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Black-crowned Night-Heron is a fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and, rarely, on kelp beds in marine subtidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands. Common nesting species on northeastern plateau from April to August. Uncommon in northwestern, and rare in northeastern, California in midwinter. Uncommon transient and rare in winter in southern deserts, and rare on Channel Islands. Seldom seen in mountains, but formerly nested at Big

Bear Lake in San Bernardino Mountains. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain suitable foraging habitat such as, large riverine and emergent habitat, and densely vegetated Marshes. Trees are limited on-site. Nesting habitat in trees or in dense cattails is also not present on the Project site and thus, nesting is not likely to occur. The nearest record for this species is located greater than five miles from the Project site and is not expected.

Vernal Pool Fairy Shrimp

Branchinectidae > *Branchinecta lynchi*

FESA: Threatened, CESA: None

Life History: The Vernal Pool Fairy Shrimp inhabits ephemeral pools with clear to tea- colored water. This species has been most commonly observed in grass or mud bottomed swales, earth sump, or basalt flow depression pools in unplowed grasslands. The Vernal Pool Fairy Shrimp has been collected from early December to early May. The water in pools inhabited by this species has a pH averaging 7.0; and low TDS, conductivity, alkalinity, and chloride. Although the Vernal Pool Fairy Shrimp is found at a number of sites, it is not abundant at any of them. It often occurs with other fairy shrimp species, but is never the numerically dominant one. *Source: https://www.govinfo.gov/content/pkg/FR-1992-05-08/pdf/FR-1992-05-08.pdf#page=76*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: Project site lacks the vernal pool habitat to support this species. Ponded areas consist of water basins and marshes on site, irregularly inundated and artificially irrigated as part of agricultural operations. Given these non-natural conditions, these areas are unlikely to support this species, and this species is not expected to occur.

California Condor

Cathartidae > *Gymnogyps californianus*

FESA: Endangered, Protected, CESA: Endangered

Life History: Endangered, permanent resident of the semi-arid, rugged mountain ranges surrounding the southern San Joaquin Valley, including the Coast Ranges from Santa Clara County south to Los Angeles County, the Transverse Ranges, Tehachapi Mountains, and southern Sierra Nevada. Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags. Occurs mostly between sea-level and 2700 m (0-9000 ft), and nests from 610-1372 m (2000-6500 ft). Nonbreeding individuals move north to Kern and Tulare counties in April, often returning south in September to winter in Tehachapi Mountains, Mount Pinos, and Ventura and Santa Barbara counties. Total population in early 1980's estimated to

be fewer than 20, and declining. Occurrence in the wild now in question. Two U.S. Forest Service sanctuaries set aside within the Los Padres National Forest, primarily for nesting and roosting protection. *California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the open rangelands and rugged mountain habitats preferred by this species for foraging. The Project site is below the preferred elevations for nesting and thus, is not expected to occur. The nearest record for this species is located greater than five miles from the Project site and is not expected to occur.

Valley Elderberry Longhorn Beetle

Cerambycidae > *Desmocerus californicus dimorphus*

FESA: Threatened, CESA: None, SJMSCP-covered Species

Life History: Valley elderberry longhorn beetle is a medium sized beetle that is endemic to the Central Valley of California. The beetle is found only in association with its host plant, elderberry (Sambucus spp.) and originally occurred in elderberry thickets in moist valley oak woodland along the margins of the Sacramento and San Joaquin Rivers in the Central Valley of California. The habitat of this insect has now largely disappeared throughout much of its former range due to agricultural conversion, levee construction, and stream channelization. The clearing of undergrowth (including elderberry) and planting of lawns has resulted in further habitat degradation. *Source: https://ecos.fws.gov/ecp/species/7850*

Inclusion Source(s): IPaC; SJMSCP

Nearest CNDDB Record: 1 to 3 Miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the valley elderberry plants to support this species. Additionally, the Project site is located outside of the range for this species due to the Project site being located upland from the San Joaquin River.

Riparian Woodrat

Cricetidae > *Neotoma fuscipes riparia*

FESA: Threatened, CESA: None, SJMSCP-covered Species

Life History: The riparian woodrat is a subspecies of the dusky footed woodrat (N. fuscipes). As the name suggests, they prefer to build stick nests near rivers and streams in riparian woodland habitats. Historically, they were distributed along the San Joaquin, Stanislaus and Tuolumne rivers. Today, there are only two known population centers: Caswell Memorial Park and the San Joaquin River National Wildlife Refuge, both in San Joaquin County. *Source: https://www.fws.gov/species/riparian-woodrat-san-joaquin-valley-neotoma-fuscipes-riparia*

Inclusion Source(s): IPaC, SJMSCP

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riparian woodland habitat to support this species. Additionally, the Project site is located upland from the San Joaquin River and is not within either the Caswell Memorial Park or the San Joaquin River National Wildlife Refuge. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Yellow-billed Cuckoo

Cuculidae > *Coccyzus americanus*

FESA: Threatened, CESA: None, SJMSCP-covered Species

Life History: An uncommon to rare summer resident of valley foothill and desert riparian habitats in scattered locations in California. Along the Colorado River, breeding population on California side was estimated at 180 pairs in 1977. Additional pairs reside in the Sacramento and Owens valleys; along the South Fork of the Kern River, Kern County; along the Santa Ana River, Riverside County; and along the Amargosa River, Inyo and San Bernardino counties. Also may nest along San Luis Rey River, San Diego County. Formerly much more common and widespread throughout lowland California, but numbers drastically reduced by habitat loss. Current population estimations show about 50 pairs existing in California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riverine habitat to support nesting or foraging for this species. The Project site is also not located along any of the rivers where this species is known to occur. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Northwestern Pond Turtle

Emydidae > *Actinemys marmorata*

FESA: Proposed Threatened, CESA: Species of Special Concern

Life History: Actinemys species are uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Elevation range extends from near sea level to 1,430 meters (4,690 feet AMSL). Associated with permanent or nearly permanent water in a wide variety of habitat types. Western Pond Turtle was split into two species in 2014, with A. marmorata ranging from the Central Valley north. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; IPaC

Nearest CNDDB Record: 2.63 miles west

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable aquatic habitat to support this species. The existing Marshes surveyed on the Project site are bermed, and lack a consistent source of water to support this species. Additionally, upland refugia necessary to support nesting is lacking within these areas.

Merlin

Falconidae > *Falco columbarius*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Uncommon winter migrant from September to May. Seldom found in heavily wooded areas, or open deserts. Frequents coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, and early successional stages. Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats. Occurs in most of the western half of the state below 1500 m (3900 ft). A rare winter migrant in the Mojave Desert; a few records from the Channel Islands. Numbers have declined markedly in California in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the forested openings and riverine habitats preferred by this species for foraging. Additionally, the tall trees preferred by this species for nesting are limited on-site and nesting by this species is unlikely. The nearest record for this species is located greater than five miles from the Project site and is not expected to occur.

Loggerhead Shrike

Laniidae > *Lanius ludovicianus*

FESA: None, CESA: None, SJMSCP-covered species

Life History: A common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua Tree habitats. In the Great Basin, from Inyo County north, population declines markedly from November through March. Rare on coastal slope north of Mendocino County, occurring only in winter. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Sometimes uses edges of denser habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain scattered vegetation with open canopy that is preferred by this species. Additionally, thorny vegetation is not present within the Project site to

support nesting for this species. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Riparian Brush Rabbit

Leporidae > *Sylvilagus bachmani riparius*

FESA: Endangered, CESA: None, SJMSCP-covered Species

Life History: The riparian brush rabbit is a subspecies of the common brush rabbit. There are three known population centers for this species: Caswell Memorial Park, Lathrop, and the San Joaquin River National Wildlife Refuge, all in San Joaquin County. The riparian brush rabbit prefers riverine habitats with thickets of willow (Salix spp.), blackberry (Rubus vitifolius), wild rose (Rosa californica), wild grape (Vitis calfornica), Douglas' coyote bush (Baccharis douglasii), and grasses for foraging and sheltering. *Source: https://www.fws.gov/species/riparian-brush-rabbit-sylvilagus-bachmani-riparius*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riparian riverine habitats to support this species. Additionally, the Project site does not occur in the Caswell Memorial Park, Lathrop, or the San Joaquin River National Wildlife Refuge and is, therefore, not expected to occur. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Osprey

Pandionidae > *Pandion haliaetus*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Breeds in northern California from Cascade Ranges south to Lake Tahoe, and along the coast south to Marin County. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems. Breeding population estimated in 1975 at 350-400 pairs in northern California; numbers apparently increasing in recent years. An uncommon breeder along southern Colorado River, and uncommon winter visitor along the coast of southern California. Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the proximity to lacustrine, riverine, or pelagic habitats preferred by this species for foraging. Additionally, the tall trees preferred by this species for nesting are limited on-site and nesting by this species is unlikely. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Yellow Warbler

Parulidae > *Dendroica petechia brewsteri*

FESA: None, CESA: None, SJMSCP-covered Species

Life History:	Breeding distribution includes from the coast range in Del Norte county, east to Modoc plateau, south along coast range to Santa Barbara and Ventura counties and along western slope of Sierra Nevada south to Kern county. Also breeds along eastern side of California from the Lake Tahoe area south through Inyo county. Also breeds in several southern California mountain ranges and throughout most of San Diego county. Winters in Imperial and Colorado river valleys. Breeds in riparian woodlands from coastal and desert lowlands up to 2500 m (8000 ft) in Sierra Nevada. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. Numbers of breeding pairs have declined dramatically in recent decades in many lowland areas (southern coast, Colorado River, San Joaquin and Sacramento valleys). Now rare to uncommon in many lowland areas where formerly common. A common migrant on Channel and Farallon Islands in spring and fall. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site does not contain forested or riparian breeding habitat suitable to support this species thus, this species is not expected to occur on-site. Nesting sites occur within riparian vegetation as well and is not expected to occur within the Project site. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Coast Horned Lizard

Phrynosomatidae > *Phrynosoma blainvillii*

FESA: None, CESA: Species of Special Concern

Life History:	Blainville's Horned Lizard is uncommon to common in suitable habitat. Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Occurs in the Sierra Nevada foothills from Butte County to Kern County and throughout the central and southern California coast. Its elevational range extends up to 1,200 m (4000 ft) in the Sierra Nevada foothills and up to 1800 m (6000 ft) in the mountains of southern California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the riparian and forested habitat preferred by this species for breeding and foraging. This species may also forage in open grassland areas with sandy soils and, although grassland habitat occurs within the Project site, this area lacks bare ground and sandy soils required to support this species. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Ringtail

Procyonidae > *Bassariscus astutus*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Widely distributed, common to uncommon permanent resident. Occurs in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations. Little information available on distribution and relative abundance among habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the riparian and forested habitat preferred by this species for nesting or foraging. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

California Red-legged Frog

Ranidae > *Rana draytonii*

FESA: Threatened, CESA: None

Life History: The California Red-legged Frog inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 1,200 m (3936 ft). This species was once a subspecies of Rana aurora, then known as the Red-legged Frog, and has been elevated to species-level status. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: Although the Project site does contain aquatic resources in the form of small Marshes, most were observed to be dry during the survey and would not support this species. Those Marshes where water was present have high human disturbance from vegetation trimming and grading that would preclude this from these areas. Additionally, the nearest record of this species is located greater than five miles from the Project site and it is not expected to occur.

Western Spadefoot

Scaphiopodidae > *Spea hammondii*

FESA: None, CESA: Species of Special Concern, SJMSCP-covered Species

Life History: The Western Spadefoot ranges throughout the Central Valley and adjacent foothills, and is usually quite common where it occurs. In the Coast Ranges it is found from Point Conception, Santa Barbara County, south to the Mexican border. Elevations of occurrence extend from near sea level to 1,363 m (4,460 ft) in the southern Sierra foothills. This species occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands. Western spadefoot also require shallow, temporary pools or streams during the breeding season but may also use artificial ponds or livestock water tanks for habitat. Some populations persist for a few years in orchard or vineyard habitats. *Source: California*

Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.

Inclusion Source(s): CNDDB, SJMSCP

Nearest CNDDB Record: 2.81 miles west

Habitat Present: Not Present

Determination Reason: The Project site does contain grassland habitat north of Highway 132 and south of the California Aqueduct, but this habitat contains dense vegetation that is not suitable for western spadefoot. No shallow water resources are present within the Project site to support this species. Additionally, the orchards and vineyards are regularly maintained by agricultural machinery and human disturbance is common within these areas; thus, given the ground disturbances this species is unlikely to occur.

Long-Billed Curlew

Scolopacidae > *Numenius americanus*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: An uncommon to fairly common breeder from April to September in wet meadow habitat in northeastern California in Siskiyou, Modoc, and Lassen counties. One recent nesting record for Owens Valley, Inyo County. Uncommon to locally very common as a winter visitant from early July to early April along most of the California coast, and in the Central and Imperial valleys, where the largest flocks occur. Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats. Small numbers of nonbreeders remain on coast in summer, and larger numbers remain in some years in the Central Valley. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the wet meadow, coastal estuary, or inter-tidal mudflat habitat preferred by this species for nesting and foraging. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Vernal Pool Tadpole Shrimp

Triopsidae > *Lepidurus packardi*

FESA: Endangered, CESA: None

Life History: Vernal Pool Tadpole Shrimp inhabits vernal pools and swales containing clear to highly turbid water. The Vernal Pool Tadpole Shrimp is found at 14 vernal pool complexes in the Sacramento Valley from the Vina Plains in Butte County south of the Sacramento area in Sacramento County and west to the Jepson Prairie region of Salano County. The pools inhabited by the Vernal Pool Tadpole Shrimp range in size from 5 square meters (16.4 square ft) in the Mather Air Force Base area of Sacramento County to the 38 hectare (89 acre) Olcott Lake at Jepson Prairie. The pools at Jepson Prairie and Vina Plains have a neutral pH, and very low conductivity, TDS, and alkalinity. These pools are most commonly located in grass bottomed swales of unplowed grasslands in old alluvial soils underlain by hardpan, or in mud-

bottomed pools containing highly turbid water. All pools known to be inhabited by this species are filled by winter and spring rains and may last until June. *Source: https://www.govinfo.gov/content/pkg/FR-1992-05-08/pdf/FR-1992-05-08.pdf#page=76*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the vernal pool habitat to support this species. Ponded areas consist of water basins and marshes on site, irregularly inundated and artificially irrigated as part of agricultural operations. Given these non-natural conditions, these areas are unlikely to support this species, and this species is not expected to occur.

Yuma Myotis

Vespertilionidae > *Myotis yumanensis*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Yuma Myotis is common and widespread in California. It is uncommon in the Mojave and Colorado Desert regions, except for the mountain ranges bordering the Colorado River Valley. Found in a wide variety of habitats ranging from sea level to 3300 m (11,000 ft), but it is uncommon to rare above 2560 m (8000 ft). Optimal habitats are open forests and woodlands with sources of water over which to feed. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the open forest and woodland habitats preferred by this species for foraging. Additionally, there were few manmade structures present within the Project site that would support these species, but regular human disturbance around these buildings may preclude bats from these structures. Roosting sites are not expected to occur within the Project site. The nearest record of this species is located greater than five miles from the Project site and it is not expected to occur.

Western Red Bat

Vespertilionidae > *Lasiurus blossevillii*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Western Red Bat is locally common in some areas of California, occurring from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. The winter range includes western lowlands and coastal regions south of San Francisco Bay. There is migration between summer and winter ranges, and migrants may be found outside the normal range. Day-roost habitat is primarily among the foliage of trees such as willows, cottonwoods, and sycamores in forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Forages on a variety of insects. Not found in desert

areas. During warm months, sexes occupy different portions of the range. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Western Bat Working Group. 2005. Western Bat Species Accounts, http://wbwg.org/western-bat-species/

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the forested and woodland areas required for roosting habitat for this species. The western red bat feeds over open grassland area, which exists within the Project site to the north of Highway 132 and south of the California Aqueduct, but is small in extent and no visible signs of bats (i.e. scat or insect carcasses) were observed during the surveys. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Eastern Red Bat

Vespertilionidae > *Lasiurus borealis*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Eastern Red Bat roots approximately 3 – 36 feet (1-12 meters) above ground in tree foliage, shrubs, or even house shingles, usually in shaded but open areas generally east of the Continental Divide in North America. They prefer large trees in cleared landscapes and commonly use deciduous species near streams, fields, or urban edges. They forage over open areas, including water, pastures, and forest edges, and are drawn to streetlights that attract insects. They prefer landscapes with water and moderate development while avoiding dense forests and agriculture. *Source: New York Natural Heritage Program, https://guides.nynhp.org/eastern-red-bat/*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site is located outside of the primary distribution range east of the continental divide for this species. Additionally, the Project site lacks the tall, forested areas preferred by this species for roosting. The eastern red bat feeds over open area, which exists within the Project site to the north of Highway 132 and south of the California Aqueduct but is small in extent and no visible signs of bats (i.e. scat or insect carcasses) were observed during the surveys. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Least Bell's Vireo

Vireonidae > *Vireo bellii pusillus*

FESA: Endangered, CESA: Endangered

Life History: Formerly a common and widespread summer resident below about 600 m (2,000 ft) in western Sierra Nevada, throughout Sacramento and San Joaquin valleys, and in the coastal valleys and foothills from Santa Clara County south. Also, was common in

	coastal southern California from Santa Barbara County south, below about 1,200 m (4,000 ft) east of the Sierra Nevada, in Owens and Benton valleys, along Mojave River and other streams at western edge of southeastern deserts, and along entire length of Colorado River. Has declined drastically or vanished entirely throughout California range in recent decades, apparently from cowbird parasitism and habitat destruction and degradation. Now a rare, local, summer resident below about 600 m (2,000 ft) in willows and other low, dense valley foothill riparian habitat and lower portions of canyons mostly in San Benito and Monterey counties; in coastal southern California from Santa Barbara County south; and along the western edge of the deserts in desert riparian habitat. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.68 miles west
Habitat Present:	Not Present
Determination Reason:	The Project site lacks suitable dense riparian habitat and streams to support this species. This species is considered locally extirpated.

4.7 Other Considerations

4.7.1 Wildlife Movement

Effects on wildlife movement are an important consideration when assessing the potential anthropogenic effects of any project. At a small enough scale, any project or activity can potentially affect the movement of wildlife if any wildlife are present at all. In general, however, the term “wildlife movement corridor” means an area of habitat that is important for the movement of wildlife between larger habitat areas. Wildlife movement corridors are important for maintaining population levels and genetic diversity.

Wildlife require space to roam in search of food, shelter, mates, or for seasonal migration. Fragmentation of wildlife movement from human development can disrupt the normal flow of essential ecosystem functions. The extent of habitat movement requirements is dependent on the taxa and is crucial to the survival of many species. Overall wildlife movement has become restricted due to man-made barriers, such as roads, structures, development, walls or fencing, and even agricultural fields.

The Project site lies within the Central/Southwest Transition Zone of the SJMSCP. While the land cover and habitat types are generally consistent with that of the Central Zone (row and field crops), there are records of San Joaquin kit fox within the Southwest Transition Zone indicating some movement between the Southwest Zone and the Central Zone. A known wildlife corridor, the Corral-Lower San Joaquin Wildlife Corridor, runs from the Corral Hollow Pass through the Southwest/Central Transition Zone, approximately 0.65 miles northwest of the Project site and approximately 3.85 miles southwest of the Project site within the Southwestern Zone (**Figure 7**). No known wildlife movement corridors overlap the Project site.

The Project site generally does not function as a movement corridor for terrestrial wildlife. The Project site contains large areas of orchards and one grassland area bordered by either roads (paved and dirt) or large canals, which functionally serve as barriers to the movement of most terrestrial wildlife outside of birds. Additional active

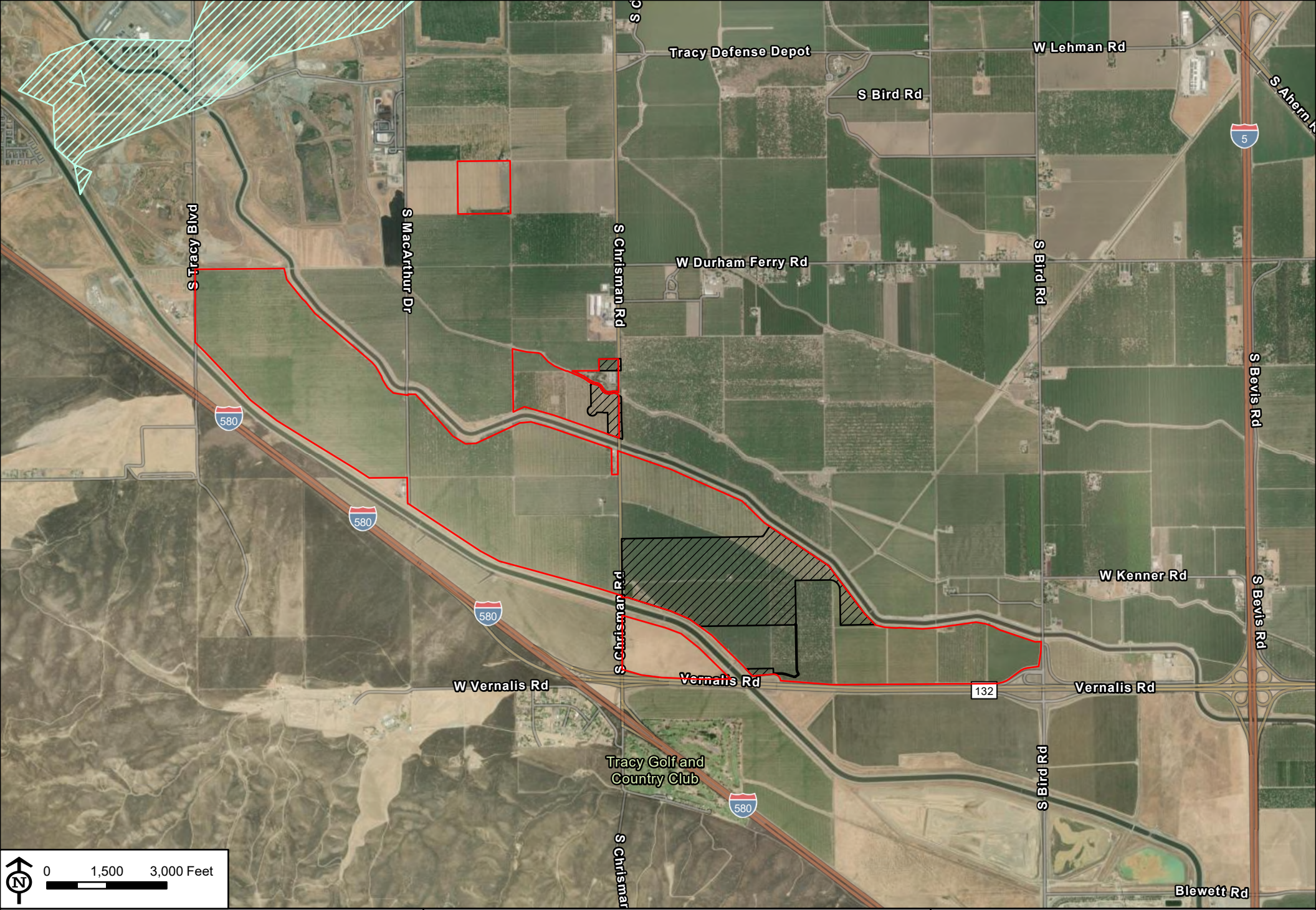
agricultural fields or urban development are located on all sides of the Project site, which generally do not serve as high quality habitat areas that would potentially attract wildlife.

The Project site does contain semi-natural and natural vegetation communities that provide foraging habitat for a number of bird species, including Swainson's hawk, northern harrier, white-tailed kite, and other avian taxa discussed in **Section 4.6.2** above. Although marginally suitable foraging habitat is present on-site, the Project site contains limited habitat to support nesting for these species due to the frequent disturbance of potential nesting areas associated with agricultural operations.

4.7.2 Nesting Birds

Birds, including native species protected by the MBTA and California Fish and Game Code, have the potential to nest in nearly any environment, including those heavily altered by anthropogenic activity. This includes the orchards that dominate the Project site and fields maintained for fire reduction. Depending upon the nature of the agricultural activities and fire management practices on-site, there may be large areas that would contain tall herbaceous vegetation or bare ground to support bird species with those nesting habitat preferences, such as the rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), and house finch (*Haemorhous mexicanus*). Tall mature trees are limited on-site; however, the site does contain manmade structures such as utility poles that provide potentially suitable nesting habitat raptors or other large birds identified in the desktop and literature review.

The areas surrounding the aquatic features within the Project site may provide marginal nesting habitat for blackbirds such as the red-winged blackbird (*Agelaius phoeniceus*) observed during the field visits, or the tricolored blackbird (*Agelaius tricolor*) identified in the desktop and literature review. However, the areas surrounding the aquatic features are not extensive enough and do not support the mature canopies that would provide suitable nesting habitat for larger wetland birds, such as great blue heron (*Ardea Herodias*) or great egret (*Ardea alba).*



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (04/2024)

BARGAS Environmental Consulting

Project Site

Initial Phase

Corral/Lower San Joaquin Wildlife Corridor

Figure 7 San Joaquin Wildlife Corridors

Pacific Gateway Specific Plan Project

Map Created: 2/3/2025, Map Revised: N/A, Bargas Project Number: 1644-22

5 Project Effects

5.1 Thresholds of Significance

Appendix G of the CEQA Guidelines (as amended through January 2019) is frequently cited by public agencies to determine whether a project may have a significant impact on biological resources. Under Appendix G, a project may have a significant impact on biological resources if it would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations by the CDFW or USFWS.
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.
3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
5. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

5.2 Key Metrics for Assessing Project Effects

Prior to assessing the significance of Project effects on biological resources, it is important to understand the factors to be considered in the analysis. Primary among these are direct impacts to vegetation communities, which may provide habitat for special-status species or support jurisdictional aquatic resources. Direct impacts to vegetation communities are typically associated with site grading, which often result in a 100% loss of vegetation and habitat on-site.

Current plans for the Initial Phase of the Project propose to directly impact approximately 247.26 acres of existing vegetation communities as a result of mass grading to prepare the site for Initial Phase development (**Figure 8**). Approximate impacts from the Initial Phase are summarized below in **Table 7**, which include 234.39 acres of Deciduous Orchard, 0.11 acres of Cultivated/Landscaped, 9.18 acres of Developed/Disturbed, and 3.58 acres of Cattail Marsh and Wetlands.

Table 7. Initial Phase Impacts

Mapped Vegetation Communities Common Name	SJMSCP Vegetation Community Classification	Acres Impacted
Cattail Marsh and Wetlands	Freshwater Emergent Wetland (W7)	3.58
Cultivated/Landscaped	Golf Courses/Cultivated Parks (U3)	0.11
Deciduous Orchard	Orchards and Vineyards (C2)	234.39
Disturbed/Developed	Scraped/Paved Areas (U2)	9.18
	TOTAL	**247.26**

Development plans for the remainder (i.e., Programmatic-Level) areas of the Project area have not yet been designed; thus, impacts for the remainder of the Project are unknown are discussed in general terms. Overall, the implementation of the Project build-out could impact the following vegetation communities: Deciduous Orchards, Cultivated/Landscaped, Disturbed/Developed, Wild Oats and Annual Brome Grassland, and Cattail Marsh and Wetlands.

5.3 Project Effects on Candidate, Sensitive, or Special-Status Species

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations by the CDFW or USFWS.*

5.3.1 Summary of Effects

Due to the anticipated movement of many foraging and breeding species, an assessment of whether the Project will have a substantial adverse effect on any candidate, sensitive, or special-status species applies to the entire Project site, including the Initial phase. As a result, the statements of effects, significance, and proposed mitigation measures applying to the Initial Phase are not independently analyzed but rather encompassed within the overall Project assessment.

Potential Project effects are assessed based on special-status species determined to have at least moderate potential to occur on-site. Special-status species determined Not Expected to occur or Presumed Absent, would not be adversely affected by implementation of the Project; thus are not discussed further.

Special-Status Plants

Overall, based on the determination of Not Expected and Presumed Absent, implementation of the Project is not expected to impact special-status plant species due to lack of suitable soils, habitat, or elevations within the Project site.

Special-Status Animals

Five special-status wildlife species could be impacted by implementation of the Project. Swainson's hawk, white-tailed kite, and song sparrow were observed on-site whereas northern harrier and Crotch's bumble bee are considered to have moderate potential to occur. After evaluating the presence of suitable habitat, along with species-specific nesting

and foraging behavior, appropriate Avoidance and Minimization measures are proposed to reduce Project-related effects on these species to less than significant.

- **Swainson's Hawk**: The Project site contains medium quality foraging habitat within the annual grassland located north of Highway 132 and south of the California Aqueduct, as well as within agricultural fields that are adjacent to the Project site that could support this species. Tall, scattered trees for nesting habitat are limited on-site; thus, nesting by this species on-site is unlikely and not expected. As per subsection 5.2.4.11 of the SJMSCP, the Project applicant shall consult with a qualified biologist prior to any vegetation activities or ground-disturbing work to determine if any known or potential nesting trees are located within the Project site. Known or potential nesting trees can be either retained or removed from the Project site. If identified nesting trees are retained and occupied during construction activities, then a buffer of twice the dripline of the tree will be established until the nest is no longer occupied. However, nesting trees may also be removed while trees are not occupied from September 1 to February 15.

- **White-tailed Kite**: The Project site contains medium quality foraging habitat within the annual grassland located north of Highway 132 and south of the California Aqueduct, as well as within agricultural fields that are adjacent to the Project site that could support this species. Tall trees for nesting habitat are limited on-site; thus, nesting by this species on-site is unlikely and not expected. As per subsection 5.2.4.19 of the SJMSCP, a nesting preconstruction survey shall be conducted by a qualified biologist prior to any vegetation activities or ground disturbance during the nesting season (February 15 to September 15), within and adjacent (as feasible) to the Project site to determine the presence of nesting white-tailed kites. Should an active nest be identified, a buffer of 100 feet from the nesting area shall be established and maintained until the nest has been deemed inactive by a qualified biologist.

- **Song Sparrow**: The Project site contains medium quality foraging habitat within the open annual grassland located north of Highway 132 and south of the California Aqueduct, as well as within agricultural fields that are adjacent to the Project site that could support this species. Open grassland and residential houses may provide nesting habitat for this species but is limited on-site thus, nesting by this species on-site is unlikely and not expected. To ensure this species is avoided, a qualified biologist shall conduct a nesting bird survey during the nesting season (February 15 to August 31) to determine if any nests or nesting activity is present within or adjacent (as feasible) to the Project site. As per the Migratory Bird Treaty Act, no birds or their nests may be harmed or disturbed if they are observed within the Project site. If nests are observed, then an appropriate buffer will be established by the biologist that will remain in effect until the nest is no longer active.

- **Northern Harrier**: The Project site contains medium quality foraging habitat within annual grassland located north of Highway 132 and south of the California Aqueduct, as well as within agricultural fields that are adjacent to the Project site that could support this species. Nesting habitat for this species is typically within grasses, willows, cattails, or sedges but this vegetation is limited on-site; thus, nesting by this species on-site is unlikely and not expected. Per subsection 5.2.4.17 of the SJMSCP, a nesting survey shall be conducted by a qualified biologist prior to any vegetation activities or ground-disturbing activities to determine if any nests or nesting activity is present within the Project site and a surrounding 500-foot buffer, as feasible. If nesting

is observed then a 500-foot buffer shall be applied during all vegetation activities or ground-disturbing activities that occur during the nesting season (February 15 – August 31).

- **Crotch's Bumble Bee**: The Project site contains sufficient flowering plants to support foraging (i.e., nectar collection) for this species. Nesting colony habitat on-site is limited to open annual grasslands located south of the California Aqueduct, and adjacent to the Project site. Therefore, Crotch's bumble bee may be present as a transient species foraging within the orchards and vineyards during the flower blooming period. A focused survey for Crotch's bumble bee within both foraging and nesting habitat shall be conducted for this species prior to any ground-disturbing activities during the colony active period (April - August) and when floral resources are present as per the *CDFW Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* protocols (CDFW 2023) dated June 6, 2023 to determine if any individuals or nests are present within the Project site. If Crotch's bumble bees or their nests are observed then the Project applicant shall consult with CDFW, which may require an Incidental Take Permit (ITP) if any bees are expected to be harmed during implementation of the Project.

5.3.2 Significance Statement

With the implementation of these Project-specific Avoidance and Minimization measures, potential impacts would be reduced to less than significant.

5.4 Project Effects on Riparian Habitat or Other Sensitive Natural Community

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *have a substantial adverse effect on riparian habitat or other sensitive natural communities identified locally, regionally, or by the CDFW or USFWS.*

5.4.1 Summary of Effects

The Project site does not to contain sensitive natural communities or riparian habitat pursuant to CDFW, CNPS, or USFWS. Therefore, the Project is not expected to result in impacts to riparian habitats or other sensitive natural communities.

5.4.2 Significance Statement

The Project would not result in a significant impact to riparian habitat or other sensitive vegetation community.

5.5 Project Effects on State or Federally Protected Wetlands

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *have a substantial adverse effect federally protected wetlands defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

5.5.1 Summary of Effects

The Project site does not support federally protected wetlands defined by Section 404 of the CWA, as none occur on the Project site. However, although not federally protected or regulated by Section 404 of the CWA, isolated wetlands/waters of the state potentially subject to RWQCB jurisdiction per the Porter-Cologne Act occur and would be impacted (see CVRWQCB Waste Discharge Requirements below**)**.

The Initial Phase of development for the Project would have direct impacts to a total of 3.58 acres of two isolated wetland and non-wetland waters of the state, including Marsh 7, Marsh 8, and Water Basin 3 (**Figure 8**). Additional impacts to aquatic resources on-site would likely result from implementation of future phases (i.e., Programmatic-Level) of development; however, the quantities and locations are unknown at this time. Approximately 2.45 acres of aquatic resources are present within the limits of the Project site and outside of the Initial Phase development. **Table 8** presents the proposed grading limit of the Initial Phase for the Project.

Table 8. Potential Jurisdictional Aquatic Resources within Proposed Grading Limits of the Initial Phase

Feature Type and Name	Area (acres)	Length (linear feet)
Wetland Water of the State (Marsh 7)	1.60	362
Wetland Water of the State (Marsh 8)	1.67	469
Non-Wetland Water of the State (Water Basin 3)	0.31	349
TOTAL	**3.58**	**1,180**

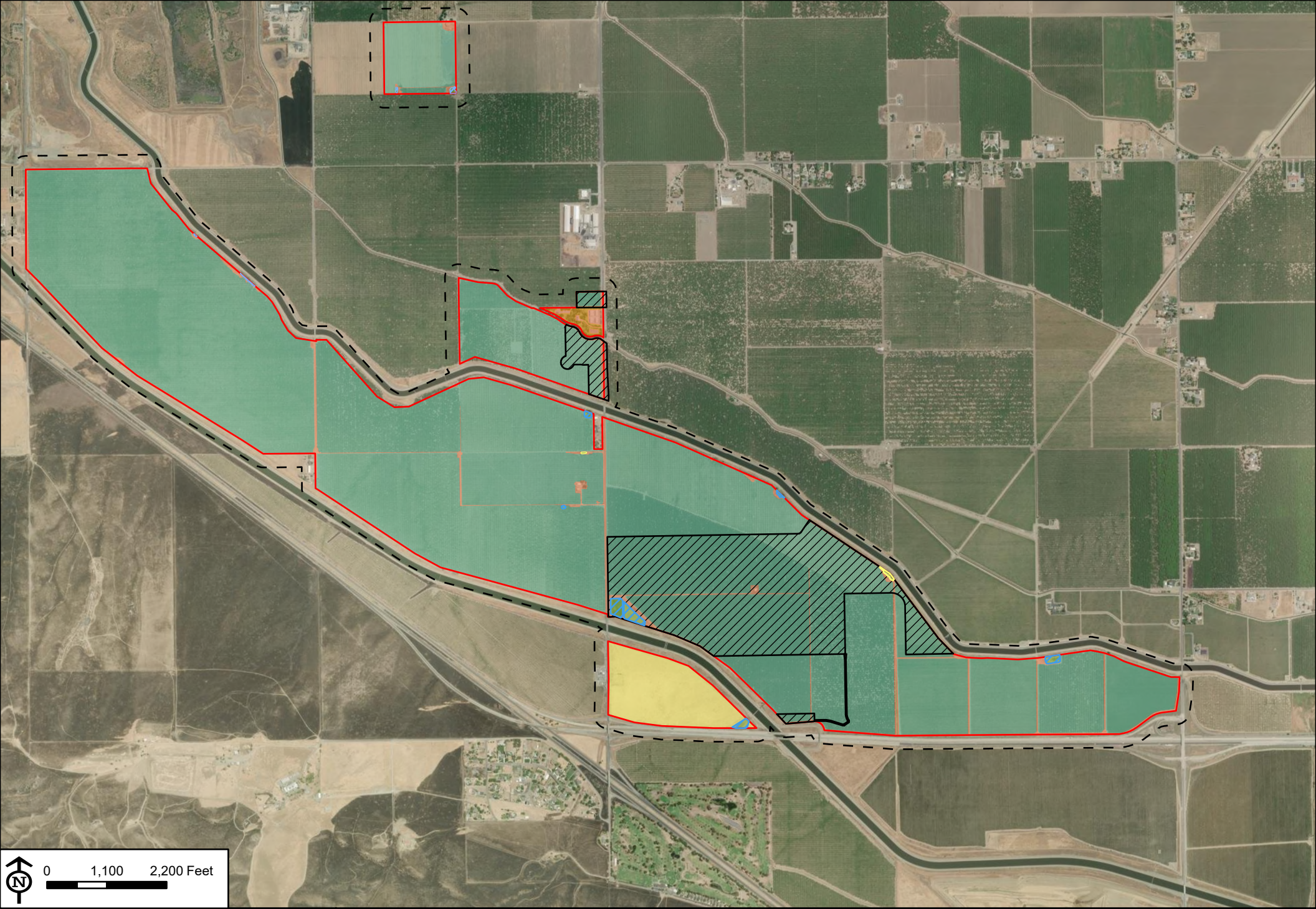
Although no aquatic features on-site were found to be under USACE jurisdiction, an Approved Jurisdictional Determination may be requested from the County during their project approval and or development/grading permit issuance process to confirm that aquatic features within the Project site and Initial Phase do not meet the definitions of waters of the U.S. If, it is determined that the aquatic resources within the Project site and Initial Phase do fall under the jurisdiction of USACE, CVRWQCB, or CDFW (Regulatory Agencies), appropriate compensation should be provided to achieve "no net loss" for impacts to aquatic resources associated with Project implementation. Wetland restoration, enhancement, and/or replacement shall be at a location and by methods acceptable to the Regulatory Agencies during appropriate consultation. The Regulatory Agency may require the purchase of compensatory mitigation credits at an agency-approved mitigation bank or preparation/submittal of a habitat mitigation and monitoring plan for on- or off-site mitigation. The mitigation plan would demonstrate how impacts to aquatic resources within Project site would be fully mitigated.

Project compliance with the Porter-Cologne Act is required; thus, coordination with RWQCB would occur.
Consultations with the applicable Regulatory Agency may result in the need to acquire the following permits and regulatory approvals:

- **CVRWQCB Waste Discharge Requirements**: An Individual Order for Waste Discharge Permit from the CVRWQCB would be required for Project activities impacted wetlands or waters of the State, which are not also under USACE jurisdiction (i.e., "isolated waters").

5.5.2 Significance Statement

With the implementation of the Project's proposed avoidance and minimization measures, as well as compliance with State and Federal regulations, the Project would not have a substantial adverse effect on state or federally protected wetlands.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

BARGAS Environmental Consulting

Initial Phase
Project Site
Biological Study Area

Potentially Jurisdictional Aquatic Resources
Non-Wetland - Waters of the State
Wetland - Waters of the State

Vegetation Communities and Land Cover Types
Cattail Marsh and Wetland
Cultivated/Landscaped
Deciduous Orchard
Disturbed/Developed
Wild Oat and Annual Brome Grassland

Figure 8 Initial Phase and Program-level Impacts
Pacific Gateway Specific Plan Project

Map Created: 1/30/2025, Bargas Project Number: 1644-22

5.6 Project Effects on Wildlife Movement and Nursery Sites

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?*

5.6.1 Summary of Effects

The Project site is not known to be an established wildlife corridor or wildlife nursery site. The site is identified by the SJMSCP as part of the *Southwest/Central Transition Zone* which recognizes that species in the Southwest Zone may use portions of the Central Zone for foraging or transit, particularly San Joaquin kit fox. A known wildlife movement corridor lies about 0.65 miles northwest of the northwest corner of the Project site (Huber 2006). No known wildlife movement corridors overlap the Project site. Given the proximity of the Project site to a known wildlife movement corridor, it is possible wildlife may use the Project site for transit; however, such activity is presumably limited and unlikely given the agricultural operations and practices at the site. Overall, the site is not considered to substantially facilitate wildlife movement. The Project would not substantially interfere with connectivity between blocks of habitat and would not block or substantially interfere with a local or regional wildlife corridor or linkage.

The proposed development site plan includes passive outdoor open spaces including a network of pedestrian and bicycle trails, a university campus, and a public park. These open spaces could provide use of the Project site as a wildlife transit corridor for San Joaquin kit fox and other ambulatory species. As per section 5.5.3(C) of the SJMSCP, stepping stone refugia for San Joaquin kit foxes would be provided for projects located between the Delta Mendota Canal and the California Aqueduct so that kit foxes may traverse between the northern Corral-Lower San Joaquin Wildlife Corridor within the Southwest/Central transition zone to the southern Corral-Lower San Joaquin Wildlife Corridor within the Southwest zone where the Southwest Zone Preserve area is located. To implement this requirement, the Project plans to provide native grassland and shrubland habitat along the southern and northeastern edges of the Project site adjacent to the California Aqueduct and Delta Mendota Canal, respectively, that support San Joaquin kit foxes. Overall, the Project is not expected to impede wildlife movement.

With respect to nursery sites, the current agricultural use of the Project site as commercial orchards may provide suitable nesting habitat for birds, particularly common passerines. A decrease in commercial orchards may change nesting habits of birds in the surrounding area, but sufficient landscape trees may be available as nesting habitat after the implementation of this Project. Tall trees for nesting habitat to accommodate raptors are limited on-site, however, manmade structures such as utility poles may provide suitable nesting habitat. Additionally, due to the limited amount of tall trees, there is no suitable nesting substrate for large colonial nursery nesters such as great blue heron or great egret. The Project would be required to comply with the MBTA and California Fish and Game Code to protect nesting bird species. The following avoidance and minimization measures shall be implemented prior to site disturbance to avoid impacts to nesting raptors and other birds in the Project site or immediately adjacent areas.

- A nesting bird survey shall be conducted within the Project site (raptors and non-raptors) and a 500-foot buffer (raptors only) as feasible prior to commencing with earth-moving or construction work for each phase of the project, if this work would begin during the typical nesting season (between February 1 and August 31).
- If nesting birds are identified during the surveys, a qualified biologist will determine an appropriate disturbance-free buffer zone (between 100 and 500 feet) depending on the species as described in

Subsections 5.2.4.16 through 5.2.4.22 in the SJMSCP. Buffer zones should be clearly demarcated in the field for avoidance by construction activities.

- The size of an established buffer may be altered if a qualified biologist conducts behavioral observations and determines the nesting birds are well acclimated to disturbance. If this occurs, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting birds. If the buffer is reduced, the qualified biologist shall remain on site to monitor the behavior of the nesting birds during construction in order to ensure that the reduced buffer does not result in take of eggs or nestlings.
- No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified biologist that the young have fledged (are no longer dependent on the nest or the adults for feeding) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by August 31. This date may be earlier or later and shall be determined by a qualified biologist. If a qualified biologist is not hired to monitor the nesting raptors, then the full buffer(s) shall be maintained in place from February 1 to August 31. The buffer may be removed, and work may proceed as otherwise planned within the buffer on September 1.

5.6.2 Significance Statement

Implementation of the Project may result in some temporary disturbance to local wildlife from construction noise; however, implementation of the Project would have a less than significant impact on wildlife movement, including nesting birds.

5.7 Project Effects on Local Policies or Ordinances Protecting Biological Resources

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

5.7.1 Summary of Effects

The Project would not conflict with any local policies or ordinances protecting biological resources. San Joaquin County has one ordinance pertaining the protection of biological resources and is applicable to the Project; the County General Plan requirements on Development of Unincorporated Lands.

Development of Unincorporated Land: The San Joaquin County General Plan ensures that development projects in unincorporated areas align with the County's long-term vision for sustainable land use and resource management. Compliance with this ordinance requires the Project to demonstrate consistency with the General Plan's adopted goals and policies. Adherence to these regulations demonstrates the Applicant's commitment to preserving local natural resources. The Applicant would comply with San Joaquin County General Plan by working with the County to ensure the Project is approved by San Joaquin County and is consistent with the adopted General Plan.

5.7.2 Significance Statement

The project would not conflict with any County policies or ordinances; no impact would occur.

5.8 Project Effects on the Provisions of an Adopted Habitat Conservation Plan

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project *would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?*

5.8.1 Summary of Effects

The Initial Phase of the Project would have direct impacts to approximately 249.33 acres of land within the boundaries of the SJMSCP and is therefore subject to the provisions of the SJMSCP. Through adherence to these provisions, the Project aligns with the SJMSCP's goals to offset impacts focused on listed and non-listed species, agricultural land, and other open space resources. To demonstrate consistency with the provisions of the SJMSCP, appropriate avoidance, minimization, or mitigation measures consistent with the goals of the SJMSCP are incorporated into the Project, which are outlined below.

- Per Section 5.2.2 of the SJMSCP, pre-construction surveys are required to verify vegetation types affected by the project and to determine if SJMSCP-covered Species are present. Such surveys were conducted by Bargas as part of preparing this Assessment. Additionally, SJMSCP Section 5.2.2 states that following survey results, appropriate Incidental Take Minimization Measures may be developed and required as conditions of project approval. Results of the surveys as well as discussions in Section 5.3 of this Assessment concluded that five SJMSCP-covered species have at least moderate potential for occurrence within the Project site, due to the presence of suitable habitat. As a result, species-specific Avoidance and Minimization measures are proposed for the Project, which are detailed by each species in Section 5.3.1.
- Although burrowing owls are not expected to occur at the Project site, ground squirrel burrows were observed, which may provide potential to support burrowing owl. To ensure impacts to this species are avoided, and to demonstrate consistency with the SJMSCP, the following efforts shall be employed. Within 14-days prior to any of Project activities on-site, a single pre-construction clearance survey for burrowing owl should be conducted within the Project work areas and surrounding 300-foot buffer, as accessible and as feasible, to confirm absence or presence of burrowing owl. The survey shall be conducted by a qualified biologist with experience in surveying for burrowing owl, including identification of burrowing owl sign and burrowing owl individuals. Furthermore, Subsection 5.2.4.15 of the SJMSCP provides guidelines for avoiding impacts and protecting burrowing owl, which would be implemented for the Project as applicable. These guidelines state that burrowing owls may be discouraged from entering a potential construction site by preventing ground squirrels from creating these burrows. This can be achieved through planting or maintaining vegetation entirely covering the site at a height of approximately 36" above the ground, discing or plowing the entire project site to destroy any burrows, and removing ground squirrels. Per the current guidance from CDFW regarding how to proceed if active burrows are located within and around 150 meters of the work area (CDFW 2024), Project activities conducted during the breeding (February 1 through August 31) and non-breeding seasons should delineate a 150-meter protective buffer with high-visibility material around occupied burrow and burrow complexes until the completion of the project when the delineation material can be removed. Furthermore, any burrowing owl observed within the Project site or within 150 meters adjacent to the site shall be allowed to leave on their own and any Project activities that could result in harm will cease until the owl has left the work area (CDFW 2024). The designated biologist shall locate the burrow or burrow complex and delineate using high-visibility material, as previously described, until work in the area has ceased. A designated biologist shall be present during all Project activities if active burrowing owl complexes are observed within 150 meters of the work area to conduct biological monitoring as prescribed

by CDFW (CDFW 2024) and determine if burrowing owl behavior is affected during construction activities. The designated biologist shall have the authority to cease construction activities if burrowing owl are being negatively affected by the work and shall consult with CDFW to determine proper protocols before work activities may recommence. All active burrowing owl complexes shall be avoided unless the burrow location or ground disturbing work pose a risk to individual burrowing owls. However, if burrowing owl complexes are located within an area of temporary disturbance and are not active at the time of work (as determined by the designated biologist), CDFW shall be consulted and an approved exclusion object may be inserted into the entrance of the burrow to ensure burrowing owls do not occupy potential burrows within the Project site. If burrowing owls are found present on-site or within 150 meters of Project activities, and such activities would result in direct impacts to occupied habitat or burrowing owl individuals (as determined by the designated project biologist), CDFW shall be notified immediately to discuss whether an Incidental Take Permit (ITP) would be required prior to work. Any measures or recommendations prescribed by CDFW to avoid and minimize impacts to burrowing owl shall be required.

- The Project is also consistent with the SJMSCP regarding measures to protect San Joaquin kit fox even though the species is Not Expected to occur within the Project site. Because the site is located within the Southwest/Central Transition Zone, pre-construction surveys for San Joaquin kit fox shall be conducted prior to any ground-disturbing work. Specifically, subsection 5.2.4.25 of the SJMSCP states that pre-construction surveys for San Joaquin kit fox and/or their dens should be conducted by a qualified biologist between two calendar weeks to thirty calendar days prior to any ground-disturbing activities. If individual kit foxes are observed during the survey, then an additional protocol level survey will be conducted as outlined in the USFWS *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* protocol dated January 2011 (USFWS 2011). Additionally, if dens with openings of a diameter of four inches and that open within two feet inside of the den are observed within the Project site then a biologist will dust the opening of the den for three calendar days to determine if the den is occupied. If is discovered that the den is occupied by a single adult kit fox then the den may be destroyed as soon as the fox either moves or leaves the den, whereas if the den is discovered to be a natal den, then a 250-foot buffer shall be maintained around the den until it is determined to be vacant by a qualified biologist. Implementation of a pre-construction survey for San Joaquin kit fox would be required as part of the Project implementation; thus, demonstrating consistency with the SJMSCP. Furthermore, Section 5.5.3(C) of the SJMSCP prescribes that projects located between the Delta Mendota Canal and the California Aqueduct shall provide 2.5 acre stepping stone refugia for San Joaquin kit foxes at 0.5-mile intervals. This requirement put forth by the SJMSCP is designed to aid foxes in traversing between the Corral-Lower San Joaquin Wildlife Corridor that terminates approximately 0.65 miles north of the Project site in the Southwest/Central Transition Zone and begins again approximately 3.85 miles southwest of the Project site within the Southwest Zone. The Project site plan proposes to provide several intermittent corridors of native grassland and shrubland habitat (averaging approximately 5,223 feet length) in the northeastern boundary of the site as well as nearly the entire length of the southern boundaries of the Project development. These habitat corridors are intentionally incorporated into the Project, along the outer extents of the site plan, adjacent to the California Aqueduct and Delta Mendota Canal, respectively, to serve as San Joaquin kit fox habitat refugia as they traverse between the Southwest/Central Transition Zone and Southwest Zone wildlife corridors. Thereby, demonstrating compliance with the SJMSCP regarding San Joaquin kit fox.

Additionally, the Project must establish concurrence with the SJMSCP Technical Advisory Committee (TAC) and Permitting Agencies that all potential suitable habitat for SJMSCP Covered Species will be fully avoided pursuant to Section 5.5.9 of the SJMSCP. Should concurrence be established, pre-construction surveys may be waived and further Avoidance and Minimization measures would not be required. Additionally, to compensate for the loss of habitat of the SJMSCP Covered Species, several Mitigation Measures may be required by the County for the Project, consistent with the SJMSCP:

- Pay the appropriate fee, in this case, $750 per acre for Conversion of Multi-Purpose Open Space Lands; or
- Establish Preserves, enhanced by the Joint Powers Authority (JPA), upon which SJMSCP Covered Species rely, through the purchase of easements from landowners willing to sell urban development rights; or
- Purchase approved mitigation bank credits as specified in Section 5.3.2.4. D. of the SJMSCP.
- Propose an alternative mitigation plan, consistent with the goals of the SJMSCP and equivalent in biological value to options above, subject to approval by the JPA with the concurrence of the Permitting Agencies' representatives on the TAC.

5.8.2 Significance Statement

The Project would result in development within the SJMSCP. The SJMSCP has an overall goal of creating a multi-species conservation program to mitigate impacts to covered species that may result from development in San Joaquin County. Accordingly, appropriate avoidance, minimization, or mitigation measures that are consistent with the goals of the SJMSCP, including covered-species condition requirements, would be implemented for the Project. Thus, implementation of the Project would not conflict with the adopted SJMSCP and Project impacts would be less than significant.

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7 Appendix A. Floral & Faunal Compendia

Bargas has documented the presence of 48 plant taxa and 25 wildlife taxa. Taxa are presented in taxonomic order.

7.1.1 Plants

Common Name	Scientific Name	Family	Major Clade	Native/Non-Native
Cattail	*Typha domingensis*	Typhaceae	Monocots	Native
Common Sunflower	*Helianthus annuus*	Asteraceae	Eudicots	Native
Bristly Ox-Tongue	*Helminthotheca echioides*	Asteraceae	Eudicots	Non-native
Perennial Pepperweed	*Lepidium latifolium*	Brassicaceae	Eudicots	Non-native
Tumbleweed	*Amaranthus albus*	Amaranthaceae	Eudicots	Non-native
Lamb's Quarters	*Chenopodium album*	Chenopodiaceae	Eudicots	Non-native
Turkey-Mullein	*Croton setiger*	Euphorbiaceae	Eudicots	Native
Little Mallow	*Malva parviflora*	Malvaceae	Eudicots	Non-native
Common Devil's Claw	*Proboscidea louisianica subsp. louisianica*	Martyniaceae	Eudicots	Non-native
Mule Fat	*Baccharis salicifolia subsp. salicifolia*	Asteraceae	Eudicots	Native
Desert Almond	*Prunus fasciculata*	Rosaceae	Eudicots	Native
Peach	*Prunus persica*	Rosaceae	Eudicots	Non-native
Narrow-Leaved Willow	*Salix exigua var. exigua*	Salicaceae	Eudicots	Native
Tree Tobacco	*Nicotiana glauca*	Solanaceae	Eudicots	Non-native
American Black Nightshade	*Solanum americanum*	Solanaceae	Eudicots	Native
Yellow Star-Thistle	*Centaurea solstitialis*	Asteraceae	Eudicots	Non-native
Tall Flatsedge	*Cyperus eragrostis*	Cyperaceae	Monocots	Native
False Nutsedge	*Cyperus strigosus*	Cyperaceae	Monocots	Native
Wild Oat	*Avena fatua*	Poaceae	Monocots	Non-native
Rescue Grass	*Bromus catharticus*	Poaceae	Monocots	Non-native
Jungle Rice	*Echinochloa colona*	Poaceae	Monocots	Non-native
Barnyard Grass, Japanese Millet, Watergrass	*Echinochloa crus-galli*	Poaceae	Monocots	Non-native
Wall Barley	*Hordeum murinum*	Poaceae	Monocots	Non-native

Common Name	Scientific Name	Family	Major Clade	Native/Non-Native
Bull Thistle	*Cirsium vulgare*	Asteraceae	Eudicots	Non-native
Rough Blue Grass	*Poa trivialis*	Poaceae	Monocots	Non-native
Shortpod mustard	*Hirschfeldia incana*	Brassicaceae	Eudicots	Non-native
Prickly pear sp.	*Opuntia sp.*	Cactaceae	Eudicots	Native
Salsola sp.	*Salsola sp.*	Chenopodiaceae	Eudicots	Non-native
Horseweed	*Erigeron canadensis*	Asteraceae	Eudicots	Native
Pacific Willow	*Salix lasiandra var. lasiandra*	Salicaceae	Eudicots	Native
Alamo or Fremont Cottonwood	*Populus fremontii* subsp. *fremontii*	Salicaceae	Eudicots	Native
Purpleoiser Willow	*Salix purpurea*	Salicaceae	Eudicots	Non-native
California Bay	*Umbellularia californica*	Lauraceae	Magnoliid	Native
Bindweed, Orchard Morning Glory	*Convolvulus arvensis*	Convolvulaceae	Eudicots	Non-native
Saltcedar	*Tamarix ramosissima*	Tamaricaceae	Eudicots	Non-native
Common cocklebur	*Xanthium orientale*	Asteraceae	Eudicot	Native
Eastern annual saltmarsh aster	*Symphyotrichum subulatum*	Asteraceae	Eudicot	Native
Velvetleaf	*Abutilon theophrasti*	Malvaceae	Eudicot	Non-native
Bog yellowcress	*Rorippa palustris*	Brassicaceae	Eudicot	Native
Alkali heliotrope	*Heliotropium curassavicum var. oculatum*	Heliotropiaceae	Eudicot	Native
Tree Tobacco	*Nicotiana glauca*	Solanaceae	Eudicot	Non-native
Wild Radish	*Raphanus raphanistrum*	Brassicaceae	Eudicot	Non-native
Milk Thistle	*Silybum marianum*	Asteraceae	Eudicots	Non-native
Stinkwort	*Dittrichia graveolens*	Asteraceae	Eudicot	Non-native
Willow Herb	*Epilobium brachycarpum*	Onagraceae	Eudicot	Native
Wild Rhubarb	*Rumex hymenosepalus*	Polygonaceae	Eudicot	Native
Dwarf Mallow	*Malva neglecta*	Malvaceae	Eudicot	Non-native
California Dodder	*Cuscuta californica*	Convolvulaceae	Eudicot	Native

7.1.2 Wildlife

Common Name	Scientific Name	Family	Native/Non-Native
Rock Pigeon	*Columba livia*	Columbidae (Pigeons and Doves)	Non-native
Mourning Dove	*Zenaida macroura*	Columbidae (Pigeons and Doves)	Native
Red-shouldered Hawk	*Buteo lineatus*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
California Scrub-Jay	*Aphelocoma californica*	Corvidae (Crows and Jays)	Native
Common Raven	*Corvus corax*	Corvidae (Crows and Jays)	Native
Northern Mockingbird	*Mimus polyglottos*	Mimidae (Mockingbirds and Thrashers)	Native
Song Sparrow	*Melospiza melodia*	Passerellidae (New World Sparrows)	Native
Red-winged Blackbird	*Agelaius phoeniceus*	Icteridae (Blackbirds)	Native
Black-tailed Jackrabbit	*Lepus californicus*	Leporidae (Hares and Rabbits)	Native
Coyote	*Canis latrans*	Canidae	Native
Swainson's Hawk	*Buteo swainsoni*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
White-tailed Kite	*Elanus leucurus*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
White-crowned Sparrow	*Zonotrichia leucophrys*	Passerellidae (New World Sparrows)	Native
California Gull	*Larus californicus*	Laridae (Gulls, Terns, and Skimmers)	Native
Black Phoebe	*Sayornis nigricans*	Tyrannidae (Tyrant Flycatchers)	Native
House Finch	*Haemorhous mexicanus*	Fringillidae (Fringilline and Cardueline Finches and Allies)	Native
Northern Mockingbird	*Mimus polyglottos*	Mimidae (Mockingbirds and Thrashers)	Native
Townsend’s Warbler	*Setophaga townsendi*	Parulidae (New World Warblers)	Native
Turkey Vulture	*Cathartes aura*	Cathartidae (New World Vultures)	Native
Eurasian Colored-Dove	*Streptopelia decaocto*	Columbidae (Pigeons and Doves)	Non-native
Double-crested Cormorant	*Phalacrocorax auritus*	Phalacrocoracidae (Cormorants and Shags)	Native
California Scrub Jay	*Aphelocoma californica*	Corvidae (Crows and Jays)	Native
Brewer's Blackbird	*Euphagus cyanocephalus*	Icteridae (Blackbirds)	Native

Common Name	Scientific Name	Family	Native/Non-Native
American Kestrel	*Falco sparverius*	Falconidae (Caracaras and Falcons)	Native
American Pipit	*Anthus rubescens*	Motacillidae (Wagtails and Pipits)	Native

8 Appendix B. Special-Status Biological Resource Summary

The research conducted for this report included a desktop review of numerous resource databases in order to determine a list of special-status biological resources, including 7 plant taxa and 44 wildlife taxa to be analyzed for potential occurrence. Table column definitions:

- **Common Name:** The most widely-accepted English common name for the taxon.
- **Scientific Name:** The most widely-accepted scientific name for the taxon.
- **Source(s):** The desktop review source(s) that contained this taxon.
- **Sensitivity Status:** The legal protected status of the taxon. These terms are described in detail in the Methods section of this report.
- **Habitat:** The quality of the habitat on the Project site for supporting the taxon. Classification of habitats is described in detail in the Methods section of this report.
- **Soils:** The suitability of soils on the Project site to support the taxon, if known. Classification of soils is described in detail in the Methods section of this report.
- **Potential:** The potential for the taxon to be found on the Project site. Ranking of potential is described in detail in the Methods section of this report.

8.1.1 Plants

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Soils	Potential
Big Tarplant	*Blepharizonia plumosa*	CNDDB, CNPS	CRPR 1B.1	Low Quality	Unknown	Not Expected
Slough Thistle	*Cirsium crassicaule*	CNPS, SJMSCP	CRPR 1B.1	Not Present	No	Presumed Absent
Mt. Hamilton Coreopsis	*Leptosyne hamiltonii*	CNPS, SJMSCP	CRPR 1B.2	Not Present	Unknown	Presumed Absent
Showy Golden Madia	*Madia radiata*	CNDDB, CNPS, SJMSCP	CRPR 1B.1	Not Present	Unknown	Presumed Absent
Large-flowered Fiddleneck	*Amsinckia grandiflora*	CNDDB, CNPS, IPaC	FE, CE, CRPR 1B.1	Not Present	Unknown	Presumed Absent
Diamond-petaled California Poppy	*Eschsholzia rhombipetala*	CNPS	CRPR 1B.1	Low Quality	Unknown	Not Expected
Lemmon's jewelflower	*Caulanthus lemmonii*	CNDDB	CRPR 1B.2	Not Present	Unknown	Presumed Absent

8.1.2 Wildlife

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Potential
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	IPaC, SJMSCP	FT	Not Present	Presumed Absent
Vernal Pool Tadpole Shrimp	*Lepidurus packardi*	IPaC, SJMSCP	FE	Not Present	Presumed Absent
Valley Elderberry Longhorn Beetle	*Desmocerus californicus dimorphus*	IPaC; SJMSCP	FT	Not Present	Presumed Absent

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Potential
Monarch - California Overwintering Population	*Danaus plexippus pop. 1*	IPaC	FC	Low Quality	Not Expected
California Red-legged Frog	*Rana draytonii*	IPaC, SJMSCP	FT, SCC	Not Present	Presumed Absent
Western Spadefoot toad	*Spea hammondii*	CNDDB, SJMSCP	SSC	Not Present	Presumed Absent
California Tiger Salamander	*Ambystoma californiense*	CNDDB; IPaC, SJMSCP	FE, CE	Not Present	Presumed Absent
California Glossy Snake	*Arizona elegans occidentalis*	CNDDB	SSC	Low Quality	Not Expected
San Joaquin Coachwhip	*Coluber flagellum ruddocki*	CNDDB, SJMSCP	SSC	Low Quality	Not Expected
Northwestern Pond Turtle	*Actinemys marmorata*	CNDDB, IPaC, SJMSCP	SSC	Not Present	Presumed Absent
Yellow-billed Cuckoo	*Coccyzus americanus*	IPaC, SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Long-billed Curlew	*Numenius americanus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Great Blue Heron	*Ardea herodias*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Great Egret	*Ardea alba*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
California Condor	*Gymnogyps californianus*	IPaC	FE, CE, FP	Not Present	Presumed Absent
Osprey	*Pandion haliaetus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Northern Harrier	*Circus hudsonius*	SJMSCP	SSC	Medium Quality	Moderate
Sharp-shinned Hawk	*Accipiter striatus*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Cooper's Hawk	*Accipiter cooperii*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Swainson's Hawk	*Buteo swainsoni*	CNDDB; SJMSCP	CT, SJMSCP Covered Species	Medium Quality	Present
Burrowing Owl	*Athene cunicularia*	CNDDB; SJMSCP	CCE	Low Quality	Not Expected
Merlin	*Falco columbarius*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Least Bell's Vireo	*Vireo bellii pusillus*	CNDDB	FE, CE	Not Present	Presumed Absent
Horned Lark	*Eremophila alpestris*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Yellow-breasted Chat	*Icteria virens*	SJMSCP	SSC	Low Quality	Not Expected
Tricolored Blackbird	*Agelaius tricolor*	CNDDB; SJMSCP	CT, SSC	Low Quality	Not Expected
Yuma Myotis	*Myotis yumanensis*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Western Red Bat	*Lasiurus blossevillii*	SJMSCP	SSC	Not Present	Presumed Absent
Eastern Red Bat	*Lasiurus borealis*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Potential
Riparian Brush Rabbit	*Sylvilagus bachmani riparius*	IPaC, SJMSCP	FE, CE	Not Present	Presumed Absent
Riparian Woodrat	*Neotoma fuscipes riparia*	IPaC, SJMSCP	FE, SSC	Not Present	Presumed Absent
San Joaquin Kit Fox	*Vulpes macrotis mutica*	CNDDB; IPaC; SJMSCP	FE, CE	Low Quality	Not Expected
Ringtail	*Bassariscus astutus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
American Badger	*Taxidea taxus*	CNDDB; SJMSCP	SSC	Low Quality	Not Expected
Yellow warbler	*Dendroica petechia brewsteri*	SJMSCP	SSC, SJMSCP Covered Species	Not Present	Presumed Absent
White-tailed Kite	*Elanus leucurus*	SJMSCP	FP, SJMSCP Covered Species	Medium Quality	Present
Loggerhead shrike	*Lanius ludovicianus*	SJMSCP, CNDDB	SSC, SJMSCP Covered Species	Not Present	Presumed Absent
Black-crowned night heron	*Nycticorax nycticorax*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Song Sparrow (Modesto Population)	*Melospiza melodia*	CNDDB	SSC	Medium Quality	Present
Townsend's big-eared bat	*Corynorhinus townsendii*	CNDDB	SSC	Low Quality	Not Expected
Pallid bat	*Antrozous pallidus*	CNDDB	SSC	Low Quality	Not Expected
Western mastiff bat	*Eumops perotis californicus*	CNDDB	SSC	Low Quality	Not Expected
Coast horned lizard	*Phrynosoma blainvillii*	CNDDB	SSC	Not Present	Presumed Absent
Crotch's bumblebee	*Bombus crotchii*	CNDDB	CE, SSC	Medium Quality	Moderate

Appendix C. Site Photographs



Photo 1. Potentially jurisdictional Marsh 8, containing tall flatsedge, turkey-mullein, stinkwort, and flax leaved horseweed; looking west.



Photo 2. Agricultural ditch with banks containing curly dock, stinkwort, milk thistle, yellow star thistle, and flax-leaved horseweed between orchard and vineyards; looking north.



Photo 3. Potentially jurisdictional Marsh 10 near an orchard containing pacific willow, narrowleaf willow, purple willow, and stinkwort; looking southwest.



Photo 4. Heavily disturbed potentially jurisdictional Agricultural Detention Basin 3 used for storage south of the Delta Mendota Canal; looking west.



Photo 5. Potentially jurisdictional Marsh 9 containing cattail species with a box culvert; looking southwest.



Photo 6. Valley grassland north of Vernalis Road at the southwestern end of the project site; looking north.



Photo 7. Potentially jurisdictional Marsh 6 containing California dodder surrounded by orchards, facing west.



Photo 8. Heavily disturbed Marsh 3 without vegetation and containing debris, surrounded by disturbed lands and orchards.

Appendix I



PACIFIC GATEWAY
TRACY, CA

GEOTECHNICAL FEASABILITY UPDATE

SUBMITTED TO
Mr. Steve Arthur,
Ridgeline Property Group, LLC
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

PREPARED BY
ENGEO Incorporated

September 13, 2024
Revised April 29, 2025

PROJECT NO.
19633.000.002

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ENGEO
Expect Excellence

Project No.
19633.000.002

September 13, 2024
Revised April 29, 2025

Mr. Steve Arthur
Ridgeline Property Group, LLC
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Subject: Pacific Gateway
Tracy, CA

GEOTECHNICAL FEASABILITY UPDATE

Dear Mr. Arthur:

We prepared this geotechnical feasibility update report for the proposed development located in Tracy, California, as outlined in our agreement with you, dated July 17, 2024. The accompanying geotechnical feasibility update compiles our field exploration findings, along with our conclusions and recommendations regarding development within the study area. We performed this feasibility study to identify basic geotechnical considerations for the development and potential geologic hazards within the project site.

The proposed development is feasible from a geotechnical engineering viewpoint, provided that subsurface explorations are performed at a future date to confirm the preliminary conclusions presented herein. Based on our feasibility study, the primary geotechnical considerations for the planned development include the potential for existing fill and expansive soil.

If you have any questions or comments regarding this report, please call and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated

Viridiana Navarro

Steve Harris, GE, QSD



vn/sh/cb

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APPENDIX C – Previous Exploration logs and Laboratory Test Results (ENGEO,2021)

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

We prepared this geotechnical feasibility update report for the Pacific Gateway in Tracy, California. We prepared this report as outlined in our agreement dated July 17, 2024. ENGEO previously prepared a preliminary geotechnical exploration report for the property, which provided preliminary geotechnical recommendations based on the areas explored in 2021 (ENGEO,2021). Since the publication of the report, Ridgeline Property Group has acquired new property for the Pacific Gateway project. The new parcels acquired are identified as Assessor's Parcel Numbers (APNs) 253-190-110, 253-180-110, 253-180-060, 253-260-090, 253-260-120, 253-260-130, and 253-260-140.

The purpose of our report is to update the referenced report to include the additional parcels and provide a preliminary assessment of the geotechnical hazards pertinent to the current development and provide preliminary geotechnical recommendations for site development. Ridgeline Property Group authorized us to conduct the following scope of services.

- Review of available historical aerials and geologic maps
- Limited field exploration
- Limited soil sampling and laboratory testing
- Preliminary analysis and conclusions
- Report preparation

This report provides an assessment of geotechnical feasibility and does not provide design recommendations or design parameters; these items can be provided at a future date following supplemental subsurface exploration, sampling, lab testing, and engineering analysis once the project moves to the design phase.

In preparation of this report, we reviewed the previous preliminary geotechnical investigation report for the site, completed by ENGEO on November 30, 2021, and revised January 11, 2023.

We prepared this report for the exclusive use of our client and their consultants for evaluation of feasibility of this project. In the event that any changes are made in the character, design, or layout of the development, we must be contacted to review the conclusions and recommendations contained in this report to evaluate whether modifications are recommended. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without our express written consent.

1.2 PROJECT LOCATION AND DESCRIPTION

The proposed 1,433-acre Pacific Gateway project is located east of I-580, north of State Highway 132, and south of South Tracy Boulevard in Tracy, California, as shown in Figure 1. Based on our review of the provided information, we understand that Areas A, B, C, D, and E will be developed for industrial parks with warehouse and office structures, paved roadways and parking areas, and associated improvements. The conceptual site plan indicates 10 basins will be constructed throughout the site. The site will also include UofSA university campus, consisting of approximately 1.4 million square feet of university buildings and associated infrastructure. Based on our discussions with the project team, we understand the university buildings will be either glass over steel frame construction or concrete tilt-up construction.

Review of publicly available historical aerial photographs indicates that the property was utilized for agriculture, consisting of a mix of row crops, orchards, and dry land farming, since at least 1949. At the time of our site reconnaissance, the majority of the property consisted of active orchards and vineyards.

1.3 PREVIOUS EXPLORATION

ENGEO previously prepared a preliminary geotechnical investigation report (ENGEO, 2021) for the original property of Pacific Gateway. We performed our preliminary field exploration between November 11 and November 16, 2021. Our field exploration included drilling 6 borings and excavation of 15 test pits at various locations across the proposed development, shown on Site Plan, Figure 2.

In our preliminary study, undocumented fill was found in 7 of the 14 test pit locations. The undocumented fill encountered was limited to excavations within existing access roads. The undocumented fill ranged from ½ to 2 feet in thickness.

2.0 FINDINGS

2.1 GEOLOGY AND SEISMICITY

2.1.1 Geology

The subject project in located within the margins of Great Valley and Coast Range Geomorphic Provinces of California. This valley is an elongate, asymmetric trough filled with a thick sequence of sediments beginning in the Jurassic period (180 million years ago) and continues currently. The sediments within the valley vary in thickness and are estimated to be up 10 km deep. These sediments are mostly derived from the erosion of the Sierra Nevada Mountain Range to the east, with lesser amounts of material from the Coast Range Mountains to the west.

As shown in Figure 3, Wagner (1991) mapped the project location as Holocene to Pleistocene aged alluvial fan deposits (Qf) consisting of unconsolidated gravel, sand, silt and clay in addition to Miocene to Pliocene fanglomerate deposits (Mf) consisting of conglomerates, siltstone, and sandstone primarily derived from the Coast Range to the southwest.

2.1.2 Seismicity

The site is located in an area of moderate seismicity. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and no known surface expressions of active faults[1] are believed to exist within the site. According to the 2008 National Seismic Hazard Maps Spatial Query, the two nearest earthquake faults zoned as active by the State of California Geological Survey are the Great Valley fault, located approximately 1 mile south, and the Greenville fault, located approximately 11.7 miles west. Other active faults in the region are summarized in the table below. Figure 4 shows the approximate locations of these faults and significant historic earthquakes recorded within the region.

[1] An active fault is defined by the State Mining and Geology Board as one that has had surface displacement within Holocene time (about the last 11,000 years) (California Geological Survey, 2007).

TABLE 2.1.2-1: Active Faults Capable of Producing Significant Ground Shaking at the Site

FAULT NAME	DISTANCE FROM SITE (miles)	DIRECTION FROM SITE	MAXIMUM MOMENT MAGNITUDE
Great Valley	1	South	6.9
Greenville Connected	12	West	7.0
Mount Diablo Thrust	24	West	6.7
Calaveras	26	West	7.0
Hayward-Rodgers Creek	29	West	7.3
Green Valley Connected	36	West	6.8

Portions of the Great Valley fault are considered seismically active blind thrust faults; however, since the Great Valley fault segments are not known to extend to the ground surface, the State of California has not defined Earthquake Fault Zones around postulated traces. The Great Valley fault is considered capable of causing significant ground shaking at the site, but the recurrence interval is believed longer than for more distant, strike-slip faults. Recent studies suggest that this boundary fault may have been the cause of the Vacaville-Winters earthquake sequence of April 1892 (Eaton, 1986; Wong and Biggar, 1989; Moores and others, 1991). Other large (>M_W7) earthquakes have historically occurred in the Bay Area to the west and along the margins of the Central Valley and many earthquakes of low magnitude occur every year.

2.2 FIELD EXPLORATION

We performed our preliminary field exploration on August 16, 2024. Our field exploration included drilling six borings at various locations across the site. The locations of our explorations are approximate and were estimated by utilizing smart phones equipped with GPS; they should be considered accurate only to the degree implied by the method used.

2.2.1 Borings

We observed drilling of six borings at the locations shown in the Site Plan, Figure 2. An ENGEO representative observed the drilling and logged the subsurface conditions at each location. We retained a truck-mounted drill rig and crew to advance the borings using 4½-inch-diameter solid-flight auger methods. The borings were advanced to a maximum depth of approximately 25 feet below existing grade.

Soil samples were collected at frequent intervals using either a 3-inch outside-diameter (O.D.) California-type split-spoon sampler fitted with 6-inch-long brass liners, or a 2-inch O.D. Standard Penetration Test (SPT) split-spoon sampler. The samplers were advanced with a 140-pound hammer with a 30-inch drop, employing a rope-and-cathead hammer system. The penetration of the sampler was field recorded as the number of blows needed to drive the sampler 18 inches in 6-inch increments. The boring logs show the number of blows required for the last 1 foot of penetration, or the number of blows per depth of penetration for samples that met driving refusal. The blow counts depicted on the boring logs have not been converted using any correction factors.

We used the field logs to develop the report logs in Appendix A. The logs depict subsurface conditions at the exploration locations for the date of exploration; however, subsurface conditions may vary with time.

2.3 LABORATORY TESTING

We performed laboratory tests on selected soil samples to evaluate their engineering properties. For this project, we performed unconfined compression testing, plasticity index, hydrometer, and sieve analysis. Select laboratory data is recorded on the exploration logs in Appendix A; other laboratory data is included in Appendix B.

2.4 SURFACE CONDITIONS

We observed the following site features during our 2024 site reconnaissance.

- The majority of the site consists of active orchards
- Vineyards were observed near Area C
- An approximate 1,500 feet long irrigational channel crosses the site near Area C, between the division of southern section of the orchard field and vineyard
- Two existing basins were observed throughout the site. One basin was located along South Chrisman Road and the other existing basin was observed north of the perimeter of Area C.
- A large stockpile of almonds was observed in Area C
- Distribution lines were observed along the perimeter of the property parallel to the Delta Mendota Canal
- Pipeline markers for existing, underground oil and gas lines (Phillips 66 Pipeline LLC – Crude Oil, Pacific Gas & Electric Company – Natural Gas, Crimson Pipeline L.P. – Crude Oil) were observed across the site in Areas C, B, D, trending northwest to southeast.
- Various irrigation features are located along perimeters of site and within orchards
- Water containers observed near the north eastern perimeter of the site in Area C
- Existing residential structures were observed near the southwest perimeter of Area A along South MacArthur Drive, and in Area B along South Chrisman Road

Please refer to the Site Plan, Figure 2, for more information on site features.

2.5 SUBSURFACE CONDITIONS

Based on our preliminary field exploration, the site consists of a surficial layer of lean to fat clay underlain by lean clay with sand, sandy lean clay to silt and sandy silt. We encountered interbedded layers of silty sand, poorly graded sand with silt, and silty sand with gravel clay at depths ranging from 9 to 20 feet below the ground surface in borings. Based on our limited laboratory testing, the surficial soil samples we analyzed consisted of moderate to highly expansive clay with plasticity index (PI) values ranging from 12 to 30.

Consult the Site Plans and exploration logs for specific subsurface conditions at each location. We include our exploration logs in Appendix A. The logs contain the soil type, color, consistency, and visual classification in general accordance with the Unified Soil Classification System. The logs graphically depict the subsurface conditions encountered at the time of exploration.

2.6 GROUNDWATER CONDITIONS

We did not observe static or perched groundwater in any of our subsurface explorations. Our review of publicly available data for groundwater wells in the immediate vicinity of the site indicates that groundwater is greater than 50 feet below the existing grade. Fluctuations in the level of groundwater may occur due to variations in rainfall, irrigation practice, and other factors not evident at the time measurements were made.

3.0 DISCUSSION AND CONCLUSIONS

Based on our review of existing information and limited field exploration, the primary geotechnical concerns that could affect development of the site are potential existing fill and expansive soil. We summarize our conclusions below.

3.1 EXISTING FILL

We did not encounter undocumented or non-engineered fills during our 2024 exploration. However, given the past explorations performed in 2021 (ENGEO, 2021) and history of the site, we expect existing fill to be present.

The undocumented fill encountered in 2021 ranged from ½ to 2 feet in thickness. We expect that a surficial layer of undocumented fill exists along the majority of the access roads throughout the site. We also expect that there is some amount of existing fill adjacent to the existing structures noted in Section 2.4. Based on our limited field exploration and records review, we expect that the undocumented is limited to these areas.

Without documentation regarding the manner of placement, type of material used, and degree of compaction, existing fill encountered at the site should be considered non-engineered. Non-engineered fill can undergo excessive settlement, especially under new fill or building loads. The approximate extent of undocumented fill at the site should be further investigated during a design-level geotechnical exploration. Refer to Section 5.1 for preliminary recommendations regarding existing fill.

3.2 EXPANSIVE SOIL

As discussed in Section 2.5, our limited soil sampling and laboratory testing indicated the near-surface site soil exhibits moderate to high expansion potential.

Expansive soil can change in volume with changes in moisture. It can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Building damage due to volume changes associated with expansive soil can be reduced by: (1) using a rigid mat foundation that is designed to resist the settlement and heave of expansive soil, (2) deepening the foundations to below the zone of moisture fluctuation, i.e. by using deep footings or drilled piers, and/or (3) using footings at normal shallow depths but bottomed on a layer of select fill having a low expansion potential.

To reduce the potential for damage to the planned buildings, we recommend that the upper 18 inches of the building pad, extending at least 5 feet laterally beyond the building pad, be underlain by fill with low expansion potential (PI<12). This may be achieved by either importing material with low expansion potential or chemically stabilizing the native material on site.

We have also provided specific grading recommendations for compaction of clay soil at the site. The purpose of these recommendations is to reduce the swell potential of the clay by compacting the soil at a high moisture content and controlling the amount of compaction. Expansive soil mitigation recommendations are presented in Section 4.1 of this report.

Preliminary grading recommendations for compaction of expansive soil at the site is included in Section 5.0. Preliminary foundation design recommendations are provided in Section 6.0.

3.3 SEISMIC HAZARDS

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary effect is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and ground lurching. The following sections present a discussion of these hazards as they apply to the site. Based on topographic and lithologic data, the risk of regional subsidence or uplift, soil liquefaction, lateral spreading, landslides, tsunamis, flooding or seiches is considered low to negligible at the site.

3.3.1 Ground Rupture

Since there are no known active faults crossing the property and the site is not located within an Earthquake Fault Special Study Zone, it is our opinion that ground rupture is unlikely at the subject property.

3.3.2 Ground Shaking

An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the site, similar to that which has occurred in the past. To mitigate the shaking effects, structures should be designed using sound engineering judgment and the latest California Building Code (CBC) requirements, as a minimum. Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead and live loads. The code-prescribed lateral forces are generally considered to be substantially smaller than the comparable forces that would be associated with a major earthquake. Therefore, structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. Conformance to the current building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake; however, it is reasonable to expect that a well-designed and well-constructed structure will not collapse or cause loss of life in a major earthquake (SEAOC, 1996).

3.3.3 Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soil most susceptible to liquefaction is clean, loose, saturated, uniformly graded, fine-grained sand. We encountered poorly graded sand with silt in boring 2-B5, however the sand encountered in other borings often contained a significant amount of fine-grained material and were medium dense. In addition, groundwater was not encountered to the terminal depth of our borings. For these reasons and based upon engineering judgment, it is our opinion on a preliminary basis that the potential for liquefaction at the site is low during seismic shaking. This should be studied further with additional explorations and analysis during a design-level study.

3.4 2022 CBC SEISMIC DESIGN PARAMETERS

The 2022 CBC utilizes seismic design criteria established in the ASCE/SEI Standard "Minimum Design Loads and Associated Criteria for Buildings and Other Structures," (ASCE 7-16). Based on the subsurface conditions encountered, we characterized the site as Site Class D.

ASCE 7-16 requires a site-specific ground-motion hazard analysis for Site Class D sites with a mapped S_1 value greater than or equal to 0.2. However, Section 11.4.8 of ASCE 7-16 and Supplement No. 3 provide an exception to this requirement. A site-specific ground-motion hazard analysis is not required where the value of the parameter S_{M1} determined by Equation 11.4-2 and shown in Table 1 is increased by 50 percent for developing the mapped Risk-Targeted Maximum Considered Earthquake (MCE_R) spectral response, calculating S_{D1}, and evaluating C_s in accordance with Chapter 12 of ASCE 7-16.

In Table 3.4-1 below, we provide the CBC seismic parameters based on the United States Geological Survey's (USGS') Seismic Design Maps for your use. When using this table, considerations should be given to exceptions in Section 11.4.8 of ASCE 7-16, as described in this report.

TABLE 3.4-1: 2022 CBC Seismic Design Parameters, Latitude: 37.64872 Longitude: -121.3987

PARAMETER	VALUE
Site Class	D
Mapped MCE_R Spectral Response Acceleration at Short Periods, S_S (g)	1.270
Mapped MCE_R Spectral Response Acceleration at 1-second Period, S_1 (g)	0.435
Site Coefficient, F_a	1.00
Site Coefficient, F_v	1.865*
MCE_R Spectral Response Acceleration at Short Periods, S_{MS} (g)	1.270
MCE_R Spectral Response Acceleration at 1-second Period, S_{M1} (g)	0.811*
Design Spectral Response Acceleration at Short Periods, S_{DS} (g)	0.847
Design Spectral Response Acceleration at 1-second Period, S_{D1} (g)	0.541*
Mapped MCE Geometric Mean (MCE_G) Peak Ground Acceleration, PGA (g)	0.535
Site Coefficient, F_{PGA}	1.1
MCE_G Peak Ground Acceleration adjusted for Site Class effects, PGA_M (g)	0.589
Long period transition-period, T_L (sec)	8

*The parameters above should only be used for calculation of T_s, determination of Seismic Design Category, and, when taking the exceptions under Items 1 and 2 of ASCE 7-16 Section 11.4.8. (Supplement Number 3 https://ascelibrary.org/doi/epdf/10.1061/9780784414248.sup3).

We recommend that we collaborate with the structural engineer of record to further evaluate the effects of taking the exception on the structural design and identify the need for performing a site-specific ground-motion hazard analysis. We can prepare a proposal for a site-specific ground-motion hazard analysis, if requested.

4.0 CONSTRUCTION MONITORING

Our experience and that of our profession clearly indicate that the risk of costly design, construction, and maintenance problems can be significantly lowered by retaining the design geotechnical engineering firm to:

1. Review the final grading and foundation plans and specifications prior to construction to evaluate whether our recommendations have been implemented, and to provide additional or modified recommendations, as needed. This also allows us to check if any changes have occurred in the nature, design or location of the proposed improvements and provides the opportunity to prepare a written response with updated recommendations.
2. Perform construction monitoring to check the validity of the assumptions we made to prepare this report. Earthwork operations should be performed under the observation of our representative to check that the site is properly prepared, the selected fill materials are satisfactory, and that placement and compaction of the fill has been performed in accordance with our recommendations and the project specifications. Sufficient notification to us prior to earthwork is important.

If we are not retained to perform the services described above, then we are not responsible for any party's interpretation of our report and subsequent addenda, letters, and verbal discussions.

5.0 PRELIMINARY EARTHWORK RECOMMENDATIONS

As used in this report, relative compaction refers to the in-place dry unit weight of soil expressed as a percentage of the maximum dry unit weight of the same soil, as determined by the ASTM D1557 laboratory compaction test procedure, latest edition. Compacted soil is not acceptable if it is unstable; it should exhibit only minimal flexing or pumping, as observed by an ENGEO representative.

The term "moisture condition" refers to adjusting the moisture content of the soil by either drying if too wet or adding water if too dry. We define "structural areas" as any area sensitive to settlement of compacted soil. These areas include, but are not limited to building pads, sidewalks, pavement areas, and retaining walls.

The following recommendations should be considered preliminary and should be verified in a design-level report.

5.1 SITE PREPARATION

Site development will commence with the general clearing of the site and the excavation and removal of buried structures. Areas to be developed should be cleared of all surface and subsurface deleterious materials, including existing structures and associated foundation systems, buried utilities and irrigation lines, septic systems, debris, and designated fencing, trees, shrubs, and associated roots. All debris should be removed from any location to be graded and from areas to receive fill or structures. The depth of removal of such materials should be determined by our representative in the field at the time of grading.

All undocumented fills encountered during grading, including fill placed during our exploratory test pits, should be removed to competent native soil, as determined in the field by ENGEO. We expect that in the locations where there are existing structures, we will need to overexcavate 2 feet of

material and rip and additional 12 inches to confirm that all pipes, foundations, and debris are removed. The subexcavation area should extend approximately 10 feet beyond the footprints of the existing structures. Additional subexcavation may be required based on our field observations. Provided the excavated soil is free from debris, it can be placed back as engineered fill.

Existing vegetation should be removed from areas to receive fill or improvements. Tree roots should be removed down to a depth of approximately 2 feet below existing grade. Once the orchards are removed, we will need to overexcavate approximately 12 inches of material and rip and additional 12 inches to mitigate the areas disturbed by removing the orchards.

All excavations from demolition and clearing below design grades should be cleaned to a firm undisturbed native soil surface determined by our representative. This surface should then be scarified, moisture conditioned, and backfilled with compacted engineered fill, in accordance with Section 5.4.

5.2 OVER-OPTIMUM SOIL MOISTURE CONDITIONS

The contractor should anticipate encountering excessively over-optimum (wet) soil moisture conditions during winter or spring grading, or during or following periods of rain. Wet soil can make proper compaction difficult or impossible. Wet soil conditions can be mitigated by:

1. Frequent spreading and mixing during warm dry weather,
2. Mixing with drier materials,
3. Mixing with a lime and/or cement product, or
4. Stabilizing with aggregate or geotextile stabilization fabric, or both.

Options 3 and 4 should be evaluated by ENGEO prior to implementation.

5.3 ACCEPTABLE FILL

On-site soil may be suitable as fill material provided it is processed to remove concentrations of organic material, debris, and particles greater than 8 inches in maximum dimension.

Imported fill materials should meet the above requirements and have a plasticity index equal to or less than the on-site material. If nonexpansive material is imported for the building pads, it should have a plasticity index of less than 12. Allow ENGEO to sample and test proposed imported fill materials at least 5 days prior to delivery to the site.

5.4 FILL COMPACTION

5.4.1 Grading in Structural Areas

Perform subgrade compaction prior to fill placement, following cutting operations, and in areas left at grade as follows.

1. Scarify to a depth of at least 12 inches.
2. Moisture condition soil to at least 3 percentage points over the optimum moisture content for expansive soil (PI ≥ 12) and to at least 1 percentage point over the optimum moisture content for soil with low expansion potential (PI < 12).

3. Compact the soil to between 90 percent relative compaction. Prior to aggregate base placement, compact the upper 6 inches of finish pavement subgrade to at least 92 percent relative compaction for expansive soil or at least 95 percent relative compaction for soil with low expansion potential.

After the subgrade has been compacted, place and compact acceptable fill as follows.

1. Spread fill in loose lifts that do not exceed 12 inches.
2. Moisture condition soil to at least 3 percentage points over the optimum moisture content for expansive soil (PI ≥ 12) and to at least 1 percentage point over the optimum moisture content for soil with low expansion potential (PI < 12).
3. Compact fill to between 90 percent relative compaction. Prior to aggregate base placement, compact the upper 6 inches of finish pavement subgrade to at least 92 percent relative compaction for expansive soil or at least 95 percent relative compaction for soil with low expansion potential.

Compact the pavement Caltrans Class 2 aggregate base section to at least 95 percent relative compaction (ASTM D1557). Moisture condition aggregate base to or slightly above the optimum moisture content prior to compaction.

Where lime or cement treatment of the soil is used to mitigate expansive soil conditions, we recommend the type of chemical admixture (lime, quicklime, or cement) and percentage of chemical additive be based on testing of actual foundation soil after mass grading is substantially completed. Based on our experience, on a preliminary basis we estimate that chemical treatment with approximately 4 percent lime (by dry unit weight) may be appropriate to reduce the plasticity of the on-site soil. The soil should be moisture conditioned to at least 3 percentage points above the optimum moisture content before mixing. The mixing should be performed in accordance with the current version of Caltrans Standard Specifications with the following exceptions.

1. Following mixing, the treated soil should be allowed to fully hydrate prior to compaction.
2. Following hydration, the treated soil should compacted according to ASTM D1557 to at least 95 percent relative compaction at, or slightly above, the optimum moisture content.

We recommend that the chemical treatment be performed by a specialty contractor experienced in this type of work.

5.4.2 Underground Utility Backfill

5.4.2.1 General

The contractor is responsible for conducting trenching and shoring in accordance with Cal/OSHA requirements. Project consultants involved in utility design should specify pipe bedding materials.

5.4.2.2 Structural Areas

Place and compact trench backfill as follows.

1. Trench backfill should have a maximum particle size of 6 inches.

2. Moisture condition trench backfill to a minimum of 3 percent above the optimum moisture content. Moisture condition backfill outside the trench.
3. Place fill in loose lifts not exceeding 12 inches.
4. Compact fill to 90 percent minimum relative compaction.

Where utility trenches cross underneath buildings, we recommend that a plug be placed within the trench backfill to help prevent the normally granular bedding materials from acting as a conduit for water to enter beneath the building. The plug should be constructed using a sand cement slurry (minimum 28-day compressive strength of 500 psi) or relatively impermeable native soil for pipe bedding and backfill. We recommend that the plug extend for a distance of at least 3 feet in each direction from the point where the utility enters the building perimeter.

Jetting of backfill is not an acceptable means of compaction.

5.5 SITE DRAINAGE

The project civil engineer is responsible for designing surface drainage improvements. With regard to geotechnical engineering issues, we recommend that finish grades be sloped away from buildings and pavements to the maximum extent practical to reduce the potentially damaging effects of expansive soil. As a minimum, we recommend the following.

1. Discharge roof downspouts into closed conduits and direct away from foundations and pavements to appropriate drainage devices.
2. Do not allow water to pond near foundations, pavements, or exterior flatwork.

6.0 PRELIMINARY FOUNDATION RECOMMENDATIONS

It is anticipated that the proposed development will consist of concrete tilt-up warehouse structures and university buildings consisting of either glass over steel frame construction or concrete tilt-up construction. Based on our limited field exploration, laboratory testing, and engineering analysis, we recommend that the proposed buildings be supported on continuous or isolated spread footing foundation systems with slab-on-grade floors bearing in compacted subgrade with low expansion potential.

We developed preliminary structural improvement recommendations using data obtained from our limited field exploration and laboratory test results. The following recommendations should be considered preliminary and should be verified in a design-level report.

6.1 BUILDING PAD SUBGRADE PREPARATION

We recommend the upper 18 inches of the building pad, and to at least 5 feet laterally beyond, should consist of imported low-expansive fill with a Plasticity Index less than 12. Alternatively, the upper 18 inches of the finished building pad, and to at least 5 feet laterally beyond, can be chemically treated to reduce the plasticity of site soil.

If chemical treatment is selected as an alternative to importing low-expansive fill for building pad construction, the type of chemical admixture (lime, quicklime, or cement) and percentage of chemical additive should be based on testing of actual foundation soil after mass grading is substantially completed. Based on our experience, on a preliminary basis, we estimate that

chemical treatment with approximately 4 percent lime (by dry unit weight) may be appropriate to reduce the plasticity of on-site soil. Chemical treatment should be performed by a specialty contractor experienced in this type of work. In addition, excavations performed in chemically treated soil, such as for utility trenches, should be stockpiled and protected for reuse in the upper backfill area to match the treated section.

6.2 FOOTING DIMENSIONS AND ALLOWABLE BEARING CAPACITY

Preliminary minimum footing dimensions are presented in Table 6.2-1 below.

TABLE 6.2-1: Preliminary Minimum Footing Dimensions

FOOTING TYPE	MINIMUM DEPTH (inches)	MINIMUM WIDTH (inches)
Continuous	**24**	**12**
Isolated	**24**	**24**

Minimum footing depths shown above are taken from the lowest adjacent pad grade.

On a preliminary basis, conventional footing foundations can be designed for a maximum allowable bearing pressure of 2,000 pounds per square foot (psf) for dead-plus-live loads. Increase this bearing capacity by one-third for the short-term effects of wind or seismic loading.

The maximum allowable bearing pressure is a net value; the weight of the footing may be neglected for design purposes. All footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1:1 (horizontal:vertical) plane projected upward from the bottom edge of the trench to the footing.

A subgrade modulus can be provided in a design-level geotechnical report.

6.3 INTERIOR SLAB-ON-GRADE

We anticipate that the operation of the warehouse facilities will include forklift and rack loads on the interior concrete slab. While no loading information was provide for our review, we developed our preliminary recommendations assuming a lightly loaded industrial concrete floor. This would include only small racks and forklifts.

As previously discussed, due to the expansive nature of the onsite material, the interior slabs should be underlain by 18 inches of low expansive imported material or chemically treated native material. Interior concrete floors that will support forklift or rack loads should be underlain by 6 inches of granular base having an R-value of at least 50 and a Plasticity Index less than 12. The base should be compacted to at least 95 percent relative compaction (ASTM D1557) to provide firm, uniform support for the slab-on-grade. These 6 inches of base may be considered part of the low expansive fill recommended in Section 5.4 of this report.

Prior to construction of the slab, the surface should be proof-rolled with heavy equipment to check that the base material is uniformly compacted and does not deflect under equipment loads. Prior to placing the base material, the building subgrade should be prepared in accordance with Section 5.0.

The slab thickness and reinforcement should be designed by the structural engineer based on the intended use and loading of the slab.

Post-construction cracking of concrete slabs-on-grade is inherent in any project, especially where soil expansion potential is high. Adequate slab reinforcement should be provided to satisfy the anticipated use and loading requirements.

When buildings are constructed with concrete slab-on-grade, water vapor from beneath the slab will migrate through the slab and into the building. This water vapor can be reduced but not stopped. Vapor transmission can negatively affect floor coverings and lead to increased moisture within a building. When water vapor migrating through the slab would be undesirable, we recommend the following to reduce, but not stop, water vapor transmission upward through the slab-on-grade.

1. Install a vapor retarder membrane directly beneath the slab. Seal the vapor retarder at all seams and pipe penetrations. Vapor retarders shall conform to Class A vapor retarder in accordance with ASTM E 1745, latest edition, "Standard Specification for Plastic Water Vapor Retarders used in Contact with Soil or Granular Fill under Concrete Slabs."
2. Use a concrete water-cement ratio for slabs-on-grade of no more than 0.50.
3. Provide inspection and testing during concrete placement to check that the proper concrete and water cement ratio are used.
4. Moist cure slabs for a minimum of 3 days or use other equivalent curing specified by the structural engineer.

7.0 PRELIMINDARY PAVEMENT DESIGN

7.1 FLEXIBLE PAVEMENTS

Based on our limited field exploration and laboratory testing, we determined an R-Value of 5 to be appropriate for untreated native soil.

Using estimated traffic indexes for various pavement loading requirements, we developed the following recommended pavement sections using Topic 633 of the Caltrans Highway Design Manual (including the asphalt factor of safety). The recommendations in Table 7.1-1 should be considered preliminary and should be verified in a design-level report.

TABLE 7.1-1: Preliminary Asphalt Concrete Pavement Section Recommendations

TRAFFIC INDEX	ASPHALT CONCRETE (inches)	CLASS 2 AB (inches) NO LIME TREATMENT OF SUBGRADE
5	3	10
6	3½	13
7	4	16
8	5	18
9	5½	21
10	6½	23
11	7	26
12	8	28

The civil engineer should determine the appropriate traffic indexes based on the estimated traffic loads and frequencies.

7.2 RIGID PAVEMENTS

We developed the preliminary rigid pavement sections in accordance with the methods contained in the Guide for the Design and Construction of Concrete Parking Lots, based on ACI 330R-08. Table 7.2-1 presents recommended PCCP and aggregate base (AB) thicknesses for various allowable Average Daily Truck Traffic (ADTT) indices that correspond to R-values of 5 for untreated subgrade and the use of concrete with a Modulus of Rupture equal to 500 psi, which corresponds to a compressive strength of approximately 4,000 psi.

TABLE 7.2-1: Preliminary Concrete Pavement Section Recommendations, Class 2 AB

ADTT	AXLE CATEGORY	SECTION	
		PCCP (INCHES) NO LIME TREATMENT OF SUBGRADE	CLASS 2 AB (INCHES)
100	C	7.0	6
300	C	7.5	6
700	D	8.5	6

7.3 SUBGRADE AND AGGREGATE BASE COMPACTION

Compact finish subgrade and aggregate base in accordance with Section 5.4. Aggregate Base should meet the requirements for ¾-inch maximum Class 2 AB in accordance with Section 26-1.02B of the latest Caltrans Standard Specifications.

8.0 DESIGN-LEVEL GEOTECHNICAL REPORT

This report presents preliminary geotechnical findings, conclusions and recommendations intended for preliminary planning purposes only. A design-level geotechnical exploration and assessment should be performed when development plans are available. The design-level geotechnical report should further discuss topics presented in this report and address the following items.

- Field exploration and laboratory testing to support design-level recommendations based on the actual development layout.
- Design-level analyses related to geologic and geotechnical hazards.
- Design-level earthwork, improvements, and construction recommendations.

9.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

This report presents geotechnical recommendations for design of the improvements discussed in Section 1.3 for the Pacific Gateway project. If changes occur in the nature or design of the project, we should be allowed to review this report and provide additional recommendations, if any. It is the responsibility of the owner to transmit the information and recommendations of this report to the appropriate organizations or people involved in design of the project, including but not limited to developers, owners, buyers, architects, engineers, and designers. The conclusions and

recommendations contained in this report are solely professional opinions and are valid for a period of no more than 2 years from the date of report issuance.

We strive to perform our professional services in accordance with generally accepted principles and practices currently employed in the area; there is no warranty, express or implied. There are risks of earth movement and property damages inherent in building on or with earth materials. We are unable to eliminate all risks; therefore, we are unable to guarantee or warrant the results of our services.

This report is based upon field and other conditions discovered at the time of report preparation. We developed this report with limited subsurface exploration data. We assumed that our subsurface exploration data are representative of the actual subsurface conditions across the site. Considering possible underground variability of soil and groundwater, additional costs may be required to complete the project. We recommend that the owner establish a contingency fund to cover such costs. If unexpected conditions are encountered, ENGEO must be notified immediately to review these conditions and provide additional and/or modified recommendations, as necessary.

Our services did not include excavation sloping or shoring, soil volume change factors, flood potential, or a geohazard exploration. In addition, our geotechnical exploration did not include work to determine the existence of possible hazardous materials. If any hazardous materials are encountered during construction, the proper regulatory officials must be notified immediately.

This document must not be subject to unauthorized reuse, that is, reusing without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time.

Actual field or other conditions will necessitate clarifications, adjustments, modifications or other changes to ENGEO's documents. Therefore, ENGEO must be engaged to prepare the necessary clarifications, adjustments, modifications or other changes before construction activities commence or further activity proceeds. If ENGEO's scope of services does not include on-site construction observation, or if other persons or entities are retained to provide such services, ENGEO cannot be held responsible for any or all claims arising from or resulting from the performance of such services by other persons or entities, and from any or all claims arising from or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

We determined the lines designating the interface between layers on the exploration logs using visual observations. The transition between the materials may be abrupt or gradual. The exploration logs contain information concerning samples recovered, indications of the presence of various materials such as clay, sand, silt, rock, existing fill, etc., and observations of groundwater encountered. The field logs also contain our interpretation of the subsurface conditions between sample locations. Therefore, the logs contain both factual and interpretative information. Our recommendations are based on the contents of the final logs, which represent our interpretation of the field logs.

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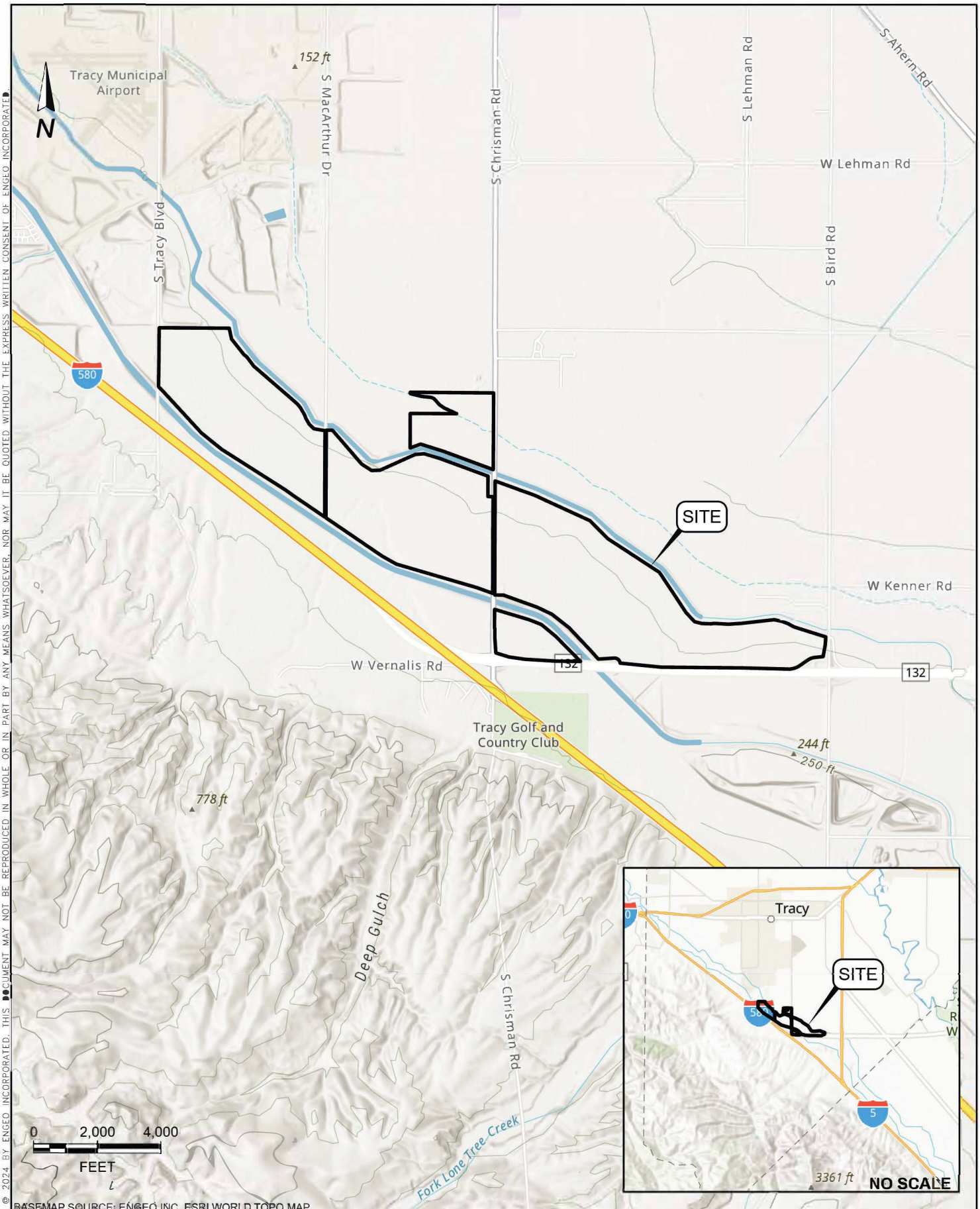
FIGURES

FIGURE 1: Vicinity Map
FIGURE 2: Site Plan
FIGURE 3: Regional Geologic Map
FIGURE 4: Regional Faulting and Seismicity Map



BASEMAP SOURCE: ENGEO INC, ESRI WORLD TOPO MAP

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VICINITY MAP

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: MMH	CHECKED BY: SDH

FIGURE NO. 1

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000001\GEOTECH\GEX 2024\GOLDEN STATE LOGISITCS HUB.APRX
LAYOUT: 01. VICINITY 8.5 X 11 PORTRAIT USER: MHAWKINS

*Figure not OCR compatible

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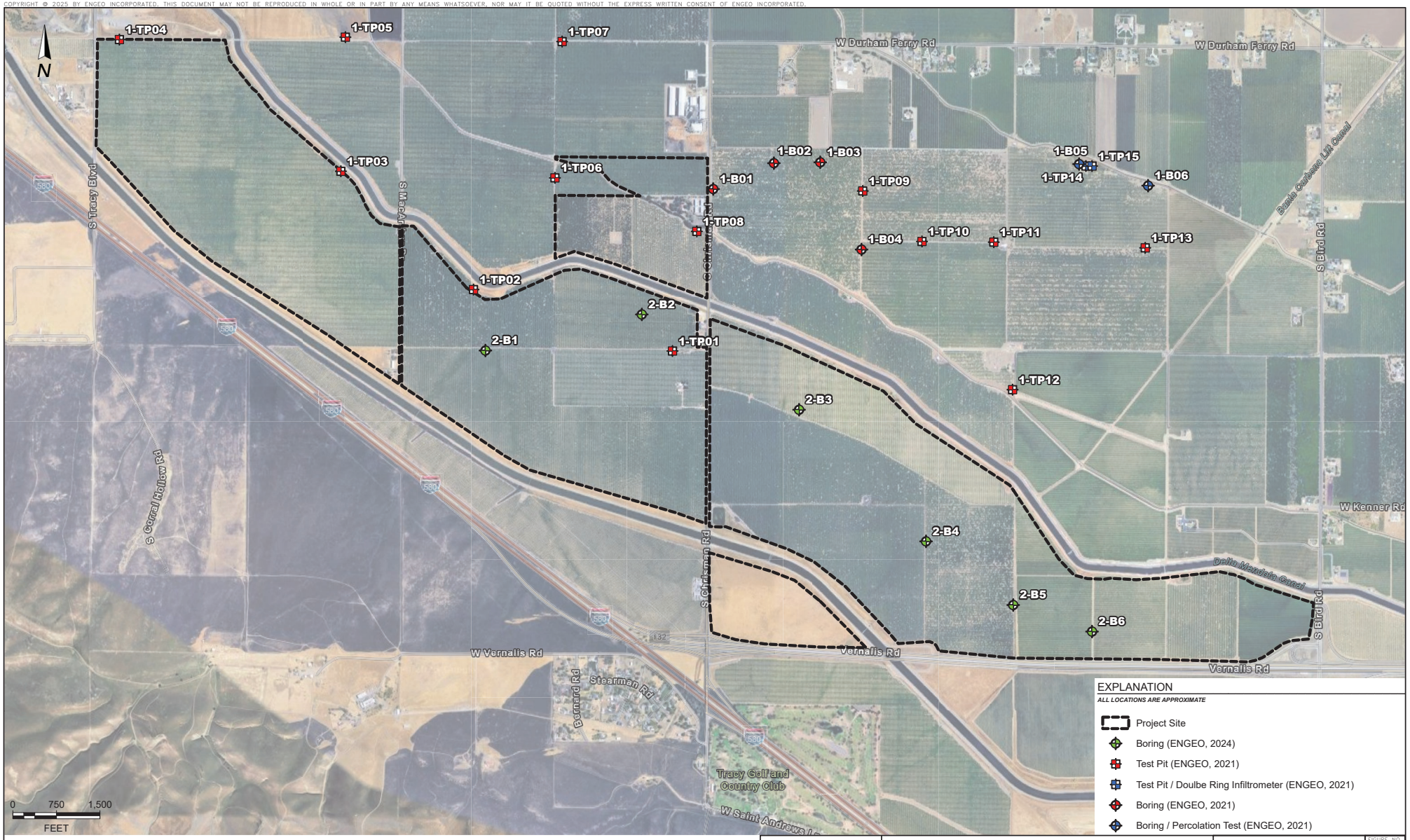

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- Project Site
- Boring (ENGEO, 2024)
- Test Pit (ENGEO, 2021)
- Test Pit / Doulbe Ring Infiltrometer (ENGEO, 2021)
- Boring (ENGEO, 2021)
- Boring / Percolation Test (ENGEO, 2021)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2022

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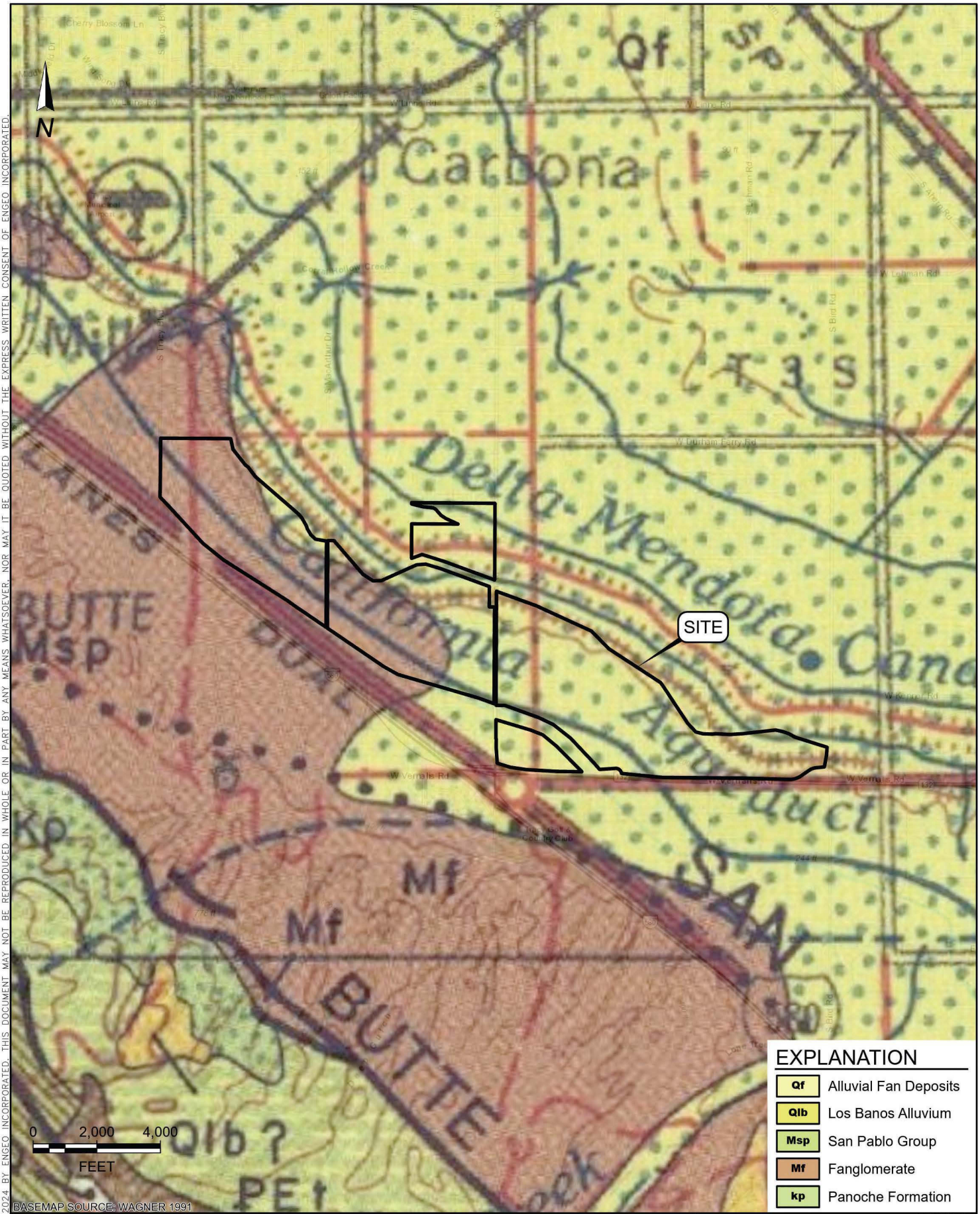
SITE PLAN
PACIFIC GATEWAY
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY:	MMH
CHECKED BY:	SDH

FIGURE NO. 2

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000001\GEOTECH\GEX 2024\GOLDEN STATE LOGISITCS HUB.APRX
LAYOUT: 02. SITE PLAN 11X17 LANDSCAPE USER: MHAWKINS



BASEMAP SOURCE: WAGNER 1991

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REGIONAL GEOLOGIC MAP

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: MMH	CHECKED BY: SDH

FIGURE NO. 3

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000001\GEOTECH\GEX 2024\GOLDEN STATE LOGISITCS HUB.APRX
LAYOUT: 03. GEOLOGIC 8.5 X 11 PORTRAIT USER: MHAWKINS

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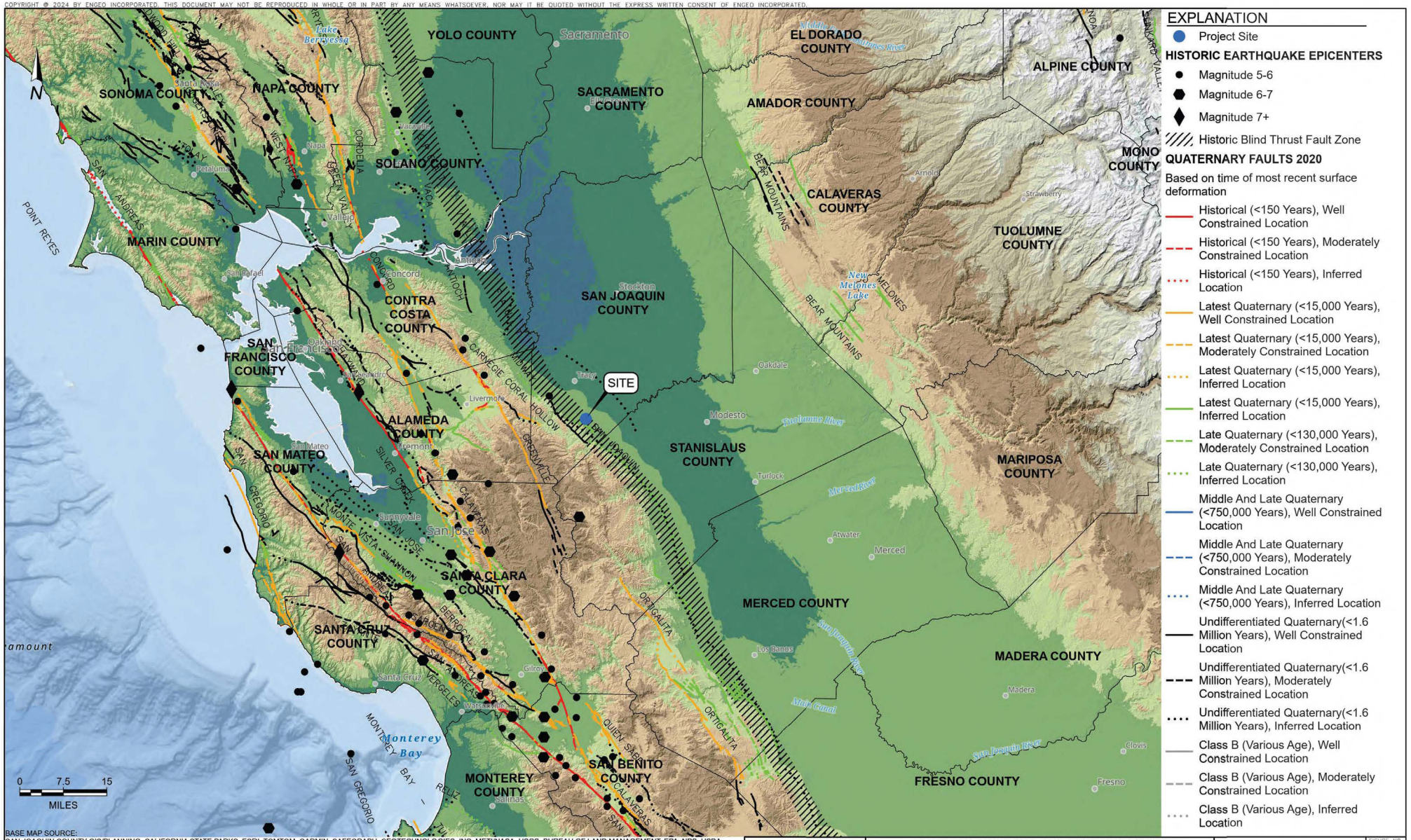

EXPLANATION

- Project Site

HISTORIC EARTHQUAKE EPICENTERS

- Magnitude 5-6
- Magnitude 6-7
- Magnitude 7+
- Historic Blind Thrust Fault Zone

QUATERNARY FAULTS 2020

Based on time of most recent surface deformation

- Historical (<150 Years), Well Constrained Location
- Historical (<150 Years), Moderately Constrained Location
- Historical (<150 Years), Inferred Location
- Latest Quaternary (<15,000 Years), Well Constrained Location
- Latest Quaternary (<15,000 Years), Moderately Constrained Location
- Latest Quaternary (<15,000 Years), Inferred Location
- Latest Quaternary (<15,000 Years), Inferred Location
- Late Quaternary (<130,000 Years), Moderately Constrained Location
- Late Quaternary (<130,000 Years), Inferred Location
- Middle And Late Quaternary (<750,000 Years), Well Constrained Location
- Middle And Late Quaternary (<750,000 Years), Moderately Constrained Location
- Middle And Late Quaternary (<750,000 Years), Inferred Location
- Undifferentiated Quaternary(<1.6 Million Years), Well Constrained Location
- Undifferentiated Quaternary(<1.6 Million Years), Moderately Constrained Location
- Undifferentiated Quaternary(<1.6 Million Years), Inferred Location
- Class B (Various Age), Well Constrained Location
- Class B (Various Age), Moderately Constrained Location
- Class B (Various Age), Inferred Location

BASE MAP SOURCE:
SAN JOAQUIN COUNTY GIS/PLANNING, CALIFORNIA STATE PARKS, ESRI, TOMTOM, GARMIN, SAFEGRAPH, GEOTECHNOLOGIES, INC, METI/NASA, USGS, BUREAU OF LAND MANAGEMENT, EPA, NPS, USDA, USFWS, CSUMB, ESRI, GARMIN, NATURALVUE, ESRI, GEBCO, GARMIN, NATURALVUE, SAN JOAQUIN COUNTY GIS/PLANNING, CALIFORNIA STATE PARKS, ESRI, TOMTOM, GARMIN, SAFEGRAPH, FAO, METI/NASA, USGS, BUREAU OF LAND MANAGEMENT, EPA, NPS, USFWS
COLOR HILLSHADE IMAGE BASED ON THE NATIONAL ELEVATION DATA SET (NED) AT 30 METER RESOLUTION
U.S.G.S. QUATERNARY FAULT DATABASE, 2020
C.G.S. HISTORIC EARTHQUAKE DATABASE

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REGIONAL FAULTING AND SEISMICITY MAP

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY:	MMH
CHECKED BY:	SDH

FIGURE NO. 4

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000001\GEOTECH\GEX 2024\GOLDEN STATE LOGISITCS HUB.APRX
LAYOUT: 04. FAULT&SEISMICITY 11 X 17 LANDSCAPE USER: MHAWKINS

ORIGINAL FIGURE PRINTED IN COLOR



APPENDIX A

BORING LOG KEY
EXPLORATION LOGS

KEY TO BORING LOGS

MAJOR TYPES			DESCRIPTION
COARSE-GRAINED SOILS MORE THAN HALF OF MAT'L LARGER THAN #200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	CLEAN GRAVELS WITH LESS THAN 5% FINES	GW - Well graded gravels or gravel-sand mixtures GP - Poorly graded gravels or gravel-sand mixtures
		GRAVELS WITH OVER 12 % FINES	GM - Silty gravels, gravel-sand and silt mixtures GC - Clayey gravels, gravel-sand and clay mixtures
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 5% FINES	SW - Well graded sands, or gravelly sand mixtures SP - Poorly graded sands or gravelly sand mixtures
		SANDS WITH OVER 12 % FINES	SM - Silty sand, sand-silt mixtures SC - Clayey sand, sand-clay mixtures
FINE-GRAINED SOILS MORE THAN HALF OF MAT'L SMALLER THAN #200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50 % OR LESS		ML - Inorganic silt with low to medium plasticity CL - Inorganic clay with low to medium plasticity OL - Low plasticity organic silts and clays
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50 %		MH - Elastic silt with high plasticity CH - Fat clay with high plasticity OH - Highly plastic organic silts and clays
	HIGHLY ORGANIC SOILS		PT - Peat and other highly organic soils

For fine-grained soils with 15 to 29% retained on the #200 sieve, the words "with sand" or "with gravel" (whichever is predominant) are added to the group name.

For fine-grained soil with >30% retained on the #200 sieve, the words "sandy" or "gravelly" (whichever is predominant) are added to the group name.

GRAIN SIZES

U.S. STANDARD SERIES SIEVE SIZE					CLEAR SQUARE SIEVE OPENINGS			
200	40	10	4	3/4 "	3"	12"		
SILTS AND CLAYS	SAND			GRAVEL			COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE			

RELATIVE DENSITY

SANDS AND GRAVELS	BLOWS/FOOT (S.P.T.)
VERY LOOSE	0-4
LOOSE	4-10
MEDIUM DENSE	10-30
DENSE	30-50
VERY DENSE	OVER 50

CONSISTENCY

SILTS AND CLAYS	STRENGTH*
VERY SOFT	0-1/4
SOFT	1/4-1/2
MEDIUM STIFF	1/2-1
STIFF	1-2
VERY STIFF	2-4
HARD	OVER 4

SAMPLER SYMBOLS

- Modified California (3" O.D.) sampler
- California (2.5" O.D.) sampler
- S.P.T. - Split spoon sampler
- Shelby Tube
- Dames and Moore Piston
- Continuous Core
- Bag Samples
- Grab Samples
- NR No Recovery

MOISTURE CONDITION

DRY	Dusty, dry to touch
MOIST	Damp but no visible water
WET	Visible freewater

LINE TYPES

- ———— Solid - Layer Break
- – – – – – Dashed - Gradational or approximate layer break

GROUNDWATER SYMBOLS

- Groundwater level during drilling
- Stabilized groundwater level

(S.P.T.) Number of blows of 140 lb. hammer falling 30" to drive a 2-inch O.D. (1-3/8 inch I.D.) sampler

* Unconfined compressive strength in tons/sq. ft., asterisk on log means determined by pocket penetrometer

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LOG OF BORING 2-B1

LATITUDE: 37.652472 LONGITUDE: -121.410996

Geotechnical Exploration
Pacific Gateway
Tracy, CA
19633.000.002

DATE DRILLED: 8/16/2024
HOLE DEPTH: Approx. 16½ ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 215 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			FAT CLAY WITH SAND (CH), dark brown, very stiff to hard, moist, high plasticity, fine- to coarse-grained sand, carbonates present			35	53	23	30	84				>4.5*	PP
			LEAN CLAY (CL), yellowish brown, stiff to hard, moist, medium plasticity, <15% fine-grained sand, contains silt fines			9									
			SANDY LEAN CLAY (CL), yellowish brown, stiff, moist, low plasticity, 30-40% fine- to medium-grained sand												
5	210		LEAN CLAY (CL), dark brown, soft, wet, medium to high plasticity, <15% fine-grained sand			18									
			SANDY LEAN CLAY (CL), yellowish brown, hard, moist, medium plasticity, 30-40% fine- to coarse-grained sand												
10	205		Grades to contain 5-10% fine gravel			50/6"								>4.5*	PP
15	200		Grades to contain <5% fine gravel			50								>4.5*	PP
														>4.5*	PP
			Bottom of boring at approximately 16½ feet below ground surface. No groundwater encountered at time of drilling.												

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LOG OF BORING 2-B2

LATITUDE: 37.654251 LONGITUDE: -121.401709

Geotechnical Exploration
Pacific Gateway
Tracy, CA
19633.000.002

DATE DRILLED: 8/16/2024
HOLE DEPTH: Approx. 25 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 190 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY WITH SAND (CL), dark brown, hard, moist, medium plasticity, 15-25% fine- to coarse-grained sand, rootlets present												
						31								>4.5*	PP
														>4.5*	PP
			Grades to brown, contains carbonates, no rootlets present			10									
5	185		Grades to light brown mottled with dark brown			29								>4.5*	PP
														>4.5*	PP
			SILT (ML), very light yellowish brown, hard, moist, low to medium plasticity, <15% fine- to medium-grained, contains clay fines												
10	180					50/6"								>4.5*	PP
			LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, high plasticity, 15-25% fine- to medium-grained sand, carbonates present												
			Grades to brown, very stiff												
15	175					65								3.0*	PP
			LEAN CLAY WITH SAND (CL), yellowish brown, very stiff to hard, moist, medium plasticity, 15-25% fine-grained sand											>4.5*	PP
			Grades to hard, maganese oxide present												
			SANDY LEAN CLAY (CL), yellowish brown, hard, moist, medium plasticity, 30-40% fine-grained sand											4.5*	PP
20	170														

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_PH004_2-B01 THROUGH 2-B06.GPJ ENGEO INC.GDT 9/12/24

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LOG OF BORING 2-B2

LATITUDE: 37.654251 LONGITUDE: -121.401709

Geotechnical Exploration
Pacific Gateway
Tracy, CA
19633.000.002

DATE DRILLED: 8/16/2024
HOLE DEPTH: Approx. 25 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 190 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			SILTY SAND (SM), yellowish brown, medium dense, moist, 15-20% fines, fine- to medium-grained sand			38									
			LEAN CLAY WITH SAND (CL), yellowish brown, very stiff, moist, medium plasticity, 15-25% fine- to medium-grained sand			47									
25	165		Bottom of boring at approximately 25 feet below ground surface. No groundwater encountered at time of drilling.												

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LOG OF BORING 2-B3

LATITUDE: 37.649813 LONGITUDE: -121.392297

Geotechnical Exploration
Pacific Gateway
Tracy, CA
19633.000.002

DATE DRILLED: 8/16/2024
HOLE DEPTH: Approx. 16½ ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 204 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark brown, stiff to hard, moist, medium to high plasticity, <15% fine- to medium-grained sand			21								>4.5*	PP
			LEAN CLAY WITH SAND (CL), yellowish brown, very stiff to hard, moist, medium plasticity, 15-25% fine- to medium-grained sand, 5-10% fine gravel			21									
	200														
5			SANDY SILT (ML), light yellowish brown, very stiff, moist, medium plasticity, slow dilatancy, 30-40% fine-grained sand			40									
			LEAN CLAY WITH SAND (CL), yellowish brown, very stiff, moist, medium plasticity, 15-25% fine- to coarse-grained sand												
	195														
10						20									
			Grades to Brown												
	190														
15															
			LEAN CLAY WITH SAND (CL), olive brown, very stiff, moist, medium plasticity, 15-25% fine- grained sand, contains silt fines			25	31	19	12					3.0*	PP
			Bottom of boring at approximately 16½ feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_PH004_2-B01 THROUGH 2-B06.GPJ ENGEO INC.GDT 9/12/24

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LOG OF BORING 2-B4

LATITUDE: 37.643639 LONGITUDE: -121.384667

Geotechnical Exploration
Pacific Gateway
Tracy, CA
19633.000.002

DATE DRILLED: 8/16/2024
HOLE DEPTH: Approx. 23 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 215 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			SANDY LEAN CLAY (CL), dark brown, stiff to hard, moist, medium plasticity, 30-40% fine- to medium-grained sand, rootlets present, carbonates present			20								>4.5*	PP
			Grades to yellowish brown			8									
5	210		LEAN CLAY WITH SAND (CL), brown, soft, moist to wet, medium plasticity, 15-25% fine- to medium-grained sand												
			SANDY LEAN CLAY WITH GRAVEL (CL), yellowish brown, hard, moist, medium plasticity, approximately 15% gravel, 30-40% sand			14								>4.5*	PP
10	205		SILTY SAND (SM), yellowish brown, medium dense, moist, 15-25% fines, <5% fine gravel, fine- to coarse-grained sand			22									
			SANDY LEAN CLAY (CL), yellowish brown, moist, low to medium plasticity, 30-40% fine- to coarse-grained sand, <5% gravel, contains silt fines												
15	200		SANDY SILT (ML), yellowish brown, medium stiff to hard, moist, medium plasticity, fine-grained sand			16				61				>4.5*	PP
			LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, medium plasticity, 15-25% fine- to medium-grained sand												
20	195		SANDY LEAN CLAY (CL), yellowish brown, very stiff, moist, low to medium plasticity, 30-40% fine- to coarse-grained sand			38									
						18									
			Bottom of boring at approximately 23 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_PH004_2-B01 THROUGH 2-B06.GPJ ENGEO INC.GDT 9/12/24

ENGEO
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LOG OF BORING 2-B5

LATITUDE: 37.640666 LONGITUDE: -121.379444

Geotechnical Exploration
Pacific Gateway
Tracy, CA
19633.000.002

DATE DRILLED: 8/16/2024
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 203 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	200		LEAN CLAY (CL), dark brown, stiff to hard, moist, medium plasticity, <15% fine-grained sand, <5% fine to coarse gravel			22								>4.5*	PP
														4.5*	PP
			SANDY LEAN CLAY (CL), yellowish brown, medium stiff, moist, medium plasticity, 30-40% fine- to coarse-grained sand, 5-10% fine gravel			6									
5			Grades to soft Grades to hard			15						110		1.58	UC
	195														
10			POORLY GRADED SAND WITH SILT (SP-SM), yellowish brown, medium dense, moist, contains fine gravel, fine- to coarse-grained sand			26				9					
	190		SILTY SAND WITH GRAVEL (SM), yellowish brown, medium dense, moist, fine- to coarse-grained sand												
15						12				21					
			LEAN CLAY WITH SAND (CL), brown, stiff, moist, medium plasticity, 15-25% fine- to medium-grained sand												
	185														
			SANDY LEAN CLAY (CL), yellowish brown, stiff, moist, medium plasticity, 30-40% fine- to medium-grained sand			24									
20			Bottom of boring at approximately 20 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_PH004_2-B01 THROUGH 2-B06.GPJ ENGEO INC.GDT 9/12/24

ENGEO
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LOG OF BORING 2-B6

LATITUDE: 37.639445 LONGITUDE: -121.37474

Geotechnical Exploration
Pacific Gateway
Tracy, CA
19633.000.002

DATE DRILLED: 8/16/2024
HOLE DEPTH: Approx. 15 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 197 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY WITH SAND (CL), brown, hard, moist, medium plasticity, 15-25% fine- to medium-grained sand, <5% fine gravel, rootlets present											>4.5*	PP
	195		SILT WITH SAND (ML), yellowish brown, hard, moist, medium plasticity, slow dilatancy, 15-25% fine- to medium-grained sand, <5% fine gravel			24								>4.5*	PP
						13									
5			SANDY LEAN CLAY (CL), dark brown, soft, wet, low plasticity, 30-40% fine- to medium-grained sand											2*	PP
			Grades to moist, stiff to hard			40								>4.5*	PP
	190		SILTY SAND WITH GRAVEL (SM), yellowish brown, medium dense, moist, 15-25% fines, fine- to medium-grained sand, fine to coarse gravel												
10			Grades to very dense			50/6"				23					
	185		LEAN CLAY WITH GRAVEL (CL), yellowish brown, moist, low plasticity, 15-25% fine gravel												
			SILTY SAND WITH GRAVEL (SM), yellowish brown, medium dense, moist, 30-40% fines, fine- to medium-grained sand, fine to coarse gravel			50/6"									
15			Bottom of boring at approximately 15 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_PH004_2-B01 THROUGH 2-B06.GPJ ENGEO INC.GDT 9/12/24

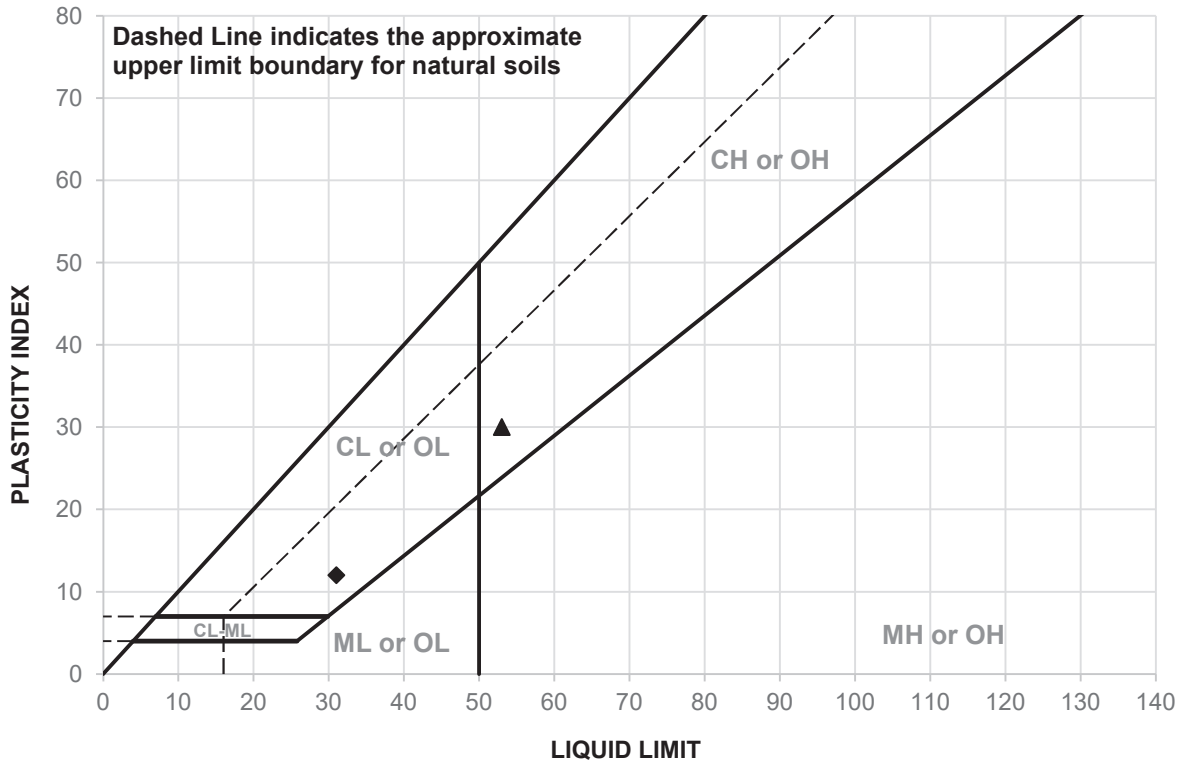


APPENDIX B

LABORATORY TEST DATA

Liquid and Plastic Limits Test Report
Unconfined Compression Test
Particle Size Distribution Report

LIQUID AND PLASTIC LIMITS TEST REPORT
ASTM D4318



	SAMPLE ID	DEPTH (ft)	MATERIAL DESCRIPTION	LL	PL	PI
▲	2-B1@1.5	1.5	See exploration logs	53	23	30
◆	2-B3@16	16	See exploration logs	31	19	12

	SAMPLE ID	TEST METHOD	REMARKS
▲	2-B1@1.5	PI: ASTM D4318, Wet Method	
◆	2-B3@16	PI: ASTM D4318, Wet Method	

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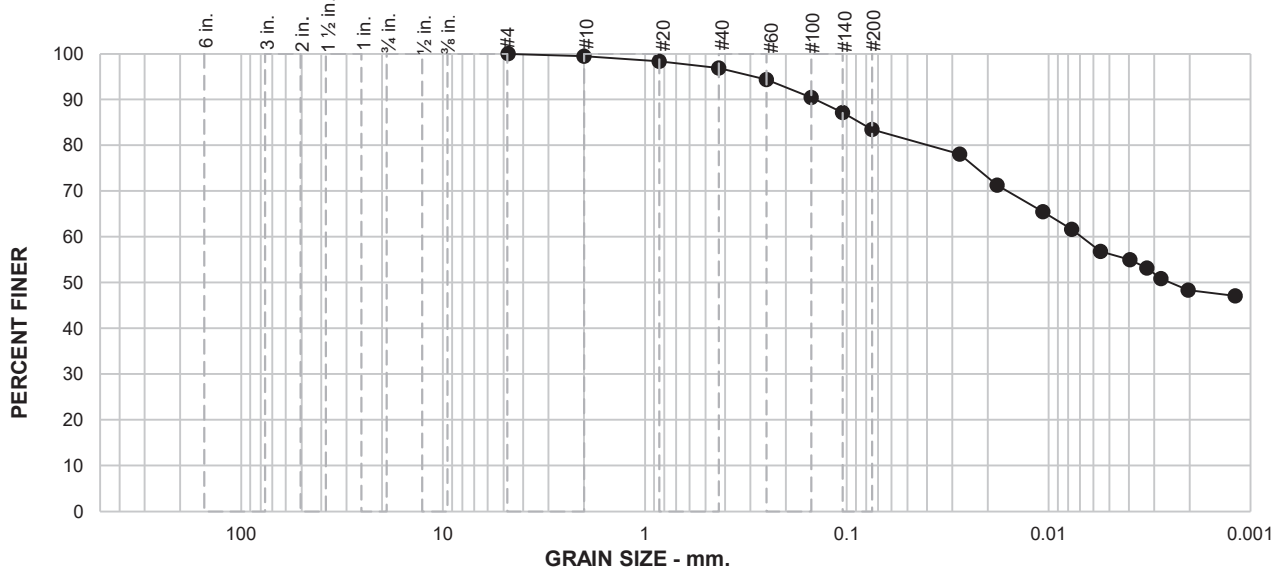
CLIENT: Ridgeline Property Group, LLC
PROJECT NAME: Pacific Gateway
PROJECT NO: 19633.000.002 PH004
PROJECT LOCATION: Tracy, CA
REPORT DATE: 9/10/2024
TESTED BY: V. Nunez
REVIEWED BY: K. Lecce

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D422



SAMPLE ID: 2-B1@1.5

DEPTH (ft): 1.5

LOCATION: 2-B1

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
			0.5	2.6	13.4	35.2	48.3

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#4	100.0		
#10	99.5		
#20	98.3		
#40	96.9		
#60	94.3		
#100	90.4		
#140	87.1		
#200	83.5		
0.0276 mm.	78.1		
0.0180 mm.	71.3		
0.0107 mm.	65.5		
0.0077 mm.	61.6		
0.0055 mm.	56.8		
0.0040 mm.	55.0		
0.0033 mm.	53.2		
0.0028 mm.	50.9		
0.0020mm.	48.3		
0.0012mm.	47.1		

SOIL DESCRIPTION

See exploration logs

ATTERBERG LIMITS

PL = 23 LL = 53 PI = 30

COEFFICIENTS

D_{90} = 0.1437 mm D_{85} = 0.0863 mm D_{60} = 0.0069 mm

D_{50} = 0.0025 mm D_{30} = D_{15} =

D_{10} = C_u = C_c =

CLASSIFICATION

USCS = CH

REMARKS

Silt/clay division of 0.002mm used
PI: ASTM D4318, Wet Method
USCS: ASTM D2487

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Ridgeline Property Group, LLC

PROJECT NAME: Pacific Gateway

PROJECT NO: 19633.000.002 PH004

PROJECT LOCATION: Tracy, CA

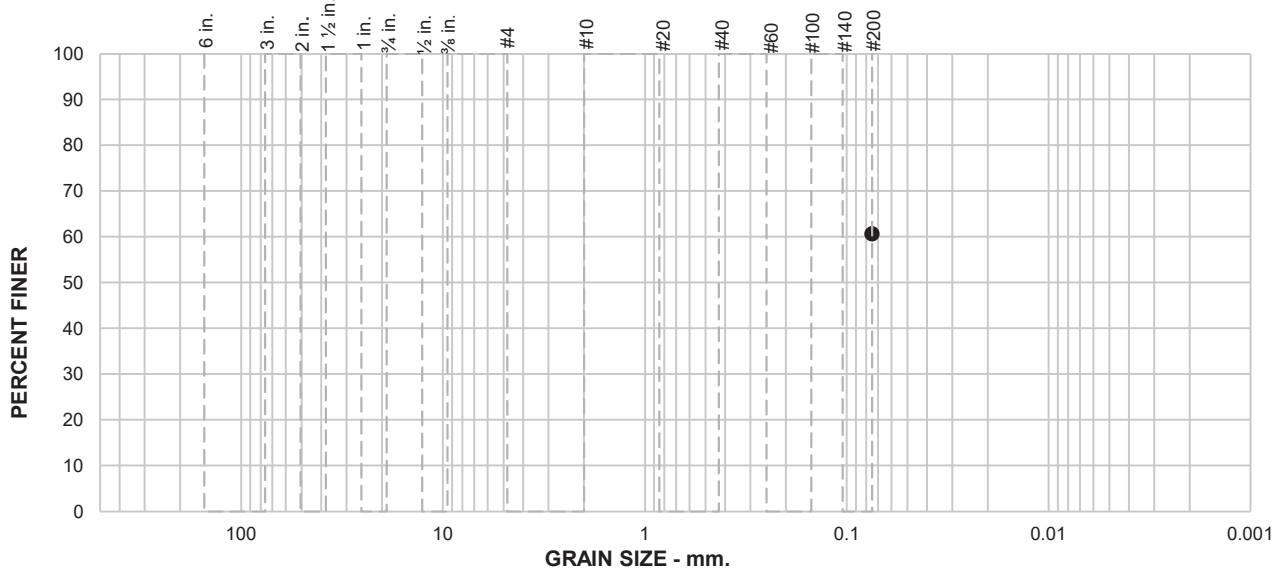
REPORT DATE: 9/10/2024

TESTED BY: V. Nunez

REVIEWED BY: K. Lecce

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D1140, Method B



SAMPLE ID: 2-B4@16

DEPTH (ft): 16

LOCATION: 2-B4

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
						61	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
#200	61		

SOIL DESCRIPTION

See exploration log

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = D_{85} = D_{60} =
D_{50} = D_{30} = D_{15} =
D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

USCS: ASTM D2487

Soak time = 180 min
Dry sample weight = 724.6 g
Largest particle size ≥ No. 4 Sieve

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Ridgeline Property Group, LLC

PROJECT NAME: Pacific Gateway

PROJECT NO: 19633.000.002 PH004

PROJECT LOCATION: Tracy, CA

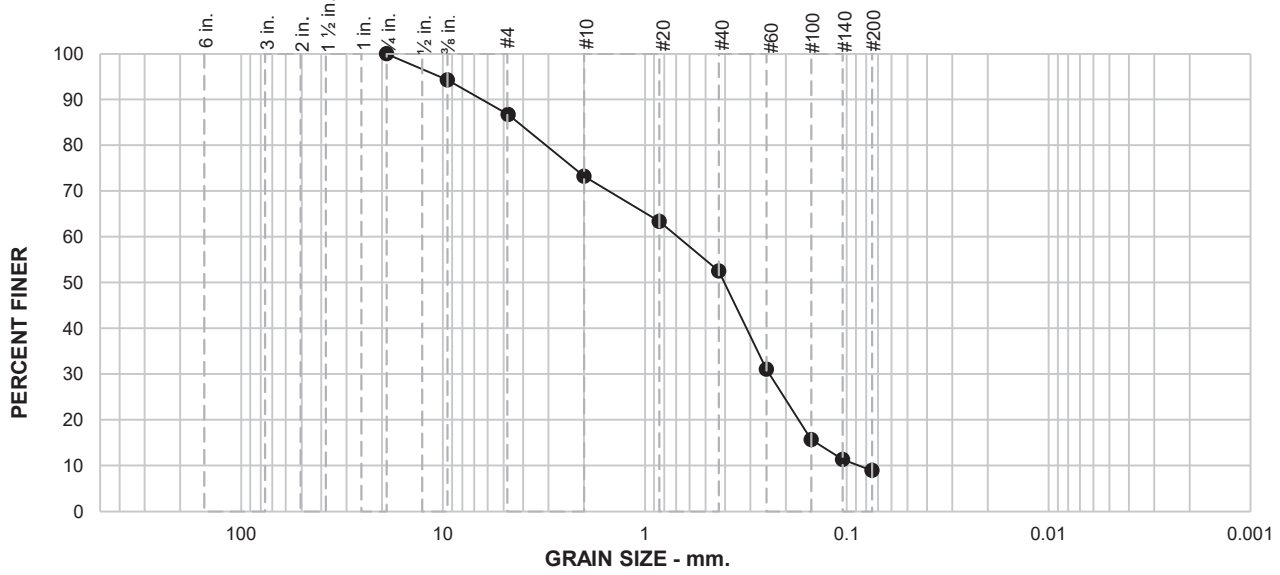
REPORT DATE: 9/9/2024

TESTED BY: J. Tarinda

REVIEWED BY: K. Lecce

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913, Method B



SAMPLE ID: 2-B5@10-11.5

DEPTH (ft): 10-11.5

LOCATION: 2-B5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
		13	14	20	44	9	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.75 in.	100		
0.38 in.	94		
#4	87		
#10	73		
#20	63		
#40	53		
#60	31		
#100	16		
#140	11		
#200	9		

SOIL DESCRIPTION

See exploration log

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = 6.4002 mm D_{85} = 4.1979 mm D_{60} = 0.6928 mm

D_{50} = 0.3993 mm D_{30} = 0.2416 mm D_{15} = 0.1397 mm

D_{10} = 0.0887 mm C_u = 7.81 C_c = 0.95

CLASSIFICATION

USCS =

REMARKS

USCS: ASTM D2487

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Ridgeline Property Group, LLC

PROJECT NAME: Pacific Gateway

PROJECT NO: 19633.000.002 PH004

PROJECT LOCATION: Tracy, CA

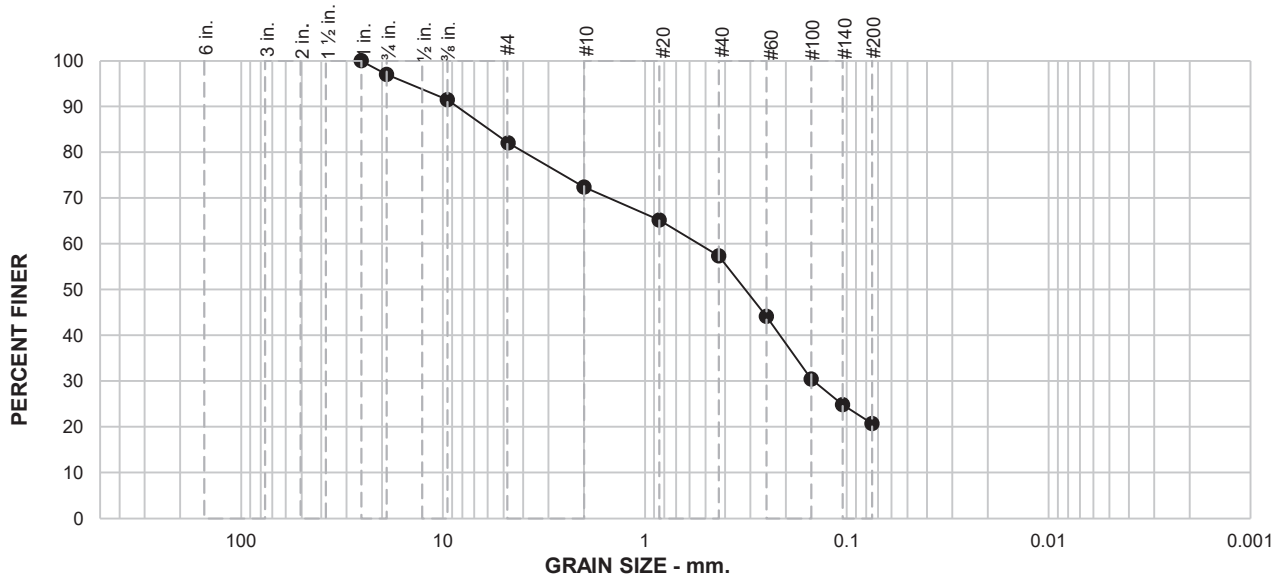
REPORT DATE: 9/9/2024

TESTED BY: J. Tarinda

REVIEWED BY: K. Lecce

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913, Method B



SAMPLE ID: 2-B5@15-16.5

DEPTH (ft): 15-16.5

LOCATION: 2-B5

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
	3	15	10	15	36	21	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
1 in.	100		
0.75 in.	97		
0.38 in.	91		
#4	82		
#10	72		
#20	65		
#40	57		
#60	44		
#100	30		
#140	25		
#200	21		

SOIL DESCRIPTION

See exploration log

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = 8.8164 mm D_{85} = 5.9899 mm D_{60} = 0.5552 mm

D_{50} = 0.3211 mm D_{30} = 0.1500 mm D_{15} =

D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

USCS: ASTM D2487

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Ridgeline Property Group, LLC

PROJECT NAME: Pacific Gateway

PROJECT NO: 19633.000.002 PH004

PROJECT LOCATION: Tracy, CA

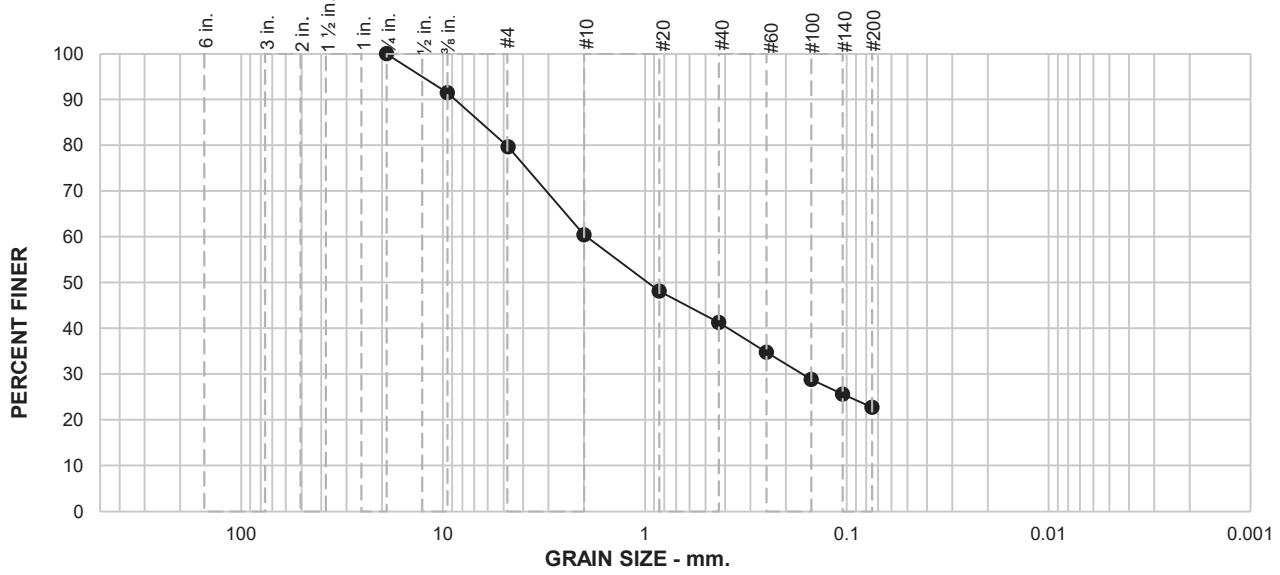
REPORT DATE: 9/9/2024

TESTED BY: J. Tarinda

REVIEWED BY: K. Lecce

PARTICLE SIZE DISTRIBUTION REPORT

ASTM D6913, Method B



SAMPLE ID: 2-B6 @10-11.5

DEPTH (ft): 10-11.5

LOCATION: 2-B6

% +75mm	% GRAVEL		% SAND			% FINES	
	COARSE	FINE	COARSE	MEDIUM	FINE	SILT	CLAY
		20	20	19	18	23	

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
0.75 in.	100		
0.38 in.	92		
#4	80		
#10	60		
#20	48		
#40	41		
#60	35		
#100	29		
#140	26		
#200	23		

SOIL DESCRIPTION

See exploration log

ATTERBERG LIMITS

PL = LL = PI =

COEFFICIENTS

D_{90} = 8.4821 mm D_{85} = 6.3474 mm D_{60} = 2.0000 mm

D_{50} = 0.9803 mm D_{30} = 0.1633 mm D_{15} =

D_{10} = C_u = C_c =

CLASSIFICATION

USCS =

REMARKS

USCS: ASTM D2487

* (no specification provided)

ENGEO
Expect Excellence

CLIENT: Ridgeline Property Group, LLC

PROJECT NAME: Pacific Gateway

PROJECT NO: 19633.000.002 PH004

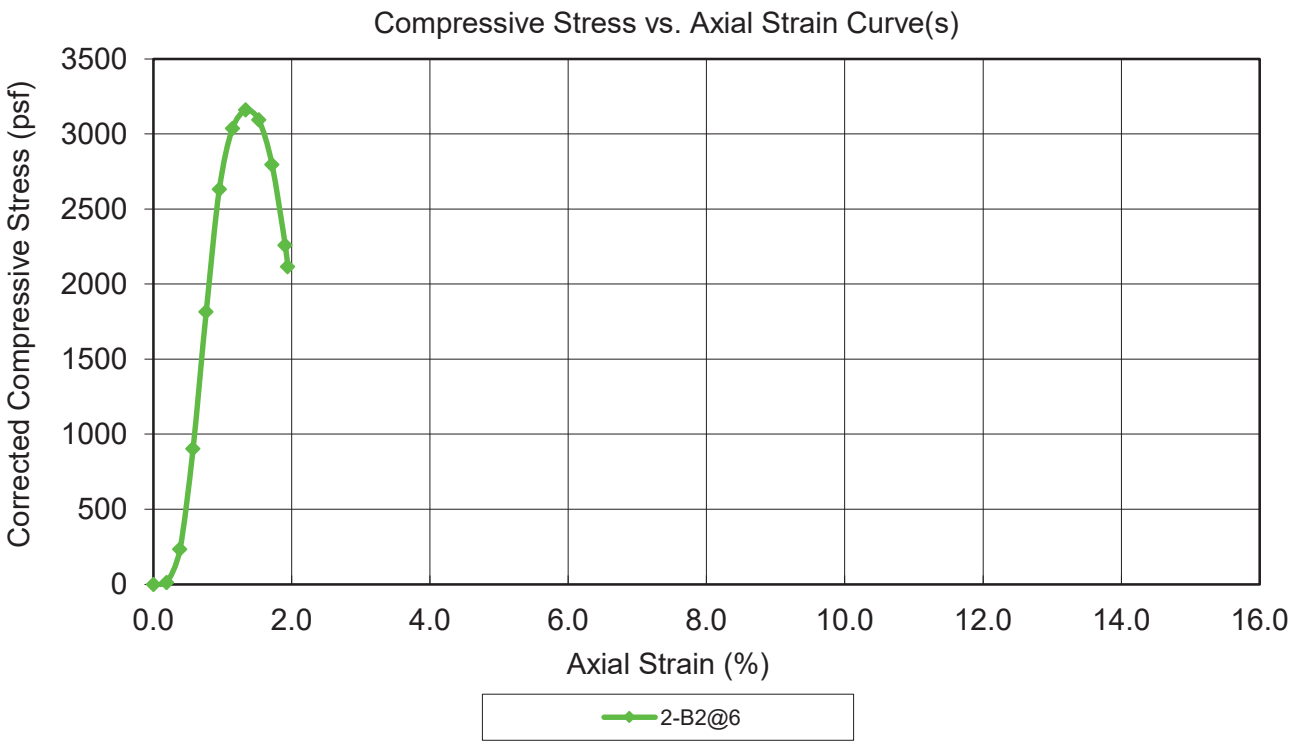
PROJECT LOCATION: Tracy, CA

REPORT DATE: 9/9/2024

TESTED BY: J. Tarinda

REVIEWED BY: K. Lecce

UNCONFINED COMPRESSION TEST REPORT
(ASTM D2166)



BEFORE TEST	SPECIMEN 2-B5 @6
Test Moisture Content (%)	11.89
Dry Density (pcf)	109.9
Saturation (%)	59.3
Void Ratio	0.55
Diameter (in)	2.390
Height (in)	5.250
Height-To-Diameter Ratio	2.20
TEST DATA	
Unconfined Compressive Strength (psf)	3160
Undrained Shear Strength (psf)	1579.79
Strain Rate (in/min)	0.050
Specific Gravity (ASSUMED)	2.720
Strain at Failure(%)	1.33
Test Remarks	

SPECIMEN	DESCRIPTION
2-B5 @6	See exploration logs

ENGEO
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PROJECT NAME: Pacific Gateway
PROJECT NO: 19633.000.002 PH004
CLIENT: Ridgeline Logistics Group, LLC
LOCATION: Tracy, CA

Test Date: 9/6/2024
Tested By: J. Tarinda
Reviewed By: K. Lecce



APPENDIX C

PREVIOUS EXPLORATION LOGS AND LABORATORY TESTING RESULTS (ENGEO, 2021)

ENGEO
Expect Excellence

LOG OF BORING 1-B01

LATITUDE: 37.66022 LONGITUDE: -121.397533

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 159 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), brown, hard, moist, medium plasticity, 10% fine- to coarse-grained sand, <5% fine to coarse gravel												
			Grades to yellowish brown, stiff			38								>4.5*	PP
														>4.5*	PP
						7									
	155														
5			Grades to 15% fine- to coarse-grained sand												
						9									
			Grades to <5% fine- to coarse-grained sand												
	150														
10			Grades to 10% fine- to coarse grained sand, very stiff			37								>4.5*	PP
	145														
15						22									
			CLAYEY SAND (SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 20% fines												
	140					54									
20			Bottom of boring at approximately 20 feet below ground surface. Groundwater not encountered during drilling.												

LOG OF BORING 1-B02

Expect Excellence

LATITUDE: 37.662131 LONGITUDE: -121.39397

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 16½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 150 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark brown, medium stiff, moist, medium plasticity, <5% fine to coarse gravel												
						18								3.25*	PP
			SANDY LEAN CLAY (CL), yellowish brown, medium stiff, moist, low plasticity, 40% fine- to coarse-grained sand, <5% fine gravel											3.0*	PP
						7									
5	145		LEAN CLAY (CL), yellowish brown, very stiff, moist, medium plasticity, 5% fine- to coarse-grained sand												
						37									
10	140														
			CLAYEY SAND (SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 25% fines, <5% fine gravel			20									
			Grades to 40% fines, 10% fine- to coarse-grained gravel												
15	135					40									
			LEAN CLAY WITH SAND (CL), yellowish brown, very stiff, moist, medium plasticity, 15% fine- to coarse-grained sand												
			Bottom of boring at approximately 16 1/2 feet below ground surface. Groundwater not encountered during drilling.												

LOG OF BORING 1-B03

ENGEO Expect Excellence

LATITUDE: 37.662157 LONGITUDE: -121.391202

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 17½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 145 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark brown, moist, medium plasticity, 5% fine- to coarse-grained sand, <5% fine to coarse gravel												
			LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, medium plasticity, 15% fine- to coarse-grained sand, <5% coarse gravel			30								>4.5*	PP
5	140		Grades to very stiff			25									
			Grades to hard, 5% fine- to coarse-grained sand			68								>4.5*	PP
			Grades to 15% fine- to coarse-grained sand												
10	135		POORLY GRADED SAND WITH CLAY (SP-SC), yellowish brown, medium dense to dense, moist, fine- to coarse-grained sand, 10% fines, 10% fine to coarse gravel			30									
			CLAYEY SAND (SC), yellowish brown, medium dense to dense, moist, fine- to coarse-grained sand, 40% fines												
15	130		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 25% fine to coarse gravel, 5-10% fines			43								>4.5*	PP
			LEAN CLAY (CL), yellowish brown, hard, moist, medium plasticity, <5% fine- to coarse-grained sand												
			Bottom of boring at approximately 17 1/2 feet below ground surface. Groundwater not encountered during drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 1-BS.GPJ ENGEO INC.GDT 1/10/23

LOG OF BORING 1-B04

ENGEO Expect Excellence

LATITUDE: 37.657422 LONGITUDE: -121.388672

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 19 ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 156 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
	155		SANDY LEAN CLAY (CL), dark brown, hard, moist, medium plasticity, 30% fine- to coarse-grained sand			24								>4.5*	PP
														>4.5*	PP
			LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, medium plasticity, 15% fine- to coarse-grained sand			24									
5															
	150		LEAN CLAY (CL), yellowish brown, very stiff, moist, medium plasticity, <5% fine- to coarse-grained sand			16									
10															
	145		Grades to hard, medium to high plasticity, 5% fine- to coarse-grained sand			70								>4.5*	PP
			SANDY LEAN CLAY (CL), yellowish brown, hard, moist, medium plasticity, 40% fine- to coarse-grained sand												
15						38									
	140		LEAN CLAY (CL), yellowish brown, hard, moist, medium to high plasticity, <5% fine- to coarse-grained sand			68								>4.5*	PP
			Bottom of boring at approximately 19 feet below ground surface. Groundwater not encountered during drilling.												

LOG OF BORING 1-B05

ENGEO Expect Excellence

LATITUDE: 37.661565 LONGITUDE: -121.375773

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 20½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 127 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
	125		LEAN CLAY (CL), dark brown, stiff, moist, medium plasticity, 5% fine- to coarse-grained sand												
			LEAN CLAY WITH SAND (CL), yellowish brown, stiff, moist, medium plasticity, 15% fine- to coarse-grained sand			13									
5			SANDY LEAN CLAY (CL), yellowish brown, very stiff, moist, low plasticity, 30-40% fine- to coarse-grained sand												
	120					25									
			LEAN CLAY WITH SAND (CL), dark yellowish brown, very stiff, moist, medium plasticity, 15% fine- to coarse-grained sand												
10						22									
	115		LEAN CLAY (CL), dark yellowish brown, very stiff, moist, medium plasticity, <5% fine- to coarse-grained sand												
						26									
15															
						27									
			CLAYEY SAND (SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 35% fines												
	110		LEAN CLAY (CL), yellowish brown, very stiff, moist, medium plasticity, 5% fine- to coarse-grained sand												
						25									
						18									
20			SANDY LEAN CLAY (CL), yellowish brown, stiff, moist, low plasticity, 35% fine- to coarse-grained sand												
			Bottom of boring at approximately 20 1/2 feet below ground surface. Groundwater not encountered during drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 1-BS.GPJ ENGEO INC.GDT 1/10/23

ENGEO
Expect Excellence

LOG OF BORING 1-B06

LATITUDE: 37.660573 LONGITUDE: -121.371652

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 15 ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 129 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark brown, moist, medium plasticity, <5% fine- to coarse-grained sand												
	125		SANDY LEAN CLAY (CL), yellowish brown, medium stiff, moist, low plasticity, 30% fine- to coarse-grained sand												
5						7									
	120		Grades to 35% medium- to coarse-grained sand			10									
10			Grades to 20-30% fine- to coarse-grained sand			14									
			POORLY GRADED SAND WITH CLAY (SP-SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 10% fines												
	115		SANDY LEAN CLAY (CL), yellowish brown, stiff, moist, low plasticity, 30-40% fine- to coarse-grained sand, contains silt fines			15									
15			Bottom of boring at approximately 15 feet below ground surface. Groundwater not encountered during drilling.												

ENGEO Expect Excellence	TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001	Logged By: Jason Sedore Logged Date: November 11, 2021

Test Pit Number	Depth (feet)	Description
1-TP01	0 – 3	FAT CLAY (CH), dark grayish brown, hard (Pocket Penetrometer >4.5 tsf at 2 feet), moist, high plasticity, <15% fine- to medium-grained sand, contains gravel Bottom of test pit at approximately 3 feet below ground surface. No groundwater encountered during excavation.
1-TP02	0 – 1½ 1 ½ - 3	LEAN CLAY WITH SAND (CL), dark grayish brown mottled with brown, very stiff (Pocket Penetrometer = 3.5 tsf at 1 foot), moist, medium to high plasticity, 15-25% fine- to medium-grained sand, contains silt fines and gravel FAT CLAY (CH) very dark grayish brown, hard (Pocket Penetrometer >4.5 tsf at 2 feet), moist, high plasticity, <15% fine-grained sand Bottom of test pit at approximately 3 feet below ground surface. No groundwater encountered during excavation.
1-TP03	0 – 2 2 – 3	FAT CLAY (CH), very dark brown mottled with yellowish brown, hard (Pocket Penetrometer = 4.0 tsf at 1 foot), moist, high plasticity, <15% fine-grained sand [Undocumented Fill] FAT CLAY (CH), very dark brown, hard, moist, high plasticity, <15% fine-grained sand [Native] Bottom of test pit at approximately 3 feet below ground surface. No groundwater encountered during excavation.
1-TP04	0 – 6	SANDY LEAN CLAY (CL), grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine-grained sand, contains fine gravel Grades to brown, low to medium plasticity, contains silt fines at 3½ feet Grades to yellowish brown to brown, contains carbonates at 4½ feet Bottom of test pit at approximately 6 feet below ground surface. No groundwater encountered during excavation.

ENGEO Expect Excellence		TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001		Logged By: Jason Sedore Logged Date: November 11, 2021
Test Pit Number	Depth (feet)	Description
1-TP05	0 – 3	SANDY LEAN CLAY (CL), dark grayish brown, medium to high plasticity, 30-40% fine-grained sand, <10% fine to coarse gravel, contains cobbles
	3 – 5½	SILTY GRAVEL WITH SAND (GM), brown, dense to very dense, moist, fine to coarse, subangular to to subrounded gravel, 25-35% fine- to coarse-grained sand, 15-20% fines, contains cobbles Bottom of test pit at approximately 5½ feet below ground surface. No groundwater encountered during excavation.
1-TP06	0 – 4	FAT CLAY (CH), very dark grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine-grained sand Grades to brown, contains carbonates at 3 feet
	4 – 5	LEAN CLAY (CL), brown, very stiff to hard, moist, medium plasticity, <15% fine-grained sand, contains silt fines and carbonates
	5 – 5½	SANDY LEAN CLAY (CL), brown to yellowish brown, moist, medium plasticity, 30-40% fine-grained sand, contains silt fines Bottom of test pit at approximately 5½ feet below ground surface. No groundwater encountered during excavation.
1-TP07	0 – ⅔	SANDY LEAN CLAY (CL), dark brown with strong brown, hard, moist, medium plasticity, 30-40% fine- to coarse-grained sand, contains debris [Undocumented Fill]
	⅔ – 2½	FAT CLAY (CH), brown mottled with grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine-grained sand [NATIVE]
	2½ – 4	LEAN CLAY WITH SAND (CL), brown, very stiff (Pocket Penetrometer = 3.5 to 4.0 tsf), moist, medium plasticity, 15-25% fine-grained sand, contains silt fines
	4 – 6½	SANDY LEAN CLAY (CL), brown, very stiff (Pocket Penetrometer = 3.75 to 4.0 tsf), moist, medium plasticity, 30-40% fine-grained sand, contains silt fines Bottom of test pit at approximately 6½ feet below ground surface. No groundwater encountered during excavation.

ENGEO Expect Excellence	TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001	Logged By: Jason Sedore Logged Date: November 11, 2021

Test Pit Number	Depth (feet)	Description
1-TP08	0 – 1	FAT CLAY WITH SAND (CH), very dark grayish brown, very stiff (Pocket Penetrometer = 3.5 to 4.0 tsf), moist, high plasticity, <15% fine-grained sand, <15% fine gravel [Undocumented Fill]
	1 – 4	FAT CLAY (CH), very dark brown to very dark grayish brown, very stiff (Pocket Penetrometer = 3.0 tsf), moist, high plasticity, <15% fine-grained sand [Native] Grades to hard at 3½ feet (Pocket Penetrometer >4.5 tsf)
	4 – 5	LEAN CLAY WITH SAND (CL), brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium to high plasticity, 15-25% fine-grained sand
	5 – 6½	SANDY LEAN CLAY (CL), brown to yellowish brown, moist, medium plasticity, 30-40% fine-grained sand, contains silt fines and carbonates Bottom of test pit at approximately 6½ feet below ground surface. No groundwater encountered during excavation.
1-TP09	0 – ½	SANDY LEAN CLAY (CL), dark grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine- to coarse-grained sand, contains gravel [Undocumented Fill]
	½ - 4½	SANDY LEAN CLAY (CL), dark grayish brown, hard (Pocket Penetrometer 4.0 to 4.5 tsf), moist, medium plasticity, 30-40% fine-grained sand, contains silt fines Graded to brown, very stiff (Pocket Penetrometer = 3.0 tsf), contains carbonates at 4 feet Bottom of test pit at approximately 4½ feet below ground surface. No groundwater encountered during excavation.

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Test Pit Number	Depth (feet)	Description
1-TP10	0 – ¾	FAT CLAY WITH SAND (CH), dark brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, 10-20% fine- to medium-grained sand, <10% fine gravel
	¾ – 3½	FAT CLAY (CH), dark brown mottled with brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine-grained sand, contains carbonates
	3½ – 4	SANDY LEAN CLAY (CL), brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine-grained sand
	4 – 5	SILTY SAND (SM), brown, moist, fine-grained sand, 25-35% fines
		Bottom of test pit at approximately 5 feet below ground surface. No groundwater encountered during excavation.
1-TP11	0 – 1	FAT CLAY WITH SAND (CH), dark grayish brown, very stiff to hard (Pocket Penetrometer = 4.0 to 4.5 tsf), moist, high plasticity, <15% fine- to coarse-grained sand, 5-10% fine gravel [UNDOCUMENTED FILL]
	1 – 2	FAT CLAY (CH), dark grayish brown, very stiff to hard (Pocket Penetrometer = 4.0 tsf), moist, high plasticity, <15% fine- to coarse-grained sand [NATIVE]
	2 – 3½	LEAN CLAY WITH SAND (CL), brown mottled with dark brown, very stiff to hard (Pocket Penetrometer = 3.5 to 4.5 tsf), moist, 15-25% fine-grained sand, contains silt fines
	3½ – 5	SANDY LEAN CLAY (CL), yellowish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine-grained sand, contains silt fines and carbonates
		Bottom of test pit at approximately 5 feet below ground surface. No groundwater encountered during excavation.

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Pacific Gateway Tracy, California 19633.000.001	Logged By: Jason Sedore Logged Date: November 11, 2021

Test Pit Number	Depth (feet)	Description
1-TP12	0 – 2	SANDY LEAN CLAY (CL), brown to grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine- to coarse-grained sand, <10% gravel [UNDOCUMENTED FILL]
	2 – 4½	SANDY LEAN CLAY (CL), brown to grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine- to medium-grained sand, trace gravel [NATIVE] Grades to brown with silt fines at 3¾ feet Bottom of test pit at approximately 4½ feet below ground surface. No groundwater encountered during excavation.
1-TP13	0 – 1	FAT CLAY (CH), very dark brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine- to coarse-grained sand, trace gravel [UNDOCUMENTED FILL]
	1 – 2	FAT CLAY (CH), very dark brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine- to coarse-grained sand, trace gravel [NATIVE]
	2 – 5	LEAN CLAY (CL), yellowish brown, very stiff to hard (Pocket Penetrometer = 3.0 to 4.0 tsf), moist, medium plasticity, contains carbonates Grades to brown at 4 feet Bottom of test pit at approximately 5 feet below ground surface. No groundwater encountered during excavation.
1-TP14	0 – 5	LEAN CLAY (CL), dark brown, moist, medium plasticity, <5% fine- to coarse-grained sand Grades to dark yellowish brown at 2½ feet
	5 – 7	SANDY SILT (ML), yellowish brown, moist, low plasticity, 20-30% fine- to coarse-grained sand Bottom of test pit at approximately 7 feet below ground surface. No groundwater encountered during excavation.

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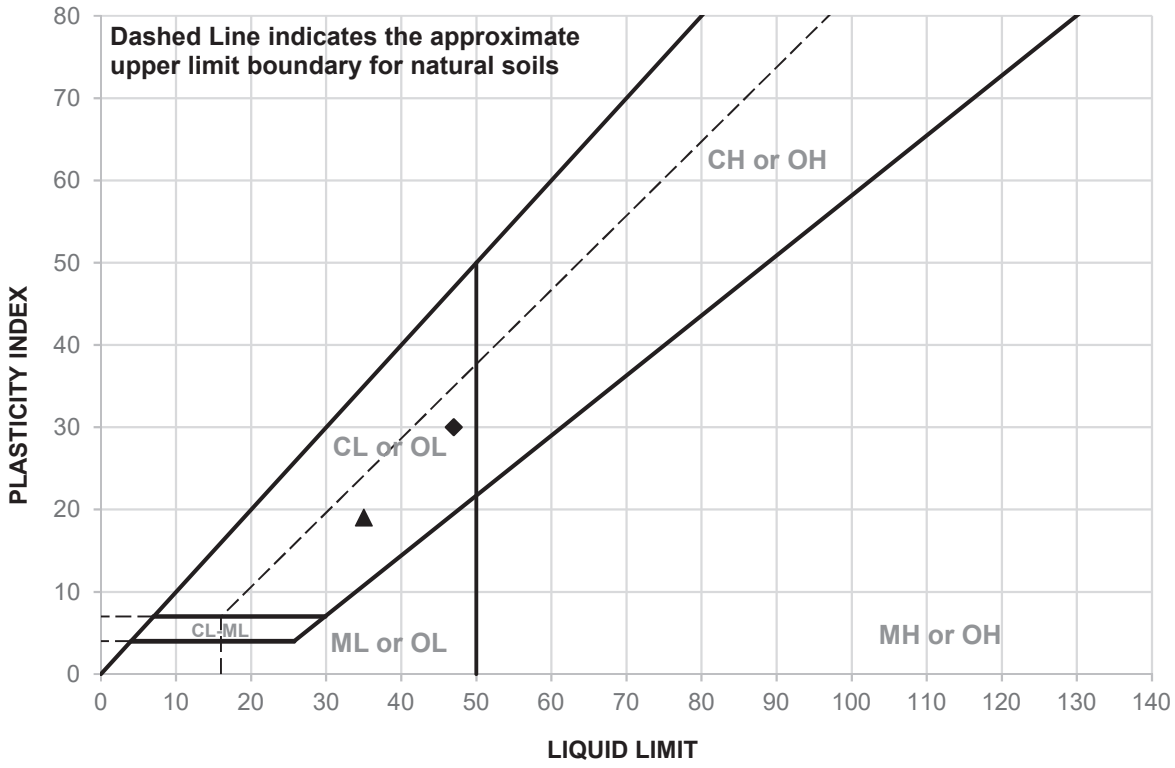
Pacific Gateway Tracy, California 19633.000.001		Logged By: Jason Sedore Logged Date: November 11, 2021
Test Pit Number	Depth (feet)	Description
1-TP15	0 – 5½	LEAN CLAY (CL), dark brown, moist, medium plasticity, <5% fine- to coarse-grained sand Grades to dark yellowish brown, 10% fine- to coarse-grained sand at 3½ feet
	5½ – 8	SANDY SILT (ML), yellowish brown, moist, low plasticity, 30-40% fine- to coarse grained sand Bottom of test pit at approximately 8 feet below ground surface. No groundwater encountered during excavation.

LIQUID AND PLASTIC LIMITS TEST REPORT
ASTM D4318



SAMPLE ID	DEPTH (ft)	MATERIAL DESCRIPTION	LL	PL	PI
1-TP09 @ 1'	1 foot	See exploration logs	35	16	19
1-TP13 @ 1'	1 foot	See exploration logs	47	17	30

SAMPLE ID	TEST METHOD	REMARKS
1-TP09 @ 1'	PI: ASTM D4318, Wet Method	
1-TP13 @ 1'	PI: ASTM D4318, Wet Method	

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CLIENT: Ridgeline Property Group
PROJECT NAME: Pacific Gateway
PROJECT NO: 19633.000.001 PH001
PROJECT LOCATION: Tracy, CA
REPORT DATE: 11/18/2021
TESTED BY: D. Bryant
REVIEWED BY: K. Lecce



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Appendix J

Phase I Environmental Site Assessment
1,580-Acre Tract - Pacific Gateway
Tracy, California 95304

Prepared for:

Mr. Kolten Booher
Affinius Capital
9830 Colonnade Boulevard, Suite 600
San Antonio, Texas 78230

Prepared by:

CAMERON-COLE
creating sustainable success
AN ADEC INNOVATION

200 East Government Street, Suite 100
Pensacola, Florida 32502

January 31, 2025

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FIGURES

Figure 1: Site Location Map
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1.0 SUMMARY

Cameron-Cole, LLC (Cameron-Cole) has completed a Phase I Environmental Site Assessment (ESA) for a 1,580.44-acre tract of primarily agricultural land located in Tracy, San Joaquin County, California (hereafter the "subject property"). The assessment was performed in accordance with the Master Agreement for Environmental Engineering Consulting Services between Cameron-Cole, LLC and Affinius Capital and Cameron-Cole's proposal number 482-4465, dated December 16, 2024, and authorized by Mr. Kolten Booher with Affinius Capital on January 2, 2025. The scope of services is generally consistent with the scope and limitations of the American Society for Testing and Materials International (ASTM International) Standard Practice for Environmental Site Assessments, Designation: E1527-21. The purpose of this Phase I ESA is to identify, to the extent feasible pursuant to the ASTM International Standard Practice E1527-21, recognized environmental conditions (RECs) in connection with the subject property.

The proposed Pacific Gateway development is comprised of 33 contiguous parcels of land plus an outlying 40-acre parcel that is identified as the off-site basin property. The parcels are grouped into five general development areas identified as 1) The University Center 2) Pacific Gateway West 3) Pacific Gateway Central 4) Pacific Gateway East, and 5) Gateway Center. A table provided by the developer that details the 34 parcels that comprise the subject property, including the associated development area, acreage, and Assessors Property Number (APN) is provided in Appendix D. The subject property is comprised primarily of agricultural land developed with almond orchards that is located between the Delta Mendota Canal to the north and the California Aqueduct to the south. A commercial metal fabrication business known as A.B. Fab, Inc. is located on the north side of the Delta Mendota Canal within the development area known as the University Center tract. Figure 1 is a Site Location Map depicting the subject property and surrounding area.

The goal of this Phase I ESA is to identify the presence or likely presence of hazardous substances or petroleum products on the subject property under conditions that indicate an existing release, a past release, or a material threat of a future release of any hazardous substances or petroleum products in, on or, at the property. The findings of this report are summarized below and may include known or suspected RECs, controlled RECs (CRECs), historical RECs (HRECs), or de minimis conditions identified during the performance of this Phase I ESA.

- Hazardous substances and/or petroleum products in connection with identified uses were observed on the subject property at the time of site reconnaissance.

- As an element of this assessment, Cameron-Cole obtained and reviewed a regulatory database search of environmental records consistent with the requirements of ASTM International E1527-21 Standard Practice that was obtained from Envirosite Corporation (Envirosite). The subject property was identified in the Hazardous Waste Information System (HAZNET), Hazardous Waste Generator (HWG), California Environmental Protection Agency Sites (CALEPA SITES), Enforcement Compliance Historical Online (ECHO), Facility Registry Service (FRS), Manifest EPA, and the Resource Conservation and Recovery Act Non-Generators (RCRA_NONGEN) databases.

- According to the Envirosite Report, there is one Underground Storage Tank (UST) / UST_SAN JOAQUIN COUNTY site located within the approximate minimum search distance (AMSD) of the subject property.

- According to the Envirosite Report, there is one Leaking Underground Storage Tank Region 5 (LUST REG 5) site located within the AMSD of the subject property.

- According to the Envirosite Report, there is one Department of Toxic Substances Control (ENVIROSTOR) site located within the AMSD of the subject property.

- According to the Envirosite Report, there are six HWG/HAZNET sites located within the AMSD of the subject property.

- According to the Envirosite Report, there are two Solid Waste Facility / Landfill (SWF/LF) sites located within the AMSD of the subject property.

- According to the Envirosite Report, there is one state recycling facility (SWRCY) / Land Disposal Site (LDS) site located within the AMSD of the subject property.

- According to the Envirosite Report, there are seven CALEPA SITES located within the AMSD of the subject property.

- Cameron-Cole queried the National Pipeline Mapping System (NPMS) online database to identify the presence of conveyance pipelines on the subject property. Records indicate there is a natural gas pipeline and hazardous liquid pipeline that transects the subject property.

With reference to these findings, the following Opinions are provided in connection with this assessment:

- Hazardous substances and/or petroleum products in connection with identified uses were observed on the subject property at the time of site reconnaissance. Following is a discussion of materials observed and locations within the Pacific Gateway development:

    - The AB-FAB, Inc. property is located within the future University Center Area of the Pacific Gateway development and north of the Delta Mendota Canal. A.B. Fab, Inc. is a metal fabrication business that specializes in dust control systems for almond hullers, shellers, and processors. Manufacturing equipment including laser cutters, metal bending machines, several welding stations, metal shaping machines, materials storage, a paint booth were observed inside the four metal frame structures located on the property. Hazardous substances observed at the time of the site reconnaissance included approximately five 3-gallon diesel jerry cans, three 5-gallon pails of compressor oil, five 1-gallon containers of hydraulic fluid, one 1-gallon container of WD-40, eight acetylene gas cylinders, and three 40-pound propane tanks that are used to power forklifts. Two 10,000-gallon aboveground storage tanks (ASTs) were observed along the eastern property boundary. According to Mr. Branden Mendes, Operations Manager with A.B. Fab, Inc., the ASTs are used to store water associated with the on-site fire suppression system. Mr. Mendes also indicated the facility generates oily rags that are properly disposed off-site by a third-party vendor. Metal scraps and shavings are reportedly stored in a dumpster that is periodically transported off-site for proper disposal. Mr. Mendes indicated that the only solvent used at the facility is one you would normally find consistent with metal fabrication workshops aside from the WD-40. As observed during the January 10 site reconnaissance, the materials were stored on impervious surfaces, in closed containers, with no visible indicators of leaks or spills. Minor staining was observed in areas where vehicles are stored or parked, but is located on concrete pavement, and would be classified as *de minimis*. Based on the proper storage of the hazardous materials and lack of any stained soil or concrete indicative of a release, in the opinion of Cameron-Cole, the observed hazardous substances and/or materials at A.B. Fab, Inc. does not constitute a REC in connection with the subject property as defined by the applicable standard.

    - Two estimated 200-gallon fuel ASTs were observed on the subject property within the “Central Industrial Area”. Although the ASTs were located within a secondary containment structure, evidence of

stained/discolored soil and concrete was observed both inside and outside the secondary containment. A petroleum odor was also noted in the soil surrounding the secondary containment structure. In addition, approximately 10, 55-gallon drums labelled as containing pesticides or herbicides, most of them empty but some containing residual fluids, were observed stored on bare soil with no secondary containment. Large areas of stained/discolored soils impacted by what appeared to be hydraulic fluid or oil were also observed around various pieces of farm equipment or machinery that were stored in exterior locations. Two, approximately 330-gallon plastic intermediate bulk containers (IBCs) containing used oil were also observed stored in exterior locations with direct soil contact. Evidence of spillage on the side of the IBCs and significant staining on the surrounding soils was observed at the time of the site reconnaissance. A large pile of more than 100 discarded 1- to 5-gallon pesticide/herbicide containers was observed to be haphazardly strewn in and around a storage building in this same area. Approximately one dozen empty 330-gallon IBCs were observed. Labels indicate the IBCs formerly contained herbicides. A pile of some 25 lead acid automotive batteries were observed improperly stored directly on soil adjacent to a storage building. Several 55-gallon drums used as burn barrels, containing what appeared to be household trash, were also observed. Approximately 30 boxes of unused pesticides and water conditioning agents were observed in the vicinity of the shop, all of which were stored directly on the soil. Based on the observed improper storage and visual evidence of releases to the environment, in the opinion of Cameron-Cole, the hazardous substances and petroleum products observed within the Pacific Gateway Central portion of the subject property constitutes a REC in as defined by the applicable standard.

- Cameron-Cole observed a 200-gallon AST, approximately 50, 1- to 5-gallon pesticide/herbicide containers, 2, 55-gallon drums containing what appeared to be waste oil, and various pieces of farm equipment including tractors, all terrain vehicles (ATVs), trucks, sprayers, and tillers on the 40-acre, non-contiguous parcel identified as the Off-Site Basin portion of the subject property. This area of the subject property consisted mainly of agricultural land in addition to two shop buildings and various equipment storage areas. Numerous large, covered mounds of almonds undergoing fumigation were also observed on this portion of the property. Visual evidence of stained/discolored soil and petroleum odors were noted around the AST and the waste oil drums. Limited areas of *de minimis* staining were observed around some of the agricultural equipment in this area. Based on the improper storage of materials and the evidence of releases surrounding the AST and drums, in the opinion of Cameron-Cole, the hazardous substances or petroleum products observed on the Off-Site Basin portion of the subject property constitutes a REC as defined by the applicable standard.

- According to the Envirosite Report, the subject property was identified in the HAZNET, HWG, CALEPA SITES, ECHO, FRS, Manifest EPA, and RCRA_NONGEN databases. Additional details regarding these database listings are presented as follows:

  - The subject property was identified within these databases based on operations associated with three facilities, two of which are no longer active. The inactive facilities, 1X Marchese Farms, located at 32400 South Chrisman Road, and Pushpinder Singh, located at 34234 South Chrisman Road, were identified in the HAZNET and HWG databases. The records reviewed indicate neither facility had reported releases or violations associated with this database listing prior to ceasing generation of hazardous or other regulated wastes.

  - The remaining facility, A.B. Fab, Inc., located at 32483 South Chrisman Road, was identified in the CALEPA SITES, ECHO, FRS, HAZNET, HWG, MANIFEST, and RCRA_NONGEN databases regarding the storage and handling of hazardous substances or materials. The records reviewed indicate that there have not been any reported violations or releases associated with operations at this facility, which based

on interview comments with a representative of the property owner, no longer generates hazardous waste. Based on this information, in the opinion of Cameron-Cole, the identified database listings for the A.B. Fab, Inc. portion of the subject property does not constitute RECs as defined by the applicable standard.

- According to the Envirosite Report, there is one UST / UST_SAN JOAQUIN COUNTY site located within the AMSD of the subject property. Country Mart Gas & Food Station, 34243 South Chrisman Road, is located 0.023 miles southeast (inferred crossgradient) from the subject property. This facility is also identified in the CALEPA SITES, ECHO, EPA LUST, FRS, HAZNET, HWG, LUST REG 5, MANIFEST EPA, and RCRA_NONGEN databases. The site is an active retail fueling station that is located on the west side of South Chrisman Road. The records reviewed indicate a discharge was reported on January 24, 1995 during the removal and replacement of USTs on the property. The site completed assessment for potential soil contamination, and the case was closed on May 12, 1998. There was no other information provided, nor were there any documents saved within the California State Water Resources Control Board GeoTracker database. The site is reported to currently maintain four USTs containing gasoline and diesel fuel. Records indicate these tanks were all installed in January 1995. The ECHO database listing is associated with the RCRA status of the site as a RCRA Non-Generator of hazardous waste. The records reviewed indicate there have not been any reported violations or incidents associated with the site's RCRA status. Based on this information, in the opinion of Cameron-Cole, Country Mart Gas & Food Station, identified in the above listed databases, does not constitute a REC in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there is one LUST REG 5 site located within the ASMD of the subject property. Country Mart Gas & Food Station, 34243 South Chrisman Road, reported a release in January 1995 that was subsequently closed in May 1998. Based on this information, in the opinion of Cameron-Cole, the identified LUST REG 5 site does not constitute a REC in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there is one ENVIROSTOR site located within the AMSD of the subject property. Tracy Tire Fire, 29425 South MacArthur Drive, is located 0.734 miles northwest (inferred crossgradient) from the subject property. The records reviewed indicate a tire fire resulted in the contamination of soil and groundwater at the site. The facility underwent remediation and subsequently achieved regulatory closure. Based on the closed regulatory status, distance, and inferred crossgradient location, in the opinion of Cameron-Cole, the identified ENVIROSTOR site does not constitute a REC in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there are six HWG/HAZNET sites located within the AMSD of the subject property, including the subject property which is discussed above. The records reviewed indicate four of the remaining sites do not have any documented releases or violations associated with these database listings. The remaining facility, Crown Nut Company, 31995 South Chrisman Road, is located 0.158 miles north (inferred downgradient) from the subject property. The records reviewed indicate the facility has eight violations associated with an inspection completed in May 2019, all regarding improper filing of emergency response plans or hazardous material inventory lists. Records indicate the facility subsequently achieved regulatory compliance and there are no other records of violations reported. Based on this information, in the opinion of Cameron-Cole, the identified HWG/HAZNET sites do not constitute RECs in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there are two SWF/LF sites located within the AMSD of the subject property. Tracy Material and Recovery Transfer Station, 30703 South MacArthur Drive, is located 0.409 miles northwest (inferred crossgradient) from the subject property. The record reviewed indicate that the facility is

properly permitted and active with no reported violations. The second site is Sukhit Sandhu (IDS) (Solid Waste Information System #39-AA-0064), 31310 South Tracy Boulevard, located 0.166 miles northwest (inferred crossgradient) from the subject property. Records indicate this facility does not require a permit and is inspected monthly. There are no records of reported violations or releases. Based on this information, in the opinion of Cameron-Cole, the identified SWF/LF sites do not constitute RECs in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there is one SWRCY / LDS site located within the AMSD of the subject property. Tracy Material Recovery and Transfer Station, 30703 MacArthur Drive, is located 0.409 miles northwest (inferred crossgradient) from the subject property. The records reviewed indicate this facility has been operating since March 16, 2017, and there are no reported violations or releases associated with operations. Based on this information, in the opinion of Cameron-Cole, the identified SWRCY / LDS site does not constitute a REC in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there are seven CALEPA SITES located within the AMSD of the subject property. The records reviewed indicate each of these sites are listed within the CALEPA SITES database due to the use, storage, or handling of hazardous substances or petroleum products. Two of these sites have received violations for improper filing of emergency response plans. However, there have been no violations or reported releases from any of the identified sites. Based on this information, in the opinion of Cameron-Cole, the identified CALEPA SITES do not constitute RECs in connection with the subject property as defined by the applicable standard.

- Cameron-Cole queried the NPMS online database to identify the presence of conveyance pipelines on the subject property. Records indicate there is a natural gas pipeline and hazardous liquid pipeline that transects the subject property. According to the NPMS, there have been no reported incidents or violations associated with the pipelines. Based on this information, in the opinion of Cameron-Cole, the presence of the identified underground pipeline(s) on the subject property does not constitute RECs in connection with the subject property as defined by the applicable standard.

- A majority of the subject property is currently developed as agricultural land. The principal crop is almonds with some acreage planted with cherries. Historical records indicate the property has been developed for agricultural purposes dating back to at least 1937. This historical use of the subject property and surrounding area could have resulted in the presence of fertilizer and/or pesticide residuals on the subject property. Observations made during the site reconnaissance also indicate that almonds are fumigated in covered piles on portions of the subject property to prevent or treat possible crop damage. Proper application of pesticides on agricultural properties is not considered a release under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and therefore the potential presence of these constituents on portions of the property would not be considered a REC pursuant to the ASTM International E1527-21 Standard Practice. In the opinion of Cameron-Cole, the potential presence of such fertilizer and/or pesticide residuals on the subject property due to the proper application of these products is considered a Business Environmental Risk (BER).

In summary, Cameron-Cole has performed a Phase I ESA, in general conformance with the scope and limitations of ASTM International Standard E1527-21, for a 1,580.44-acre tract of land located in Tracy, San Joaquin County, California. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. This assessment has revealed the following RECs, CRECs, HRECs, or significant data gaps in connection with the subject property.

- Two estimated 200-gallon fuel ASTs were observed on the subject property within the "Central Industrial Area". Although the ASTs were located within a secondary containment structure, evidence of stained/discolored soil and concrete was observed both inside and outside the secondary containment. A petroleum odor was also noted in the soil surrounding the secondary containment structure. In addition, approximately 10, 55-gallon drums labelled as containing pesticides or herbicides, most of them empty but some containing residual fluids were observed stored on bare soil with no secondary containment. Large areas of stained/discolored soils impacted by what appeared to be hydraulic fluid or oil were also observed around various pieces of farm equipment or machinery that were stored in exterior locations. Two, approximately 330-gallon plastic IBCs containing used oil were also observed stored in exterior locations with direct soil contact. Evidence of spillage on the side of the IBCs and significant staining on the surrounding soils was observed at the time of the site reconnaissance. A large pile of more than 100 discarded 1- to 5-gallon pesticide/herbicide containers was observed to be haphazardly strewn in and around a storage building in this same area. Approximately one dozen empty 330-gallon IBCs were observed. Labels indicate the IBCs formerly contained herbicides. A pile of some 25 lead acid automotive batteries were observed improperly stored directly on soil adjacent to a storage building. Several 55-gallon drums used as burn barrels and containing what appeared to be household trash were also observed. Approximately 30 boxes of unused pesticides and water conditioning agents were observed in the vicinity of the shop, all of which were stored directly on the soil. Based on the observed improper storage and visual evidence of releases to the environment, in the opinion of Cameron-Cole, the hazardous substances and petroleum products observed within the Pacific Gateway Central portion of the subject property constitutes a REC as defined by the applicable standard.

- Cameron-Cole observed a 200-gallon AST, approximately 50, 1- to 5-gallon pesticide/herbicide containers, 2, 55-gallon drums containing what appeared to be waste oil, and various pieces of farm equipment including tractors, ATVs, trucks, sprayers, and tillers on the 40-acre, non-contiguous parcel identified as the Off-Site Basin portion of the subject property. This area of the subject property consisted mainly of agricultural land in addition to two shop buildings and various equipment storage areas. Numerous large, covered mounds of almonds undergoing fumigation were also observed on this portion of the property. Visual evidence of stained/discolored soil and petroleum odors were noted around the AST and the waste oil drums. Limited areas of *de minimis* staining were observed around some of the agricultural equipment in this area. Based on the improper storage of materials and the evidence of releases surrounding the AST and drums, in the opinion of Cameron-Cole, the hazardous substances or petroleum products observed on Off-Site Basin portion of the subject property constitutes a REC as defined by the applicable standard.

This summary does not contain all the information that is found in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and aid in any decisions made or actions taken based on this information.

2.0 INTRODUCTION

2.1 Purpose

Cameron-Cole performed a Phase I ESA for a 1,580.44-acre tract of land comprised of 34 parcels located in Tracy, San Joaquin County, California The assessment was conducted in accordance with the Master Agreement for Environmental Engineering Consulting Services between Cameron-Cole, LLC and Affinius Capital (the Client) and in general conformance with the ASTM International Standard E1527-21 Standard Practice for Environmental Site Assessments. This ESA was designed to identify, to the extent feasible, the presence or likely presence of RECs in connection with the property.

The purpose of this Phase I ESA is to allow the "User" to benefit from one of the defenses referenced in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) liability: the innocent landowner defense, the contiguous property owner defense, or bona fide prospective purchaser defense. These defenses are collectively referred to as the "landowner liability protections" or "LLPs." ASTM International Standard E1527-21 constitutes "all appropriate inquiry" into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 USC §9601(35)(B). Cameron-Cole considers the Client to be the "User" of this report.

The goal of this Phase I ESA is to identify RECs in connection with the subject property consistent with ASTM International Standard E1527-21. A REC is defined as:

> *1) the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; 2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or 3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment.*

2.2 Detailed Scope of Services

This Phase I ESA was conducted in accordance with the Master Agreement for Environmental Engineering Consulting Services between Cameron-Cole, LLC and Affinius Capital and Cameron-Cole's proposal number 482-4465, dated December 16, 2024, and authorized by Mr. Kolten Booher with Affinius Capital on January 2, 2025. The scope of work consists of completing a Phase I ESA in general conformance with ASTM International Standard E1527-21 and the Scope of Services specified in the Master Agreement.

2.3 Significant Assumptions

Historical resources, personal interviews, and federal and state agency files regarding site operations and past historical use have been considered when presenting Cameron-Cole's findings and opinions. Cameron-Cole considers all information provided by our environmental database subcontractor regarding regulatory status of facilities to be current, accurate, and complete. Although Cameron-Cole made no independent investigation as to the accuracy and completeness of other information derived from secondary sources, Cameron-Cole assumes such information is reliable and representative of site conditions.

2.4 Limitations and Exceptions of Assessment

2.4.1 Site-specific Limitations

The property was observed by driving through accessible roadways throughout the subject property as well as walking. Some portions of the subject property were not observed due to the size and limited roadway access as well as inside the residential properties. Cameron-Cole was not permitted to obtain photographic documentation of the inside of the A.B. Fab. Inc. warehouse but was permitted to observe the inside for the presence of hazardous substances or petroleum products. No other site-specific limitations were encountered during the site reconnaissance.

2.4.2 Data Gaps

A data gap is a lack of, or inability to, obtain information required by ASTM International Standard E1527-21 despite good faith efforts to gather such information. Data gaps may result from incompleteness in any of the activities required by ASTM International Standard E1527-21. According to ASTM International Standard Practice E1527-21, data gaps are only significant if "other information and/or professional experience raise reasonable concerns involving the data gap." In the opinion of Cameron-Cole, no significant data gaps were encountered during the completion of this Phase I ESA.

2.4.3 General Limitations and Exceptions

The Phase I ESA is produced in accordance with customary principles and practices in the applicable fields of environmental science and engineering. Cameron-Cole is not responsible for conclusions, opinions, or recommendations made by others based upon the information presented herein.

Although industry standard practices are employed, Phase I ESAs are inherently limited, given that findings and conclusions are developed from limited site evaluation and research. In performing a Phase I ESA, Cameron-Cole can only rely upon those records regarding the subject property and surrounding properties, which are available to the public and which can reasonably be obtained by Cameron-Cole. Cameron-Cole's opinions, conclusions, and recommendations are therefore limited to those which can be derived from such available and reasonably obtainable records. It is often necessary for Cameron-Cole to rely on information prepared or obtained by others to complete the Phase I ESA. Cameron-Cole makes no warranty or representation as to the accuracy or completeness of information obtained from third parties. Additionally, changes may result with the passage of time with respect to characteristics of the subject property and those of surrounding properties. Cameron-Cole and its representatives do not warrant for or against future changes in operations or conditions, nor do they warrant for or against conditions present of a type or at a location not specifically addressed in the Phase I ESA.

Subject to the limitations stated herein, the opinions presented in the Phase I ESA are valid for a period of 90 days from the date of issuance.

Air, soil, and groundwater testing are not part of the Phase I ESA Report. This Phase I ESA is not intended to establish whether air, soil, or groundwater contamination, or waste disposal is present or not present on the subject property or on surrounding properties. Knowledge of actual environmental conditions on the subject property or on any surrounding properties can only be obtained from air, soil, and groundwater testing; the installation of groundwater monitoring wells; and possibly additional testing—all of which are outside the scope of the Phase I ESA.

Reasonable efforts were made within the scope of the Phase I ESA to identify the presence of underground storage tanks (USTs), aboveground storage tanks (ASTs), and ancillary equipment on or near the subject property. Limitations to the Phase I ESA exist regarding USTs and ASTs, inasmuch as information was obtained by Cameron-Cole solely through its review of unobstructed and readily accessible areas, database information, and interviews. Such methods (which are considered industry standard) do not preclude the actual presence of subsurface equipment (including USTs) or regulated materials that are hidden from view due to historical activity, such as site paving, re-grading, construction, or debris pile storage. Similarly, it is possible that additional UST facilities not listed in regulatory database files may exist at the subject property or on properties adjacent to the subject property due to owner/operator registration negligence, filing errors with the state regulatory agency, or other reasons over which Cameron-Cole has no control or ability to determine.

Conclusions in the Phase I ESA regarding potential environmental impact of properties and facilities surrounding the subject property are based upon reasonably available information obtained from environmental databases and inferred groundwater flow direction. Actual groundwater conditions on the subject property, including flow direction, can only be definitively ascertained through the installation and gauging of at least three on-site groundwater monitoring wells, which is outside the scope of a Phase I ESA.

No environmental assessment can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of a Phase I ESA is solely intended to reduce, but not eliminate, uncertainty regarding the potential for RECs in connection with the subject property, and this practice recognizes reasonable limits of time and cost. This Phase I ESA has been prepared for the exclusive use and benefit of Affinius Capital subject to the terms and conditions specified in the Master Agreement for Environmental Engineering Consulting Services between Cameron-Cole, LLC and Affinius Capital. The Phase I ESA is for the sole and exclusive use and benefit of Affinius Capital, our Client. Cameron-Cole makes no warranty as to the Phase I ESA except as to Affinius Capital's exclusive use of the Phase I ESA. The Client bears the sole responsibility for ensuring that the Phase I ESA is distributed or disseminated to only those third-parties to whom Affinius Capital is strictly obligated by contract, law, regulation, or ordinance to provide it. Cameron-Cole disclaims any and all liability to any person or entity other than Affinius Capital who uses or relies on the Phase I ESA in any way whatsoever without the express written consent of both Affinius Capital and Cameron-Cole.

Third-party reliance letters may be issued upon request and upon payment of the then current fee for such letters, and only if both Affinius Capital and Cameron-Cole provide express written consent for any such reliance letters.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

The subject property consists of a 1,580.44-acre tract of land comprised of 34 parcels that are currently developed for agricultural and commercial purposes. The property is located in Tracy, San Joaquin County, California. A Site Location Map is provided as Figure 1. According to the San Joaquin Office of the Assessor's online records, the Property ID Number for each parcel is 253-140-090, 253-140-100, 253-140-110, 253-140-130, 253-140-140, 253-140-150, 253-140-160, 253-140-170, 253-140-190, 253-140-200, 253-140-210, 253-140-220, 253-140-230, 253-140-240, 253-140-250, 253-180-020, 253-190-210, 253-190-220, 253-180-060, 253-180-110, 253-190-110, 253-260-090, 253-260-120, 253-260-130, 253-290-050, 253-290-110, 253-290-120, 253-290-130, 253-260-050, 253-260-140, 253-190-040, 253-190-050, 253-190-190, 253-200-190, and are currently owned by multiple parties.

3.2 Site and Vicinity Characteristics

The subject property consists of 1,580.44-acres of mostly developed agricultural land, along with residential and commercial property. The subject property is bordered by other agricultural land and the California Aqueduct and Delta Mendota Canal. The commercial property identified as A.B. Fab. Inc. consists of four single-story structures used for office space, materials storage, and a manufacturing facility. Also observed on the subject property are residential trailers, equipment storage buildings, and multiple workshops. Surrounding properties consist primarily of agricultural land with residential and commercial properties. A Site Vicinity Map depicting the subject and adjoining properties is provided as Figure 2. Photographic documentation of the site and neighboring property conditions is presented in Appendix A, Photographs.

3.3 Current Uses of the Property

At the time of site reconnaissance, the subject property was developed as agricultural land with almond orchards, commercial property identified as A.B. Fab. Inc., and residential properties. Other portions of the subject property are utilized for storage space and abandoned materials including semi-trucks, shop buildings, and equipment storage.

3.4 Descriptions of Structures, Roads, and Other Improvements to the Site

The subject property can be accessed via South MacArthur Drive, South Chrisman Road, South Bird Road, as well as multiple undeveloped roadways that transect the property through the orchards. There are multiple structures associated with commercial and residential uses. There is also a large concrete pit located along the western boundary of the California Aqueduct, most likely associated with the aqueduct, that is no longer in use.

3.5 Current Uses of Adjoining Properties

North	Agricultural land.
South	Agricultural land and Tracy Golf and Country Club

East	Agricultural land.
West	Agricultural land.

4.0 USER PROVIDED INFORMATION

In order for the User to qualify for one of the LLPs offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, Section 6 of ASTM International Standard E1527-21 requires the User to provide the environmental professional (EP) the following information:

- The existence of environmental cleanup liens;
- Activity and Use Limitations (AULs) recorded against the subject property;
- Specialized knowledge or experience of the User;
- Relationship of the purchase price to the fair market value of the property if it were not contaminated;
- Commonly known or reasonably ascertainable information about the subject property; and
- The degree of obviousness of the presence of contamination at the subject property.

4.1 Title Records

Historical chain-of-title reports were not provided by the User of the report nor obtained by Cameron-Cole as part of the approved scope of services for this project. According to the San Joaquin Office of the Assessor's online records, the Property ID Number for each parcel is 253-140-090, 253-140-100, 253-140-110, 253-140-130, 253-140-140, 253-140-150, 253-140-160, 253-140-170, 253-140-190, 253-140-200, 253-140-210, 253-140-220, 253-140-230, 253-140-240, 253-140-250, 253-180-020, 253-190-210, 253-190-220, 253-180-060, 253-180-110, 253-190-110, 253-260-090, 253-260-120, 253-260-130, 253-290-050, 253-290-110, 253-290-120, 253-290-130, 253-260-050, 253-260-140, 253-190-040, 253-190-050, 253-190-190, 253-200-190, and are currently owned by multiple parties.

4.2 Environmental Liens or Activity and Use Limitations

Mr. Kolten Booher, Associate with Affinius Capital, indicated via a completed User Questionnaire that he is not aware of any AULs, such as engineering controls, land use restrictions, or institutional controls, that have been filed or recorded in connection with the subject property.

4.3 Specialized Knowledge

Mr. Booher indicated he does not possess any specialized knowledge or experience regarding the subject property.

4.4 Commonly Known or Reasonably Ascertainable Information

Mr. Booher was asked to provide any commonly known or reasonably ascertainable information within the local community that would be material to identifying RECs in connection with the subject property. Mr. Booher indicated he was aware of pervious use of the subject property as agricultural land for almond farming. Mr. Booher indicated he was aware of fertilizers used for agriculture on the subject property and that he is not aware of any previous spills or releases on the property that required environmental cleanup.

4.5 Valuation Reduction for Environmental Issues

Mr. Booher indicated he has no reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property.

4.6 Owner, Property Manager, and Occupant Information

According to the San Joaquin Office of the Assessor's online records, the Property ID Number for each parcel is 253-140-090, 253-140-100, 253-140-110, 253-140-130, 253-140-140, 253-140-150, 253-140-160, 253-140-170, 253-140-190, 253-140-200, 253-140-210, 253-140-220, 253-140-230, 253-140-240, 253-140-250, 253-180-020, 253-190-210, 253-190-220, 253-180-060, 253-180-110, 253-190-110, 253-260-090, 253-260-120, 253-260-130, 253-290-050, 253-290-110, 253-290-120, 253-290-130, 253-260-050, 253-260-140, 253-190-040, 253-190-050, 253-190-190, 253-200-190, and are currently owned by multiple parties.

4.7 Reason for Performing Phase I ESA

Mr. Booher indicated via a User Questionnaire completed on January 8, 2025, that the reason for performing the Phase I ESA is to satisfy one of the requirements for the innocent landowner defense under CERCLA and/or to understand potential environmental conditions that could materially impact the operations of the business associated with the parcel of commercial real estate.

A copy of the questionnaire completed by the User representative is provided in Appendix B.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources and Review

Envirosite provided Cameron-Cole with a comprehensive government agency information search in accordance with ASTM International Standard E1527-21. The regulatory search information and a legend of the database acronyms are presented as Appendix C: Government Records Report. Maps depicting properties listed in the various databases searched by Envirosite are also provided. The table below provides a summary of the federal records reviewed along with each record's AMSD from the subject property.

Standard Environmental Database Record Summary

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8 MILE	1/8–1/4 MILE	1/4–1/2 MILE	1/2–1 MILE	>1 MILE	TOTAL MAPPED
FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS								
AST—CA		0.250	0	0	-	-	-	0
FID UST – CA		0.250	0	0	-	-	-	0
HIST AST – CA		0.250	0	0	-	-	-	0
HIST UST – CA		0.250	0	0	-	-	-	0
UST—CA		0.250	1	0	-	-	-	1
UST_SAN JOAQUIN COUNTY – CA		0.250	1	0	-	-	-	1
FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS								
LUST_ALAMEDA COUNTY – CA		0.500	0	0	0	-	-	0
LUST REG 5 – CA		0.500	1	0	0	-	-	1
SLIC REG 5 – CA		0.500	0	0	0	-	-	0
STATE AND TRIBAL – EQUIVALENT CERCLIS								
ENVIROSTOR – CA		1.000	0	0	0	1	-	1
OIL & GAS CLEANUP – CA		0.500	0	0	0	-	-	0
SWRCB CLEANUP – CA		0.500	0	0	0	-	-	0
TOXIC PITS – CA		1.000	0	0	0	0	-	0
STATE RCRA GENERATORS LIST								
HWF – CA	X	0.250	1	2	-	-	-	6

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8 MILE	1/8–1/4 MILE	1/4–1/2 MILE	1/2–1 MILE	>1 MILE	TOTAL MAPPED
STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS								
SWF/LF – CA		0.500	0	1	1	-	-	2
LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES								
CDL – CA		SP	0	-	-	-	-	0
SCH – CA		0.250	0	0	-	-	-	0
LOCAL LAND RECORDS								
HIST LIENS – CA		SP	0	-	-	-	-	0
LIENS – CA		SP	0	-	-	-	-	0
LOCAL LISTS OF LANDFILL/SOLID WASTE DISPOSAL SITES								
SWRCY -CA		0.500	0	0	1	-	-	1

SUBJECT PROPERTY

According to the Envirosite Report, the subject property was identified in the HAZNET, HWG, CALEPA SITES, ECHO, FRS, Manifest EPA, and RCRA_NONGEN databases. Further investigation regarding the identified database listing is as follows:

- The subject property was identified within these database listings from three facilities, two of which are no longer active. The inactive facilities, 1X Marchese Farms, located at 32400 South Chrisman Road, and Pushpinder Singh, located at 34234 South Chrisman Road, were identified in the HAZNET and HWG databases. The records reviewed indicate neither facility had reported releases or violations associated with operations prior to inactivity.

- The remaining facility, A.B. Fab, Inc., located at 32483 South Chrisman Road was identified in the CALEPA SITES, ECHO, FRS, HAZNET, HWG, MANIFEST, and RCRA_NONGEN databases regarding the storage and handling of hazardous substances or materials. A.B. Fab, Inc. is a metal fabrication and dust control system facility. The records reviewed indicate that there have not been any reported violations or releases associated with operations at this facility.

FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS

According to the Envirosite Report, there is one UST / UST_SAN JOAQUIN COUNTY site located within the AMSD of the subject property. Country Mart Gas & Food Station, 34243 South Chrisman Road, is located 0.023 miles southeast (inferred crossgradient) from the subject property. This facility is also identified in the CALEPA SITES, ECHO, EPA LUST, FRS, HAZNET, HWG, LUST REG 5, MANIFEST EPA, and RCRA_NONGEN databases. The site is an active retail fueling station that is located on the west side of South Chrisman Road. The records reviewed indicate a leak was reported on January 24, 1995 during a tank removal on the property. The site underwent assessment for potential soil contamination, and the case was closed on May 12, 1998. There was no other information provided, nor were there any documents saved within the California State Water Resources Control Board GeoTracker database. The site is reported to currently maintain four USTs containing

gasoline and diesel fuel. Records indicate these tanks were all installed on January 1, 1995. The ECHO database listing is associated with the RCRA status of the site as a RCRA Non-Generator of hazardous waste. The records reviewed indicate there have not been any reported violations or incidents associated with the site's RCRA status.

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS

According to the Envirosite Report, there is one LUST REG 5 site located within the ASMD of the subject property. This database listing, Country Mart Gas & Food Station, was also identified and discussed in the EPA UST database section.

STATE AND TRIBAL EQUIVALENT CERCLIS

According to the Envirosite Report, there is one ENVIROSTOR site located within the AMSD of the subject property. Tracy Tire Fire, 29425 South MacArthur Drive, is located 0.734 miles northwest (inferred crossgradient) from the subject property. The records reviewed indicate a reported release resulted in the contamination of soil and groundwater at the site. The facility underwent remediation and subsequently achieved compliance to the satisfaction of the regulatory agency.

STATE RCRA GENERATORS LIST

According to the Envirosite Report, there are six HWG sites, including the subject property discussed above, located within the AMSD of the subject property. The records reviewed indicate five of these sites do not have any reported releases or violations. The remaining facility, Crown Nut Company, 31995 South Chrisman Road, is located 0.158 miles north (inferred downgradient) from the subject property. The records reviewed indicate the facility has eight violations associated with an inspection completed on May 10, 2019, all regarding improper filing of emergency response plans or hazardous material inventory lists. The facility has subsequently achieved compliance and there are no other records of violations reported.

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS / LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

According to the Envirosite Report, there are two SWF/LF sites located within the AMSD of the subject property. Tracy Material and Recovery Transfer Station, 30703 South MacArthur Drive, is located 0.409 miles northwest (inferred crossgradient) from the subject property. The record reviewed indicate that the facility is properly permitted and active with no reported violations. The second site is Sukhit Sandhu (IDS) (Solid Waste Information System #39-AA-0064), 31310 South Tracy Boulevard, located 0.166 miles northwest (inferred crossgradient) from the subject property. Records indicate this facility is operating without a permit and is inspected monthly. There are no records of reported violations or releases.

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

According to the Envirosite Report, there is one SWRCY site located within the AMSD of the subject property. Tracy Material Recovery and Transfer Station, 30703 MacArthur Drive, is located 0.409 miles northwest (inferred crossgradient) from the subject property. The records reviewed indicate this facility has been operating since March 16, 2017, and there are no reported violations or releases associated with operations.

5.2 Additional Environmental Record Sources and Review

The table below provides a summary of the additional environmental records reviewed along with each record's AMSD from the subject property.

Other Ascertainable Records Summary

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8 MILE	1/8–1/4 MILE	1/4–1/2 MILE	1/2–1 MILE	>1 MILE	TOTAL MAPPED
CALEPA SITES – CA	X	0.250	3	3	0	-	-	7
CIWQS – CA		SP	0	-	-	-	-	0
CIWQS 2 – CA		SP	0	-	-	-	-	0
DRYCLEARNERS – CA		0.250	0	0	-	-	-	0
DRYCLEANERS_SAN JOAQUIN VALLEY – CA		0.250	0	0	-	-	-	0
FA – CA		SP	0	-	-	-	-	0
FA 2 – CA		SP	0	-	-	-	-	0
HAZNET – CA	X	0.250	1	2	-	-	-	6
HIST HAZNET – CA		0.250	0	0	-	-	-	0
HIST HWP – CA		1.000	0	0	0	0	-	0
HIST LDS – CA		0.500	0	0	0	-	-	0
HIST MCS – CA		1.000	0	0	0	0	-	0
HIST NFA – CA		0.500	0	0	0	-	-	0
HWM COMMERCIAL FACILITIES – CA		0.250	0	0	-	-	-	0
HWF – CA		1.000	0	0	0	0	-	0
HWT – CA		0.250	0	0	-	-	-	0
LDS – CA		0.500	0	0	1	-	-	1
MCS 0 CA		1.000	0	0	0	0	-	0
MMMP – CA		0.250	0	0	-	-	-	0
MMMP 2 – CA		0.250	0	0	-	-	-	0
NFA – CA		0.500	0	0	0	-	-	0
NPDES – CA		SP	0	-	-	-	-	0
PERCHLORATE 2 – CA		0.500	0	0	0	-	-	0
PFAS—CA		0.500	0	0	0	-	-	0
PFAS DOD – CA		0.500	0	0	0	-	-	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8 MILE	1/8–1/4 MILE	1/4–1/2 MILE	1/2–1 MILE	>1 MILE	TOTAL MAPPED
PFAS GAMA – CA		0.500	0	0	0	-	-	0
RFR – CA		SP	0	-	-	-	-	0
WDR – CA		SP	0	-	-	-	-	0
WDS – CA		SP	0	-	-	-	-	0

SP = Subject Property

CALIFORNIA EPA SITES

According to the Envirosite Report, there are seven CALEPA SITES located within the AMSD of the subject property. The records reviewed indicate each of these sites are listed within the CALEPA SITES database due to the use, storage, or handling of hazardous substances or petroleum products. Two of these sites have received violations for improper filing of emergency response plans; however, there have been no violations or reported releases from any site.

HAZNET

According to the Envirosite Report, there are six HAZNET sites, including the subject property discussed above, located within the AMSD of the subject property. The records reviewed indicate five of these sites do not have any reported releases or violations. The remaining facility, Crown Nut Company, 31995 South Chrisman Road, is located 0.158 miles north (inferred downgradient) from the subject property. The records reviewed indicate the facility has eight violations associated with an inspection completed on May 10, 2019, all regarding improper filing of emergency response plans or hazardous material inventory lists. The facility has subsequently achieved compliance and there are no other records of violations reported.

LDS

According to the Envirosite Report, there is one LDS site located within the AMSD of the subject property. Tracy Material Recovery and Transfer Station, 30703 MacArthur Drive, is located 0.409 miles northwest (inferred crossgradient) from the subject property. The records reviewed indicate this facility has been operating since March 16, 2017, and there are no reported violations or releases associated with operations.

5.3 Vapor Encroachment Condition Summary

Cameron-Cole conducted a review of available environmental records and conditions observed on the subject property and adjoining parcels to evaluate the potential for a vapor encroachment condition (VEC) to exist on the subject property. Evidence of releases and spills of hazardous materials and/or petroleum products was observed at multiple areas of the subject property. Also, the historical and current use of the property as agricultural land includes the treatment of chemicals like pesticides/herbicides that are applied to the fields for almond production. Based on this information, the records reviewed, inferred groundwater gradient, depth to groundwater, and physical setting information, the potential for a VEC to exist on the subject property cannot be ruled out.

5.4 Unmappable Sites

The Envirosite Report includes a summary of sites that may be located in the general area of the subject property, yet do not have adequate location addresses or latitude/longitude coordinates to pinpoint their location in relation to the subject property. According to the Envirosite Report, there are no unmappable sites.

5.5 Additional Environmental Record Sources

5.5.1 County Property Assessor/Appraiser

According to the San Joaquin Office of the Assessor's online records, the Property ID Number for each parcel is 253-140-090, 253-140-100, 253-140-110, 253-140-130, 253-140-140, 253-140-150, 253-140-160, 253-140-170, 253-140-190, 253-140-200, 253-140-210, 253-140-220, 253-140-230, 253-140-240, 253-140-250, 253-180-020, 253-190-210, 253-190-220, 253-180-060, 253-180-110, 253-190-110, 253-260-090, 253-260-120, 253-260-130, 253-290-050, 253-290-110, 253-290-120, 253-290-130, 253-260-050, 253-260-140, 253-190-040, 253-190-050, 253-190-190, 253-200-190, and are currently owned by multiple parties.

5.5.2 Fire/Police Officials

Cameron-Cole contacted the San Joaquin County Fire Authority on January 24, 2025, requesting records pertaining to fires or responses to incidents, spills, or releases of hazardous substances or petroleum products associated with the property. A response was not received within the time frame for completion of this report.

5.5.3 Other Record Sources

Cameron-Cole contacted the San Joaquin County Public Health Services Agency via email on January 24, 2025, for records pertaining to the registration, use, storage, or handling of hazardous substances or petroleum products, including storage tanks or any other environmental concerns associated with the property or in the immediate vicinity of the property. A response was not received within the time frame for completion of this report.

Cameron-Cole queried the NPMS online database to identify the presence of conveyance pipelines on the subject property. Records indicate there is a natural gas pipeline that transects the subject property, as well as a hazardous liquid pipeline that runs along the western property boundary. According to the NPMS, there have been no reported incidents or violations associated with the pipelines.

5.6 Physical Setting Sources

5.6.1 Topography

A Site Location Map is provided as Figure 1 and includes information from the 2018 USGS 7.5-minute Series, Tracy and Vernalis, California quadrangles. The map was reviewed to establish the physical setting of the subject site and surrounding area. The site elevation is reported to be approximately 183 ft above mean sea level with a relatively flat area.

5.6.2 Soils/Geology

The Envirosite Report provides a summary of the US Department of Agriculture (USDA) Soil Survey of the subject property's general area. According to the Envirosite Report, the soil components are primarily identified as El Solyo series, a clay loam that is classified as a non-hydric soil, well drained with a high corrosion potential, Capay series,

a clay classified as a hydric soil, moderately well drained with a high corrosion potential, and Zacharias series, also a clay loam that is classified as a non-hydric soil, well drained with a moderate corrosion potential. The soil classifications vary throughout the property which is currently utilized as agricultural land.

5.6.3 Hydrology

Based on topographic maps and considering regional flow patterns, the groundwater flow in the vicinity of the site is inferred to be to the northeast. It must be noted that groundwater flow direction can be influenced by factors, such as surface topography, underground structures, seasonal fluctuation, soil and bedrock geology, and production wells, which were not considered in this interpretation. Therefore, actual groundwater flow direction under the subject property can only be determined conclusively through the use of groundwater wells and collection of depth-to-water and surface elevation measurements.

5.7 Historical Use Information

Available historical resources were consulted to develop a history of the previous uses of the property to help identify the likelihood of past uses having led to RECs in connection with the property. Copies of the aerial photographs, historical topographic maps, Fire Insurance Maps, and City Directory Report are provided in Appendix D.

Historical documentation identifies use of the subject property to consist of residential, commercial, and agricultural land.

Records indicate majority of the subject property is currently developed for agricultural purposes. Although no evidence of spills, misuse, or misapplication of pesticides, herbicides, or fertilizers was identified during this Phase I assessment, the historical agricultural use of the subject property and surrounding area could have resulted in the accumulation of fertilizer and/or pesticide residuals on the subject property. Proper application of pesticides on agricultural properties is not considered a release under CERCLA and therefore the potential presence of these constituents on portions of the property would not be considered a REC under the ASTM International E1527-21 Standard Practice. However, the potential presence of these constituents on the subject property may constitute a BER, depending on the intended future uses of the property.

5.7.1 Aerial Photographs

The aerial photographs described below were previously furnished by Envirosite. Copies of 1937, 1954, 1957, 1967, 1968, 1970, 1971, 1973, 1974, 1982, 1983, 1985, 1987, 1993, 1998, 2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, and 2022 aerial photographs are provided in Appendix D.

Date	1937 - 1974
Scale	1” = 1,500’
Description of Subject Property	The subject property appears to be developed for agricultural purposes along with a few residential properties. There are no other improvements to the property.
Adjoining North	Delta Mendota canal followed by agricultural land.
Adjoining East	Undeveloped or agricultural land.
Adjoining South	Undeveloped or agricultural land.

Adjoining West	Developed aqueduct followed by agricultural land.
Surrounding Area	Primarily undeveloped or agricultural land. A mining facility is visible to the northwest of the subject property.

Date	1982–2022
Scale	1" = 1,500'
Description of Subject Property	The subject property is developed with a few residential properties, commercial properties, and agricultural use. No other improvements or structures are visible on the property.
Adjoining North	Delta Mendota canal, followed by agricultural land and commercial property.
Adjoining East	Undeveloped or agricultural land.
Adjoining South	Undeveloped or agricultural land.
Adjoining West	Developed aqueduct followed by agricultural land.
Surrounding Area	Primarily agricultural land and some commercial or residential properties.

5.7.2 Fire Insurance Maps (Sanborn Maps)

The Historical Information Gatherers Historical Map Collection and the US Library of Congress Map Collection were searched for Fire Insurance Maps (FIMs), real estate atlases, and similar maps for the subject property and adjoining properties. These maps were used to create a multi-page file named FIM+Maps. According to the Envirosite Report, there is no coverage provided for this area.

5.7.3 Recorded Land Title Records

Historical chain-of-title reports were not provided by the User of the report nor obtained by Cameron-Cole as part of the approved scope of services for this project. According to the San Joaquin Office of the Assessor's online records, the Property ID Number for each parcel is 253-140-090, 253-140-100, 253-140-110, 253-140-130, 253-140-140, 253-140-150, 253-140-160, 253-140-170, 253-140-190, 253-140-200, 253-140-210, 253-140-220, 253-140-230, 253-140-240, 253-140-250, 253-180-020, 253-190-210, 253-190-220, 253-180-060, 253-180-110, 253-190-110, 253-260-090, 253-260-120, 253-260-130, 253-290-050, 253-290-110, 253-290-120, 253-290-130, 253-260-050, 253-260-140, 253-190-040, 253-190-050, 253-190-190, 253-200-190, and are currently owned by multiple parties.

5.7.4 Historic USGS Topographic Maps

The historic topographic maps described below were obtained from Envirosite. Copies of the 1915, 1916, 1922, 1942, 1952, 1954, 1969, 1991, 2012, 2015, 2018, and 2021 topographic maps are provided in Appendix D.

Date	1916 – 1942
Scale	1:31680 for 1915, 1916, 1:62500 for remaining images
Description of Subject Property	Two structures are visible on the "Off-Site Basin" portion of the subject property. There are also four structures, most likely associated with a residential property, located in the center of the subject property main area. No other structures or improvements are depicted on the subject property aside from undeveloped roadways which are depicted on the property.
Adjoining North	Delta Mendota, followed by undeveloped land.
Adjoining East	Vacant, undeveloped land.
Adjoining South	Vacant, undeveloped land.
Adjoining West	Vacant, undeveloped land.
Surrounding Area	Vacant, undeveloped land. Southern Pacific Railway is located to the northwest of the subject property.

Date	1952 – 2021
Scale	1:24000
Description of Subject Property	There is a single structure on the southeast corner of the property along with a pipeline transecting the property from the northwest to the southeast. The pipeline is only visible in the 1954 image.
Adjoining North	Delta Mendota, followed by agricultural land.
Adjoining East	Undeveloped or agricultural land.
Adjoining South	Undeveloped or agricultural land.
Adjoining West	Undeveloped or agricultural land.
Surrounding Area	The surrounding area appears to be primarily agricultural land, along with the Delta Mendota Canal and California Aqueduct.

5.7.5 Local Street Directories

Historical street directories for the subject property and surrounding property addresses were provided by Envirosite. There is no address associated with the subject property, so it was not identified within the city directory listings. Surrounding properties are identified as commercial businesses or individuals associated with those businesses and residential properties.

5.7.6 Building Department Records

Historical use of the subject property was researched using other standard historical sources. Therefore, Building Department records were not reviewed as part of this assessment.

5.7.7 Zoning/Land Use Records

Historical use of the subject property was researched using other standard historical sources. Therefore, historical Zoning/Land Use records were not reviewed as part of this assessment.

5.7.8 Prior Assessment Reports

Cameron-Cole previously completed four Phase I ESAs for the subject property and other adjoining properties, dated December 17, 2021. These assessments were broken down into different areas and identified two RECs associated with the improper storage/discarding of hazardous substances and/or petroleum products on non-permeable surfaces that resulted in potential impacts. The observations made during these assessments included stained soil and strong petroleum odors from abandoned containers throughout the property. The main areas of concern for these observations were discussed and identified within the Pacific Gateway Areas A and F Phase I ESA.

Cameron-Cole also completed a Phase I ESA for a property that included the subject property, dated September 13, 2024. This assessment did not identify any RECs, HRECs, CRECs, or significant data gaps.

5.8 Historical Use Information on Adjoining Properties

The following is a summary of adjoining property historical uses based on a review of the historical records reviewed in Section 5.7

North	Adjoining property to the north is depicted as undeveloped or agricultural land with the Delta Mendota Canal adjoining.
East	Adjoining property to the east is depicted as undeveloped or agricultural land.
South	Adjoining property to the south is depicted as undeveloped or agricultural land.
West	Adjoining property to the west is depicted as undeveloped or agricultural land.

5.9 Data Failure

In accordance with ASTM International E1527-21, 8.3.1, the objective of compiling and analyzing historical property information and developing a history of the previous uses of the subject property, adjoining properties, and surrounding area is to help identify the likelihood of past uses having led to RECs in connection with the subject property. All obvious uses of the subject property must be identified from the present, back to the subject property's first developed use, or back to 1940, whichever is earlier. The report must describe all identified uses, justify the earliest date identified for the subject property's first developed use, and explain the reason for any gaps in the history of use. This task requires reviewing as many of the standard historical resources in 8.3.4.1 through 8.3.4.8, as necessary, and both reasonably ascertainable and likely to be useful. Data failure occurs when all of the standard historical sources that are reasonably ascertainable and likely to be useful have been reviewed and yet the objective has not been met. Data failure is not uncommon in trying to identify historical uses at five-year intervals back to first use or 1940 (whichever is earlier). If the data failure represents a significant data gap to the EP, ASTM International Standard E1527-21 requires documentation of the impact of the data gap on the ability of the EP to identify RECs. Based on the above information and sources searched, historical use information is deemed sufficient to comply with ASTM International E1527-21 in regard to data failure. No significant historical use information data gaps were identified.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

The methodology used by the Cameron-Cole representative during the January 10, 2025, site reconnaissance consisted of visual observations of readily accessible areas of the subject property to determine the presence or absence of hazardous substance or petroleum product storage areas or spills as indicated by stressed vegetation, soil staining, storage tanks, drums, etc.

6.2 General Site Setting

The subject property consists of a 1,580.44-acre tract of land comprised of 34 parcels that are currently developed for agricultural and commercial purposes. The property is located in Tracy, San Joaquin County, California. A Site Location Map is provided as Figure 1. According to the San Joaquin Office of the Assessor's online records, the Property ID Number for each parcel is 253-140-090, 253-140-100, 253-140-110, 253-140-130, 253-140-140, 253-140-150, 253-140-160, 253-140-170, 253-140-190, 253-140-200, 253-140-210, 253-140-220, 253-140-230, 253-140-240, 253-140-250, 253-180-020, 253-190-210, 253-190-220, 253-180-060, 253-180-110, 253-190-110, 253-260-090, 253-260-120, 253-260-130, 253-290-050, 253-290-110, 253-290-120, 253-290-130, 253-260-050, 253-260-140, 253-190-040, 253-190-050, 253-190-190, 253-200-190, and are currently owned by multiple parties. The subject property can be accessed via South MacArthur Drive, South Chrisman Road, South Bird Road, as well as multiple undeveloped roadways that transect the property through the orchards. There are multiple structures associated with commercial and residential use. There is also a large concrete pit located along the western boundary of the California Aqueduct, most likely associated with the aqueduct, that is no longer in use.

6.2.1 Geologic, Hydrogeologic, and Topographic Conditions

Based on topographic maps and observations, the subject property is generally level. Assuming groundwater flow follows topography, the shallow groundwater flow in the vicinity of the site is inferred to be to the northeast. It must be noted that groundwater flow direction can be influenced by factors, such as surface topography, underground structures, seasonal fluctuation, soil and bedrock geology, and production wells, were not considered in this interpretation. Therefore, actual groundwater flow direction under the subject property can only be determined conclusively by groundwater wells and collection of depth-to-water and surface elevation measurements.

6.2.2 General Description of Structures

There are multiple structures located on the subject property. The commercial property identified as A.B. Fab. Inc. consists of four single-story structures used for office space, materials storage, and a manufacturing facility. Also observed on the subject property are residential trailers, equipment storage buildings, and multiple workshops. There are also a few residential properties, as well as an abandoned concrete pit most likely associated with the California Aqueduct.

6.2.3 Roads

The subject property can be accessed via South MacArthur Drive, South Chrisman Road, South Bird Road, as well as multiple undeveloped roadways that transect the property through the orchards.

6.2.4 Potable Water Supply

The subject property primarily consists of agricultural land. Cameron-Cole observed two groundwater supply wells and nutrient mixing stations associated with the agricultural operations. According to the identified Key Site Manager and Property Owner representative, Ms. Siva Saini, potable water is provided to the area by Del Puerto Water District (DPWD). Cameron-Cole contacted the DPWD who confirmed the subject property is located within an area that provides service.

6.2.5 Sewage Disposal System

Cameron-Cole did not observe any evidence of sewage disposal systems on the subject property at the time of the site reconnaissance; however, according to Ms. Saini, there is a septic tank located on the subject property. Other inquired information determined that the septic system is serviced by Septic B.

6.3 Interior and Exterior Observations

At the time of site reconnaissance, the subject property was developed as agricultural land with scattered commercial and residential properties.

6.3.1 Hazardous Substances and Petroleum Products in Connection with Identified Uses

Hazardous substances and/or petroleum products in connection with identified uses were not observed on the subject property at the time of site reconnaissance. Cameron-Cole observed four single-story structures occupied by A.B. Fab. Inc., which consisted of slab-on grade foundation, metal siding warehouse type structures. These structures consisted of office space, materials storage, and some manufacturing equipment including laser cutters and metal bending machines. The structures also included several welding stations, metal shaping machines, materials storage, paint booth and machinery, and parts assembly at the facility. Hazardous materials observed included approximately five 3-gallon jerry cans used for diesel, three 5-gallon pails of compressor oil, five 1-gallon containers of hydraulic fluid, one 1-gallon of WD-40, eight gas cylinders with acetylene, and three 40-pound propane tanks used for forklifts. Also observed on the property included two 10,000-gallon ASTs located along the eastern boundary. According to the Key Site Manager, Mr. Brendan Mendes, Operations Manager with A.B. Fab, Inc., these tanks are used only for water associated with the fire suppression system. Mr. Mendes also indicated the property produces and disposes of waste oil rags which are disposed through a third-party contractor for recycling, as well as any metal scraps, and shavings are stored in an on-site dumpster for off-site disposal. Mr. Mendes indicated that the facility does not use any solvents aside from the WD-40 that one would normally find consistent with metal fabrication workshops. All the materials were stored on impervious surfaces, in closed containers, with no indicators of leaks or spills. Minor staining was observed in areas where vehicles are stored or parked, but is located on concrete pavement, and would be classified as *de minimis*.

On the “Central Industrial Area” portion of the subject property, two, 200-gallon fuel ASTs within secondary containment were observed. There is evidence of significant staining both inside and outside the containment pad along with a strong odor of fuel from the soil surrounding the containment pad. Approximately 10, 55-gallon drums, most of them empty, some with residual contents of pesticides/herbicides were observed stored on soil with no secondary containment. Leaks of material (likely hydraulic fluid and/or oil) were observed from various farm machinery, with each of the leaks observed as significant with pools of material surrounding the equipment. Two ~330-gallon plastic storage cubes of waste oil, stored directly on soil, was observed with evidence of spillage on the side of the tanks and significant staining around them as well as a very strong odor of petroleum product. A large pile of over 100, 1– to 5-gallon pesticide/herbicide containers were observed. These were haphazardly strewn throughout the entire vicinity of the storage building and improperly stored on soil. Approximately 12,

330-gallon IBCs, all empty but stored on soil with no secondary containment were observed. Labels indicate these are herbicides. A pile of 25 lead acid vehicle batteries stored directly on soil with significant staining below them were observed; however, it had an odor of petroleum product so it is likely associated with other materials that did not include the batteries. Two 55-gallon burn barrels with what appeared to be household trash were observed. Approximately 30 boxes of pesticides and water conditioning agents were also located throughout the vicinity of the shop, all of which were stored directly on the soil. Over 100, 1- to 5-gallon full containers of pesticides/herbicides/fungicides stored within a secondary containment pad inside the shop and approximately 25 containers of various materials including motor oil, hydraulic oil, coolants, lubricants, solvents, paints, etc. were observed.

Cameron-Cole observed the "Off-Site Basin", which is the northern section of the subject property that is not attached to the main area. This property mainly consisted of agricultural land along with two shop buildings and various equipment storage areas. Hazardous substances or petroleum products, including one 200-gallon AST, approximately 50, 1- to 5-gallon pesticide/herbicide containers, 2, 55-gallon drums with what appears to be waste oil, 25 large mounds of almonds undergoing fumigation, and various pieces of farm equipment including tractors, ATVs, trucks, sprayers, and trillers were observed. There was significant staining and odors surrounding the AST, the pesticide containers, the 55-gallon drums, and limited staining below the farming equipment.

6.3.2 Storage Tanks

Cameron-Cole observed three, 200-gallon fuel ASTs, two 10,000-gallon water tanks, and a 3,000-gallon empty storage tank. The fuel tanks all had significant staining surrounding the area.

6.3.3 Odors

Cameron-Cole observed numerous areas of strong petroleum odor associated with the release of petroleum products from improperly stored or discarded containers.

6.3.4 Pools of Liquid

Cameron-Cole observed pools of liquid from containers of hazardous substances and/or petroleum products.

6.3.5 Drums

Cameron-Cole observed 2, 55-gallon drums containing what appears to be waste oil, 2, 55-gallon drums used for burn barrels of household trash, and approximately 10, 55-gallon drums, most of which were empty but a few contained residual material labeled as pesticides/herbicides.

6.3.6 Hazardous Substance and Petroleum Product Containers Not in Connection with Identified Uses

Hazardous substances and/or petroleum products not in connection with identified uses were observed on the subject property at the time of site reconnaissance. Numerous discarded containers containing these substances were observed scattered across the subject property.

6.3.7 Unidentified Substance Containers

Cameron-Cole did not observe any unidentified substance containers.

6.3.8 Indicators of PCBs

Polychlorinated biphenyls (PCBs) are contained in coolant or lubricating oils used in some electrical transformers, electrical panels, hydraulic lifts, elevator hydraulics and hydraulic dock lifters. Cameron-Cole did not observe any pole- or pad-mounted transformers on the subject property at the time of site reconnaissance.

6.4 Interior Observations

6.4.1 Heating/Cooling

Cameron-Cole observed four single-story structures occupied by A.B. Fab, Inc., which consisted of slab-on grade foundation, metal siding warehouse type structures. These structures consisted of office space, materials storage, and some manufacturing equipment including laser cutters and metal bending machines. The structures also includied several welding stations, metal shaping machines, materials storage, paint booth and machinery, and parts assembly at the facility. Cameron-Cole did not observe the inside of residential properties nor did they observe any heating/cooling system inside the A.B. Fab, Inc. facility.

6.4.2 Stains or Corrosion

Cameron-Cole did not observe any stains or corrosion inside the structure at the time of site reconnaissance.

6.4.3 Drains and Sumps

Cameron-Cole did not observe any drains or sumps.

6.5 Exterior Observations

6.5.1 Pits, Ponds, or Lagoons

Cameron-Cole observed an approximate 200 ft x 300 ft pond present at the western corner of Parcel 6, adjacent to the fenced in tank storage area along South Chrisman Road. Cameron-Cole also observed an approximate 10 ft x 10 ft pit at the main shop area.

6.5.2 Stained Soil or Pavement

Cameron-Cole observed numerous areas of stained soil located around discarded drums, containers, or fuel tanks.

6.5.3 Stressed Vegetation

Cameron-Cole did not observe any obvious evidence of stressed vegetation on the subject property at the time of site reconnaissance.

6.5.4 Solid Waste

Cameron-Cole observed apparently discarded materials in various locations on the subject property including cargo containers, truck bed, and old vehicles.

6.5.5 Wastewater

Cameron-Cole did not observe any wastewater systems on the subject property at the time of site reconnaissance.

6.5.6 Wells

Cameron-Cole observed two groundwater supply wells associated with agricultural use.

6.5.7 Septic Systems

Cameron-Cole did not observe any evidence of sewage disposal systems on the subject property at the time of the site reconnaissance; however, according to Ms. Saini, there is a septic tank located on the subject property. Other inquired information determined that the septic system is serviced by Septic B.

7.0 INTERVIEWS

7.1 Site Owner/Occupants

The identified Key Site Manager and property owner representative, Ms. Siva Saini, indicated via a completed Pre-Site Questionnaire that he was not aware of any previous ESAs, compliance audits, geotechnical studies, or registrations for underground or aboveground tank associated with the subject property. Ms. Saini did indicate he was aware of a septic tank located on the subject property, and that electrical and water service are provided by PG&E, and the Del Puerto Water District. Ms. Saini indicated he is aware of hazardous materials used on the subject property, including agricultural chemical sprays such as pesticides and herbicides. Ms. Saini indicated he is not aware of any pending or past violations, environmental issues, spills, or other environmental concerns associated with the subject property.

Mr. Branden Mendes, Operations Manager with A.B. Fab, Inc. also completed a Pre-Site Questionnaire during the site reconnaissance on January 10, 2025. Mr. Mendes indicated he is aware of previous ESAs that were completed for the facility as well as permits that have been regularly maintained. Mr. Mendes indicated he is not aware of registrations for underground or aboveground tanks associated with the subject property. Mr. Mendes indicated he is aware of a septic tank located on the subject property, and that electrical and water service are provided by PG&E, and the Del Puerto Water District. Mr. Mendes indicated he is aware of compressor oil, motor oil, WD-40, diesel fuel, hydraulic fluid, waste oil, and fire suppression water tanks located on the property associated with facility operations.

7.2 Past Owners, Operators, and Occupants

Past owners, operators, or occupants were not interviewed for this ESA.

7.3 User

Mr. Kolten Booher, Associate, Affinius Capital, completed the User Questionnaire on January 8, 2025. A summary of the responses is provided in Section 4.0, and a copy of the questionnaire is provided in Appendix B.

7.4 State and/or Local Government Officials

Cameron-Cole contacted the San Joaquin County Fire Authority on January 24, 2025, requesting records pertaining to fires or responses to incidents, spills, or releases of hazardous substances or petroleum products associated with the property. A response was not received within the time frame for completion of this report.

Cameron-Cole contacted the San Joaquin County Public Health Services Agency via email on January 24, 2025, for records pertaining to the registration, use, storage, or handling of hazardous substances or petroleum products, including storage tanks or any other environmental concerns associated with the property or in the immediate vicinity of the property. A response was not received within the time frame for completion of this report.

Cameron-Cole contacted the California Office of Environmental Health Hazard Assessment (OEHHA) via email on January 24, 2025 requesting records regarding the registration, use, storage, or handling or hazardous substances or petroleum products, including storage tanks or any other environmental concerns, associated with the property. A response received indicated this department does not have any records for the subject property.

8.0 FINDINGS

The goal of this Phase I ESA is to identify the presence or likely presence of hazardous substances or petroleum products on the subject property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water on the property. The findings of this report are summarized below and may include known or suspected RECs, CRECs, HRECs, or *de minimis* conditions identified during the performance of this Phase I ESA.

- Hazardous substances and/or petroleum products in connection with identified uses were observed on the subject property at the time of site reconnaissance.
- As an element of this assessment, Cameron-Cole obtained and reviewed a regulatory database search of environmental records consistent with the requirements of ASTM International E1527-21 Standard Practice that was obtained from Envirosite. The subject property was identified in the HAZNET, HWG, CALEPA SITES, ECHO, FRS, Manifest EPA, and the RCRA_NONGEN databases.
- According to the Envirosite Report, there is one UST / UST_SAN JOAQUIN COUNTY site located within the AMSD of the subject property.
- According to the Envirosite Report, there is one LUST REG 5 site located within the AMSD of the subject property.
- According to the Envirosite Report, there is one ENVIROSTOR site located within the AMSD of the subject property.
- According to the Envirosite Report, there are six HWG/HAZNET sites located within the AMSD of the subject property.
- According to the Envirosite Report, there are two SWF/LF sites located within the AMSD of the subject property.
- According to the Envirosite Report, there is one SWRCY / LDS site located within the AMSD of the subject property.
- According to the Envirosite Report, there are seven CALEPA SITES located within the AMSD of the subject property.
- Cameron-Cole queried the NPMS online database to identify the presence of conveyance pipelines on the subject property. Records indicate there is a natural gas pipeline and hazardous liquid pipeline that transects the subject property.

9.0 OPINION

With reference to the foregoing section of this report (Section 8.0), the following Opinion is provided in connection with this assessment.

- Hazardous substances and/or petroleum products in connection with identified uses were observed on the subject property at the time of site reconnaissance. Following is a discussion of materials observed and locations within the Pacific Gateway development:

    - The AB-FAB, Inc. property is located within the future University Center Area of the Pacific Gateway development and north of the Delta Mendota Canal. A.B. Fab, Inc. is a metal fabrication business that specializes in dust control systems for almond hullers, shellers, and processors. Manufacturing equipment including laser cutters, metal bending machines, several welding stations, metal shaping machines, materials storage, a paint booth were observed inside the four metal frame structures located on the property. Hazardous substances observed at the time of the site reconnaissance included approximately five 3-gallon diesel jerry cans, three 5-gallon pails of compressor oil, five 1-gallon containers of hydraulic fluid, one 1-gallon container of WD-40, eight acetylene gas cylinders, and three 40-pound propane tanks that are used to power forklifts. Two 10,000-gallon AST were observed along the eastern property boundary. According to Mr. Branden Mendes, Operations Manager with A.B. Fab, Inc., the ASTs are used to store water associated with the on-site fire suppression system. Mr. Mendes also indicated the facility generates oily rags that are properly disposed off-site by a third-party vendor. Metal scraps and shavings are reportedly stored in a dumpster that is periodically transported off-site for proper disposal. Mr. Mendes indicated that the only solvent used at the facility is one you would normally find consistent with metal fabrication workshops aside from the WD-40. As observed during the January 10 site reconnaissance, the materials were stored on impervious surfaces, in closed containers, with no visible indicators of leaks or spills. Minor staining was observed in areas where vehicles are stored or parked, but is located on concrete pavement, and would be classified as *de minimis*. Based on the proper storage of the hazardous materials and lack of any stained soil or concrete indicative of a release, in the opinion of Cameron-Cole, the observed hazardous substances and/or materials at A.B. Fab, Inc. does not constitute a REC in connection with the subject property as defined by the applicable standard.

    - Two estimated 200-gallon fuel ASTs were observed on the subject property within the “Central Industrial Area”. Although the ASTs were located within a secondary containment structure, evidence of stained/discolored soil and concrete was observed both inside and outside the secondary containment. A petroleum odor was also noted in the soil surrounding the secondary containment structure. In addition, approximately 10, 55-gallon drums labelled as containing pesticides or herbicides, most of them empty but some containing residual fluids, were observed stored on bare soil with no secondary containment. Large areas of stained/discolored soils impacted by what appeared to be hydraulic fluid or oil were also observed around various pieces of farm equipment or machinery that were stored in exterior locations. Two, approximately 330-gallon plastic IBCs containing used oil were also observed stored in exterior locations with direct soil contact. Evidence of spillage on the side of the IBCs and significant staining on the surrounding soils was observed at the time of the site reconnaissance. A large pile of more than 100 discarded 1- to 5-gallon pesticide/herbicide containers was observed to be haphazardly strewn in and around a storage building in this same area. Approximately one dozen empty 330-gallon IBCs were observed. Labels indicate the IBCs formerly contained herbicides. A pile of some 25 lead acid automotive batteries were observed improperly stored directly on soil adjacent to a storage building. Several 55-gallon drums used as burn barrels, containing what appeared to be household trash, were also observed. Approximately 30 boxes of unused pesticides and water conditioning agents were observed in the vicinity of the shop, all of which were stored directly on the soil. Based on the observed

improper storage and visual evidence of releases to the environment, in the opinion of Cameron-Cole, the hazardous substances and petroleum products observed within the Pacific Gateway Central portion of the subject property constitutes a REC in as defined by the applicable standard.

- Cameron-Cole observed a 200-gallon AST, approximately 50, 1- to 5-gallon pesticide/herbicide containers, 2, 55-gallon drums containing what appeared to be waste oil, and various pieces of farm equipment including tractors, ATVs, trucks, sprayers, and tillers on the 40-acre, non-contiguous parcel identified as the Off-Site Basin portion of the subject property. This area of the subject property consisted mainly of agricultural land in addition to two shop buildings and various equipment storage areas. Numerous large, covered mounds of almonds undergoing fumigation were also observed on this portion of the property. Visual evidence of stained/discolored soil and petroleum odors were noted around the AST and the waste oil drums. Limited areas of *de minimis* staining were observed around some of the agricultural equipment in this area. Based on the improper storage of materials and the evidence of releases surrounding the AST and drums, in the opinion of Cameron-Cole, the hazardous substances or petroleum products observed on the Off-Site Basin portion of the subject property constitutes a REC as defined by the applicable standard.

- According to the Envirosite Report, the subject property was identified in the HAZNET, HWG, CALEPA SITES, ECHO, FRS, Manifest EPA, and RCRA_NONGEN databases. Additional details regarding these database listings are presented as follows:

  - The subject property was identified within these databases based on operations associated with three facilities, two of which are no longer active. The inactive facilities, 1X Marchese Farms, located at 32400 South Chrisman Road, and Pushpinder Singh, located at 34234 South Chrisman Road, were identified in the HAZNET and HWG databases. The records reviewed indicate neither facility had reported releases or violations associated with this database listing prior to ceasing generation of hazardous or other regulated wastes.

  - The remaining facility, A.B. Fab, Inc., located at 32483 South Chrisman Road, was identified in the CALEPA SITES, ECHO, FRS, HAZNET, HWG, MANIFEST, and RCRA_NONGEN databases regarding the storage and handling of hazardous substances or materials. The records reviewed indicate that there have not been any reported violations or releases associated with operations at this facility, which based on interview comments with a representative of the property owner, no longer generates hazardous waste. Based on this information, in the opinion of Cameron-Cole, the identified database listings for the A.B. Fab, Inc. portion of the subject property does not constitute RECs as defined by the applicable standard.

- According to the Envirosite Report, there is one UST / UST_SAN JOAQUIN COUNTY site located within the AMSD of the subject property. Country Mart Gas & Food Station, 34243 South Chrisman Road, is located 0.023 miles southeast (inferred crossgradient) from the subject property. This facility is also identified in the CALEPA SITES, ECHO, EPA LUST, FRS, HAZNET, HWG, LUST REG 5, MANIFEST EPA, and RCRA_NONGEN databases. The site is an active retail fueling station that is located on the west side of South Chrisman Road. The records reviewed indicate a discharge was reported on January 24, 1995 during the removal and replacement of USTs on the property. The site completed assessment for potential soil contamination, and the case was closed on May 12, 1998. There was no other information provided, nor were there any documents saved within the California State Water Resources Control Board GeoTracker database. The site is reported to currently maintain four USTs containing gasoline and diesel fuel. Records indicate these tanks were all installed in January 1995. The ECHO database listing is associated with the RCRA status of the site as a RCRA Non-Generator of hazardous waste. The records reviewed indicate there have not been any reported violations or incidents associated with the site's RCRA status. Based on this

information, in the opinion of Cameron-Cole, Country Mart Gas & Food Station, identified in the above listed databases, does not constitute a REC in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there is one LUST REG 5 site located within the ASMD of the subject property. Country Mart Gas & Food Station, 34243 South Chrisman Road, reported a release in January 1995 that was subsequently closed in May 1998. Based on this information, in the opinion of Cameron-Cole, the identified LUST REG 5 site does not constitute a REC in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there is one ENVIROSTOR site located within the AMSD of the subject property. Tracy Tire Fire, 29425 South MacArthur Drive, is located 0.734 miles northwest (inferred crossgradient) from the subject property. The records reviewed indicate a tire fire resulted in the contamination of soil and groundwater at the site. The facility underwent remediation and subsequently achieved regulatory closure. Based on the closed regulatory status, distance, and inferred crossgradient location, in the opinion of Cameron-Cole, the identified ENVIROSTOR site does not constitute a REC in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there are six HWG/HAZNET sites located within the AMSD of the subject property, including the subject property which is discussed above. The records reviewed indicate four of the remaining sites do not have any documented releases or violations associated with these database listings. The remaining facility, Crown Nut Company, 31995 South Chrisman Road, is located 0.158 miles north (inferred downgradient) from the subject property. The records reviewed indicate the facility has eight violations associated with an inspection completed in May 2019, all regarding improper filing of emergency response plans or hazardous material inventory lists. Records indicate the facility subsequently achieved regulatory compliance and there are no other records of violations reported. Based on this information, in the opinion of Cameron-Cole, the identified HWG/HAZNET sites do not constitute RECs in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there are two SWF/LF sites located within the AMSD of the subject property. Tracy Material and Recovery Transfer Station, 30703 South MacArthur Drive, is located 0.409 miles northwest (inferred crossgradient) from the subject property. The record reviewed indicate that the facility is properly permitted and active with no reported violations. The second site is Sukhit Sandhu (IDS) (Solid Waste Information System #39-AA-0064), 31310 South Tracy Boulevard, located 0.166 miles northwest (inferred crossgradient) from the subject property. Records indicate this facility does not require a permit and is inspected monthly. There are no records of reported violations or releases. Based on this information, in the opinion of Cameron-Cole, the identified SWF/LF sites do not constitute RECs in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there is one SWRCY / LDS site located within the AMSD of the subject property. Tracy Material Recovery and Transfer Station, 30703 MacArthur Drive, is located 0.409 miles northwest (inferred crossgradient) from the subject property. The records reviewed indicate this facility has been operating since March 16, 2017, and there are no reported violations or releases associated with operations. Based on this information, in the opinion of Cameron-Cole, the identified SWRCY / LDS site does not constitute a REC in connection with the subject property as defined by the applicable standard.

- According to the Envirosite Report, there are seven CALEPA SITES located within the AMSD of the subject property. The records reviewed indicate each of these sites are listed within the CALEPA SITES database due to the use, storage, or handling of hazardous substances or petroleum products. Two of these sites have received violations for improper filing of emergency response plans. However, there have been no violations

or reported releases from any of the identified sites. Based on this information, in the opinion of Cameron-Cole, the identified CALEPA SITES do not constitute RECs in connection with the subject property as defined by the applicable standard.

- Cameron-Cole queried the NPMS online database to identify the presence of conveyance pipelines on the subject property. Records indicate there is a natural gas pipeline and hazardous liquid pipeline that transects the subject property. According to the NPMS, there have been no reported incidents or violations associated with the pipelines. Based on this information, in the opinion of Cameron-Cole, the presence of the identified underground pipeline(s) on the subject property does not constitute RECs in connection with the subject property as defined by the applicable standard.

- A majority of the subject property is currently developed as agricultural land. The principal crop is almonds with some acreage planted with cherries. Historical records indicate the property has been developed for agricultural purposes dating back to at least 1937. This historical use of the subject property and surrounding area could have resulted in the presence of fertilizer and/or pesticide residuals on the subject property. Observations made during the site reconnaissance also indicate that almonds are fumigated in covered piles on portions of the subject property to prevent or treat possible crop damage. Proper application of pesticides on agricultural properties is not considered a release under CERCLA and therefore the potential presence of these constituents on portions of the property would not be considered a REC pursuant to the ASTM International E1527-21 Standard Practice. In the opinion of Cameron-Cole, the potential presence of such fertilizer and/or pesticide residuals on the subject property due to the proper application of these products is considered a BER.

10.0 CONCLUSIONS

In summary, Cameron-Cole has performed a Phase I ESA, in general conformance with the scope and limitations of ASTM International Standard E1527-21, for a 1,580.44-acre tract of land located in Tracy, San Joaquin County, California. Any exceptions to, or deletions from, this practice are described in Section 2.4 of this report. This assessment has revealed the following RECs, CRECs, HRECs, de minimis conditions, or significant data gaps in connection with the subject property.

- Two estimated 200-gallon fuel ASTs were observed on the subject property within the "Central Industrial Area". Although the ASTs were located within a secondary containment structure, evidence of stained/discolored soil and concrete was observed both inside and outside the secondary containment. A petroleum odor was also noted in the soil surrounding the secondary containment structure. In addition, approximately 10, 55-gallon drums labelled as containing pesticides or herbicides, most of them empty but some containing residual fluids were observed stored on bare soil with no secondary containment. Large areas of stained/discolored soils impacted by what appeared to be hydraulic fluid or oil were also observed around various pieces of farm equipment or machinery that were stored in exterior locations. Two, approximately 330-gallon plastic IBCs containing used oil were also observed stored in exterior locations with direct soil contact. Evidence of spillage on the side of the IBCs and significant staining on the surrounding soils was observed at the time of the site reconnaissance. A large pile of more than 100 discarded 1- to 5-gallon pesticide/herbicide containers was observed to be haphazardly strewn in and around a storage building in this same area. Approximately one dozen empty 330-gallon IBCs were observed. Labels indicate the IBCs formerly contained herbicides. A pile of some 25 lead acid automotive batteries were observed improperly stored directly on soil adjacent to a storage building. Several 55-gallon drums used as burn barrels and containing what appeared to be household trash were also observed. Approximately 30 boxes of unused pesticides and water conditioning agents were observed in the vicinity of the shop, all of which were stored directly on the soil. Based on the observed improper storage and visual evidence of releases to the environment, in the opinion of Cameron-Cole, the hazardous substances and petroleum products observed within the Pacific Gateway Central portion of the subject property constitutes a REC as defined by the applicable standard.

- Cameron-Cole observed a 200-gallon AST, approximately 50, 1- to 5-gallon pesticide/herbicide containers, 2, 55-gallon drums containing what appeared to be waste oil, and various pieces of farm equipment including tractors, ATVs, trucks, sprayers, and tillers on the 40-acre, non-contiguous parcel identified as the Off-Site Basin portion of the subject property. This area of the subject property consisted mainly of agricultural land in addition to two shop buildings and various equipment storage areas. Numerous large, covered mounds of almonds undergoing fumigation were also observed on this portion of the property. Visual evidence of stained/discolored soil and petroleum odors were noted around the AST and the waste oil drums. Limited areas of *de minimis* staining were observed around some of the agricultural equipment in this area. Based on the improper storage of materials and the evidence of releases surrounding the AST and drums, in the opinion of Cameron-Cole, the hazardous substances or petroleum products observed on Off-Site Basin portion of the subject property constitutes a REC as defined by the applicable standard.

11.0 DEVIATIONS

There were no contractual excluded elements or deviations from ASTM International Standard E1527-21.

12.0 ADDITIONAL SERVICES (NON-SCOPE CONSIDERATIONS)

12.1 Concerning Mold Risk and Legionella

As an element of this study, Cameron-Cole personnel performed a limited visual assessment to determine the presence of mold, conditions conducive to mold/fungal growth, or evidence of moisture intrusion. The screening conducted for purposes of this assessment was based on visual and/or olfactory indicators only and did not include laboratory testing/analysis for mold or collection of real-time climatological and moisture readings. The subject property consists of a 1,580.44-acre tract of land located in Tracy, San Joaquin County, California. Four fabricated metal storage buildings and mobile homes were observed on the subject property along with a few other residences. Mold was not observed within the metal buildings, but Cameron-Cole did not observe the private residences. The presence of mold is unlikely in the storage buildings due to the presence of large bay doors and metal construction. The risk of Legionella is also unlikely.

12.2 National Wetlands Inventory

As an element of this study, Cameron-Cole personnel performed a review of the National Wetlands Inventory (NWI) for the subject property and surrounding area. The NWI provides inclusive geospatial data of all wetlands and water surface features in the US. No on-site wetlands were identified on the NWI image. In addition, no visual evidence of wetlands, such as vegetation indicative of wetlands or standing water, were observed on-site during the site reconnaissance. The California Aqueduct transects the subject property from northwest to southeast, and the Delta Mendota Canal borders northern and southern portions of the property boundary. A copy of the NWI image for the subject property is provided in Appendix D.

12.3 Asbestos Containing Materials

Cameron-Cole did not conduct asbestos sampling as part of this assessment. There are four fabricated metal storage buildings and a mobile home located on a portion of the subject property. The San Joaquin County Assessor's Office would not confirm the date the buildings were constructed. However, historical records indicate at least one building in the eastern portion of the subject property was present as early as 1963; therefore, the presence of ACMs cannot be ruled out. The United States Environmental Protection Agency (US EPA) banned the manufacture, installation, and processing of spray-on insulation and fireproofing in 1972. The application of spray-on material for fireproofing and insulation was banned by the US EPA in 1973. The US EPA banned molded and wet applied asbestos in 1975, and ACMs in mechanical system insulation (e.g., pipe and elbow pipe insulation and boiler insulation) were banned in 1976. ACMs in acoustical and decorative applications were banned by the US EPA in 1978 and the three-staged phase out of non-friable ACMs in construction materials began in the 1980s and 1990s.

12.4 Flood Zone Information

A Review of the Federal Emergency Management Agency (FEMA) Flood Map online was performed on the subject property to determine if the subject property is located within the 100-year or 500-year flood zone. Based on the records reviewed, the subject property is in an area of minimal flood hazard. The FEMA Map image is provided in Appendix D.

13.0 REFERENCES

Aerial Photographs: Envirosite—1937, 1954, 1957, 1967, 1968, 1970, 1971, 1973, 1974, 1982, 1983, 1985, 1987, 1993, 1998, 2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, and 2022. Report generated on January 9, 2025.

ASTM International: ASTM International Standard Practice Designation E1527-21.

USGS Topographic Maps: Envirosite—1915, 1916, 1922, 1942, 1952, 1954, 1969, 1991, 2012, 2015, 2018, and 2021 7.5-minute USGS Topographic Maps of Vernalis, Carbona, and Tracy, California, and USGS 15-minute Topographic Maps of Carbona, California. Report generated on January 8, 2025.

Standard Environmental Records Search: Completed by Envirosite for 1,580.44-Acre Property located in Tracy, San Joaquin County, California. Report generated on January 8, 2025.

Fire Insurance Map Search: Completed by Envirosite for 1,580.44-Acre Property located in Tracy, San Joaquin County, California. Report generated on January 8, 2025.

City Directory Abstract: Completed by Envirosite for 1,580.44-Acre Property located in Tracy, San Joaquin County, California Report generated on January 8, 2025.

Parcel Information: Obtained from the San Joaquin County Assessor's Office: https://www.sjgov.org/department/assessor/property-information

Other Sources

- FEMA Flood Map Service Center: https://msc.fema.gov/portal/home
- NWI: http://www.fws.gov/wetlands/
- National Pipeline Mapping System (NPMS) Public Map Viewer: https://pvnpms.phmsa.dot.gov/PublicViewer/

Interviews

- User: Mr. Kolten Booher. Associate, Affinius Capital, interview conducted via User Questionnaire completed on January 8, 2025. (Email: kolten.booher@affiniuscapital.com).
- Key Site Manager: Ms. Siva Saini, Property Owner, interview conducted via Pre-Site Questionnaire completed on January 20, 2025.
- On-Site Interview: Mr. Branden Mendes, Operations Manager, A.B. Fab, Inc., interview conducted via Pre-Site Questionnaire and during site reconnaissance completed on January 10, 2025.
- Local Official: San Joaquin County Fire Authority, interview conducted via email on January 24, 2025. (Email: fire.dept@sjcfire.org).
- Local Official: California Office of Environmental Health Hazard Assessment, interview conducted via email on January 24, 2025. (Email: oehha.pras.ca.gov).

- Local Official: San Joaquin County Public Health Services Agency, interview conducted via email on January 24, 2025. (Email: phs-info@sjcphs.org).

14.0 SIGNATURE OF ENVIRONMENTAL PROFESSIONAL

The following Cameron-Cole personnel were involved with the site inspection, records search, regulatory review, and drafting of the Phase I Environmental Site Assessment Report for the 1,580.44-acre tract of land located in Tracy, San Joaquin County, California. .

Prepared by:

Matthew Allen, MS, Environmental Scientist II



01/31/2025

This is to certify that I have reviewed and approve the contents of the Phase I Environmental Site Assessment Report for the 1,580.44-acre tract of land located in Tracy, San Joaquin County, California. Qualifications of the environmental professional are provided in Appendix F.

Reviewed by:

John H. Bondurant, Vice President & Director

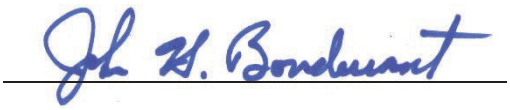


01/31/2025

15.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of EP as defined in 312.10 of 40 Code of Federal Regulations (CFR) 312, and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

John H. Bondurant, Vice President & Director



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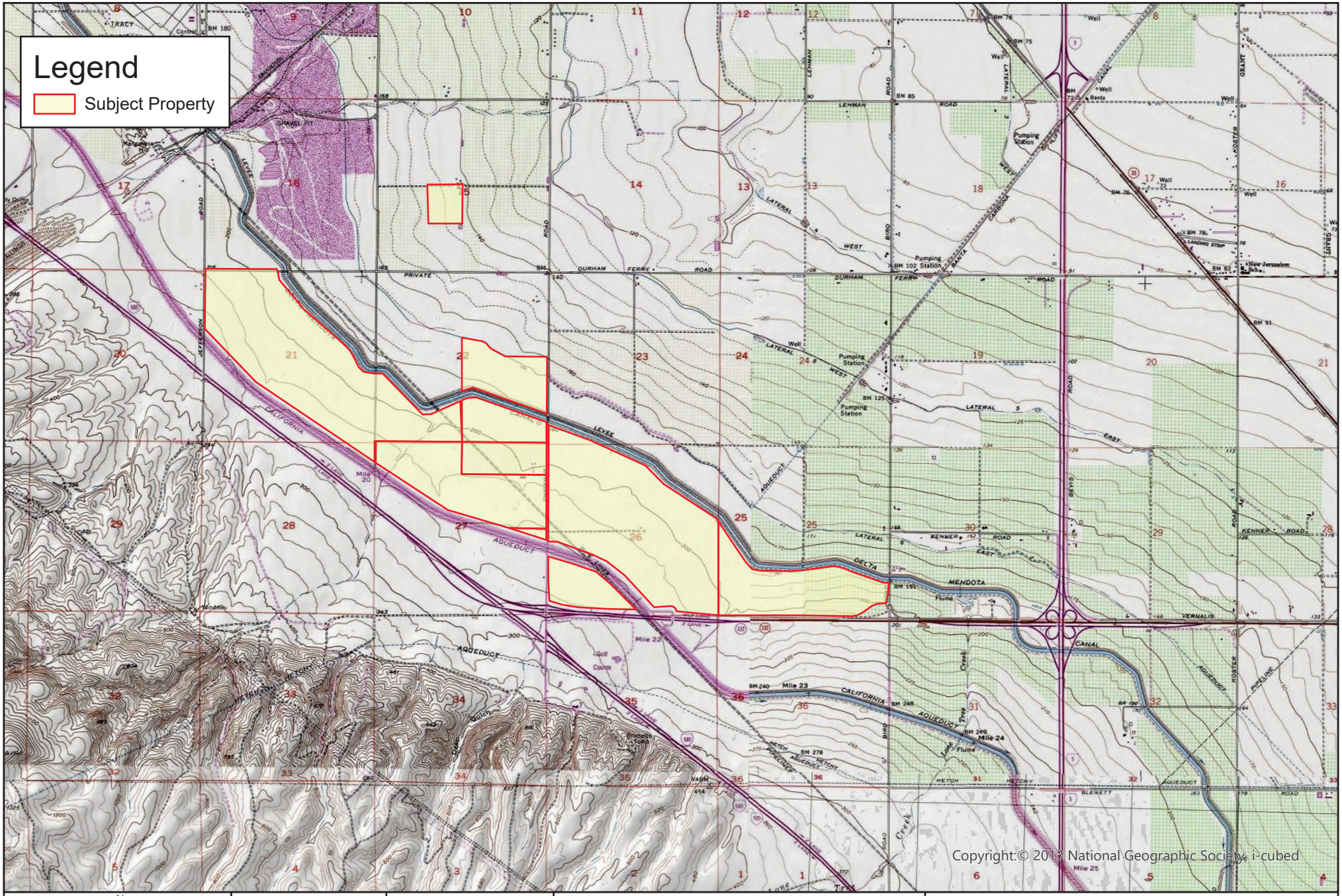
FIGURES



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CAMERON-COLE
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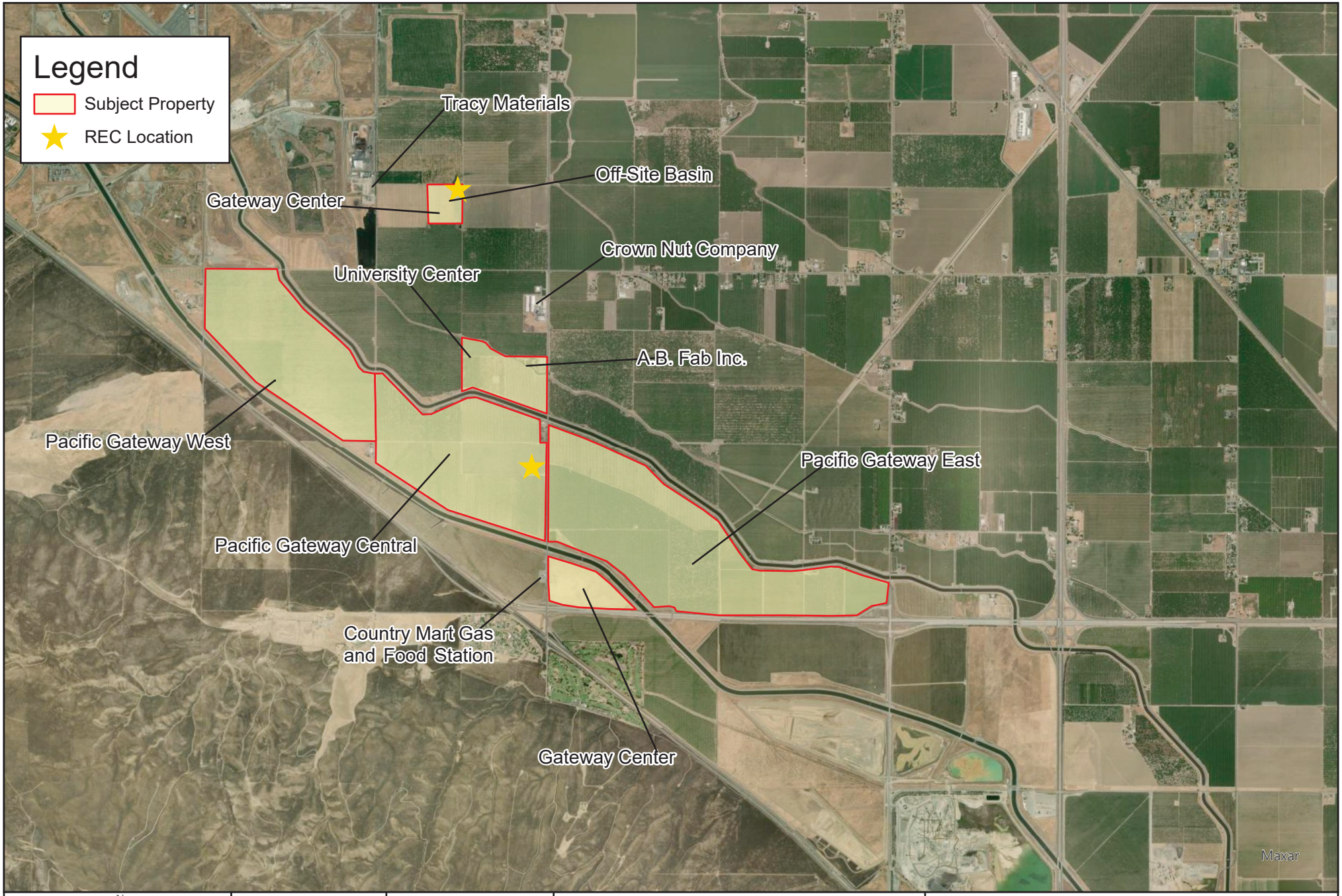
AN ADEC INNOVATION

Figure 1
Site Location Map
Pacific Gateway Basin
South MacArthur Drive
Tracy, California

*Figure not OCR compatible



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CAMERON-COLE
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Figure 2
Site Vicinity Map
Pacific Gateway Basin
South MacArthur Drive
Tracy, California

*Figure not OCR compatible

APPENDICES

Appendix A:
Photographs

PACIFIC GATEWAY CENTRAL



Photograph 1: View of Two, 200-Gallon fuel Aboveground Storage Tanks (ASTs) Located Outside the Shop Area West of Chrisman Road.



Photograph 2: View of Stained Soil Below Fueling ASTs. Strong Odors Observed Surrounding the Staining and ASTs.



Photographs 3: View of Storage Tanks and Drums North of Fueling ASTs.



Photograph 4: View of 55-Gallon Drum Storage Area North of Fueling ASTs.



Photograph 5: View of Pesticide Containers Outside Storage Shop.



Photograph 6: View of Labeled Pesticide Container.



Photograph 7: View of Empty Pesticide Containers Located to the South of the Shop.



Photograph 8: View of Stained Soil Located Beneath Farming Equipment.



Photograph 9: View of Pesticide Containers Outside Storage Shop.



Photograph 10: View of Waste Oil Container and Evidence of Significant Staining.



Photograph 11: View of Stained Area.



Photograph 12: View of Discarded Containers Located Outside Shop Area.



Photograph 13: View of Labeled Pesticide Bottle.



Photograph 14: View of Mobile Storage Tank Located to the West of the Shop.



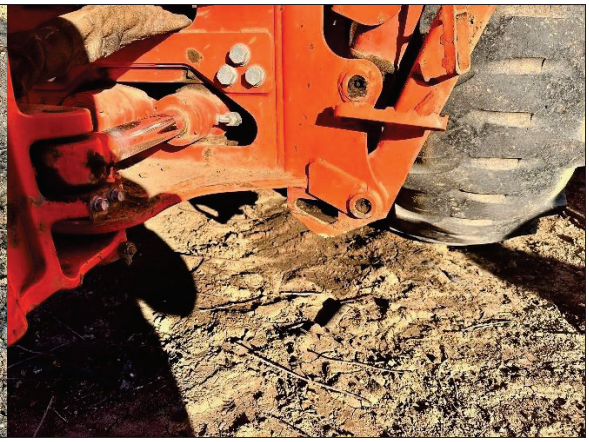
Photograph 15: View of Various Tires Located Near Shop and Discarded Containers.



Photograph 16: View of Empty Storage Tanks.



Photograph 17: View of Petroleum Leaking Out of Tractor South of Shop Area.



Photograph 18: View of Additional Staining Below Tractor.



Photograph 19: View of Stained Soil Below Farming Equipment.



Photograph 20: View of Stained Soil Below Farming Equipment.



Photograph 21: View of Lead Acid Batteries Outside Shop Area.



Photograph 22: View of Stained Soil Below Battery Pile.



Photograph 23: View of 55-Gallon Burn Barrel Located Outside Shop Area.



Photograph 24: View of Stained Soil.



Photograph 25: View of Additional Drums Located to the East of the Shop.



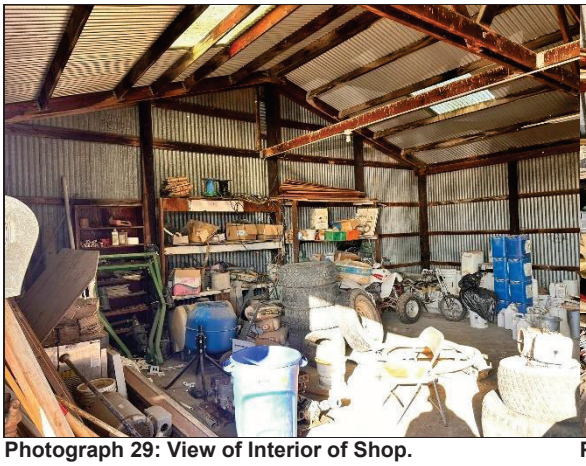
Photograph 26: View of 55-Gallon Drum Label.



Photograph 27: View of Pool of Liquid with Visible Sheen.



Photograph 28: View of Ash Piles Adjacent to Residence.



Photograph 29: View of Interior of Shop.



Photograph 30: View of Storage Containment Area Within the Shop.



Photograph 31: View of Labeled Pesticide Container.



Photograph 32: View of Labeled Pesticide Container.



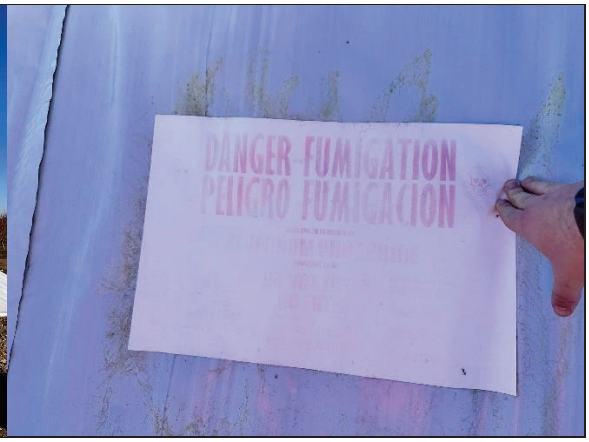
Photograph 33: View of Farm Equipment Stored on Unnamed Roadway West of Chrisman Road.



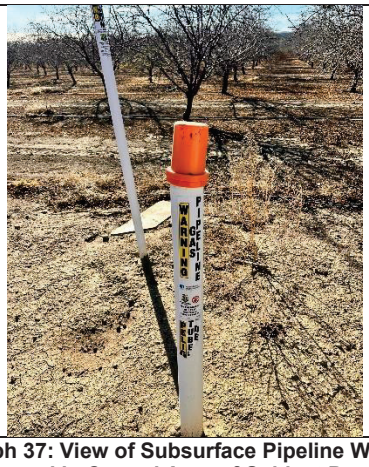
Photograph 34: View of Orchards Present on Subject Property, Facing Southeast.



Photograph 35: View of Almond Mound Undergoing Fumigation Located Near Intersection of APNs 253-18-011 and 253-19-011.



Photograph 36: View of Fumigation Warning Sign.



Photograph 37: View of Subsurface Pipeline Warning Marker Located in Central Area of Subject Property.



Photograph 38: View of Irrigation System in Eastern Section of the Central Portion of the Subject Property.



Photograph 39: View Of Additional Petroleum Pipeline Sign.



Photograph 40: View of Discarded Washing Machine East of MacArthur Drive.



Photograph 39: View of Western Adjacent Property Across MacArthur Drive.

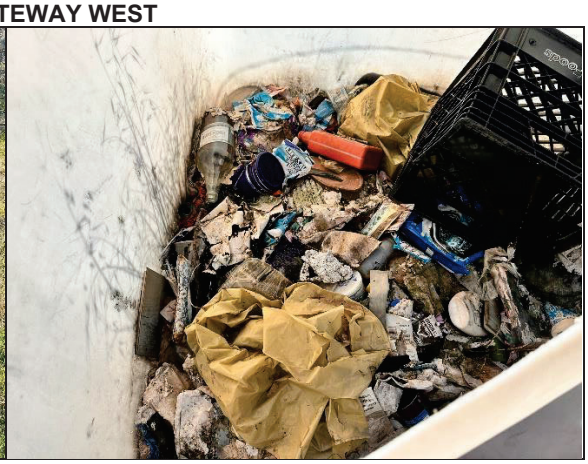


Photograph 40: View of Western Adjacent Property Across MacArthur Drive.

PACIFIC GATEWAY WEST



Photograph 41: View of Discarded Trach on Southern Property Boundary.



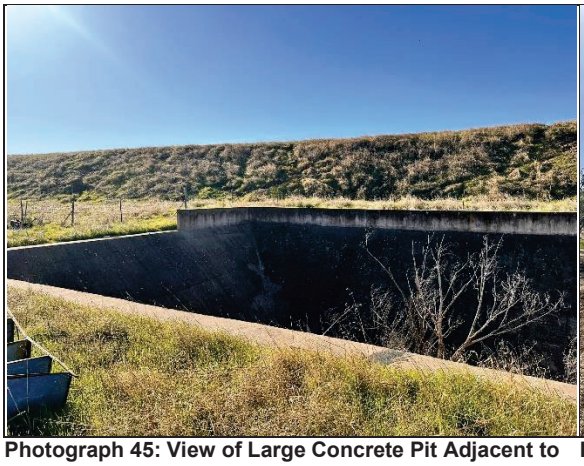
Photograph 42: View of Inside Trash Container.



Photograph 43: View of Empty Oil Container Located Inside Trash Bin.



Photograph 44: View of Discarded Truck Bed Along Southern Property Boundary, Adjacent to Aqueduct.



Photograph 45: View of Large Concrete Pit Adjacent to Aqueduct.



Photograph 46: View of Discarded Trash Located Near Concrete Pit.



Photograph 47: View of Inside Pit Area.



Photograph 48: View of Southeastern Property Boundary, Facing Northwest.



Photograph 49: View of Abandoned, Burnt Out Van Located on Northwestern Corner Adjacent to Tracy Boulevard.



Photograph 50: View of Western Adjoining Property, Facing West.



Photograph 51: View of Burnt Abandoned Van.



Photograph 52: View of Western Adjoining Property Entrance.

UNIVERSITY CENTER



Photograph 52: View of Northern Edge of A.B. Fab Property, Facing West.



Photograph 53: View of A.B. Fab Parking Area.



Photograph 54: View of Entrance to A.B. Fab Property.



Photograph 55: View of Northern Edge of A.B. Fab Property.



Photograph 56: View of Storage Container Located West of the A.B. Fab Buildings.



Photograph 57: View of Water Tanks Used for Fire Suppression System.

PACIFIC GATEWAY EAST



Photograph 58: View of Eastern Property Boundary, Facing South.



Photograph 59: View of Locked Gate and Orchards.



Photograph 60: View of Northern Property Boundary, Facing West.



Photograph 61: View of Discarded Irrigation System Adjacent to Canal and Northern Boundary.



Photograph 61: View of Northern Property Boundary, Facing East.



Photograph 62: View of Empty Containers.



Photograph 63: View of 5-Gallon Container of Pump Oil Near Wellhead.



Photograph 64: View of Empty Storage Tank Near Supply Well.



Photograph 65: View of Northern Property Boundary, Facing East.



Photograph 66: View of Northern Property Boundary, Facing West.



Photograph 67: View of Abandoned Semi-Trucks Located Near Supply Well Along Northern Property Boundary.



Photograph 68: View of Rigged Semi-Truck for Supply Well Operations.



Photograph 69: View of Fuel Tank Servicing the Rigged Semi-Truck for the Well Pump.



Photograph 70: View of Labeled Nutrient Tank.



Photograph 71: View of Groundwater Supply Well.



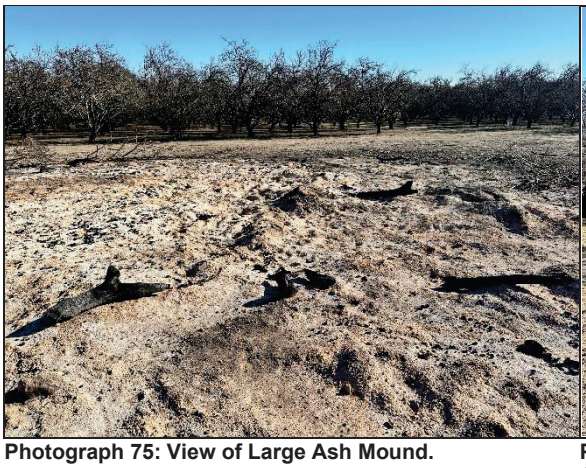
Photograph 72: View of Labeled Drum Containing Water Additives for Groundwater Supply Well.



Photograph 73: View of Southern Property Boundary, Facing West.



Photograph 74: View of Large Ash Mound and Burn Area Located in Central Portion of Property.



Photograph 75: View of Large Ash Mound.



Photograph 76: View of Large Empty Tank Adjacent to Ash Mound.



Photograph 77: View of Fumigation Mound for Almonds Located Near Southwestern Corner.



Photograph 78: View of Fumigation Mound for Almonds Located Near Southwestern Corner.



Photograph 79: View of Fumigation Sign.



Photograph 80: View of Enclosed Groundwater Supply Well Along Western Boundary and Chrisman Road.



Photograph 81: View of Retention Pond Located Along the Western Property Boundary.



Photograph 82: View of Retention Pond Located Along the Western Property Boundary.



Photograph 83: View of Interior of Conex Box and Single 5-Gallon Pail.



Photograph 84: View of Discarded Appliances Along Western Property Boundary.



Photograph 85: View of 5-Gallon Pail Within Groundwater Supply Well Enclosure.



Photograph 86: View of Orchard on the Subject Property, Facing East.

GATEWAY CENTER



Photograph 87: View of Basin Area, Facing East.



Photograph 88: View of Cut Down Vegetation Piles.



Photograph 89: View of 76 Gasoline Station Located on the Western Adjacent Property.



Photograph 90: View of Scattered Debris and Household Trash Long Western Property Boundary.

BASIN



Photograph 91: View of Equipment Storage Area Located Along Eastern Side of Basin Area.



Photograph 92: View of Assorted Scrap Metal Located Along Eastern Boundary.



Photograph 93: View of Farm Equipment Storage Area.



Photograph 94: View of Solid Waste Containers.



Photograph 95: View of 55-Gallon Drums of Unknown Material Located West of Shop.



Photograph 96: View of Waste Oil Drums Stored West of the Shop.



Photograph 97: View of Assorted Pesticide Containers East of the Shop Next to a Fuel Tank.



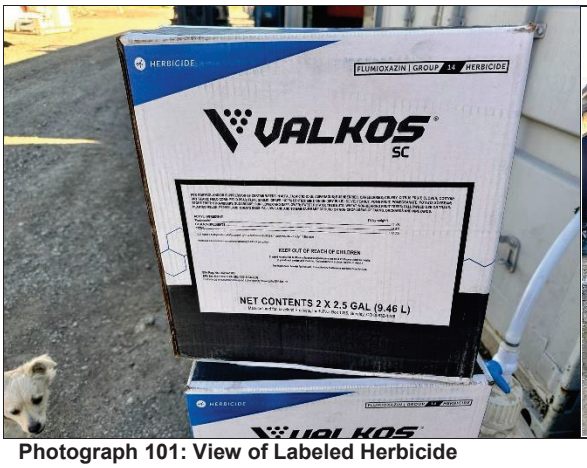
Photograph 98: View of Staining Below Pesticide Storage Tank.



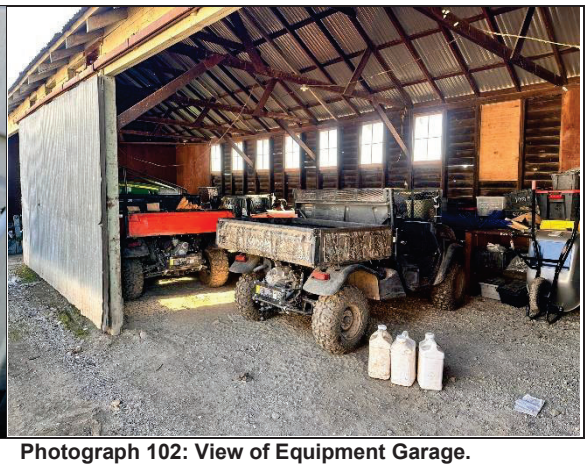
Photograph 99: View of Labeled Pesticide Container.



Photograph 100: View of Labeled Pesticide Tank.



Photograph 101: View of Labeled Herbicide Container.



Photograph 102: View of Equipment Garage.



Photograph 103: View of Assorted Pesticide/Herbicide Containers.



Photograph 104: View of Herbicide Tank Inside Garage Area.



Photograph 105: View of Stained Soil Near Herbicide Containers.



Photograph 106: View of Farm Vehicle Storage Area East of Main Shop.



Photograph 107: View of Field and Farm Area, Facing West.



Photograph108: View of Main Shop and Vehicle Storage Area, Facing Northeast.



Photograph 109: View of Mobile Fuel Tank.



Photograph 110: View of AST.



Photograph 111: View of Stained Area Beneath Fueling AST. Evidence of Strong Petroleum Odor As Well.



Photograph 112: View of Stained Area Beneath Fueling AST.



Photograph 113: View of Three Residential Trailers, Facing North.



Photograph 114: View of Large Pit East of Main Shop Area.



Photograph 115: View of Corner of Main Shop and Residential Area, Facing Northeast.



Photograph 116: View of Soil Mound Located to the West of the Shop.



Photograph 117: View of Groundwater Well Filtration System Located Along Northern Boundary.



Photograph 118: View of Mobile Storage Tank Located North of the Shop.



Photograph 119: View of Almond Mound Undergoing Fumigation Located South of the Shop.



Photograph 120: View of Western Property Boundary, Facing North.

Appendix B:
User Questionnaire

PHASE I ENVIRONMENTAL SITE ASSESSMENT
PRE-SITE VISIT DOCUMENT REQUEST AND QUESTIONNAIRE

Property/Site Name: Pacific Gateway Basin Phase I ESA

Property Address: 1,580.44 – Acres of Land, Tracy, San Joaquin County, California

Name and Title: _____ Date: _____

In accordance with American Society for Testing and Materials International (ASTM International) Standard Practice E 1527-13, Cameron-Cole, LLC is required to inquire if the Property Owner, Tenants/Occupants, and Key Site Manager are aware of the existence of any of the following documents. Please review the following list of documents and indicate, to the best of your knowledge, whether such document(s) exist. If so, please indicate if you have copies of the document(s) that can be provided for review as part of this Phase I assessment.

		Yes	No	Attached
1)	Previous Environmental Site Assessment Reports.	☐	☐	☐
2)	Previous Environmental Compliance Audit Reports.	☐	☐	☐
3)	Environmental Permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES Permits, underground injection permits).	☐	☐	☐
4)	Registrations for underground or aboveground storage tanks.	☐	☐	☐
5)	Registrations for underground injection systems.	☐	☐	☐
6)	Safety Data Sheets for materials used, handled, or stored on the property.	☐	☐	☐
7)	Community Right-to-Know Plan(s).	☐	☐	☐
8)	Safety Plans; Preparedness and Prevention Plans; Spill Prevention, Control, and Countermeasures Plan(s); Facility Response Plans, etc.	☐	☐	☐
9)	Reports regarding hydrogeologic conditions on the property or surrounding area?	☐	☐	☐
10)	Notices or other correspondence from any government agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property.	☐	☐	☐
11)	Hazardous waste generator notices or reports.	☐	☐	☐
12)	Geotechnical studies.	☐	☐	☐

	Yes	No	Attached
13) Risk Assessments or other Site Assessment Reports.	☐	☐	☐
14) Recorded activity and use limitations (AULs)?	☐	☐	☐
15) Are you aware of any pending, threatened or past litigation relevant to hazardous substances or petroleum products in, on or from the property? If so, please explain.	☐	☐	
16) Are you aware of any pending, threatened or past administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the property?	☐	☐	
17) Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible of liability relating to hazardous substances or petroleum products?	☐	☐	
18) Are you aware of any septic tanks or previous septic tanks located on the property?	☐	☐	

19) Who are the electrical service, sewer, and water provider?

_____

_____

_____

20) Are you aware of any hazardous materials stored on-site? If so explain.	☐	☐	

_____

_____

_____

21) Are you aware of any hazardous wastes generated on-site? If so explain.	☐	☐	

_____

_____

_____

22) Are you aware of any ASTs or USTs on-site or previously located on-site? If yes, please indicate their contents, and if they are still used or have been properly closed?	☐	☐	
23) Has there ever been previous or ongoing water intrusion or mold events associated with the building?	☐	☐	
24) Does the facility have a water intrusion/mold prevention program currently in place?	☐	☐	
25) In the event that historic water intrusion/mold events have occurred, was corrective action taken in accordance with an on-site O&M Plan?	☐	☐	

26) What is the longest amount of time the building has been vacant and how were water supply and HVAC systems managed during that vacant period? ☐ ☐

27) Are you aware of any past or current Legionella problems? If there was a Legionella problem, how was it mitigated? ☐ ☐

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PHASE I ESA USER'S QUESTIONNAIRE

In order to qualify for protection from land owner liability under CERCLA as an *innocent landowner, bona fide prospective purchaser,* or *contiguous property owner*, ASTM standard practice E1527-13 and the federal AAI rule (40 CFR 312) require that the User of the Phase I ESA report provide certain information (if available) to the Environmental Professional completing the assessment. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete. Information that is not or cannot be provided to the Environmental Professional may be identified as a "data gap" in the Phase I ESA report.

Property Information.

Cameron-Cole/Client Project #: 04.10555.0259. Property Name: Pacific Gateway Basin Phase I ESA

Property Address: 1,580.44- Acres of Land

City: Tracy State: California Zip: 95304

Property Owner Name: Multiple Owners of Sandhu Family.

Please answer the following questions as completely as possible. Attach additional pages as needed.

1. **Reason for Completion.** Is the reason for performing the Phase I to satisfy one of the requirements for the innocent landowner defense under CERCLA AND/OR to understand potential environmental conditions that could materially impact the operation of the business associated with the parcel of commercial real estate?
   ____X____ Yes _____ No

   Other (indicate if required for property transaction, sale, purchase, exchange, lending requirement, etc). _____

2. **Environmental Cleanup Liens**. Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?
   _____ Yes ____X____ No

   If yes, describe or attach details of the lien_____

3. **Activity and Land Use Limitations**. Are you aware of any activity and use limitations, such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded as applicable to the property as a result of environmental contamination, investigation, cleanup, or related matters?
   _____ Yes ____X____ No

   If yes, describe or attach details of the limitations_____

PHASE I ESA USER'S QUESTIONNAIRE

4. **Specialized Knowledge or Experience**. As the User of this ESA, do you have any specialized knowledge or experience related to the property or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property, such that you would have specialized knowledge about chemicals and processes used by this type of business?

   _____ Yes _____X____ No

   If yes, describe or attach details of your specialized knowledge or experience_____
   _____

5. **Relationship of Purchase Price to Fair Market Value of Property**. Does the purchase price being paid for this property reasonably reflect the fair market value of the property? If you conclude that there is a difference, do you have any reason to believe that the reduced purchase price may be related to contamination known or believed to be present at the property?

   _____ Yes, I have reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property?

   ____X_____ No, I have no reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property?

   _____ Not applicable. User is not involved in a purchase of the property.

6. **Commonly Known or Reasonably Ascertainable Information**. Are you aware of commonly known or reasonably ascertainable information about the property that would help the Environmental Professional to identify conditions indicative of releases or threatened releases of hazardous substances or petroleum products? For example:

   Do you know the past uses of the property?
   ___X____ Yes (describe) Agriculture, mostly almond farming.
   _____
   _____ No

   Do you know of chemicals, hazardous substances or petroleum products that are present or once were present at the property?
   ___X____ Yes (describe) Fertilizers used in agriculture.
   _____
   _____ No

   Do you know of spills or other releases of chemicals, hazardous substances or petroleum products that have taken place at the property?
   _____ Yes (describe) _____
   _____
   ___X____ No

   Do you know of any environmental cleanups that have taken place at the property?
   _____ Yes (describe) _____
   _____
   ___X____ No

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PHASE I ESA USER'S QUESTIONNAIRE

7. **The Degree of Obviousness of Contamination.** E1527-13 and the federal AAI rule (40 CFR 312.31) require that the Phase I ESA consider the degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation. Based on your knowledge and experience related to the property, are there any *obvious* indictors that point to the presence or likely presence of contamination at the property?

   _____ Yes (describe) _____
   _____
   ___X___ No

8. **Availability of Previous Environmental Reports.** Are you aware of previous environmental site assessment reports, other environmental reports, documents, correspondence, etc. concerning the property and its environmental condition?

   _____ Yes (please identify and provide copies, if available) _____
   _____
   ___X___ No

9. **Proceedings Involving the Property.** Are you aware of any proceedings involving the property? For example:

   Are you aware of any pending, threatened or past litigation relevant to hazardous substances or petroleum products in, on or from the property?

   _____ Yes (describe) _____
   _____
   ___X___ No

   Are you aware of any pending, threatened or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property?

   _____ Yes (describe) _____
   _____
   ___X___ No

   Any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?

   _____ Yes (describe) _____
   _____
   ___X___ No

Signature: _____

Name (printed): Kolten Booher

Title: Associate

Date: 01/08/2025

Appendix C:
Government Records Report

Government Records Report | 2025

With Platinum Review

Order Number: 104550

Report Generated: 01/31/2025

Project Name: Basin

Project Number: 10555.0259.0

Basin
S Tracy Blvd
Tracy, CA 95304

with Envirosite Atlas

Contact us at:
(866) 211-2028
envirositecorp.com

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2025

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Envirosite Corporation has conducted a search of all reasonably ascertainable records in accordance with EPA's AAI (40 CFR Part 312) requirements and the ASTM E-1527-21 Environmental Site Assessments standard.

SUBJECT PROPERTY INFORMATION:

ADDRESS:

Basin
S Tracy Blvd
Tracy, CA 95304

COORDINATES:

Latitude (North):	37.651076 - 37°39'3.9"
Longitude (West):	-121.401085 - -121°24'3.9"
Universal Transverse Mercator:	Zone 10N
UTM X (Meters):	641047.68
UTM Y (Meters):	4168304.70
State Plane Coordinates:	0403 - California Zone 3 (US Survey Feet)
X Coordinate (Feet):	6300803.365 E
Y Coordinate (Feet):	2060789.91 N

ELEVATION:

Elevation:	183 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH SUBJECT PROPERTY:

Subject Property Map: 37121-F3 Vernalis, CA
Most Recent Revision: 2018

Subject Property Map: 37121-F4 Tracy, CA
Most Recent Revision: 2018

MAP ID	SITE NAME	ADDRESS	DATABASE(S)	RELATIVE ELEVATION	DIRECTION / DISTANCE
A1	1X MARCHESE FARMS	32400 S CHRISMAN RD	HAZNET - CA, HWG - CA		SP
A2	AB FAB, INC.	32483 S CHRISMAN RD | 324...	CALEPA SITES - CA, ECHO, FRS, HAZNET - CA,...		SP
B3	PUSHPINDER SINGH	34234 CHRISTMAN	HAZNET - CA, HWG - CA		SP
4	AMERICAN TOWER, L.P. | AMERICAN ...	32032 S TRACY BLVD | 3203...	CALEPA SITES - CA, EMI - CA, FRS	Higher	WNW / 0.021 mi., 111...
B5	COUNTRY MART GAS & FOOD | COUN...	34243 S CHRISMAN RD | 342...	CALEPA SITES - CA, ECHO, EPA LUST, EPA UST...	Higher	SSE / 0.023 mi., 121 ft.
6	STATE ROUTE 132 AND BIRD ROAD I...	N R	CALEPA SITES - CA	Higher	ESE / 0.109 mi., 575 ft.
7	CROWNNUT COMPANY INC.	31995 S CHRISMAN RD | 319...	CALEPA SITES - CA, HAZNET - CA, HWG - CA, ...	Lower	N / 0.158 mi., 833 ft.
8	LAND MANAGEMENT INC | WCR1998-...	33909 S BIRD RD	CALEPA SITES - CA, HAZNET - CA, HWG - CA, ...	Lower	E / 0.164 mi., 865 ft.
9	Sukhit Sandhu (IDS)	31310 S Tracy Blvd.	SWF LF - CA	Higher	WNW / 0.166 mi., 878...
10	VERIZON WIRELESS - CORRAL HOLLOW	32300 S TRACY BLVD	CALEPA SITES - CA	Higher	W / 0.199 mi., 1050 ft.
11	TRACY MATERIAL RECOVERY AND TR...	30703 S MAC ARTHUR DR | 3...	DEBRIS EPA SWRCY, HAULERS - CA, LDS - CA,...	Lower	NW / 0.409 mi., 2159 ft.
12	TRACY TIRE FIRE | TRACY TIRE SITE R...	29425 S MACARTHUR DR | 29...	ENVIROSTOR - CA, RESPONSE - CA	Lower	NNW / 0.734 mi., 3876...

SUBJECT PROPERTY SEARCH RESULTS:

The subject property was identified in the following records. For more information on this property, see Map Findings section on page 12.

SITE	DATABASE(S)	EPA ID
1X MARCHESE FARMS 32400 S CHRISMAN RD TRACY, CA 95304	HAZNET - CA, HWG - CA	CAC000829928
AB FAB, INC. 32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD TRACY, CA 95304	CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN	N/R
PUSHPINDER SINGH 34234 CHRISTMAN TRACY, CA 95371	HAZNET - CA, HWG - CA	CAC000979896

SEARCH RESULTS:

FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS

UST - CA: Listing of active underground storage tank facilities 1 SITE FOUND WITHIN .25 MILE

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
B5	*COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS*	*34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD*	*SSE / 0.023 mi., 121 ft.*	*26*

UST_SAN JOAQUIN COUNTY - CA: San Joaquin County Underground storage tank sites listing 1 SITE FOUND WITHIN .25 MILE

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
B5	*COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS*	*34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD*	*SSE / 0.023 mi., 121 ft.*	*26*

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS

LUST REG 5 - CA: Leaking underground storage tanks in Region 5: Modoc Shasta Lassen Plumas Butte Glen Colusa Lake Sutter Yuba Sierra Nevada Placer Yolo Napa (Northeast) Solano (West) Sacramento El Dorado Amador Calaveras San Joaquin Contra Costa (East) Stanislaus Toulumne Merced Mariposa Madera Kings Fresno Tulare Kern (Very small portions of San Benito and SanLuis Obispo) counties 1 SITE FOUND WITHIN .5 MILE

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
B5	*COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS*	*34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD*	*SSE / 0.023 mi., 121 ft.*	*26*
	- ID: T0607700703	Status: Completed - Case Closed	Date: 1998-05-12	

STATE- AND TRIBAL - EQUIVALENT CERCLIS

ENVIROSTOR - CA: Department of Toxic Substances Controls 1 SITE FOUND WITHIN 1 MILE

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
12	*TRACY TIRE FIRE | TRACY TIRE SITE REMEDIATION | DEPT OF CALIF/INTEGRATED WASTE MGMT BOARD*	*29425 S MACARTHUR DR | 29425 SO. MACARTHUR DRIVE 29425 SO. MACARTHUR DRIVE*	*NNW / 0.734 mi., 3876 ft.*	*58*
	- ID: 39000003	Status: Refer: IWMB	Date: Cleanup Date 2009-06-15	

STATE RCRA GENERATORS LIST

HWG - CA: Hazardous waste generator listing 6 SITES FOUND WITHIN .25 MILE

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
B5	*COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS*	*34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD*	*SSE / 0.023 mi., 121 ft.*	*26*

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
7	*CROWNNUT COMPANY INC.*	*31995 S CHRISMAN RD | 31995 SOUTH CHRISMAN ROAD*	*N / 0.158 mi., 833 ft.*	*45*
8	*LAND MANAGEMENT INC | WCR1998-006002*	*33909 S BIRD RD*	*E / 0.164 mi., 865 ft.*	*48*

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

SWF/LF - CA: Solid Waste Information System's facility listing of solid waste facilities and landfills 2 SITES FOUND WITHIN .5 MILE

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
9	Sukhit Sandhu (IDS)	31310 S Tracy Blvd.	WNW / 0.166 mi., 878 ft.	*51*
	- ID: SWIS Number 39-AA-0064	Status: Unpermitted	Date: Permit Date N/R	
	- ID: N/R	Status: Operational Status Active	Date: N/R	

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
11	*TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY*	*30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE*	*NW / 0.409 mi., 2159 ft.*	*52*
	- ID: SWIS Number 39-AA-0024	Status: Permitted	Date: Permit Date N/R	
	- ID: N/R	Status: Operational Status Absorbed	Date: N/R	
	- ID: N/R	Status: Operational Status Active	Date: N/R	
	- ID: N/R	Status: Operational Status Planned	Date: N/R	

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

SWRCY - CA: Listing of facilities which perform recycled material processing activities 1 SITE FOUND WITHIN .5 MILE

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
11	*TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY*	*30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE*	*NW / 0.409 mi., 2159 ft.*	*52*

OTHER ASCERTAINABLE RECORDS

CALEPA SITES - CA: CalEPA Regulated Sites from the Certified Unified Program Agencies (CUPA). 7 SITES FOUND WITHIN .25 MILE

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
4	*AMERICAN TOWER, L.P. | AMERICAN TOWER CORPORATION | AMERICAN TOWER, L.P. - TRACY-HWY 580, SITE # 8692*	*32032 S TRACY BLVD | 32032 SOUTH TRACY BOULEVARD*	*WNW / 0.021 mi., 111 ft.*	*21*
B5	*COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS*	*34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD*	*SSE / 0.023 mi., 121 ft.*	*26*
6	STATE ROUTE 132 AND BIRD ROAD INTERCHANGE	N/R	ESE / 0.109 mi., 575 ft.	*45*
10	VERIZON WIRELESS - CORRAL HOLLOW	32300 S TRACY BLVD	W / 0.199 mi., 1050 ft.	*52*

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
7	*CROWNNUT COMPANY INC.*	*31995 S CHRISMAN RD | 31995 SOUTH CHRISMAN ROAD*	*N / 0.158 mi., 833 ft.*	*45*
8	*LAND MANAGEMENT INC | WCR1998-006002*	*33909 S BIRD RD*	*E / 0.164 mi., 865 ft.*	*48*

HAZNET - CA: Listing of hazardous waste manifests from when hazardous waste is transported from generators to permitted recycling treatment storage or disposal facilities by registered hazardous waste transporters 6 SITES FOUND WITHIN .25 MILE

EQUAL/HIGHER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
B5	*COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS*	*34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD*	*SSE / 0.023 mi., 121 ft.*	*26*

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
7	*CROWNNUT COMPANY INC.*	*31995 S CHRISMAN RD | 31995 SOUTH CHRISMAN ROAD*	*N / 0.158 mi., 833 ft.*	*45*
8	*LAND MANAGEMENT INC | WCR1998-006002*	*33909 S BIRD RD*	*E / 0.164 mi., 865 ft.*	*48*

OTHER ASCERTAINABLE RECORDS *(cont.)*

LDS - CA: List of Land Disposal Cleanup Sites from Geotracker 1 SITE FOUND WITHIN .5 MILE

LOWER ELEVATION

MAP ID	SITE NAME	SITE ADDRESS	DIRECTION/DISTANCE	PAGE
11	*TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY*	*30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE*	*NW / 0.409 mi., 2159 ft.*	*52*
	- ID: T10000010231	Status: Open - Operating	Date: 2017-03-16	

No unmappable sites reported.

DATABASE(S) WITH NO MAPPED SITES:

FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS

AST - CA	Aboveground storage tanks
FID UST - CA	Facility Inventory Database
HIST AST - CA	Historical Aboveground Storage Tanks
HIST UST - CA	Historical Underground Storage Tanks

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS

LUFT_ALAMEDA COUNTY - CA	Alameda County Leaking Underground Fuel Tanks
SLIC REG 5 - CA	Spills Leaks Investigation & Cleanup Program

STATE- AND TRIBAL - EQUIVALENT CERCLIS

OIL & GAS CLEANUP - CA	SWRCB Oil & Gas Cleanup Sites
SWRCB CLEANUP - CA	SWRCB Cleanup Program
TOXIC PITS - CA	Toxic Pits Cleanup Act

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES

CDL - CA	Meth and Clandestine Drug Labs
SCH - CA	School Property Evaluation Program

LOCAL LAND RECORDS

HIST LIENS - CA	Historical Liens
LIENS - CA	Liens

OTHER ASCERTAINABLE RECORDS

CIWQS - CA	California Integrated Water Quality System
CIWQS 2 - CA	California Integrated Water Quality System
DRYCLEANERS - CA	Drycleaners
DRYCLEANERS_SAN JOAQUIN VALLEY - CA	San Joaquin Valley Drycleaners
FA - CA	Financial Assurance
FA 2 - CA	Financial Assurance for Solid Waste Facilities
HIST HAZNET - CA	Historical Hazardous Waste Manifests
HIST HWP - CA	Historical EnviroStor Permitted Facilities
HIST LDS - CA	Historical Land Disposal Sites
HIST MCS - CA	Historical Military Cleanup Sites
HIST NFA - CA	Historical No Further Action Sites
HWM COMMERCIAL FACILITIES - CA	Hazardous Waste Management Commercial Facilities
HWP - CA	EnviroStor Permitted Facilities
HWT - CA	Hazardous Waste Transporters
MCS - CA	Military Cleanup Sites
MWMP - CA	Medical Waste Management Program
MWMP 2 - CA	Medical Waste Management Program
NFA - CA	No Further Action Sites
NFE - CA	Unconfirmed contaminated properties

OTHER ASCERTAINABLE RECORDS *(cont.)*

NPDES - CA	State Wastewater and NPDES Permits
PERCHLORATE 2 - CA	Perchlorate contaminted sites
PFAS - CA	PFAS Site Listing
PFAS DOD - CA	PFAS Site Listing
PFAS GAMA - CA	PFAS GAMA Well Sampling
RFR - CA	Regulated Facility Report
WDR - CA	Waste Discharge Requirement Sites
WDS - CA	Waste Discharge System

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: January 31, 2025

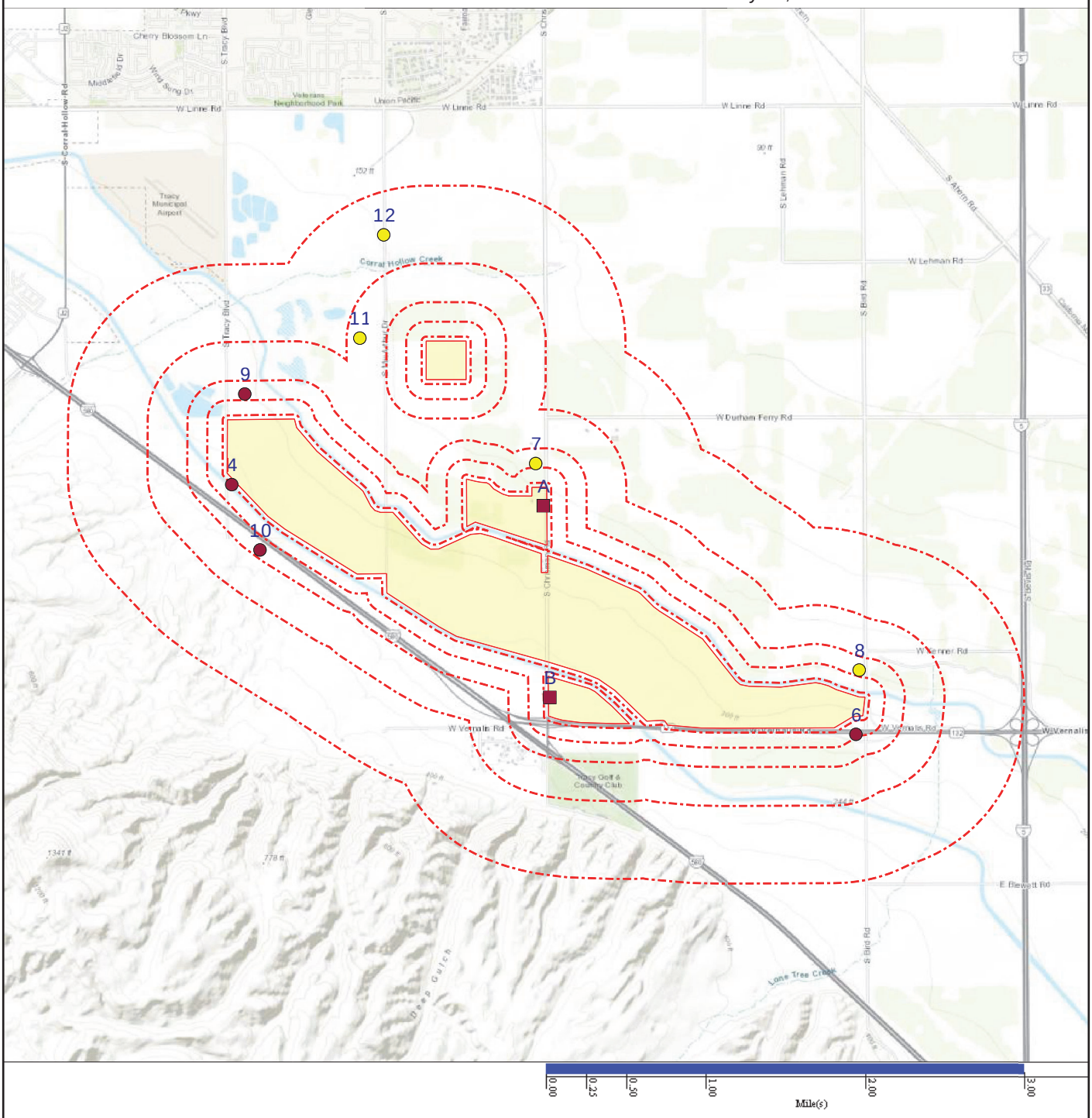


*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: January 31, 2025

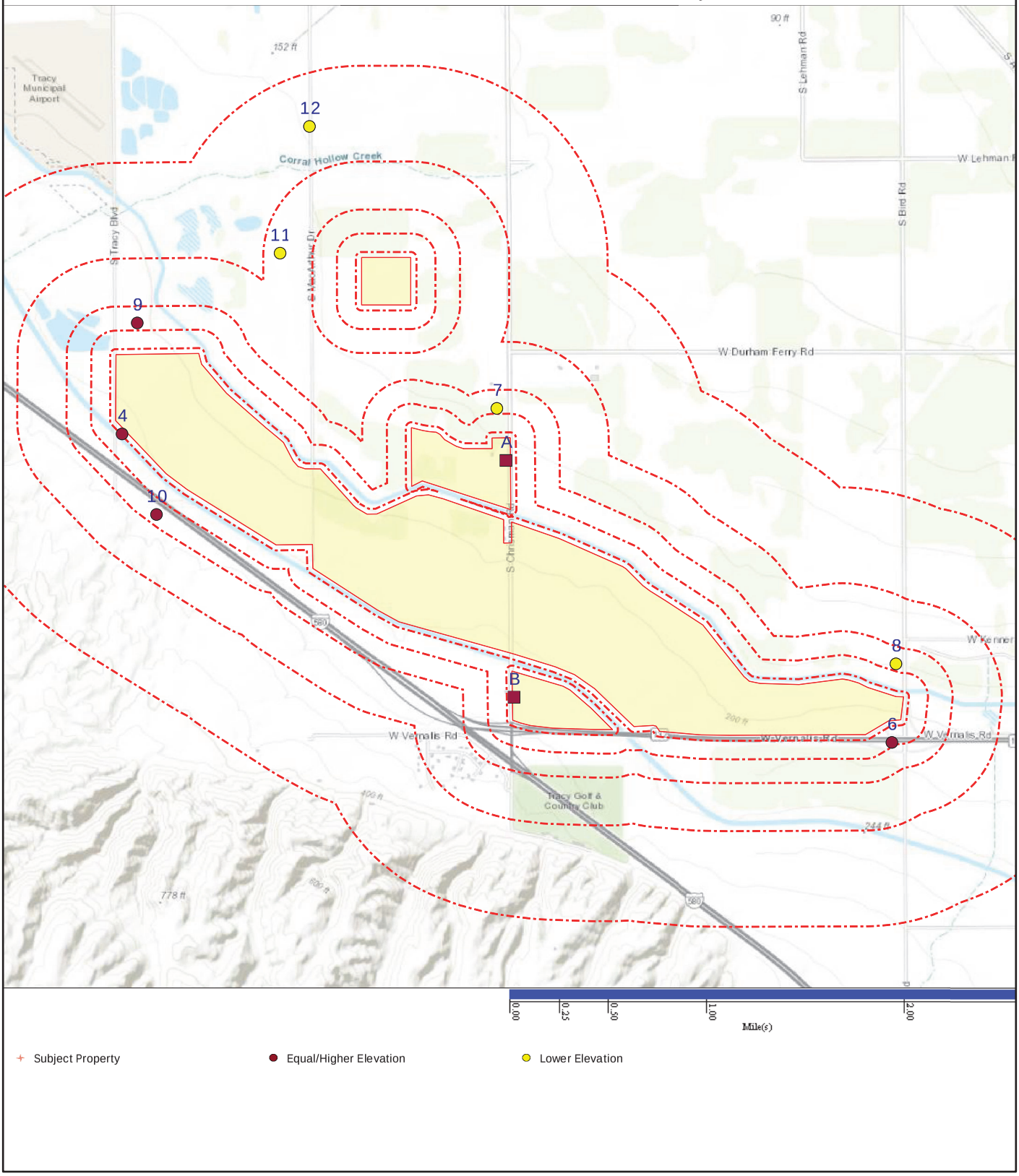


*Figure not OCR compatible

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS								
AST - CA		0.250	0	0	--	--	--	0
FID UST - CA		0.250	0	0	--	--	--	0
HIST AST - CA		0.250	0	0	--	--	--	0
HIST UST - CA		0.250	0	0	--	--	--	0
UST - CA		0.250	1	0	--	--	--	1
UST_SAN JOAQUIN COUNTY - CA		0.250	1	0	--	--	--	1
FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS								
LUFT_ALAMEDA COUNTY - CA		0.500	0	0	0	--	--	0
LUST REG 5 - CA		0.500	1	0	0	--	--	1
SLIC REG 5 - CA		0.500	0	0	0	--	--	0
STATE- AND TRIBAL - EQUIVALENT CERCLIS								
ENVIROSTOR - CA		1.000	0	0	0	1	--	1
OIL & GAS CLEANUP - CA		0.500	0	0	0	--	--	0
SWRCB CLEANUP - CA		0.500	0	0	0	--	--	0
TOXIC PITS - CA		1.000	0	0	0	0	--	0
STATE RCRA GENERATORS LIST								
HWG - CA	X	0.250	1	2	--	--	--	6
STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS								
SWF/LF - CA		0.500	0	1	1	--	--	2
LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES								
CDL - CA		SP	0	--	--	--	--	0
SCH - CA		0.250	0	0	--	--	--	0
LOCAL LAND RECORDS								
HIST LIENS - CA		SP	0	--	--	--	--	0
LIENS - CA		SP	0	--	--	--	--	0
LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES								
SWRCY - CA		0.500	0	0	1	--	--	1
OTHER ASCERTAINABLE RECORDS								
CALEPA SITES - CA	X	0.250	3	3	--	--	--	7
CIWQS - CA		SP	0	--	--	--	--	0
CIWQS 2 - CA		SP	0	--	--	--	--	0
DRYCLEANERS - CA		0.250	0	0	--	--	--	0

DATABASE	SUBJECT PROPERTY	SEARCH DISTANCE (MILES)	<1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	>1	TOTAL MAPPED
OTHER ASCERTAINABLE RECORDS *(cont.)*								
DRYCLEANERS_SAN JOAQUIN VALLEY - CA		0.250	0	0	--	--	--	0
FA - CA		SP	0	--	--	--	--	0
FA 2 - CA		SP	0	--	--	--	--	0
HAZNET - CA	X	0.250	1	2	--	--	--	6
HIST HAZNET - CA		0.250	0	0	--	--	--	0
HIST HWP - CA		1.000	0	0	0	0	--	0
HIST LDS - CA		0.500	0	0	0	--	--	0
HIST MCS - CA		1.000	0	0	0	0	--	0
HIST NFA - CA		0.500	0	0	0	--	--	0
HWM COMMERCIAL FACILITIES - CA		0.250	0	0	--	--	--	0
HWP - CA		1.000	0	0	0	0	--	0
HWT - CA		0.250	0	0	--	--	--	0
LDS - CA		0.500	0	0	1	--	--	1
MCS - CA		1.000	0	0	0	0	--	0
MWMP - CA		0.250	0	0	--	--	--	0
MWMP 2 - CA		0.250	0	0	--	--	--	0
NFA - CA		0.500	0	0	0	--	--	0
NFE - CA		0.500	0	0	0	--	--	0
NPDES - CA		SP	0	--	--	--	--	0
PERCHLORATE 2 - CA		0.500	0	0	0	--	--	0
PFAS - CA		0.500	0	0	0	--	--	0
PFAS DOD - CA		0.500	0	0	0	--	--	0
PFAS GAMA - CA		0.500	0	0	0	--	--	0
RFR - CA		SP	0	--	--	--	--	0
WDR - CA		SP	0	--	--	--	--	0
WDS - CA		SP	0	--	--	--	--	0

Map Id: A1
Direction:
Distance:
Elevation:
Relative:

Site Name : 1X MARCHESE FARMS
32400 S CHRISMAN RD
TRACY, CA 95304

Database(s) : [HAZNET - CA, HWG - CA]

Envirosite ID: 58153889
EPA ID: CAC000829928

HAZNET - CA

Facility Name :	1X MARCHESE FARMS
Facility Address :	32400 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

Site Details

Generator EPA ID :	CAC000829928
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	3690 HOMESTEAD ROAD, SANTA CLARA, CA 950510000
Latitude :	37.65909913
Longitude :	-121.39770893
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	1993: 223 - Unspecified oil-containing waste, 0.3753 tons to CAD083166728

HWG - CA

Facility Name :	1X MARCHESE FARMS
Facility Address :	32400 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

EPA ID :	CAC000829928
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	3690 HOMESTEAD ROAD, SANTA CLARA, CA 950510000
Owner Name :	MARCHESE FARMS
Owner Address :	N/A
Operator Name :	RICHARD A. LOWRY
Operator Address :	EXTENDED UNTIL 9-1-93, N/A
Latitude :	37.658509
Longitude :	-121.397729

Map Id: A2
Direction:
Distance:
Elevation:
Relative:

Site Name : AB FAB, INC.
32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN]

Envirosite ID: 58153888
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	AB FAB, INC.
Facility Address :	32483 S CHRISMAN RD, TRACY, 95304
Site ID :	430748
EI ID :	10750459
EI Description :	Chemical Storage Facilities
Latitude :	37.659400
Longitude :	-121.397900
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23

ECHO

Facility Name :	AB FAB, INC.
Facility Address :	32483 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN
Last Inspection Date :	N/R
Registry ID :	110071054006
FIPS Code :	06077
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R

Map Id: A2
Direction:
Distance:
Elevation:
Relative:

Site Name : AB FAB, INC.
32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153888
EPA ID: N/R

ECHO *(cont.)*

CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	333999 - All Other Miscellaneous General Purpose Machinery Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	N
Latitude :	37.73973
Longitude :	-121.407976
Last Date in Agency List :	2024-07-12

Last Inspection Date :	N/R
Registry ID :	N/R
FIPS Code :	N/R
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0

Map Id: A2
Direction:
Distance:
Elevation:
Relative:

Site Name : AB FAB, INC.
32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153888
EPA ID: N/R

ECHO *(cont.)*

Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	Zip Code Centroid
Reference Point :	N/R
Accuracy Meters :	10000
Derived Tribes :	N/R
Derived HUC :	N/R
Derived WBD :	N/R
Derived STCTY FIPS :	N/R
Derived Zip :	N/R
Derived CD113 :	N/R
Derived CB2010 :	N/R
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	333999 - All Other Miscellaneous General Purpose Machinery Manufacturing
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N

Map Id: A2
Direction:
Distance:
Elevation:
Relative:

Site Name :	AB FAB, INC. 32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD TRACY, CA 95304
Database(s) :	[CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153888
EPA ID: N/R

ECHO *(cont.)*

Federal Flag :	N/R
US Mexico Border Flag :	N/R
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N
SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	N/R
NAA Flag :	N
Latitude :	37.73973
Longitude :	-121.407976
Last Date in Agency List :	2021-04-16

FRS

Facility Name :	AB FAB, INC.
Facility Address :	32483 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

Site Details

Registry ID :	110071054006
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-12-16

Source Description

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	RCRAINFO - CAC003104229

HAZNET - CA

Facility Name :	AB FAB, INC.
Facility Address :	32483 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

Map Id: A2
Direction:
Distance:
Elevation:
Relative:

Site Name : AB FAB, INC.
32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153888
EPA ID: N/R

HAZNET - CA *(cont.)*

Site Details

Generator EPA ID :	CAC003104229
Active :	Active
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	32483 S CHRISMAN RD, TRACY, CA 95304
Latitude :	37.65827795
Longitude :	-121.39782020
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HWG - CA

Facility Name :	AB FAB, INC.
Facility Address :	32483 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN
EPA ID :	CAC003104229
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	32483 S CHRISMAN RD, TRACY, CA 95304
Owner Name :	BRANDEN MENDES
Owner Address :	32483 S CHRISMAN RD, TRACY, CA 95304
Operator Name :	BRANDEN MENDES
Operator Address :	32483 S CHRISMAN RD, TRACY, CA 95304
Latitude :	37.658278
Longitude :	-121.39782

MANIFEST EPA

Manifest Details

Manifest Number :	020384589JJK
Shipped Date :	2021-02-24
Updated Date :	2021-03-26
Received Date :	2021-03-05
Status :	Signed
Generator ID :	CAC003104229
Generator Name :	AB FAB, INC.
Generator Address :	32483 SOUTH CHRISMAN ROAD, TRACY, CA 95304
Generator Mailing :	32483 S CHRISMAN RD, TRACY, CA 95304
Generator Contact :	N/R
Destination ID :	CAT080013352
Destination Name :	WORLD OIL RECYCLING
Destination Mailing :	2000 N. ALAMEDA STREET CA90222 CA037US 2000, COMPTON, CA 90222
Destination Address :	2000 N. ALAMEDA STREET, COMPTON, CA 90222-0000
Destination Contact :	N/R
Submission Type :	DataImage5Copy

Map Id: A2
Direction:
Distance:
Elevation:
Relative:

Site Name : AB FAB, INC.
32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153888
EPA ID: N/R

MANIFEST EPA *(cont.)*

Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2024-12-03

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA HAZARDOUS WASTE, LIQUID (USED OIL/MIXED OIL)
Quantity :	55 Gallons
Quantity Tons, Acute, Non-Acute :	0.2293578, 0, 0.2293578
Quantity Kg, Acute, Non-Acute :	0, 208.03441
Quantity Tons, Haz, Non-Haz :	0, 0.2293578
Quantity Kg, Haz, Non-Haz :	0, 208.03441
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 221

Waste Line Number :	2
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NON-RCRA HAZARDOUS WASTE, LIQUID (USED OIL/MIXED OIL)
Quantity :	10 Gallons
Quantity Tons, Acute, Non-Acute :	0.041701417, 0, 0.041701417
Quantity Kg, Acute, Non-Acute :	0, 37.824436
Quantity Tons, Haz, Non-Haz :	0, 0.041701417
Quantity Kg, Haz, Non-Haz :	0, 37.824436
Management Method :	H039 - OTHER RECOVERY OR RECLAMATION FOR REUSE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 221

RCRA_NONGEN

Facility Name :	AB FAB, INC.
Facility Address :	32483 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN
Date Form Received by Agency :	2021-02-05
EPA ID :	CAC003104229
Mailing Address :	32483 S CHRISMAN RD, TRACY, CA 95304
Contact :	BRANDEN MENDES
Contact Address :	32483 S CHRISMAN RD, TRACY, CA 95304
Contact Country :	N/R
Contact Telephone :	209-564-7039
Contact Email :	ABFAB2004@GMAIL.COM

Map Id: A2
Direction:
Distance:
Elevation:
Relative:

Site Name : AB FAB, INC.
32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153888
EPA ID: N/R

RCRA_NONGEN *(cont.)*

EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2024-12-17

Owner/Operator Summary

Owner/Operator Name :	BRANDEN MENDES
Owner/Operator Address :	32483 S CHRISMAN RD, TRACY, CA 95304
Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-564-7039
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	BRANDEN MENDES
Owner/Operator Address :	32483 S CHRISMAN RD, TRACY, CA 95304
Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-564-7039
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N/R
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Map Id: A2
Direction:
Distance:
Elevation:
Relative:

Site Name : AB FAB, INC.
32483 S CHRISMAN RD | 32483 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, ECHO, FRS, HAZNET - CA, HWG - CA, MANIFEST EPA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153888
EPA ID: N/R

RCRA_NONGEN *(cont.)*

Notices of Violations Summary
Regulation Violated : N

Map Id: B3
Direction:
Distance:
Elevation:
Relative:

Site Name : PUSHPINDER SINGH
34234 CHRISTMAN
TRACY, CA 95371

Database(s) : [HAZNET - CA, HWG - CA]

Envirosite ID: 58153891
EPA ID: CAC000979896

HAZNET - CA

Facility Name : PUSHPINDER SINGH
Facility Address : 34234 CHRISTMAN, TRACY, CA 95371
County : SAN JOAQUIN

Site Details
Generator EPA ID : CAC000979896
Active : Inactive
Category : STATE
Facility Types : N/R
Type : TEMPORARY
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 34234 CHRISTMAN, TRACY, CA 953710000
Latitude : 37.63983919
Longitude : -121.39756751
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

HWG - CA

Facility Name : PUSHPINDER SINGH
Facility Address : 34234 CHRISTMAN, TRACY, CA 95371
County : SAN JOAQUIN

EPA ID : CAC000979896
Status : Inactive
Category : STATE
Type : TEMPORARY
Facility Type : N/R
Mailing Address : 34234 CHRISTMAN, TRACY, CA 953710000
Owner Name : N/R
Owner Address : N/A
Operator Name : PUSHPINDER SINGH
Operator Address : 34234 CHRISTMAN, TRACY, CA 953710000

Map Id: B3
Direction:
Distance:
Elevation:
Relative:

Site Name : PUSHPINDER SINGH
34234 CHRISTMAN
TRACY, CA 95371

Database(s) : [HAZNET - CA, HWG - CA] *(cont.)*

Envirosite ID: 58153891
EPA ID: CAC000979896

HWG - CA *(cont.)*

Latitude :	37.711411
Longitude :	-121.437423

Map Id: 4
Direction: WNW
Distance: 0.021 mi., 111 ft.
Elevation: 250 ft.
Relative: Higher

Site Name : AMERICAN TOWER, L.P. | AMERICAN TOWER CORPORATION | AMERICAN TOWER, L.P. - TRACY-HWY 580, SITE # 8692
32032 S TRACY BLVD | 32032 SOUTH TRACY BOULEVARD
TRACY, CA

Database(s) : [CALEPA SITES - CA, EMI - CA, FRS]

Envirosite ID: 58153890
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	AMERICAN TOWER, L.P. - TRACY-HWY 580, SITE # 8692
Facility Address :	32032 S TRACY BLVD, TRACY, 95376
Site ID :	384848
EI ID :	10405972
EI Description :	Chemical Storage Facilities
Latitude :	37.659500
Longitude :	-121.433600
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23
Facility Name :	AT&T MOBILITY - I-580 - SOUTH TRACY BLVD (USID14056)
Facility Address :	32032 S TRACY BLVD, TRACY, 95377
Site ID :	8522
EI ID :	10415770
EI Description :	Chemical Storage Facilities
Latitude :	37.664185
Longitude :	-121.434293
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-07-21

EMI - CA

Facility Name :	AMERICAN TOWER CORPORATION
Facility Address :	32032 S TRACY BLVD, TRACY, 95377
County :	San Joaquin
Facility ID :	8788
Air Basin Code :	San Joaquin Valley

Map Id: 4
Direction: WNW
Distance: 0.021 mi., 111 ft.
Elevation: 250 ft.
Relative: Higher

Site Name : AMERICAN TOWER, L.P. | AMERICAN TOWER CORPORATION | AMERICAN TOWER, L.P. - TRACY-HWY 580, SITE # 8692
32032 S TRACY BLVD | 32032 SOUTH TRACY BOULEVARD
TRACY, CA

Database(s) : [CALEPA SITES - CA, EMI - CA, FRS] *(cont.)*

Envirosite ID: 58153890
EPA ID: N/R

EMI - CA *(cont.)*

District :	SAN JOAQUIN VALLEY APCD
County ID :	SJ
SIC Code :	4812
CHAPIS :	N/R
CERR Code :	N/R
Last Date in Agency List :	2019-07-08

Additional Details

Year :	2017
Total Organic Gases (Tons/Year) :	.000283665338645418326693227091633466135458
Reactive Organic Gases (Tons/Year) :	.0002492
Carbon Monoxide (Tons/Year) :	.001109
Nitrogen Oxides (Tons/Year) :	.004185
Sulfur Oxides (Tons/Year) :	.00000706
Particulate Matter (Tons/Year) :	.000211885245901639344262295081967213114754
Fine Particulate Matter (Tons/Year) :	.0002068

Facility Name :	AMERICAN TOWER, L.P.
Facility Address :	32032 S TRACY BLVD, TRACY, 95377
County :	San Joaquin

Facility ID :	8788
Air Basin Code :	San Joaquin Valley
District :	SAN JOAQUIN VALLEY APCD
County ID :	SJ
SIC Code :	4812
CHAPIS :	N/R
CERR Code :	N/R
Last Date in Agency List :	2025-01-21

Additional Details

Year :	2022
Total Organic Gases (Tons/Year) :	.000268571428571428571428571428571428571429
Reactive Organic Gases (Tons/Year) :	.00023594
Carbon Monoxide (Tons/Year) :	.001052
Nitrogen Oxides (Tons/Year) :	.0039529
Sulfur Oxides (Tons/Year) :	.00000668
Particulate Matter (Tons/Year) :	.000196267605633802816901408450704225352113
Fine Particulate Matter (Tons/Year) :	.00019509

FRS

Facility Name :	AMERICAN TOWER CORPORATION
Facility Address :	32032 S TRACY BLVD, TRACY, CA 95376
County :	SAN JOAQUIN

Map Id: 4
Direction: WNW
Distance: 0.021 mi., 111 ft.
Elevation: 250 ft.
Relative: Higher

Site Name :	AMERICAN TOWER, L.P. | AMERICAN TOWER CORPORATION | AMERICAN TOWER, L.P. - TRACY-HWY 580, SITE # 8692 32032 S TRACY BLVD | 32032 SOUTH TRACY BOULEVARD TRACY, CA
Database(s) :	[CALEPA SITES - CA, EMI - CA, FRS] *(cont.)*

Envirosite ID: 58153890
EPA ID: N/R

FRS *(cont.)*

Site Details
Registry ID : 110058253241
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-12-17

Source Description
Source Description :

The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Source Description :

The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.

FRS Environmental Interest
Source and System ID : CA-CERS - 10405972
CA-ENVIROVIEW - 5290
EIS - 18506211

Facility Name : AMERICAN TOWER, L.P.
Facility Address : 32032 S TRACY BLVD, TRACY, CA 95376
County : SAN JOAQUIN

Site Details
Registry ID : 110058253241
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2024-12-16

Map Id: 4
Direction: WNW
Distance: 0.021 mi., 111 ft.
Elevation: 250 ft.
Relative: Higher

Site Name :	AMERICAN TOWER, L.P. | AMERICAN TOWER CORPORATION | AMERICAN TOWER, L.P. - TRACY-HWY 580, SITE # 8692 32032 S TRACY BLVD | 32032 SOUTH TRACY BOULEVARD TRACY, CA
Database(s) :	[CALEPA SITES - CA, EMI - CA, FRS] *(cont.)*

Envirosite ID: 58153890
EPA ID: N/R

FRS *(cont.)*

Source Description
Source Description : The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Source Description :

The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.

FRS Environmental Interest
Source and System ID : CA-CERS - 10405972
CA-ENVIROVIEW - 5290
EIS - 18506211

Facility Name : AMERICAN TOWER, L.P.
Facility Address : 32032 S TRACY BLVD, TRACY, CA 95377
County : SAN JOAQUIN COUNTY

Site Details
Registry ID : 110071807360
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2024-12-16

Source Description
Source Description : N/R

Map Id: 4
Direction: WNW
Distance: 0.021 mi., 111 ft.
Elevation: 250 ft.
Relative: Higher

Site Name :	AMERICAN TOWER, L.P. | AMERICAN TOWER CORPORATION | AMERICAN TOWER, L.P. - TRACY-HWY 580, SITE # 8692 32032 S TRACY BLVD | 32032 SOUTH TRACY BOULEVARD TRACY, CA
Database(s) :	[CALEPA SITES - CA, EMI - CA, FRS] *(cont.)*

Envirosite ID: 58153890
EPA ID: N/R

FRS *(cont.)*

FRS Environmental Interest
Source and System ID : N/R - N/R

Facility Name : AT&T MOBILITY - I-580 - SOUTH TRACY BLVD (14056)
Facility Address : 32032 SOUTH TRACY BOULEVARD, TRACY, CA 95377
County : SAN JOAQUIN

Site Details
Registry ID : 110058246982
FRS Facility URL : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2024-12-16

Source Description
Source Description :

The California Environmental Reporting System (CERS) is a statewide web-based user and information exchange system to support over 140,000 regulated businesses and over 130 local agencies in electronically collecting and reporting significant hazardous materials, hazardous waste and compliance and enforcement data as mandated by California law. Under oversight by Cal/EPA, certified local governing agencies (Unified Program Agencies - UPAs) consolidate, coordinate and provide consistent regulatory activities for six state and federal environmental programs.
The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest
Source and System ID : CA-CERS - 10415770
CA-ENVIROVIEW - 8522

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA]

Envirosite ID: 58153892
EPA ID: CAL000248766

CALEPA SITES - CA

Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, 95304-9334
Site ID :	108394
EI ID :	10181085
EI Description :	Chemical Storage Facilities
Latitude :	37.641300
Longitude :	-121.398200
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23
Site ID :	108394
EI ID :	10181085
EI Description :	Underground Storage Tank
Latitude :	37.641300
Longitude :	-121.398200
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23
Site ID :	108394
EI ID :	10181085
EI Description :	Hazardous Waste Generator
Latitude :	37.641300
Longitude :	-121.398200
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23
Site ID :	108394
EI ID :	110038015199
EI Description :	US EPA Air Emission Inventory System (EIS)
Latitude :	37.641300
Longitude :	-121.398200
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23
Facility Name :	COUNTRY MART TEXACO
Facility Address :	34243 CHRISMAN RD S, TRACY, 95376
Site ID :	250729
EI ID :	T0607700703
EI Description :	Leaking Underground Storage Tank Cleanup Site
Latitude :	37.641115
Longitude :	-121.398089

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

CALEPA SITES - CA *(cont.)*

Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2022-12-21
Site ID :	648225
EI ID :	T0607700703
EI Description :	Leaking Underground Storage Tank Cleanup Site
Latitude :	37.641115
Longitude :	-121.398089
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2023-07-21
Site ID :	888835
EI ID :	T0607700703
EI Description :	Leaking Underground Storage Tank Cleanup Site
Latitude :	37.641115
Longitude :	-121.398089
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23

ECHO

Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN
Last Inspection Date :	N/R
Registry ID :	110038015199
FIPS Code :	06077
EPA Region :	09
Inspection Count :	0
Last Inspection Days :	N/R
Informal Count :	0
Last Informal Action Date :	N/R
Formal Action Count :	0
Last Formal Action Date :	N/R
Total Penalties :	0
Penalty Count :	N/R
Last Penalty Date :	N/R
Last Penalty Amount :	N/R
QTRS IN NC :	0
Programs IN SNC :	0
Current Compliance Status :	No Violation Identified
Three-Year Compliance Status :	_____
Collection Method :	ADDRESS MATCHING-HOUSE NUMBER
Reference Point :	CENTER OF A FACILITY OR STATION
Accuracy Meters :	30

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

ECHO *(cont.)*

Derived Tribes :	N/R
Derived HUC :	18040003
Derived WBD :	180400030601
Derived STCTY FIPS :	06077
Derived Zip :	95304
Derived CD113 :	10
Derived CB2010 :	060770055021057
MYRTK Universe :	NNN
NPDES IDs :	N/R
CWA Permit Types :	N/R
CWA Compliance Tracking :	N/R
CWA NAICS :	N/R
CWA SICS :	N/R
CWA Inspection Count :	N/R
CWA Last Inspection Days :	N/R
CWA Informal Count :	N/R
CWA Formal Action Count :	N/R
CWA Last Formal Action Date :	N/R
CWA Penalties :	N/R
CWA Last Penalty Date :	N/R
CWA Last Penalty Amount :	N/R
CWA Quarters IN NC :	N/R
CWA Current Compliance Status :	N/R
CWA Current SNC Flag :	N
CWA 13 Quarters Compliance Status :	N/R
CWA 13 Quarters Effluent Exceedances:	N/R
CWA Three-Year QNCR Codes :	N/R
DFR URL :	Click here for hyperlink provided by the agency.
Facility SIC :	N/R
Facility NAICS :	447110 - Gasoline Stations with Convenience Stores, 56299 - All Other Waste Management Services
Facility Last Inspection EPA Date :	N/R
Facility Last Inspection State Date :	N/R
Facility Last Formal Act EPA Date :	N/R
Facility Last Formal Act State Date :	N/R
Facility Last Informal Act EPA Date :	N/R
Facility Last Informal Act State Date:	N/R
Facility Federal Agency :	N/R
TRI Reporter :	N/R
Facility Imp Water Flag :	N/R
Current SNC Flag :	N
Indian County Flag :	N
Federal Flag :	N/R
US Mexico Border Flag :	N
Chesapeak Bay Flag :	N/R
AIR Flag :	N
NPDES Flag :	N

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

ECHO *(cont.)*

SDWIS Flag :	N
RCRA Flag :	Y
TRI Flag :	N
GHG Flag :	N
Major Flag :	N/R
Active Flag :	Y
NAA Flag :	Y
Latitude :	37.64111
Longitude :	-121.39765
Last Date in Agency List :	2024-07-12

EPA LUST

Facility Name :	COUNTRY MART TEXACO
Facility Address :	34243 CHRISMAN RD S, TRACY, California 95376
County :	N/R
Facility ID :	N/R
LUST ID :	CAT0607700703
Reported Date :	N/R
Status :	No Further Action
Substance :	N/R
Closed With Residual Contamination (Tribal Only):	N/R
NFA_Letter (Tribal Only) :	N/R
Tribe (Tribal Only) :	N/R
EPA Region :	9
Estimated Population within 1500ft :	0
Estimated Private Domestic Wells within 1500ft:	0
Within Source Water Protection Area (SPA):	No
SPA Public Water System and Facility ID:	N/R
SPA Water Type :	N/R
SPA Facility Type :	N/R
SPA HUC12 :	N/R
Within Groundwater Wellhead Protection Area (WHPA):	Yes
WHPA Public Water System and Facility ID:	CA3902187_58475
WHPA Water Type :	GW
WHPA Facility Type :	WL
WHPA HUC12 :	180400030601
Within Estimated 100-year Floodplain:	No
Latitude :	37.6414199999999
Longitude :	-121.397689999999
Last Date in Agency List :	2024-05-23

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

EPA UST

Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, California 95304-9334
County :	N/R
Facility ID :	CA10181085
Facility Status :	Open UST(s)
Open USTs :	4
Closed USTs :	N/R
Temporarily Out of Service USTs :	N/R
Date of Last Inspection :	N/R
EPA Region :	9
Tribe :	N/R
Facility ID 2 :	N/R
Latitude :	37.6414200186922
Longitude :	-121.398089994396
Last Date in Agency List :	2024-05-22

Tank Details

Tank ID :	CA10181085-001_A Stand-alone Tank_1
Tank Status :	Open
Installation Date :	1995-01-01
Removal Date :	N/R
Capacity :	12000
Substances :	Diesel
Tank Wall Type :	Double Wall
Tank ID :	CA10181085-002_One in a Compartmented Unit_2
Tank Status :	Open
Installation Date :	1995-01-01
Removal Date :	N/R
Capacity :	6000
Substances :	Premium Unleaded
Tank Wall Type :	Double Wall
Tank ID :	CA10181085-003_One in a Compartmented Unit_2
Tank Status :	Open
Installation Date :	1995-01-01
Removal Date :	N/R
Capacity :	6000
Substances :	Diesel
Tank Wall Type :	Double Wall

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name : COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS
34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD
TRACY, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

EPA UST *(cont.)*

Tank ID :	CA10181085-004_A Stand-alone Tank_1
Tank Status :	Open
Installation Date :	1995-01-01
Removal Date :	N/R
Capacity :	12000
Substances :	Regular Unleaded
Tank Wall Type :	Double Wall

FRS

Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, CA 95304-9334
County :	SAN JOAQUIN

Site Details

Registry ID :	110038015199
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-12-16

Source Description

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

Source Description :

The Emission Inventory System (EIS) maintains an inventory of large stationary sources and voluntarily-reported smaller sources of air point pollution emitters. It contains information about facility sites and their physical location, emission units, emission processes, release points, control approaches, and regulations. Facility inventory data are kept separate from the emissions data and have stable identifiers to improve continuity from year to year and to help identify duplicate or missing facilities.

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

FRS *(cont.)*

Source Description :

RCRAInfo is EPA's comprehensive information system that supports the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984 through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA. RCRAInfo also supports generation of the National Hazardous Waste Biennial Report. All generators and treatment, storage, and disposal facilities who handle hazardous waste are required to report to the EPA Administrator at least once every two years to support creation of the Biennial Report.

FRS Environmental Interest

Source and System ID :	CA-ENVIROVIEW - 108394 EIS - 14010111 EIS - 9855411 RCRAINFO - CAL000286356
Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, CA 95376
County :	UNITED STATES

Site Details

Registry ID :	110071799057
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-12-16

Source Description

Source Description :	N/R

FRS Environmental Interest

Source and System ID :	N/R - N/R
Facility Name :	COUNTRY MART TEXACO
Facility Address :	34243 CHRISMAN RD S, TRACY, CA 95376
County :	SAN JOAQUIN

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

FRS *(cont.)*

Site Details

Registry ID :	110065382473
FRS Facility URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-12-16

Source Description

Source Description :

The California Environmental Protection Agency (CalEPA) has recently implemented a new data warehouse system (nSite). This data warehouse combines and merges facility and site information from five different systems managed within CalEPA. The five systems are: California Environmental Reporting System (CERS), EnviroStor, GeoTracker, California Integrated Water Quality System (CIWQS), and Toxic Release Inventory (TRI).

FRS Environmental Interest

Source and System ID :	CA-ENVIROVIEW - 250729

HAZNET - CA

Facility Name :	COUNTRY MART DIESEL & GAS
Facility Address :	34243 CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

Site Details

Generator EPA ID :	CAL000248766
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	3539 SHADOW CREEK DR, DANVILLE, CA 94506
Latitude :	37.63987291
Longitude :	-121.39768281
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2003: 352 - Other organic solids, 0.375 tons to CAL000161743 2003: 223 - Unspecified oil-containing waste, 0.4587 tons to CAL000161743

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

HAZNET - CA *(cont.)*

Facility Name : COUNTRY MART GAS & FOOD
Facility Address : 34243 S CHRISMAN RD, TRACY, CA 95304
County : SAN JOAQUIN

Site Details
Generator EPA ID : CAL000286356
Active : Active
Category : STATE
Facility Types : N/R
Type : PERMANENT
Contact Name : N/R
Contact Phone : N/R
Facility Mailing Address : 34243 S CHRISMAN RD, TRACY, CA 953049334
Latitude : 37.63987291
Longitude : -121.39768281
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2021-07-08

Waste Generator Details
State Waste : 2018: 223 - Unspecified oil-containing waste, 0.10000 tons to NED981723513
2018: 223 - Unspecified oil-containing waste, 0.05000 tons to CAD059494310
2015: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.2 tons to CAD059494310
2014: 352 - Other organic solids, 0.225 tons to CAD980675276
2013: 352 - Other organic solids, 0.175 tons to NVT330010000
2012: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.225 tons to CA0000084517
2011: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.1 tons to TXD077603371
2010: 352 - Other organic solids, 0.15 tons to NVT330010000
2009: 352 - Other organic solids, 0.75 tons to NVT330010000
2008: 212 - Oxygenated solvents (acetone, butanol, ethyl acetate, etc.), 0.2 tons to TXD077603371
2004: 223 - Unspecified oil-containing waste, 0.6 tons to CAT080033681
2004: 223 - Unspecified oil-containing waste, 0.35 tons to CAD028409019

Facility Name : INTERAMERICAN MOTOR CORPORATION
Facility Address : 34243 S CHRISMAN RD, TRACY, CA 95304
County : SAN JOAQUIN

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name : COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS
34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD
TRACY, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

HAZNET - CA *(cont.)*

Site Details

Generator EPA ID :	CAC002700219
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	TEMPORARY
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	30041 AHERN AVE, UNION CITY, CA 94587
Latitude :	37.63987291
Longitude :	-121.39768281
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

Waste Generator Details

State Waste :	2012: 352 - Other organic solids, 2.4 tons to NVT330010000

HWG - CA

Facility Name :	COUNTRY MART DIESEL & GAS
Facility Address :	34243 CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN
EPA ID :	CAL000248766
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	3539 SHADOW CREEK DR, DANVILLE, CA 94506
Owner Name :	APPKUN ENTERPRISE INC
Owner Address :	3539 SHADOW CREEK DR, DANVILLE, CA 94506
Operator Name :	BODH KUNWAR
Operator Address :	3539 SHADOW CREEK DR, DANVILLE, CA 94506
Latitude :	37.64097
Longitude :	-121.397642
Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN
EPA ID :	CAL000286356
Status :	Active
Category :	STATE
Type :	PERMANENT

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name : COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS
34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD
TRACY, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

HWG - CA *(cont.)*

Facility Type :	N/R
Mailing Address :	34243 S CHRISMAN RD, TRACY, CA 953049334
Owner Name :	TARANJIT SANDHU
Owner Address :	1205 PALOMAR DR, TRACY, CA 953770000
Operator Name :	TARANJIT SANDHU
Operator Address :	1205 PALOMAR DR, TRACY, CA 95377
Latitude :	37.64097
Longitude :	-121.397642

Facility Name :	INTERAMERICAN MOTOR CORPORATION
Facility Address :	34243 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

EPA ID :	CAC002700219
Status :	Inactive
Category :	STATE
Type :	TEMPORARY
Facility Type :	N/R
Mailing Address :	30041 AHERN AVE, UNION CITY, CA 94587
Owner Name :	INTERAMERICAN MOTOR CORPORATION
Owner Address :	30041 AHERN AVE, UNION CITY, CA 94587
Operator Name :	TONY VARGAS
Operator Address :	30041 AHERN AVE, UNION CITY, CA 94587
Latitude :	37.64111
Longitude :	-121.39808

LUST REG 5 - CA

Facility Name :	COUNTRY MART TEXACO
Facility Address :	34243 CHRISMAN RD S, TRACY, CA 95376
County :	San Joaquin

Site Details

Status Date :	1998-05-12
Status :	Completed - Case Closed
Begin Date :	1995-01-12
Global ID :	T0607700703
Region :	REGION 5S
Site History :	N/R
RB Case Number :	390877
Potential Media Affected :	Soil
Potential Contaminants of Concern :	Gasoline
Local Agency :	N/R
Local Case Number :	1801
Lead Agency :	SAN JOAQUIN COUNTY

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

LUST REG 5 - CA *(cont.)*

File Location :	N/R
CUF Case :	NO
Caseworker :	N/R
Case Type :	LUST Cleanup Site
How Discovered :	Tank Closure
How Discovered Description :	N/R
Stop Method :	N/R
Stop Description :	N/R
Calwater Watershed Name :	Carbona (575.00)
DWR Groundwater Subbasin Name :	San Joaquin Valley - Tracy (5-022.15)
Disadvantaged Community :	N/R
Latitude :	37.641115
Longitude :	-121.398089
Agency URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-10-07

Contacts Summary

Global ID :	T0607700703
Contact Name :	ALAN M. BUEHLER
Contact Type :	Regional Board Caseworker
Organization Name :	CENTRAL VALLEY RWQCB (REGION 5S)
Address :	11020 Sun Center Dr
City :	RANCHO CORDOVA
Phone Number :	9164644615
Email :	alan.buehler@waterboards.ca.gov

Regulatory Activities

Date :	1995-01-24
Global ID :	T0607700703
Action Type :	Other
Action :	Leak Reported

Date :	1995-01-12
Global ID :	T0607700703
Action Type :	Other
Action :	Leak Discovery

Status History

Status Date :	1998-05-12
Global ID :	T0607700703
Status :	Completed - Case Closed

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name : COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS
34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD
TRACY, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

LUST REG 5 - CA *(cont.)*

Status Date :	1995-01-12
Global ID :	T0607700703
Status :	Open - Site Assessment

Status Date :	1995-01-12
Global ID :	T0607700703
Status :	Open - Case Begin Date

MANIFEST EPA

Manifest Details

Manifest Number :	006776320SKS
Shipped Date :	2018-10-12
Updated Date :	2018-11-26
Received Date :	2018-10-26
Status :	Signed
Generator ID :	CAL000286356
Generator Name :	Country Mart
Generator Address :	34243 S Chrisman Rd, TRACY, CA 95304
Generator Mailing :	34243 S Chrisman Rd, Tracy, CA 95304
Generator Contact :	N/R
Destination ID :	CAD059494310
Destination Name :	Clean Harbors San Jose LLC
Destination Mailing :	1021 Berryessa Road, San Jose, CA 95133
Destination Address :	1021 Berryessa Road, San Jose, CA 95133
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2024-12-03

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	N
DOT ID Number :	N/R
DOT Information :	N/R
Non Waste Description :	NONE, NON RCRA HAZARDOUS WASTE SOLIDS, (DEBRIS, PETROLEUM HYDROCARBONS), N/A, NONE
Quantity :	100 Pounds
Quantity Tons, Acute, Non-Acute :	0.05, 0, 0.05
Quantity Kg, Acute, Non-Acute :	0, 45.3515
Quantity Tons, Haz, Non-Haz :	0, 0.05
Quantity Kg, Haz, Non-Haz :	0, 45.3515

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name : COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS
34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD
TRACY, CA

Database(s) : [CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

MANIFEST EPA *(cont.)*

Management Method :	H141 - STORAGE, BULKING AND/OR TRANSFER OFF SITE
Is EPA Waste :	N
Federal Code :	N/R
State Code :	CA - 223

Manifest Details

Manifest Number :	006776321SKS
Shipped Date :	2018-10-12
Updated Date :	2018-11-29
Received Date :	2018-11-02
Status :	Signed
Generator ID :	CAL000286356
Generator Name :	Country Mart
Generator Address :	34243 S Chrisman Rd, TRACY, CA 95304
Generator Mailing :	34243 S Chrisman Rd, Tracy, CA 95304
Generator Contact :	N/R
Destination ID :	NED981723513
Destination Name :	Clean Harbors Environmental Services, Inc.
Destination Mailing :	2247 South Highway 71, Kimball, NE 69145
Destination Address :	2247 South Highway 71, Kimball, NE 69145
Destination Contact :	N/R
Submission Type :	DataImage5Copy
Origin Type :	Service
Manifest Residue :	N
Rejection :	N
Last Date in Agency List :	2024-12-03

Waste Details

Waste Line Number :	1
Is DOT Hazardous :	Y
DOT ID Number :	NA3082
DOT Information :	NA3082, NA3082, HAZARDOUS WASTE, LIQUID, N.O.S.,), 9, PG II (BENZENE), 9, PG III
Non Waste Description :	N/R
Quantity :	200 Pounds
Quantity Tons, Acute, Non-Acute :	0.1, 0, 0.1
Quantity Kg, Acute, Non-Acute :	0, 90.703
Quantity Tons, Haz, Non-Haz :	0.1, 0
Quantity Kg, Haz, Non-Haz :	90.703, 0
Management Method :	H040 - INCINERATION
Is EPA Waste :	Y
Federal Code :	D018
State Code :	CA - 223

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

RCRA_NONGEN

Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, CA 95304-9334
County :	SAN JOAQUIN
Date Form Received by Agency :	2004-09-10
EPA ID :	CAL000286356
Mailing Address :	34243 S CHRISMAN RD, TRACY, CA 95304-9334
Contact :	TARANJIT SANDHU
Contact Address :	1205 PALOMAR DR, TRACY, CA 95377
Contact Country :	N/R
Contact Telephone :	209-832-8642
Contact Email :	TARANJITSANDHU1@GMAIL.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2024-12-17

Owner/Operator Summary

Owner/Operator Name :	TARANJIT SANDHU
Owner/Operator Address :	1205 PALOMAR DR, TRACY, CA 95377
Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-832-8642
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	TARANJIT SANDHU
Owner/Operator Address :	1205 PALOMAR DR, TRACY, CA 95377-0000
Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-834-1987
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

RCRA_NONGEN *(cont.)*

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

UST - CA

Facility Name :	COUNTRY MART DIESEL / GAS
Facility Address :	34243 S. CHRISMAN ROAD, TRACY, 95304
County :	San Joaquin
Facility ID :	FA00032290
CERS ID :	N/R
Permitting Agency :	N/R
Latitude :	37.642464
Longitude :	-121.396738
Last Date in Agency List :	2017-01-13
Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, 95304-9334
County :	San Joaquin
Facility ID :	FA0003290
CERS ID :	10181085
Permitting Agency :	San Joaquin County Environmental Health
Latitude :	37.6413
Longitude :	-121.3982
Last Date in Agency List :	2024-12-26

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

UST - CA *(cont.)*

Tank Details

Tank ID Number :	TA0505426
Tank Installation Date :	1995-01-01
Tank Closure Date :	N/R
Tank Status :	Confirmed/Updated Information
Facility Type :	Motor Vehicle Fueling
Owner Type :	Non-Government
Tank Owner Name :	,TARANJIT & TEJINDER SANDHU
Tank Owner Mailing Address :	1205 Palomar Drive
Tank Operator Name :	TARANJIT SINGH SANDHU
Tank Operator Mailing Address :	34243 S CHRISMAN RD
Number of In-use UST :	5094
Number of Closed UST :	0
Number of OOS UST :	0
Tank Number of Compartments :	1
Tank Contents :	Diesel
Tank Capacity Gallons :	12000
Tank Type :	Double Wall
Tank PC Construction :	Steel
Tank PW Piping Construction :	Fiberglass
Tank Piping Type :	Pressure
Tank Piping Construction :	Double Walled
Tank Sacrificial Anode :	No
Tank CP Impressed Current :	No
Tank CP Shutoff :	Yes
Tank Alarms :	No
Tank Ball Float :	No
Tank Spill Bucket :	Yes
Tank Configuration :	Stand Alone Tank

Tank ID Number :	TA0505427
Tank Installation Date :	1995-01-01
Tank Closure Date :	N/R
Tank Status :	Confirmed/Updated Information
Facility Type :	Motor Vehicle Fueling
Owner Type :	Non-Government
Tank Owner Name :	,TARANJIT & TEJINDER SANDHU
Tank Owner Mailing Address :	1205 Palomar Drive
Tank Operator Name :	TARANJIT SINGH SANDHU
Tank Operator Mailing Address :	34243 S CHRISMAN RD
Number of In-use UST :	5094
Number of Closed UST :	0
Number of OOS UST :	0
Tank Number of Compartments :	2
Tank Contents :	Premium Unleaded
Tank Capacity Gallons :	6000
Tank Type :	Double Wall
Tank PC Construction :	Steel

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

UST - CA *(cont.)*

Tank PW Piping Construction :	Fiberglass
Tank Piping Type :	Pressure
Tank Piping Construction :	Double Walled
Tank Sacrificial Anode :	No
Tank CP Impressed Current :	No
Tank CP Shutoff :	Yes
Tank Alarms :	No
Tank Ball Float :	No
Tank Spill Bucket :	Yes
Tank Configuration :	One in a Compartmented Unit

Tank ID Number :	TA0505428
Tank Installation Date :	1995-01-01
Tank Closure Date :	N/R
Tank Status :	Confirmed/Updated Information
Facility Type :	Motor Vehicle Fueling
Owner Type :	Non-Government
Tank Owner Name :	,TARANJIT & TEJINDER SANDHU
Tank Owner Mailing Address :	1205 Palomar Drive
Tank Operator Name :	TARANJIT SINGH SANDHU
Tank Operator Mailing Address :	34243 S CHRISMAN RD
Number of In-use UST :	5094
Number of Closed UST :	0
Number of OOS UST :	0
Tank Number of Compartments :	2
Tank Contents :	Diesel
Tank Capacity Gallons :	6000
Tank Type :	Double Wall
Tank PC Construction :	Steel
Tank PW Piping Construction :	Fiberglass
Tank Piping Type :	Pressure
Tank Piping Construction :	Double Walled
Tank Sacrificial Anode :	No
Tank CP Impressed Current :	No
Tank CP Shutoff :	Yes
Tank Alarms :	No
Tank Ball Float :	No
Tank Spill Bucket :	Yes
Tank Configuration :	One in a Compartmented Unit

Tank ID Number :	TA0505429
Tank Installation Date :	1995-01-01
Tank Closure Date :	N/R
Tank Status :	Confirmed/Updated Information
Facility Type :	Motor Vehicle Fueling
Owner Type :	Non-Government
Tank Owner Name :	,TARANJIT & TEJINDER SANDHU

Map Id: B5
Direction: SSE
Distance: 0.023 mi., 121 ft.
Elevation: 258 ft.
Relative: Higher

Site Name :	COUNTRY MART GAS & FOOD | COUNTRY MART TEXACO | COUNTRY MART DIESEL & GAS 34243 S CHRISMAN RD | 34243 CHRISMAN RD S | 34243 CHRISMAN RD TRACY, CA
Database(s) :	[CALEPA SITES - CA, ECHO, EPA LUST, EPA UST, FRS, HAZNET - CA, HWG - CA, LUST REG 5 - CA, MANIFEST EPA, RCRA_NONGEN, UST - CA, UST_SAN JOAQUIN COUNTY - CA] *(cont.)*

Envirosite ID: 58153892
EPA ID: CAL000248766

UST - CA *(cont.)*

Tank Owner Mailing Address :	1205 Palomar Drive
Tank Operator Name :	TARANJIT SINGH SANDHU
Tank Operator Mailing Address :	34243 S CHRISMAN RD
Number of In-use UST :	5094
Number of Closed UST :	0
Number of OOS UST :	0
Tank Number of Compartments :	1
Tank Contents :	Regular Unleaded
Tank Capacity Gallons :	12000
Tank Type :	Double Wall
Tank PC Construction :	Steel
Tank PW Piping Construction :	Fiberglass
Tank Piping Type :	Pressure
Tank Piping Construction :	Double Walled
Tank Sacrificial Anode :	No
Tank CP Impressed Current :	No
Tank CP Shutoff :	Yes
Tank Alarms :	No
Tank Ball Float :	No
Tank Spill Bucket :	Yes
Tank Configuration :	Stand Alone Tank

UST_SAN JOAQUIN COUNTY - CA

Facility Name :	COUNTRY MART DIESEL / GAS
Facility Address :	34243 S. CHRISMAN ROAD, TRACY, 95304
County :	San Joaquin
Facility ID :	FA00032290
CERS ID :	N/R
Permitting Agency :	N/R
Latitude :	37.642464
Longitude :	-121.396738
Last Date in Agency List :	2017-01-13
Facility Name :	COUNTRY MART GAS & FOOD
Facility Address :	34243 S CHRISMAN RD, TRACY, 95304-9334
County :	San Joaquin
Facility ID :	FA0003290
CERS ID :	10181085
Permitting Agency :	San Joaquin County Environmental Health
Latitude :	37.6412
Longitude :	-121.3982
Last Date in Agency List :	2022-03-08

Map Id: 6
Direction: ESE
Distance: 0.109 mi., 575 ft.
Elevation: 211 ft.
Relative: Higher

Site Name : STATE ROUTE 132 AND BIRD ROAD INTERCHANGE
N/R
CA

Database(s) : [CALEPA SITES - CA]

Envirosite ID: 6991672
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	STATE ROUTE 132 AND BIRD ROAD INTERCHANGE
Facility Address :	N/R
Site ID :	269401
EI ID :	795548
EI Description :	Wetlands - Fill and Dredge Material
Latitude :	37.637569
Longitude :	-121.362236
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23

Map Id: 7
Direction: N
Distance: 0.158 mi., 833 ft.
Elevation: 153 ft.
Relative: Lower

Site Name : CROWNNUT COMPANY INC.
31995 S CHRISMAN RD | 31995 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, HAZNET - CA, HWG - CA, RCRA_NONGEN]

Envirosite ID: 58153893
EPA ID: N/R

CALEPA SITES - CA

Facility Name :	CROWN NUT COMPANY, INC.
Facility Address :	31995 SOUTH CHRISMAN ROAD, TRACY, 95304
Site ID :	515152
EI ID :	110070059358
EI Description :	US EPA Air Emission Inventory System (EIS)
Latitude :	37.662430
Longitude :	-121.402360
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2020-02-19
Facility Name :	CROWNNUT COMPANY INC.
Facility Address :	31995 S CHRISMAN RD, TRACY, 95304
Site ID :	523461
EI ID :	10805053
EI Description :	Chemical Storage Facilities
Latitude :	37.662430
Longitude :	-121.402350
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-05-23

HAZNET - CA

Facility Name :	CROWN NUT COMPANY INC

Map Id: 7
Direction: N
Distance: 0.158 mi., 833 ft.
Elevation: 153 ft.
Relative: Lower

Site Name : CROWNNUT COMPANY INC.
31995 S CHRISMAN RD | 31995 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, HAZNET - CA, HWG - CA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153893
EPA ID: N/R

HAZNET - CA *(cont.)*

Facility Address :	31995 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

Site Details

Generator EPA ID :	CAL000446270
Active :	Inactive
Category :	STATE
Facility Types :	N/R
Type :	PERMANENT
Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	31995 S CHRISMAN RD, TRACY, CA 95304
Latitude :	37.66257900
Longitude :	-121.40241300
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HWG - CA

Facility Name :	CROWN NUT COMPANY INC
Facility Address :	31995 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

EPA ID :	CAL000446270
Status :	Inactive
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	31995 S CHRISMAN RD, TRACY, CA 95304
Owner Name :	PINDERJIT SANDHU
Owner Address :	3972 W DURHAM FERRY, TRACY, CA 95304
Operator Name :	RAJWINDER KAUR
Operator Address :	31995 S CHRISMAN RD, TRACY, CA 95304
Latitude :	37.662579
Longitude :	-121.402413

RCRA_NONGEN

Facility Name :	CROWN NUT COMPANY INC
Facility Address :	31995 S CHRISMAN RD, TRACY, CA 95304
County :	SAN JOAQUIN

Date Form Received by Agency :	2019-05-24
EPA ID :	CAL000446270
Mailing Address :	31995 S CHRISMAN RD, TRACY, CA 95304
Contact :	RAJWINDER KAUR
Contact Address :	31995 S CHRISMAN RD, TRACY, CA 95304
Contact Country :	N/R
Contact Telephone :	209-830-4400
Contact Email :	N/R
EPA Region :	09

Map Id: 7
Direction: N
Distance: 0.158 mi., 833 ft.
Elevation: 153 ft.
Relative: Lower

Site Name : CROWNNUT COMPANY INC.
31995 S CHRISMAN RD | 31995 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, HAZNET - CA, HWG - CA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153893
EPA ID: N/R

RCRA_NONGEN *(cont.)*

Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2024-12-17

Owner/Operator Summary

Owner/Operator Name :	PINDER]IT SANDHU
Owner/Operator Address :	3972 W DURHAM FERRY, TRACY, CA 95304
Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-830-4400
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	RA]WINDER KAUR
Owner/Operator Address :	31995 S CHRISMAN RD, TRACY, CA 95304
Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-830-4400
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	Y
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	Y
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Map Id: 7
Direction: N
Distance: 0.158 mi., 833 ft.
Elevation: 153 ft.
Relative: Lower

Site Name : CROWNNUT COMPANY INC.
31995 S CHRISMAN RD | 31995 SOUTH CHRISMAN ROAD
TRACY, CA 95304

Database(s) : [CALEPA SITES - CA, HAZNET - CA, HWG - CA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153893
EPA ID: N/R

RCRA_NONGEN *(cont.)*

Notices of Violations Summary
Regulation Violated : N

Map Id: 8
Direction: E
Distance: 0.164 mi., 865 ft.
Elevation: 180 ft.
Relative: Lower

Site Name : LAND MANAGEMENT INC | WCR1998-006002
33909 S BIRD RD
TRACY, CA

Database(s) : [CALEPA SITES - CA, HAZNET - CA, HWG - CA, RCRA_NONGEN]

Envirosite ID: 58153896
EPA ID: N/R

CALEPA SITES - CA

Facility Name : LAND MANAGEMENT INC
Facility Address : 33909 S BIRD RD, TRACY, 95304

Site ID : 129625
EI ID : 10185817
EI Description : Chemical Storage Facilities
Latitude : 37.651900
Longitude : -121.361200
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2024-05-23

Site ID : 129625
EI ID : 10185817
EI Description : Hazardous Waste Generator
Latitude : 37.651900
Longitude : -121.361200
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2024-05-23

HAZNET - CA

Facility Name : LAND MANAGEMENT INC
Facility Address : 33909 S Bird Rd, TRACY, CA 95376
County : SAN JOAQUIN

Site Details
Generator EPA ID : CAL000248873
Active : Active
Category : STATE
Facility Types : N/R
Type : PERMANENT

Map Id: 8
Direction: E
Distance: 0.164 mi., 865 ft.
Elevation: 180 ft.
Relative: Lower

Site Name : LAND MANAGEMENT INC | WCR1998-006002
33909 S BIRD RD
TRACY, CA

Database(s) : [CALEPA SITES - CA, HAZNET - CA, HWG - CA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153896
EPA ID: N/R

HAZNET - CA *(cont.)*

Contact Name :	N/R
Contact Phone :	N/R
Facility Mailing Address :	33909 S BIRD RD, TRACY, CA 953040000
Latitude :	37.64388434
Longitude :	-121.36126028
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2021-07-08

HWG - CA

Facility Name :	LAND MANAGEMENT INC
Facility Address :	33909 S Bird Rd, TRACY, CA 95376
County :	SAN JOAQUIN
EPA ID :	CAL000248873
Status :	Active
Category :	STATE
Type :	PERMANENT
Facility Type :	N/R
Mailing Address :	33909 S BIRD RD, TRACY, CA 953040000
Owner Name :	JEFF BROWN
Owner Address :	33909 S BIRD RD, TRACY, CA 953040000
Operator Name :	JEFF BROWN
Operator Address :	33909 S BIRD RD, TRACY, CA 95304
Latitude :	37.726488
Longitude :	-121.204414

RCRA_NONGEN

Facility Name :	LAND MANAGEMENT INC
Facility Address :	33909 S BIRD RD, TRACY, CA 95376
County :	SAN JOAQUIN
Date Form Received by Agency :	2002-03-28
EPA ID :	CAL000248873
Mailing Address :	33909 S BIRD RD, TRACY, CA 95304-0000
Contact :	JEFF BROWN
Contact Address :	33909 S BIRD RD, TRACY, CA 95304
Contact Country :	N/R
Contact Telephone :	209-839-8488
Contact Email :	JACKIE@TULIPHILLWINERY.COM
EPA Region :	09
Land Type :	Not Reported
Source Type :	Implementer
Classification :	Not a generator, verified
Description :	Not a generator, verified
Last Date in Agency List :	2024-12-17

Owner/Operator Summary

Owner/Operator Name :	JEFF BROWN
Owner/Operator Address :	33909 S BIRD RD, TRACY, CA 95304

Map Id: 8
Direction: E
Distance: 0.164 mi., 865 ft.
Elevation: 180 ft.
Relative: Lower

Site Name : LAND MANAGEMENT INC | WCR1998-006002
33909 S BIRD RD
TRACY, CA

Database(s) : [CALEPA SITES - CA, HAZNET - CA, HWG - CA, RCRA_NONGEN] *(cont.)*

Envirosite ID: 58153896
EPA ID: N/R

RCRA_NONGEN *(cont.)*

Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-839-8488
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Operator
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Owner/Operator Name :	JEFF BROWN
Owner/Operator Address :	33909 S BIRD RD, TRACY, CA 95304-0000
Owner/Operator Country :	N/R
Owner/Operator Telephone :	209-839-8488
Owner/Operator Email :	N/R
Owner/Operator Fax :	N/R
Legal Status :	Other land type
Owner/Operator Type :	Owner
Owner/Operator Start Date :	N/R
Owner/Operator End Date :	N/R

Handler Activities Summary

U.S. Importer of Hazardous Waste :	N
Mixed Waste (Haz. and Radioactive) :	N
Recycler of Hazardous Waste :	N
Transporter of Hazardous Waste :	N
Treater, Storer or Disposer of HW :	N
Underground Injection Activity :	N
On-site Burner Exemption :	N
Furnace Exemption :	N
Used Oil Fuel Burner :	N
Used Oil Processor :	N
Used Oil Refiner :	N
Used Oil Fuel Marketer to Burner :	N
Used Oil Specification Marketer :	N
Used Oil Transfer Facility :	N
Used Oil Transporter :	N

Notices of Violations Summary

Regulation Violated :	N

Map Id: 9
Direction: WNW
Distance: 0.166 mi., 878 ft.
Elevation: 204 ft.
Relative: Higher

Site Name : Sukhit Sandhu (IDS)
31310 S Tracy Blvd.
Tracy, CA

Database(s) : [SWF/LF - CA]

Envirosite ID: 58155240
EPA ID: N/R

SWF/LF - CA

Facility Name :	Sukhit Sandhu (IDS)
Facility Address :	31310 S Tracy Blvd., Tracy
County :	San Joaquin

Site Details

Permit Date :	N/R
Permit Status :	Unpermitted
Swis Number :	39-AA-0064
Land Use :	N/R
Operator :	N/R
Operator Address :	N/R
Operator Phone :	N/R
Latitude :	37.66934
Longitude :	-121.4321
Last Date in Agency List :	2025-01-10

Owner Summary

Owner :	Sukhjit Sandhu
Owner Address :	N/R
Owner Phone :	N/R

Unit Information

Closure Date :	N/R
Closure Type :	N/R
Unit Number :	N/R
Regulatory Status :	Unpermitted
Operational Status :	Active
Category :	Disposal
Activity :	Solid Waste Facility
Inspection Frequency :	Monthly
Accepted Waste :	N/R
Program Type :	N/R
Throughput :	N/R
Throughput Units :	N/R
Capacity :	N/R
Capacity Units :	N/R
Acreage :	N/R
Disposal Acreage :	N/R
Remaining Capacity :	N/R
WDR Number :	N/R

Map Id: 10
Direction: W
Distance: 0.199 mi., 1050 ft.
Elevation: 254 ft.
Relative: Higher

Site Name : VERIZON WIRELESS - CORRAL HOLLOW
32300 S TRACY BLVD
TRACY, CA 95377

Database(s) : [CALEPA SITES - CA]

Envirosite ID: 58153894
EPA ID: N/R

CALEPA SITES - CA

Facility Name : VERIZON WIRELESS - CORRAL HOLLOW
Facility Address : 32300 S TRACY BLVD, TRACY, 95377

Site ID : 503070
EI ID : 110054256434
EI Description : US EPA Air Emission Inventory System (EIS)
Latitude : 37.655100
Longitude : -121.432020
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2024-05-23

Facility Name : VERIZON WIRELESS CORRAL HOLLOW
Facility Address : 32300 S TRACY BLVD., TRACY, 95377

Site ID : 166818
EI ID : 10142859
EI Description : Chemical Storage Facilities
Latitude : 37.659176
Longitude : -121.434128
Agency Hyperlink : Click here for hyperlink provided by the agency.
Last Date in Agency List : 2024-05-23

Map Id: 11
Direction: NW
Distance: 0.409 mi., 2159 ft.
Elevation: 166 ft.
Relative: Lower

Site Name : TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY
30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE
TRACY | Tracy, CA

Database(s) : [DEBRIS EPA SWRCY, HAULERS - CA, LDS - CA, SWF/LF - CA, SWRCY - CA]

Envirosite ID: 58153898
EPA ID: N/R

DEBRIS EPA SWRCY

Facility Name : Tracy Material Recovery and Solid Waste Transfer Facility
Facility Address : 30703 S MacArthur Dr, Tracy, CA 95377

Phone : 209-832-2355
Region : 9
Recovery : Y
Landfill : N
C D : N
Composting : Y
Demolition : N

Map Id: 11
Direction: NW
Distance: 0.409 mi., 2159 ft.
Elevation: 166 ft.
Relative: Lower

Site Name :	TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY 30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE TRACY | Tracy, CA
Database(s) :	[DEBRIS EPA SWRCY, HAULERS - CA, LDS - CA, SWF/LF - CA, SWRCY - CA] *(cont.)*

Envirosite ID: 58153898
EPA ID: N/R

DEBRIS EPA SWRCY *(cont.)*

Electronic :	N
HHW :	N
Metals :	N
Tires :	Y
Transfer Station :	Y
Vehicles :	N
LF C D :	N
LF HW :	N
LF MSW :	N
Latitude :	37.677324
Longitude :	-121.416219
Last Date in Agency List :	2024-08-30

HAULERS - CA

Facility Name :	Tracy Disposal Co.
Facility Address :	30703 S MacArthur Dr, Tracy, CA 95377-9170
County :	N/R

Site Details

Site Number :	1278421
Site Type :	Hauler Main Site
Site Status :	Active
Contact :	Scott Stortroen
Phone :	N/R
Current Status :	N/R
End Use :	Yes
Generator :	Yes
Accepting Tires from Public :	No
Last Date in Agency List :	2024-08-16

Additional Details

Current Hauler Status :	N/R
Primary Contact Person :	N/R
Primary Mailing Address :	N/R
Primary Mailing Phone Number :	N/R
Website :	N/R

Permit/Authority Details

Regulatory Status Last Changed/Issued On:	N/R
Current Site Regulatory Status :	N/R
Maximum Number of Tires Permitted :	N/R
Business Types :	N/R

Map Id: 11
Direction: NW
Distance: 0.409 mi., 2159 ft.
Elevation: 166 ft.
Relative: Lower

Site Name : TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY
30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE
TRACY | Tracy, CA

Database(s) : [DEBRIS EPA SWRCY, HAULERS - CA, LDS - CA, SWF/LF - CA, SWRCY - CA] *(cont.)*

Envirosite ID: 58153898
EPA ID: N/R

LDS - CA

Facility Name :	Tracy Material Recovery and Transfer Station
Facility Address :	30703 South MacArthur Drive, Tracy, CA 95377-9170
County :	San Joaquin

Site Details

Status Date :	2017-03-16
Status :	Open - Operating
Begin Date :	2017-03-16
Global ID :	T10000010231
Site History :	N/R
RB Case Number :	N/R
Potential Media Affected :	N/R
Potential Contaminants of Concern :	N/R
Local Agency :	N/R
Local Case Number :	N/R
Lead Agency :	CENTRAL VALLEY RWQCB (REGION 5S)
File Location :	N/R
CUF Case :	NO
Caseworker :	BPK
Case Type :	Land Disposal Site
How Discovered :	N/R
How Discovered Description :	N/R
Stop Method :	N/R
Stop Description :	N/R
Calwater Watershed Name :	Carbona (575.00)
DWR Groundwater Subbasin Name :	San Joaquin Valley - Tracy (5-022.15)
Disadvantaged Community :	N/R
Latitude :	37.67594
Longitude :	-121.41743
Agency URL :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-10-07

Contacts Summary

Global ID :	T10000010231
Contact Name :	BRENDAN KENNY
Contact Type :	Regional Board Caseworker - Primary Caseworker
Organization Name :	CENTRAL VALLEY RWQCB (REGION 5S)
Address :	11020 SUN CENTER DRIVE #200
City :	RANCHO CORDOVA
Phone Number :	N/R
Email :	brendan.kenny@waterboards.ca.gov

Map Id: 11
Direction: NW
Distance: 0.409 mi., 2159 ft.
Elevation: 166 ft.
Relative: Lower

Site Name : TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY
30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE
TRACY | Tracy, CA

Database(s) : [DEBRIS EPA SWRCY, HAULERS - CA, LDS - CA, SWF/LF - CA, SWRCY - CA] *(cont.)*

Envirosite ID: 58153898
EPA ID: N/R

LDS - CA *(cont.)*

Regulatory Activities

Date :	N/R
Global ID :	T10000010231
Action Type :	N/R
Action :	N/R

Status History

Status Date :	2017-03-16
Global ID :	T10000010231
Status :	Open - Case Begin Date

Status Date :	2017-03-16
Global ID :	T10000010231
Status :	Open - Operating

SWF/LF - CA

Facility Name :	Tracy Material Recovery & T.S.
Facility Address :	30703 S. Macarthur Drive, Tracy
County :	San Joaquin

Site Details

Permit Date :	N/R
Permit Status :	Permitted
Swis Number :	39-AA-0024
Land Use :	N/R
Operator :	N/R
Operator Address :	N/R
Operator Phone :	N/R
Latitude :	37.67803
Longitude :	-121.41618
Last Date in Agency List :	2025-01-10

Owner Summary

Owner :	Repetto M
Owner Address :	N/R
Owner Phone :	(209) 835-0601

Unit Information

Closure Date :	N/R
Closure Type :	N/R

Map Id: 11
Direction: NW
Distance: 0.409 mi., 2159 ft.
Elevation: 166 ft.
Relative: Lower

Site Name : TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY
30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE
TRACY | Tracy, CA

Database(s) : [DEBRIS EPA SWRCY, HAULERS - CA, LDS - CA, SWF/LF - CA, SWRCY - CA] *(cont.)*

Envirosite ID: 58153898
EPA ID: N/R

SWF/LF - CA *(cont.)*

Unit Number :	N/R
Regulatory Status :	Not Currently Regulated
Operational Status :	Absorbed
Category :	Disposal
Activity :	Solid Waste Facility
Inspection Frequency :	None
Accepted Waste :	N/R
Program Type :	N/R
Throughput :	N/R
Throughput Units :	N/R
Capacity :	N/R
Capacity Units :	Cubic Yards per Day
Acreage :	0
Disposal Acreage :	0
Remaining Capacity :	N/R
WDR Number :	N/R

Closure Date :	N/R
Closure Type :	N/R
Unit Number :	N/R
Regulatory Status :	Permitted
Operational Status :	Active
Category :	Composting
Activity :	Solid Waste Facility
Inspection Frequency :	Monthly
Accepted Waste :	N/R
Program Type :	N/R
Throughput :	1038
Throughput Units :	Tons per week
Capacity :	69
Capacity Units :	Cubic Yards
Acreage :	8.4
Disposal Acreage :	N/R
Remaining Capacity :	N/R
WDR Number :	N/R

Closure Date :	N/R
Closure Type :	N/R
Unit Number :	N/R
Regulatory Status :	Permitted
Operational Status :	Planned
Category :	Transfer/Processing
Activity :	Solid Waste Facility
Inspection Frequency :	None
Accepted Waste :	N/R
Program Type :	N/R
Throughput :	N/R
Throughput Units :	N/R

Map Id: 11
Direction: NW
Distance: 0.409 mi., 2159 ft.
Elevation: 166 ft.
Relative: Lower

Site Name : TRACY MATERIAL RECOVERY AND TRANSFER STATION | TRACY MAT RECOVERY/SOLID WST TRANS INC | TRACY MATERIAL RECOVERY
30703 S MAC ARTHUR DR | 30703 SOUTH MACARTHUR DRIVE | 30703 MACARTHUR DRIVE
TRACY | Tracy, CA

Database(s) : [DEBRIS EPA SWRCY, HAULERS - CA, LDS - CA, SWF/LF - CA, SWRCY - CA] *(cont.)*

Envirosite ID: 58153898
EPA ID: N/R

SWF/LF - CA *(cont.)*

Capacity :	40000
Capacity Units :	Cubic Yards
Acreage :	4.7
Disposal Acreage :	N/R
Remaining Capacity :	N/R
WDR Number :	N/R

Closure Date :	N/R
Closure Type :	N/R
Unit Number :	N/R
Regulatory Status :	Permitted
Operational Status :	Active
Category :	Transfer/Processing
Activity :	Solid Waste Facility
Inspection Frequency :	Monthly
Accepted Waste :	N/R
Program Type :	N/R
Throughput :	1800
Throughput Units :	Tons per day
Capacity :	10305
Capacity Units :	Cubic Yards
Acreage :	51.7
Disposal Acreage :	N/R
Remaining Capacity :	N/R
WDR Number :	N/R

SWRCY - CA

Facility Name :	Tracy Material Recovery & Transfer Facility
Facility Address :	30703 S MacArthur Dr, Tracy, 95376
County :	N/R

Site Details

ID Number :	N/R
Activity Categories :	N/R
Activities :	N/R
Phone Number :	(209) 832-2355
Type :	UsedOil
Last Date in Agency List :	2024-12-02

Map Id: 12
Direction: NNW
Distance: 0.734 mi., 3876 ft.
Elevation: 159 ft.
Relative: Lower

Site Name : TRACY TIRE FIRE | TRACY TIRE SITE REMEDIATION | DEPT OF CALIF/INTEGRATED WASTE MGMT BOARD 29425 S MACARTHUR DR | 29425 SO. MACARTHUR DRIVE 29425 SO. MACARTHUR DRIVE TRACY, CA

Database(s) : [ENVIROSTOR - CA, RESPONSE - CA]

Envirosite ID: 273057
EPA ID: N/R

ENVIROSTOR - CA

Facility Name :	TRACY TIRE FIRE
Facility Address :	29425 S MACARTHUR DR, TRACY, CA 95377
County :	SAN JOAQUIN

Site Details

Cleanup Date :	2009-06-15
Cleanup Status :	Refer: IWMB
Site Type :	State Response
Site Type Detailed :	State Response or NPL
Acreage :	50
APN :	NONE SPECIFIED
National Priorities List :	NO
Regulatory Agencies Involved :	DTSC - Site Cleanup Program; Integrated Waste Management Board; RWQCB 5S - Central Valley
Lead Agency :	Integrated Waste Management Board
Project Manager :	N/R
Supervisor :	Steven Becker
Office :	Cleanup San Joaquin
Envirostor ID :	39000003
Site Code :	101445
Assembly :	13
Senate :	05
Congressional District :	13
Special Program :	N/R
Past Uses :	ILLEGAL DUMPING
Potential COC :	* CONTAMINATED SOIL; * WASTE OIL & MIXED OIL; Zinc; Ethylbenzene; n-Butylbenzene; Isopropylbenzene (see Cumene); Cobalt; Lead; Naphthalene; * OTHER INORGANIC SOLID WASTE
Confirmed COC :	* CONTAMINATED SOIL; * WASTE OIL & MIXED OIL; Zinc; Ethylbenzene; n-Butylbenzene; Isopropylbenzene (see Cumene); Cobalt; Lead; Naphthalene; * OTHER INORGANIC SOLID WASTE
Potential Media Affected :	Other Groundwater affected (uses other than drinking water); Aquifer used for drinking water supply affected; Soil
Restricted Use :	NO
Site Management Req :	N/R
Funding :	Orphan Funds
Latitude :	37.683692
Longitude :	-121.422816
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-08-15

Map Id: 12
Direction: NNW
Distance: 0.734 mi., 3876 ft.
Elevation: 159 ft.
Relative: Lower

Site Name : TRACY TIRE FIRE | TRACY TIRE SITE REMEDIATION | DEPT OF CALIF/INTEGRATED WASTE MGMT BOARD 29425 S MACARTHUR DR | 29425 SO. MACARTHUR DRIVE 29425 SO. MACARTHUR DRIVE
TRACY, CA

Database(s) : [ENVIROSTOR - CA, RESPONSE - CA] *(cont.)*

Envirosite ID: 273057
EPA ID: N/R

ENVIROSTOR - CA *(cont.)*

Alias :
Alternate Name - ROYSTER TIRE FACILITY
Alternate Name - TRACY TIRE FIRE
EPA (FRS #) - 110009266882
Envirostor ID Number - 39000003
Project Code (Site Code) - 101445

Completed Activities

Completed Date : 2006-11-17
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Remedial Action Completion Report
Comments : Report accepted per information in a Feb 1, 2008 NFCRA.

Completed Date : 2003-10-03
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Design/Implementation Workplan
Comments : N/R

Completed Date : 2003-09-25
Area Name : PROJECT WIDE
Sub Area Name : N/R
Document Type : Remedial Action Plan

Comments :

Remediation Work Plan (RAP) i.e., the Design document, Tracy Tire Fire Site, San Joaquin County, Tracy, California, dated September 29, 2003. The Work Plan specifies the field activities that will be implemented to remove the Site contamination per the RAP that was approved on September 22, 2003. Now that the Work Plan has been approved, work may commence on the Site to remove the contamination consisting of pyrolytic oil and metals affected soil. Remedial Action Plan (RAP) for Pyrolytic Oil - And metals affected soil, Tracy Tire Fire Site, San Joaquin County, Tracy, California, dated September 18, 2003. The RAP was approved on September 22, 2003. The California Environmental Quality Act (CEQA) documents, i.e., the Negative Declaration and the Notice of Determination were also approved on September 22, 2003.

RESPONSE - CA

Facility Name : TRACY TIRE FIRE
Facility Address : 29425 S MACARTHUR DR, TRACY, CA 95377
County : SAN JOAQUIN

Cleanup Date : 2009-06-15
Cleanup Status : Refer: IWMB
Site Type : State Response
Site Type Detailed : State Response or NPL

Map Id: 12
Direction: NNW
Distance: 0.734 mi., 3876 ft.
Elevation: 159 ft.
Relative: Lower

Site Name :	TRACY TIRE FIRE | TRACY TIRE SITE REMEDIATION | DEPT OF CALIF/INTEGRATED WASTE MGMT BOARD 29425 S MACARTHUR DR | 29425 SO. MACARTHUR DRIVE 29425 SO. MACARTHUR DRIVE TRACY, CA
Database(s) :	[ENVIROSTOR - CA, RESPONSE - CA] *(cont.)*

Envirosite ID: 273057
EPA ID: N/R

RESPONSE - CA *(cont.)*

Acreage :	50
APN :	NONE SPECIFIED
National Priorities List :	NO
Regulatory Agencies Involved :	DTSC - Site Cleanup Program; Integrated Waste Management Board; RWQCB 5S - Central Valley
Lead Agency :	Integrated Waste Management Board
Project Manager :	N/R
Supervisor :	Steven Becker
Office :	Cleanup San Joaquin
Envirostor ID :	39000003
Site Code :	101445
Assembly :	13
Senate :	05
Congressional District :	13
Special Program :	N/R
Past Uses :	ILLEGAL DUMPING
Potential COC :	Cobalt; Zinc; Ethylbenzene; Lead; * CONTAMINATED SOIL; * WASTE OIL & MIXED OIL; n-Butylbenzene; Naphthalene; Isopropylbenzene (see Cumene); * OTHER INORGANIC SOLID WASTE
Confirmed COC :	Cobalt; Zinc; Ethylbenzene; Lead; n-Butylbenzene; * WASTE OIL & MIXED OIL; Naphthalene; * CONTAMINATED SOIL; Isopropylbenzene (see Cumene); * OTHER INORGANIC SOLID WASTE
Potential Media Affected :	Soil; Other Groundwater affected (uses other than drinking water); Aquifer used for drinking water supply affected
Restricted Use :	NO
Site Management Req :	N/R
Funding :	Orphan Funds
Latitude :	37.68369247
Longitude :	-121.42281571
Agency Hyperlink :	Click here for hyperlink provided by the agency.
Last Date in Agency List :	2024-08-16

No unmappable sites reported.

FEDERAL, STATE, AND TRIBAL REGISTERED STORAGE TANK LISTS

AST - CA: Listing of tank facilities that are subject to the California Aboveground Petroleum Storage Act

Agency Version Date: 08/15/2024
Agency Update Frequency: No update
Planned Next Contact: 02/05/2025

Agency: California Environmental Protection Agency Unified Program Section
Agency Contact: 916-327-5092
Most Recent Contact: 11/11/2024

FID UST - CA: The State Water Resource Control Board's Facility Inventory Database underground storage tank locations listing

Agency Version Date: 10/15/2024
Agency Update Frequency: Varies
Planned Next Contact: 04/07/2025

Agency: California Environmental Protection Agency
Agency Contact: 916-341-5791
Most Recent Contact: 01/09/2025

HIST AST - CA: Historical listing of tank facilities that are subject to the California Aboveground Petroleum Storage Act

Agency Version Date: 07/19/2019
Agency Update Frequency: Quarterly
Planned Next Contact: 02/10/2025

Agency: California Environmental Protection Agency Unified Program Section
Agency Contact: 916-327-5092
Most Recent Contact: 11/14/2024

HIST UST - CA: Historical UST listing

Agency Version Date: 08/06/2024
Agency Update Frequency: Varies
Planned Next Contact: 04/23/2025

Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/27/2025

UST - CA: Listing of active underground storage tank facilities

Agency Version Date: 10/15/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 04/07/2025

Agency: CA Gov geotracker state water resources control board
Agency Contact: N/R
Most Recent Contact: 01/09/2025

UST_SAN JOAQUIN COUNTY - CA: San Joaquin County Underground storage tank sites listing

Agency Version Date: 03/03/2022
Agency Update Frequency: Semi Annually
Planned Next Contact: 04/04/2025

Agency: CA Gov geotracker state water resources control board
Agency Contact: 916-341-5791
Most Recent Contact: 01/08/2025

FEDERAL, STATE, AND TRIBAL LEAKING STORAGE TANK LISTS

LUFT_ALAMEDA COUNTY - CA: Listing of Alameda County leaking underground fuel tank sites

Agency Version Date: 01/18/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 03/24/2025

Agency: Alameda County Environmental Health Services
Agency Contact: 510-567-6721
Most Recent Contact: 12/26/2024

LUST REG 5 - CA: Leaking underground storage tanks in Region 5: Modoc Shasta Lassen Plumas Butte Glen Colusa Lake Sutter Yuba Sierra Nevada Placer Yolo Napa (Northeast) Solano (West) Sacramento El Dorado Amador Calaveras San Joaquin Contra Costa (East) Stanislaus Toulumne Merced Mariposa Madera Kings Fresno Tulare Kern (Very small portions of San Benito and SanLuis Obispo) counties

Agency Version Date: 09/10/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/03/2025

Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 12/05/2024

SLIC REG 5 - CA: List of Region 5 sites from GeoTracker Site Cleanup Program (formerly known as SLIC) database.

Agency Version Date: 09/10/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/03/2025

Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 12/05/2024

STATE- AND TRIBAL - EQUIVALENT CERCLIS

ENVIROSTOR - CA: Department of Toxic Substances Controls

Agency Version Date: 08/08/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 04/25/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-327-1077
Most Recent Contact: 01/29/2025

OIL & GAS CLEANUP - CA: List of SWRCB Oil & Gas Cleanup Sites from GeoTracker Site Cleanup Program database.

Agency Version Date: 09/10/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/03/2025
Agency: California Regional Water Quality Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 12/05/2024

SWRCB CLEANUP - CA: List of SWRCB Cleanups from Geotracker including CAF, Sampling Points, and Projects.

Agency Version Date: 09/10/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/03/2025
Agency: California Regional Water Quality Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 12/05/2024

TOXIC PITS - CA: Listing of Toxic Pit Cleanup Act sites

Agency Version Date: 05/28/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 02/12/2025
Agency: State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 11/18/2024

STATE RCRA GENERATORS LIST

HWG - CA: Hazardous waste generator listing

Agency Version Date: 08/01/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 04/18/2025
Agency: Department of Toxic Substances Control
Agency Contact: N/R
Most Recent Contact: 01/22/2025

STATE AND TRIBAL LANDFILL AND/OR SOLID WASTE DISPOSAL SITE LISTS

SWF/LF - CA: Solid Waste Information System's facility listing of solid waste facilities and landfills

Agency Version Date: 10/23/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 04/15/2025
Agency: Department of Resources Recycling and Recovery
Agency Contact: 916-341-6066
Most Recent Contact: 01/17/2025

LOCAL LISTS OF HAZARDOUS WASTE / CONTAMINATED SITES

CDL - CA: Listing of Meth and clandestine drug labs maintained by the Department of Toxic Substances Control

Agency Version Date: 02/23/2024
Agency Update Frequency: Varies
Planned Next Contact: 02/05/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 11/11/2024

SCH - CA: Listing of possible hazardous material contamination sites on existing school properties

Agency Version Date: 06/14/2024
Agency Update Frequency: Varies
Planned Next Contact: 03/03/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 12/05/2024

LOCAL LAND RECORDS

HIST LIENS - CA: The Department of Toxic Substances Control's listing of property locations with environmental liens that is no longer in current agency list.

Agency Version Date: 12/04/2018
Agency Update Frequency: Annually
Planned Next Contact: 03/13/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 12/17/2024

LIENS - CA: The Department of Toxic Substances Control's listing of property locations with environmental liens

Agency Version Date: 10/23/2024
Agency Update Frequency: Varies
Planned Next Contact: 04/15/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/17/2025

LOCAL LISTS OF LANDFILL / SOLID WASTE DISPOSAL SITES

SWRCY - CA: Listing of facilities which perform recycled material processing activities

Agency Version Date: 10/02/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/25/2025
Agency: California Department of Resources Recycling and Recovery (CalRecycle)
Agency Contact: 916-341-6066
Most Recent Contact: 12/27/2024

OTHER ASCERTAINABLE RECORDS

CALEPA SITES - CA: CalEPA Regulated Sites from the Certified Unified Program Agencies (CUPA).

Agency Version Date: 05/20/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 02/04/2025
Agency: California Environmental Protection Agency Unified Program Section
Agency Contact: 916-327-5092
Most Recent Contact: 11/08/2024

CIWQS - CA: California Integrated Water Quality System database facilities listing which includes owner information, violations, inspections, and other regulatory matters

Agency Version Date: 08/02/2024
Agency Update Frequency: Varies
Planned Next Contact: 04/21/2025
Agency: CA State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/23/2025

CIWQS 2 - CA: California Integrated Water Quality System database facilities listing which includer owner information violations inspections and other regulatory matters

Agency Version Date: 05/25/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 02/12/2025
Agency: CA State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 11/18/2024

DRYCLEANERS - CA: Listing of drycleaning facilities

Agency Version Date: 09/09/2014
Agency Update Frequency: Quarterly
Planned Next Contact: 04/24/2025
Agency: California EPA Air Resources Board
Agency Contact: 916-324-3013
Most Recent Contact: 01/28/2025

DRYCLEANERS_SAN JOAQUIN VALLEY - CA: Listing of drycleaning facilities in the San Joaquin Valley

Agency Version Date: 07/22/2022
Agency Update Frequency: Varies
Planned Next Contact: 03/11/2025
Agency: San Joaquin Valley APCD
Agency Contact: 559-230-5936
Most Recent Contact: 12/13/2024

OTHER ASCERTAINABLE RECORDS (cont.)

FA - CA: Listing of the Department of Toxic Substance Control's Financial Assurance report sites and facilities

Agency Version Date: 06/13/2024
Agency Update Frequency: Varies
Planned Next Contact: 02/28/2025
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 12/04/2024

FA 2 - CA: Financial Assurance Information for solid waste facilities

Agency Version Date: 06/05/2024
Agency Update Frequency: Varies
Planned Next Contact: 02/20/2025
Agency: Department of Environment & Natural Resources
Agency Contact: 916-341-6066
Most Recent Contact: 11/26/2024

HAZNET - CA: Listing of hazardous waste manifests from when hazardous waste is transported from generators to permitted recycling treatment storage or disposal facilities by registered hazardous waste transporters

Agency Version Date: 04/05/2021
Agency Update Frequency: Annually
Planned Next Contact: 04/24/2025
Agency: California Environmental Protection Agency
Agency Contact: 916-341-5791
Most Recent Contact: 01/28/2025

HIST HAZNET - CA: List of hazardous waste manifests from when hazardous waste is transported from generators to permitted recycling treatment storage or disposal facilities by registered hazardous waste transporters that are no longer in current agency list.

Agency Version Date: 10/10/2018
Agency Update Frequency: Annually
Planned Next Contact: 03/21/2025
Agency: California Environmental Protection Agency
Agency Contact: 916-341-5791
Most Recent Contact: 12/25/2024

HIST HWP - CA: List of the Department of Toxic Substance Control's hazardous waste transporters and corrective action that are no longer in current agency list.

Agency Version Date: 01/18/2019
Agency Update Frequency: Annually
Planned Next Contact: 02/26/2025
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 12/02/2024

HIST LDS - CA: List of areas of land on or in which hazardous waste is placed or the largest area in which there is significant likelihood of mixing hazardous waste constituents in the same area that are no longer in current agency list.

Agency Version Date: 05/20/2018
Agency Update Frequency: Annually
Planned Next Contact: 03/27/2025
Agency: State Water Qualilty Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 12/31/2024

HIST MCS - CA: List of the State Water Resources Control Boards investigation and remediation of water quality issues at military facilities that is no longer in current agency list.

Agency Version Date: 09/24/2018
Agency Update Frequency: No Longer Maintained
Planned Next Contact: 04/15/2025
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 01/17/2025

HIST NFA - CA: Historical No further action cleanup sites listing

Agency Version Date: 03/21/2019
Agency Update Frequency: Quarterly
Planned Next Contact: 03/18/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 12/20/2024

HWM COMMERCIAL FACILITIES - CA: Listing of all commercial hazardous waste permitted off-site transfer recycling treatment storage and disposal facilities

Agency Version Date: 09/03/2024
Agency Update Frequency: Varies
Planned Next Contact: 02/24/2025
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-5308
Most Recent Contact: 11/28/2024

OTHER ASCERTAINABLE RECORDS (cont.)

HWP - CA: Facility listing of the Department of Toxic Substance Control's hazardous waste transporters and corrective action

Agency Version Date: 09/12/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/05/2025
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 12/09/2024

HWT - CA: Listing of registered hazardous waste transporters

Agency Version Date: 09/19/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/13/2025
Agency: Department of Toxic Substance Control
Agency Contact: 916-322-2861
Most Recent Contact: 12/16/2024

LDS - CA: List of Land Disposal Cleanup Sites from Geotracker

Agency Version Date: 09/10/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/03/2025
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 12/05/2024

MCS - CA: List of Military Cleanup Sites from Geotracker

Agency Version Date: 09/10/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/03/2025
Agency: State Water Resources Control Board
Agency Contact: 916-341-5791
Most Recent Contact: 12/05/2024

MWMP - CA: Listing of treatment and transfer stations that properly handle and dispose of medical waste that are permitted and inspected by the Medical Waste Management Program

Agency Version Date: 09/16/2024
Agency Update Frequency: Varies
Planned Next Contact: 03/07/2025
Agency: California-Health Human Services Department of Public Health
Agency Contact: 916-449-5661
Most Recent Contact: 12/11/2024

MWMP 2 - CA: Listing of facilities that generate permitted medical waste and are inspected by the Medical Waste Management Program

Agency Version Date: 01/13/2022
Agency Update Frequency: Quarterly
Planned Next Contact: 02/25/2025
Agency: California-Health Human Services Department of Public Health
Agency Contact: 916-449-5661
Most Recent Contact: 11/29/2024

NFA - CA: No further action cleanup sites listing

Agency Version Date: 08/08/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 04/25/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/29/2025

NFE - CA: Unconfirmed contaminated properties listing

Agency Version Date: 08/08/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 04/25/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/29/2025

NPDES - CA: Listing of facilities with wastewater and NPDES permits including stormwater

Agency Version Date: 10/01/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 03/24/2025
Agency: State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 12/26/2024

OTHER ASCERTAINABLE RECORDS (cont.)

PERCHLORATE 2 - CA: Listing of contaminated sites where the primary known chemical is perchlorate

Agency Version Date: 10/31/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 04/23/2025
Agency: Department of Toxic Substances Control
Agency Contact: 916-322-2861
Most Recent Contact: 01/27/2025

PFAS - CA: List of PFAS sites and areas of interest

Agency Version Date: 08/21/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 02/11/2025
Agency: California State Water Resources Control Board
Agency Contact: N/R
Most Recent Contact: 11/15/2024

PFAS DOD - CA: List of DoD facilities conducting PFAS investigations

Agency Version Date: 08/23/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 02/13/2025
Agency: California State Water Resources Control Board
Agency Contact: N/R
Most Recent Contact: 11/19/2024

PFAS GAMA - CA: PFOS & PFAS GAMA Well Sampling program

Agency Version Date: 08/19/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 02/07/2025
Agency: California State Water Resources Control Board
Agency Contact: N/R
Most Recent Contact: 11/13/2024

RFR - CA: State Water Resources Control Board Regulated Facility Report database listing which includes program agency type and their permit status

Agency Version Date: 10/16/2024
Agency Update Frequency: Varies
Planned Next Contact: 04/08/2025
Agency: CA State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 01/10/2025

WDR - CA: List of Waste Discharge Requirement Sites.

Agency Version Date: 05/10/2024
Agency Update Frequency: Quarterly
Planned Next Contact: 04/23/2025
Agency: State Water Resources Control Board
Agency Contact: N/R
Most Recent Contact: 01/27/2025

WDS - CA: Listing of waste discharge system reporting facilities

Agency Version Date: 06/28/2023
Agency Update Frequency: Quarterly
Planned Next Contact: 02/26/2025
Agency: State Water Resources Control Board
Agency Contact: 916-341-5810
Most Recent Contact: 11/29/2024

SUBJECT PROPERTY ADDRESS:
Basin
S Tracy Blvd
Tracy, CA 95304

SUBJECT PROPERTY COORDINATES:

Latitude(North):	37.651076 - 37°39'3.9"
Longitude(West):	-121.401085 - -121°24'3.9"
Universal Transverse Mercator:	Zone 10N
UTM X (Meters):	641047.68
UTM Y (Meters):	4168304.70
State Plane Coordinates:	0403 - California Zone 3 (US Survey Feet)
X Coordinate (Feet):	6300803.365 E
Y Coordinate (Feet):	2060789.91 N

ELEVATION:

Elevation:	183 ft. above sea level

USGS TOPOGRAPHIC MAP:

Subject Property Map:	37121-F3 Vernalis, CA
Most Recent Revision:	2018
Subject Property Map:	37121-F4 Tracy, CA
Most Recent Revision:	2018

GEOHYDROLOGY DATA:

SUBJECT PROPERTY TOPOGRAPHY:

Topographic Gradient: North

DFIRM FLOOD ZONE:

	DFIRM Flood
Subject Property County:	Electronic Data:
SAN JOAQUIN	Yes - refer to the PROPERTY PROXIMITY MAP and AREA MAP
Flood Plain Panel at Subject Property:	N/R
Additional Panels in search area:	N/R

FEMA FLOOD ZONE:

	FEMA Flood
Subject Property County:	Electronic Data:
SAN JOAQUIN	N/R
Flood Plain Panel at Subject Property:	N/R
Additional Panels in search area:	N/R

NATIONAL WETLAND INVENTORY:

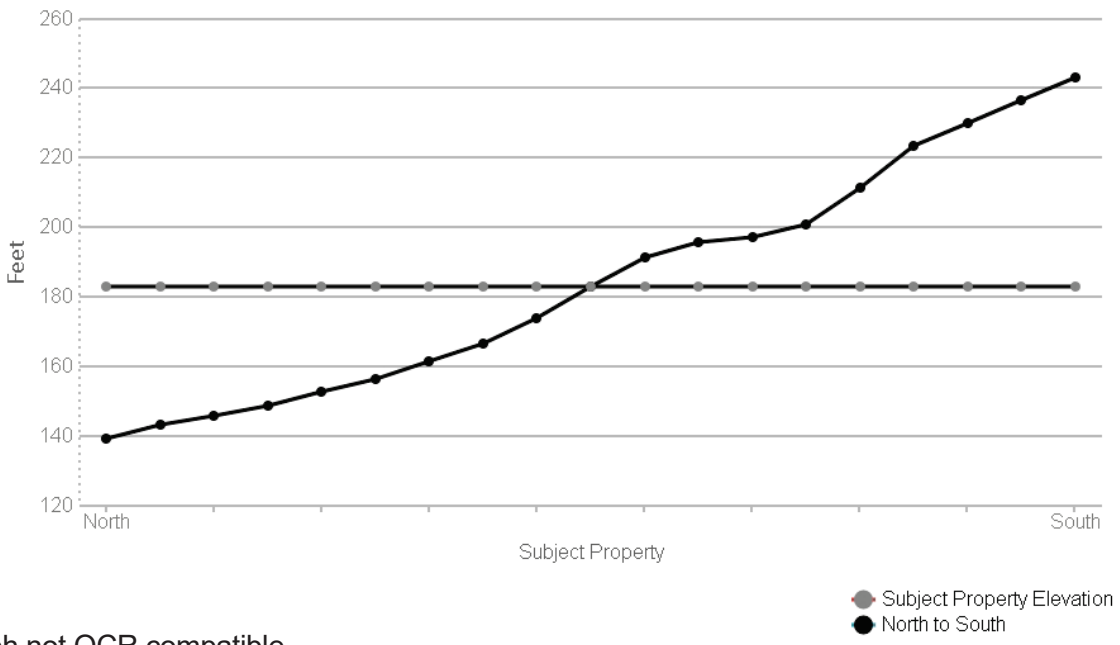
	NWI Electronic
NWI Quad at Subject Property:	Data Coverage:
No available data	No available data

LITHOSTRATIGRAPHIC INFORMATION:

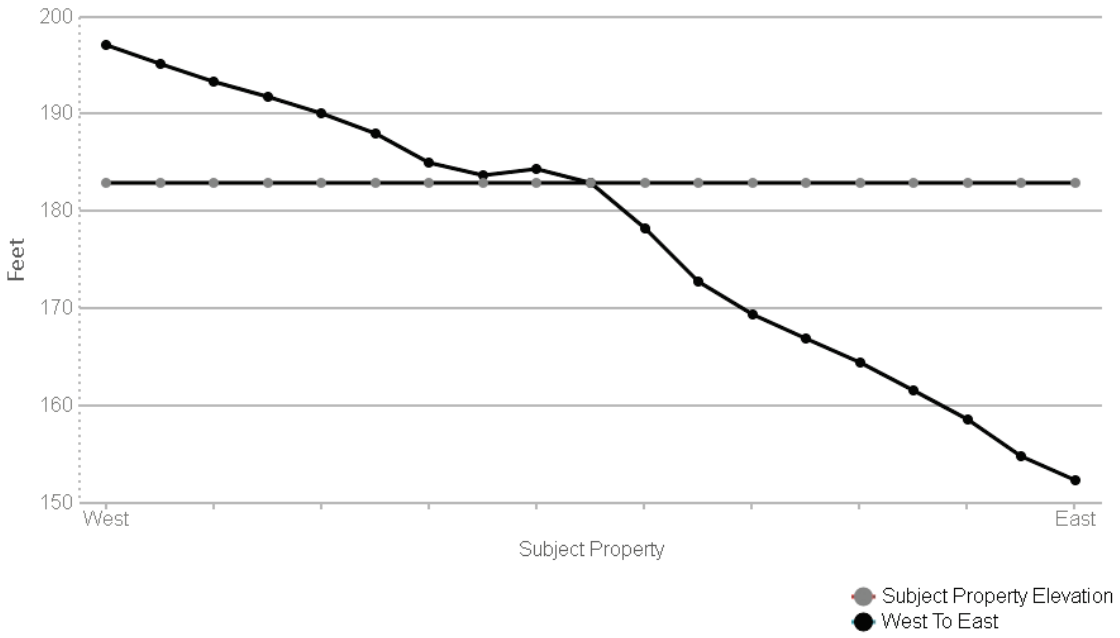
ROCK STRATIGRAPHIC UNIT: GEOLOGIC AGE IDENTIFICATION

Era:	Not Searched	Category: Not Searched
System:	Not Searched	
Series:	Not Searched	
Code:	Not Searched	

SURROUNDING ELEVATION PROFILES:



*Graph not OCR compatible



*Graph not OCR compatible

SOIL COMPOSITION IN GENERAL AREA OF SUBJECT PROPERTY:

Not Searched

WATER AGENCY DATA:

WATER AGENCY SEARCH DISTANCES:

DATABASE:	SEARCH DISTANCE (MILES):
OIL & GAS WELLS - CA	1.000
WELLS - GAMA - CA	0.000

DISTANCE TO NEAREST:	DISTANCE:
OIL & GAS WELLS - CA	0.362 mi / 1911 ft
WELLS - GAMA - CA	0.000 mi / 0 ft

STATE/LOCAL WATER AGENCY DATA SUMMARY:

MAP ID:	WELL ID:	LOCATION FROM SP:
1	03S05E26K001M	< 1/8 Mile ESE
A2	374027121242401 | USGS-374027121242401	< 1/8 Mile NNW
A3	03S05E15K001M	< 1/8 Mile NNW
B4	03S05E26M001M	< 1/8 Mile SSE
B5	373839121234601 | USGS-373839121234601	< 1/8 Mile SSE
6	3901435-007 | CA3901435_007_007	< 1/8 Mile SSE
7	373957121260101 | USGS-373957121260101	< 1/8 Mile WNW
8	0407700385	1/4 - 1/2 Mile N
9	0407700386	1/4 - 1/2 Mile NW
10	0407720393	1/4 - 1/2 Mile WNW
11	0407700388	1/2 - 1 Mile SE
12	0407700384	1/2 - 1 Mile NNE

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: January 31, 2025

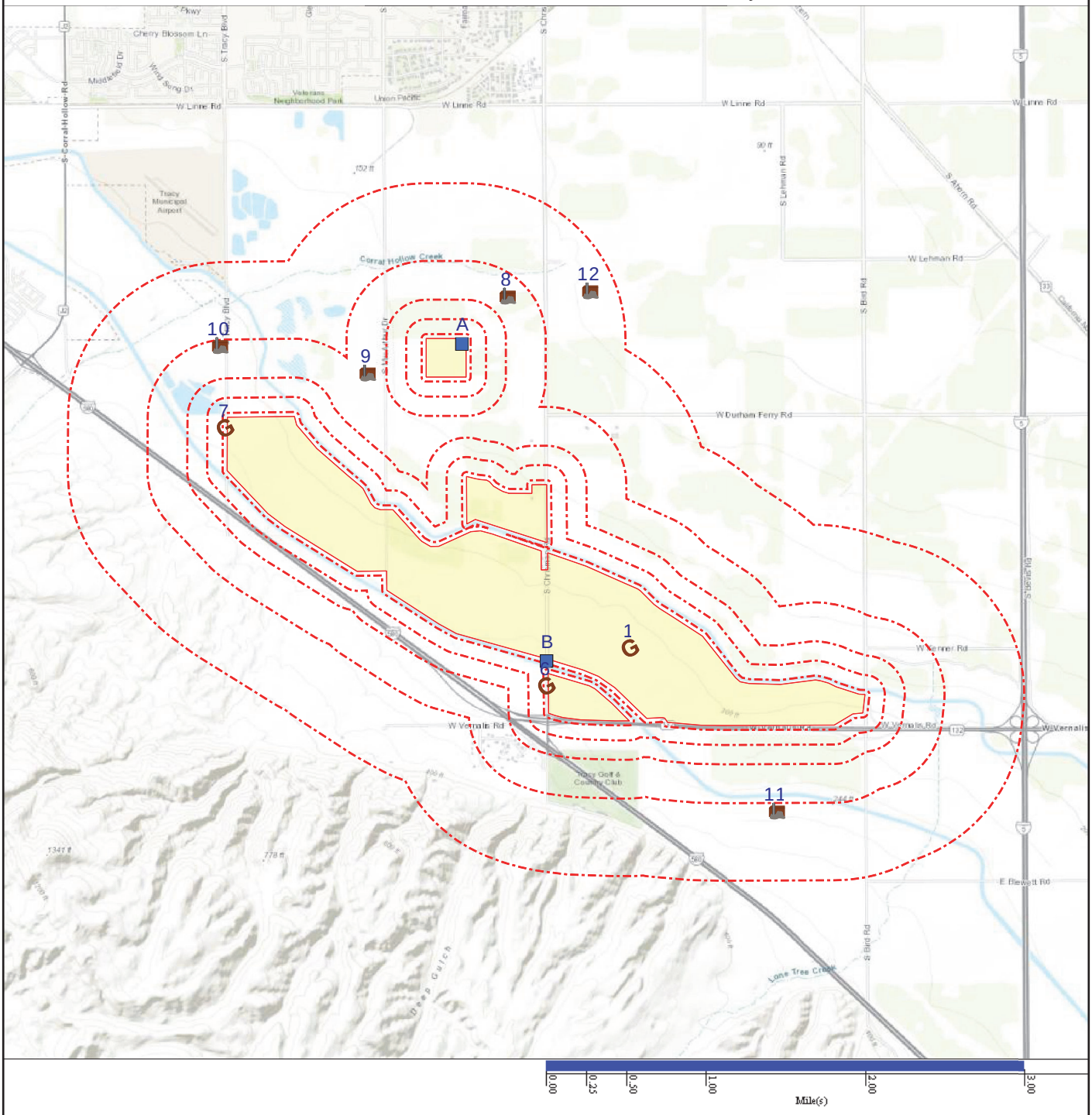


*Figure not OCR compatible

Map Id: 1
Direction: ESE
Distance: 0.000 mi., 0 ft.
Elevation: 217 ft.
Relative: Higher

Site Name : 03S05E26K001M
37.6452, -121.3883
CA

Database(s) : [WELLS - GAMA - CA]

Envirosite ID: 9304980
EPA ID: N/R

WELLS - GAMA - CA

Well Details

Well ID :	03S05E26K001M
Well Type :	Water Supply, Other
Well Depth (Ft.) :	N/R
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	Department of Water Resources
Data Source :	WDL
Source Name :	03S05E26K001M
Other Names :	N/R
Latitude :	37.6452
Longitude :	-121.3883
Last Date in Agency List :	2024-10-21

GM Chemicals

Samp Collection Date :	1969-06-10
Chemical :	ALKCACO3 (Alkalinity as CaCO3) 92 MG/L
CAS Number :	N/R
Reporting Limit :	1
Samp Collection Date :	1969-06-10
Chemical :	PH (pH) 7.9 PH UNITS
CAS Number :	N/R
Reporting Limit :	.1
Samp Collection Date :	1969-06-10
Chemical :	CL (Chloride) 116 MG/L
CAS Number :	N/R
Reporting Limit :	.1
Samp Collection Date :	1969-06-10
Chemical :	MG (Magnesium) 96 MG/L
CAS Number :	N/R
Reporting Limit :	.1
Samp Collection Date :	1967-05-16
Chemical :	CL (Chloride) 122 MG/L
CAS Number :	N/R
Reporting Limit :	.1
Samp Collection Date :	1967-05-16
Chemical :	PH (pH) 7.4 PH UNITS
CAS Number :	N/R
Reporting Limit :	.1
Samp Collection Date :	1967-05-16
Chemical :	B (Boron) 1 MG/L
CAS Number :	N/R
Reporting Limit :	.1

Map Id: 1
Direction: ESE
Distance: 0.000 mi., 0 ft.
Elevation: 217 ft.
Relative: Higher

Site Name : 03S05E26K001M
37.6452, -121.3883
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9304980
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date :	1967-05-16
Chemical :	MG (Magnesium) 96 MG/L
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1967-05-16
Chemical :	ALKCACO3 (Alkalinity as CaCO3) 94 MG/L
CAS Number :	N/R
Reporting Limit :	1

Source Details

Datum :	N/R
Well Depth (Ft.) :	N/R
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Latitude :	37.6452
Longitude :	-121.3883

Source Chemicals

Samp Collection Date-Time :	1969-06-10
Chemical :	Total Alkalinity 92 mg/L as CaCO3
Analytical Method :	EPA 310.1
Reporting Limit :	1
Lab Note :	N/R

Samp Collection Date-Time :	1969-06-10
Chemical :	pH 7.9 pH Units
Analytical Method :	EPA 150.1
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1969-06-10
Chemical :	Dissolved Chloride 116 mg/L
Analytical Method :	Std Method 4500-Cl, B
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1969-06-10
Chemical :	Dissolved Magnesium 96 mg/L
Analytical Method :	Std Method 3500-Mg, E
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1967-05-16
Chemical :	Dissolved Chloride 122 mg/L
Analytical Method :	Std Method 4500-Cl, B
Reporting Limit :	.1
Lab Note :	N/R

Map Id: 1
Direction: ESE
Distance: 0.000 mi., 0 ft.
Elevation: 217 ft.
Relative: Higher

Site Name : 03S05E26K001M
37.6452, -121.3883
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9304980
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date-Time :	1967-05-16
Chemical :	pH 7.4 pH Units
Analytical Method :	EPA 150.1
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1967-05-16
Chemical :	Dissolved Boron 1 mg/L
Analytical Method :	Std Method 4500-B, C
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1967-05-16
Chemical :	Dissolved Magnesium 96 mg/L
Analytical Method :	Std Method 3500-Mg, E
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1967-05-16
Chemical :	Total Alkalinity 94 mg/L as CaCO3
Analytical Method :	EPA 310.1
Reporting Limit :	1
Lab Note :	N/R

Map Id: A2
Direction: NNW
Distance: 0.000 mi., 0 ft.
Elevation: 145 ft.
Relative: Lower

Site Name : 374027121242401 | USGS-374027121242401
37.674097, -121.407721
CA

Database(s) : [WELLS - GAMA - CA]

Envirosite ID: 9231335
EPA ID: N/R

WELLS - GAMA - CA

Well Details

Well ID :	374027121242401
Well Type :	DOMESTIC
Well Depth (Ft.) :	142.0
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	N/R
Data Source :	NWIS
Source Name :	374027121242401
Other Names :	N/R
Latitude :	37.67409669
Longitude :	-121.407721
Last Date in Agency List :	2023-08-08

Map Id: A2
Direction: NNW
Distance: 0.000 mi., 0 ft.
Elevation: 145 ft.
Relative: Lower

Site Name : 374027121242401 | USGS-374027121242401
37.674097, -121.407721
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9231335
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

GM Chemicals

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Samp Collection Date :	1968-05-02
Chemical :	B (Boron) .7 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	ALK (Alkalinity, total) 82 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	CA (Calcium) 180 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	SC (Specific Conductivity) 2040 UMHOS/CM
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	CO3 (carbonate CO3) 0 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	CL (Chloride) 330 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	NA (Sodium) 160 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	PH (pH) 8 PH UNITS
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	HCO3 (bicarbonate HCO3) 100 MG/L

Map Id: A2
Direction: NNW
Distance: 0.000 mi., 0 ft.
Elevation: 145 ft.
Relative: Lower

Site Name : 374027121242401 | USGS-374027121242401
37.674097, -121.407721
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9231335
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1968-05-02
Chemical : ALKCACO3 (Alkalinity as CaCO3) 82 MG/L
CAS Number : N/R
Reporting Limit : N/R

Source Details
Datum : NAD83
Well Depth (Ft.) : 142
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.67409669
Longitude : -121.407721

Source Chemicals
Samp Collection Date-Time : 1968-05-02
Chemical : Boron, water, filtered, micrograms per liter 700 ug/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02

Chemical : Acid neutralizing capacity, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter as calcium carbonate 82 mg/l CaCO3

Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02
Chemical : Calcium, water, filtered, milligrams per liter 180 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02

Chemical : Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius 2040 uS/cm @25C

Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Map Id: A2
Direction: NNW
Distance: 0.000 mi., 0 ft.
Elevation: 145 ft.
Relative: Lower

Site Name : 374027121242401 | USGS-374027121242401
37.674097, -121.407721
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9231335
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date-Time : 1968-05-02

Chemical : Carbonate, water, unfiltered, fixed endpoint (pH 8.3) titration, field, milligrams per liter 0 mg/l

Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02
Chemical : Chloride, water, filtered, milligrams per liter 330 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02
Chemical : Sodium, water, filtered, milligrams per liter 160 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02
Chemical : pH, water, unfiltered, field, standard units 8 std units
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02

Chemical : Bicarbonate, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter 100 mg/l

Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-16

Chemical : Acid neutralizing capacity, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter as calcium carbonate 90 mg/l CaCO3

Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Well Details
Well ID : USGS-374027121242401
Well Type : Domestic
Well Depth (Ft.) : 142.0

Map Id: A2
Direction: NNW
Distance: 0.000 mi., 0 ft.
Elevation: 145 ft.
Relative: Lower

Site Name : 374027121242401 | USGS-374027121242401
37.674097, -121.407721
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9231335
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	N/R
Data Source :	NWIS
Source Name :	USGS-374027121242401
Other Names :	N/R
Latitude :	37.67409669
Longitude :	-121.407721
Last Date in Agency List :	2024-10-21

GM Chemicals

Samp Collection Date :	1968-05-02
Chemical :	NA (Sodium) = 160 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	SC (Specific Conductivity) = 2040 UMHOS/CM
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	B (Boron) = 0.7 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	HARD (Hardness) = 650 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	CA (Calcium) = 180 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	PH (pH) = 8 PH UNITS
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1968-05-02
Chemical :	CL (Chloride) = 330 MG/L
CAS Number :	N/R
Reporting Limit :	N/R

Map Id: A2
Direction: NNW
Distance: 0.000 mi., 0 ft.
Elevation: 145 ft.
Relative: Lower

Site Name : 374027121242401 | USGS-374027121242401
37.674097, -121.407721
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9231335
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date : 1967-05-16
Chemical : PH (pH) = 7.5 PH UNITS
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1967-05-16
Chemical : CL (Chloride) = 280 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1967-05-16
Chemical : TEMP (Temperature) = 21.1 CELSIUS
CAS Number : N/R
Reporting Limit : N/R

Source Details
Datum : NAD83
Well Depth (Ft.) : 142
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.67409669
Longitude : -121.407721

Source Chemicals
Samp Collection Date-Time : 1968-05-02
Chemical : Sodium, water, filtered, milligrams per liter 160 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02

Chemical : Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius 2040 uS/cm @25C

Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02
Chemical : Boron, water, filtered, micrograms per liter 700 ug/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1968-05-02

Map Id: A2
Direction: NNW
Distance: 0.000 mi., 0 ft.
Elevation: 145 ft.
Relative: Lower

Site Name : 374027121242401 | USGS-374027121242401
37.674097, -121.407721
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9231335
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Chemical :	Hardness, water, milligrams per liter as calcium carbonate 650 mg/l CaCO3
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1968-05-02
Chemical :	Calcium, water, filtered, milligrams per liter 180 mg/l
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1968-05-02
Chemical :	pH, water, unfiltered, field, standard units 8 std units
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1968-05-02
Chemical :	Chloride, water, filtered, milligrams per liter 330 mg/l
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-16
Chemical :	pH, water, unfiltered, field, standard units 7.5 std units
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-16
Chemical :	Chloride, water, filtered, milligrams per liter 280 mg/l
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-16
Chemical :	Temperature, water, degrees Celsius 21.1 deg C
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R

Map Id: A3
Direction: NNW
Distance: 0.002 mi., 9 ft.
Elevation: 144 ft.
Relative: Lower

Site Name : 03S05E15K001M
37.6735, -121.4069
CA

Database(s) : [WELLS - GAMA - CA]

Envirosite ID: 10005437
EPA ID: N/R

WELLS - GAMA - CA

Well Details

Well ID :	03S05E15K001M
Well Type :	Water Supply, Other
Well Depth (Ft.) :	N/R
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	Department of Water Resources
Data Source :	WDL
Source Name :	03S05E15K001M
Other Names :	N/R
Latitude :	37.6735
Longitude :	-121.4069
Last Date in Agency List :	2024-10-21

GM Chemicals

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Samp Collection Date :	1969-06-10
Chemical :	MG (Magnesium) 43 MG/L
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1969-06-10
Chemical :	CL (Chloride) 277 MG/L
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1969-06-10
Chemical :	ALKCACO3 (Alkalinity as CaCO3) 90 MG/L
CAS Number :	N/R
Reporting Limit :	1

Samp Collection Date :	1969-06-10
Chemical :	PH (pH) 7.7 PH UNITS
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1968-05-02
Chemical :	MG (Magnesium) 49 MG/L
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1968-05-02
Chemical :	PH (pH) 8 PH UNITS
CAS Number :	N/R
Reporting Limit :	.1

Map Id: A3
Direction: NNW
Distance: 0.002 mi., 9 ft.
Elevation: 144 ft.
Relative: Lower

Site Name : 03S05E15K001M
37.6735, -121.4069
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 10005437
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date : 1968-05-02
Chemical : CL (Chloride) 329 MG/L
CAS Number : N/R
Reporting Limit : .1

Samp Collection Date : 1968-05-02
Chemical : B (Boron) 0.7 MG/L
CAS Number : N/R
Reporting Limit : .1

Samp Collection Date : 1968-05-02
Chemical : ALKCACO3 (Alkalinity as CaCO3) 82 MG/L
CAS Number : N/R
Reporting Limit : 1

Samp Collection Date : 1967-05-16
Chemical : PH (pH) 7.5 PH UNITS
CAS Number : N/R
Reporting Limit : .1

Source Details
Datum : N/R
Well Depth (Ft.) : N/R
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.6735
Longitude : -121.4069

Source Chemicals
Samp Collection Date-Time : 1969-06-10
Chemical : Dissolved Magnesium 43 mg/L
Analytical Method : Std Method 3500-Mg, E
Reporting Limit : .1
Lab Note : N/R

Samp Collection Date-Time : 1969-06-10
Chemical : Dissolved Chloride 277 mg/L
Analytical Method : Std Method 4500-Cl, B
Reporting Limit : .1
Lab Note : N/R

Samp Collection Date-Time : 1969-06-10
Chemical : Total Alkalinity 90 mg/L as CaCO3
Analytical Method : EPA 310.1
Reporting Limit : 1
Lab Note : N/R

Map Id: A3
Direction: NNW
Distance: 0.002 mi., 9 ft.
Elevation: 144 ft.
Relative: Lower

Site Name : 03S05E15K001M
37.6735, -121.4069
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 10005437
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date-Time :	1969-06-10
Chemical :	pH 7.7 pH Units
Analytical Method :	EPA 150.1
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1968-05-02
Chemical :	Dissolved Magnesium 49 mg/L
Analytical Method :	Std Method 3500-Mg, E
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1968-05-02
Chemical :	pH 8 pH Units
Analytical Method :	EPA 150.1
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1968-05-02
Chemical :	Dissolved Chloride 329 mg/L
Analytical Method :	Std Method 4500-Cl, B
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1968-05-02
Chemical :	Dissolved Boron 0.7 mg/L
Analytical Method :	Std Method 4500-B, C
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1968-05-02
Chemical :	Total Alkalinity 82 mg/L as CaCO3
Analytical Method :	EPA 310.1
Reporting Limit :	1
Lab Note :	N/R

Samp Collection Date-Time :	1967-05-16
Chemical :	pH 7.5 pH Units
Analytical Method :	EPA 150.1
Reporting Limit :	.1
Lab Note :	N/R

Map Id: B4
Direction: SSE
Distance: 0.002 mi., 11 ft.
Elevation: 246 ft.
Relative: Higher

Site Name : 03S05E26M001M
37.6444, -121.398
CA

Database(s) : [WELLS - GAMA - CA]

Envirosite ID: 9305117
EPA ID: N/R

WELLS - GAMA - CA

Well Details

Well ID :	03S05E26M001M
Well Type :	Water Supply, Other
Well Depth (Ft.) :	782.0
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	Department of Water Resources
Data Source :	WDL
Source Name :	03S05E26M001M
Other Names :	N/R
Latitude :	37.6444
Longitude :	-121.398
Last Date in Agency List :	2024-10-21

GM Chemicals

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Samp Collection Date :	1968-09-19
Chemical :	ALKCACO3 (Alkalinity as CaCO3) 94 MG/L
CAS Number :	N/R
Reporting Limit :	1

Samp Collection Date :	1968-09-19
Chemical :	CL (Chloride) 148 MG/L
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1968-09-19
Chemical :	B (Boron) 1.1 MG/L
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1968-09-19
Chemical :	PH (pH) 8.3 PH UNITS
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1967-08-29
Chemical :	PH (pH) 8.3 PH UNITS
CAS Number :	N/R
Reporting Limit :	.1

Samp Collection Date :	1967-08-29
Chemical :	ALKCACO3 (Alkalinity as CaCO3) 170 MG/L
CAS Number :	N/R
Reporting Limit :	1

Map Id: B4
Direction: SSE
Distance: 0.002 mi., 11 ft.
Elevation: 246 ft.
Relative: Higher

Site Name : 03S05E26M001M
37.6444, -121.398
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9305117
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date : 1967-08-29
Chemical : CL (Chloride) 82 MG/L
CAS Number : N/R
Reporting Limit : .1

Samp Collection Date : 1967-08-29
Chemical : MG (Magnesium) 34 MG/L
CAS Number : N/R
Reporting Limit : .1

Samp Collection Date : 1967-05-17
Chemical : ALKCACO3 (Alkalinity as CaCO3) 166 MG/L
CAS Number : N/R
Reporting Limit : 1

Samp Collection Date : 1967-05-17
Chemical : PH (pH) 7.5 PH UNITS
CAS Number : N/R
Reporting Limit : .1

Source Details
Datum : N/R
Well Depth (Ft.) : N/R
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.6444
Longitude : -121.398

Source Chemicals
Samp Collection Date-Time : 1968-09-19
Chemical : Total Alkalinity 94 mg/L as CaCO3
Analytical Method : EPA 310.1
Reporting Limit : 1
Lab Note : N/R

Samp Collection Date-Time : 1968-09-19
Chemical : Dissolved Chloride 148 mg/L
Analytical Method : Std Method 4500-Cl, B
Reporting Limit : .1
Lab Note : N/R

Samp Collection Date-Time : 1968-09-19
Chemical : Dissolved Boron 1.1 mg/L
Analytical Method : Std Method 4500-B, C
Reporting Limit : .1
Lab Note : N/R

Map Id: B4
Direction: SSE
Distance: 0.002 mi., 11 ft.
Elevation: 246 ft.
Relative: Higher

Site Name : 03S05E26M001M
37.6444, -121.398
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9305117
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date-Time :	1968-09-19
Chemical :	pH 8.3 pH Units
Analytical Method :	EPA 150.1
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1967-08-29
Chemical :	pH 8.3 pH Units
Analytical Method :	EPA 150.1
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1967-08-29
Chemical :	Total Alkalinity 170 mg/L as CaCO3
Analytical Method :	EPA 310.1
Reporting Limit :	1
Lab Note :	N/R

Samp Collection Date-Time :	1967-08-29
Chemical :	Dissolved Chloride 82 mg/L
Analytical Method :	Std Method 4500-Cl, B
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1967-08-29
Chemical :	Dissolved Magnesium 34 mg/L
Analytical Method :	Std Method 3500-Mg, E
Reporting Limit :	.1
Lab Note :	N/R

Samp Collection Date-Time :	1967-05-17
Chemical :	Total Alkalinity 166 mg/L as CaCO3
Analytical Method :	EPA 310.1
Reporting Limit :	1
Lab Note :	N/R

Samp Collection Date-Time :	1967-05-17
Chemical :	pH 7.5 pH Units
Analytical Method :	EPA 150.1
Reporting Limit :	.1
Lab Note :	N/R

Map Id: B5
Direction: SSE
Distance: 0.009 mi., 48 ft.
Elevation: 244 ft.
Relative: Higher

Site Name : 373839121234601 | USGS-373839121234601
37.644097, -121.397165
CA

Database(s) : [WELLS - GAMA - CA]

Envirosite ID: 9207420
EPA ID: N/R

WELLS - GAMA - CA

Well Details

Well ID :	USGS-373839121234601
Well Type :	Irrigation / Industrial
Well Depth (Ft.) :	782.0
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	N/R
Data Source :	NWIS
Source Name :	USGS-373839121234601
Other Names :	N/R
Latitude :	37.6440971
Longitude :	-121.3971648
Last Date in Agency List :	2024-10-21

GM Chemicals

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Samp Collection Date :	1967-05-17
Chemical :	NA (Sodium) = 180 MG/L
CAS Number :	N/R
Reporting Limit :	N/R

Samp Collection Date :	1967-05-17
Chemical :	B (Boron) = 1.2 MG/L
CAS Number :	N/R
Reporting Limit :	N/R

Samp Collection Date :	1967-05-17
Chemical :	MG (Magnesium) = 46 MG/L
CAS Number :	N/R
Reporting Limit :	N/R

Samp Collection Date :	1967-05-17
Chemical :	SC (Specific Conductivity) = 1740 UMHOS/CM
CAS Number :	N/R
Reporting Limit :	N/R

Samp Collection Date :	1967-05-17
Chemical :	CA (Calcium) = 140 MG/L
CAS Number :	N/R
Reporting Limit :	N/R

Samp Collection Date :	1967-05-17
Chemical :	HARD (Hardness) = 540 MG/L
CAS Number :	N/R
Reporting Limit :	N/R

Map Id: B5
Direction: SSE
Distance: 0.009 mi., 48 ft.
Elevation: 244 ft.
Relative: Higher

Site Name : 373839121234601 | USGS-373839121234601
37.644097, -121.397165
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9207420
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date : 1967-05-17
Chemical : PH (pH) = 7.5 PH UNITS
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1967-05-17
Chemical : CL (Chloride) = 98 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1963-07-12
Chemical : B (Boron) = 0.9 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1963-07-12
Chemical : NA (Sodium) = 120 MG/L
CAS Number : N/R
Reporting Limit : N/R

Source Details
Datum : NAD83
Well Depth (Ft.) : 782
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.6440971
Longitude : -121.3971648

Source Chemicals
Samp Collection Date-Time : 1967-05-17
Chemical : Sodium, water, filtered, milligrams per liter 180 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-17
Chemical : Boron, water, filtered, micrograms per liter 1200 ug/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-17
Chemical : Magnesium, water, filtered, milligrams per liter 46 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Map Id: B5
Direction: SSE
Distance: 0.009 mi., 48 ft.
Elevation: 244 ft.
Relative: Higher

Site Name : 373839121234601 | USGS-373839121234601
37.644097, -121.397165
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9207420
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date-Time : 1967-05-17

Chemical : Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius 1740 uS/cm @25C

Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-17
Chemical : Calcium, water, filtered, milligrams per liter 140 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-17
Chemical : Hardness, water, milligrams per liter as calcium carbonate 540 mg/l CaCO3
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-17
Chemical : pH, water, unfiltered, field, standard units 7.5 std units
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-17
Chemical : Chloride, water, filtered, milligrams per liter 98 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1963-07-12
Chemical : Boron, water, filtered, micrograms per liter 900 ug/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1963-07-12
Chemical : Sodium, water, filtered, milligrams per liter 120 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Map Id: B5
Direction: SSE
Distance: 0.009 mi., 48 ft.
Elevation: 244 ft.
Relative: Higher

Site Name : 373839121234601 | USGS-373839121234601
37.644097, -121.397165
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9207420
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Well Details

Well ID :	373839121234601
Well Type :	IRRIGATION / INDUSTRIAL
Well Depth (Ft.) :	782.0
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	N/R
Data Source :	NWIS
Source Name :	373839121234601
Other Names :	N/R
Latitude :	37.6440971
Longitude :	-121.3971648
Last Date in Agency List :	2023-08-08

GM Chemicals

Samp Collection Date :	1967-05-17
Chemical :	CL (Chloride) 98 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1967-05-17
Chemical :	CO3 (carbonate CO3) 0 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1967-05-17
Chemical :	ALKCACO3 (Alkalinity as CaCO3) 164 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1967-05-17
Chemical :	ALK (Alkalinity, total) 164 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1967-05-17
Chemical :	HCO3 (bicarbonate HCO3) 200 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1967-05-17
Chemical :	PH (pH) 7.5 PH UNITS
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1967-05-17
Chemical :	CA (Calcium) 140 MG/L
CAS Number :	N/R

Map Id: B5
Direction: SSE
Distance: 0.009 mi., 48 ft.
Elevation: 244 ft.
Relative: Higher

Site Name : 373839121234601 | USGS-373839121234601
37.644097, -121.397165
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9207420
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Reporting Limit : N/R

Samp Collection Date : 1967-05-17
Chemical : NA (Sodium) 180 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1967-05-17
Chemical : B (Boron) 1.2 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1967-05-17
Chemical : MG (Magnesium) 46 MG/L
CAS Number : N/R
Reporting Limit : N/R

Source Details
Datum : NAD83
Well Depth (Ft.) : 782
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.6440971
Longitude : -121.3971648

Source Chemicals
Samp Collection Date-Time : 1967-05-17
Chemical : Chloride, water, filtered, milligrams per liter 98 mg/l
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-17

Chemical : Carbonate, water, unfiltered, fixed endpoint (pH 8.3) titration, field, milligrams per liter 0 mg/l

Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1967-05-17

Chemical : Acid neutralizing capacity, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter as calcium carbonate 164 mg/l CaCO3

Analytical Method : N/R

Map Id: B5
Direction: SSE
Distance: 0.009 mi., 48 ft.
Elevation: 244 ft.
Relative: Higher

Site Name : 373839121234601 | USGS-373839121234601
37.644097, -121.397165
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9207420
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-17
Chemical :	Bicarbonate, water, unfiltered, fixed endpoint (pH 4.5) titration, field, milligrams per liter 200 mg/l
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-17
Chemical :	pH, water, unfiltered, field, standard units 7.5 std units
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-17
Chemical :	Calcium, water, filtered, milligrams per liter 140 mg/l
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-17
Chemical :	Sodium, water, filtered, milligrams per liter 180 mg/l
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-17
Chemical :	Boron, water, filtered, micrograms per liter 1200 ug/l
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-17
Chemical :	Magnesium, water, filtered, milligrams per liter 46 mg/l
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1967-05-17
Chemical :	Specific conductance, water, unfiltered, microsiemens per centimeter at 25 degrees Celsius 1740 uS/cm @25C
Analytical Method :	N/R
Reporting Limit :	N/R

Map Id: B5
Direction: SSE
Distance: 0.009 mi., 48 ft.
Elevation: 244 ft.
Relative: Higher

Site Name : 373839121234601 | USGS-373839121234601
37.644097, -121.397165
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9207420
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Lab Note : N/R

Map Id: 6
Direction: SSE
Distance: 0.019 mi., 103 ft.
Elevation: 256 ft.
Relative: Higher

Site Name : 3901435-007 | CA3901435_007_007
37.64166, -121.397886
CA

Database(s) : [WELLS - GAMA - CA]

Envirosite ID: 23673826
EPA ID: N/R

WELLS - GAMA - CA

Well Details

Well ID :	CA3901435_007_007
Well Type :	Municipal
Well Depth (Ft.) :	N/R
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	Division of Drinking Water
Data Source :	DDW
Source Name :	CA3901435_007_007
Other Names :	3901435-007
Latitude :	37.64166
Longitude :	-121.397886
Last Date in Agency List :	2024-10-21

GM Chemicals

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Samp Collection Date :	2024-03-21
Chemical :	NO3N (Nitrate as N) = 6.7 MG/L
CAS Number :	N/R
Reporting Limit :	.4

Samp Collection Date :	2023-12-14
Chemical :	NO3N (Nitrate as N) = 7.5 MG/L
CAS Number :	N/R
Reporting Limit :	.4

Samp Collection Date :	2022-12-14
Chemical :	NO3N (Nitrate as N) = 5.8 MG/L
CAS Number :	N/R
Reporting Limit :	.23

Map Id: 6
Direction: SSE
Distance: 0.019 mi., 103 ft.
Elevation: 256 ft.
Relative: Higher

Site Name : 3901435-007 | CA3901435_007_007
37.64166, -121.397886
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 23673826
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date : 2022-09-19
Chemical : NO3N (Nitrate as N) = 6.4 MG/L
CAS Number : N/R
Reporting Limit : .23

Samp Collection Date : 2022-07-25
Chemical : NO3N (Nitrate as N) = 6.4 MG/L
CAS Number : N/R
Reporting Limit : .23

Samp Collection Date : 2022-06-13
Chemical : NO2 (Nitrite as N) < 0.05 MG/L
CAS Number : N/R
Reporting Limit : .05

Samp Collection Date : 2022-06-13
Chemical : NO3N (Nitrate as N) = 5.3 MG/L
CAS Number : N/R
Reporting Limit : .23

Samp Collection Date : 2022-03-07
Chemical : NO3N (Nitrate as N) = 5.9 MG/L
CAS Number : N/R
Reporting Limit : .23

Samp Collection Date : 2021-12-30
Chemical : NO3N (Nitrate as N) = 5.12 MG/L
CAS Number : N/R
Reporting Limit : .4

Samp Collection Date : 2021-09-20
Chemical : NO3N (Nitrate as N) = 6.3 MG/L
CAS Number : N/R
Reporting Limit : .4

Source Details
Datum : N/R
Well Depth (Ft.) : N/R
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.64166
Longitude : -121.397886

Source Chemicals
Samp Collection Date-Time : 2024-03-21 12:15:00
Chemical : 1040 N 6.7 MG/L
Analytical Method : EPA 300.0

Map Id: 6
Direction: SSE
Distance: 0.019 mi., 103 ft.
Elevation: 256 ft.
Relative: Higher

Site Name : 3901435-007 | CA3901435_007_007
37.64166, -121.397886
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 23673826
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Reporting Limit : .4
Lab Note : ALPHA ANALYTICAL LABORATORIES UKIAH

Samp Collection Date-Time : 2023-12-14 13:50:00
Chemical : 1040 N 7.5 MG/L
Analytical Method : EPA 300.0
Reporting Limit : .4
Lab Note : ALPHA ANALYTICAL LABORATORIES ELK GROVE

Samp Collection Date-Time : 2022-12-14 10:51:00
Chemical : 1040 N 5.8 MG/L
Analytical Method : EPA 300.0
Reporting Limit : .23
Lab Note : BSK ANALYTICAL LABORATORIES

Samp Collection Date-Time : 2022-09-19 12:03:00
Chemical : 1040 N 6.4 MG/L
Analytical Method : EPA 300.0
Reporting Limit : .23
Lab Note : BSK ANALYTICAL LABORATORIES

Samp Collection Date-Time : 2022-07-25 10:37:00
Chemical : 1040 N 6.4 MG/L
Analytical Method : EPA 300.0
Reporting Limit : .23
Lab Note : BSK ANALYTICAL LABORATORIES

Samp Collection Date-Time : 2022-06-13 15:20:00
Chemical : 1041 Y MG/L
Analytical Method : EPA 300.0
Reporting Limit : .05
Lab Note : BSK ANALYTICAL LABORATORIES

Samp Collection Date-Time : 2022-06-13 15:20:00
Chemical : 1040 N 5.3 MG/L
Analytical Method : EPA 300.0
Reporting Limit : .23
Lab Note : BSK ANALYTICAL LABORATORIES

Samp Collection Date-Time : 2022-03-07 14:00:00
Chemical : 1040 N 5.9 MG/L
Analytical Method : EPA 300.0
Reporting Limit : .23
Lab Note : BSK ANALYTICAL LABORATORIES

Samp Collection Date-Time : 2021-12-30 11:58:00
Chemical : 1040 N 5.12 MG/L
Analytical Method : EPA 300.0
Reporting Limit : .4

Map Id: 6
Direction: SSE
Distance: 0.019 mi., 103 ft.
Elevation: 256 ft.
Relative: Higher

Site Name : 3901435-007 | CA3901435_007_007
37.64166, -121.397886
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 23673826
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Lab Note : GEOANALYTICAL LABORATORIES, INC.

Samp Collection Date-Time : 2021-09-20 13:10:00
Chemical : 1040 N 6.3 MG/L
Analytical Method : EPA 300.0
Reporting Limit : .4
Lab Note : FAR WEST LABORATORIES

Well Details
Well ID : 3901435-007
Well Type : MUNICIPAL
Well Depth (Ft.) : N/R
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Source : Division of Drinking Water
Data Source : DDW
Source Name : 3901435-007
Other Names : CA3901435_007_007
Latitude : 37.64166
Longitude : -121.397886
Last Date in Agency List : 2022-05-12

Well ID : 3901435-007
Well Type : MUNICIPAL
Well Depth (Ft.) : N/R
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Source : Division of Drinking Water
Data Source : DDW
Source Name : 3901435-007
Other Names : N/R
Latitude : 37.64166
Longitude : -121.397886
Last Date in Agency List : 2022-05-12

GM Chemicals
Samp Collection Date : 2021-12-30
Chemical : NO3N (Nitrate as N) 5.12 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 2021-09-20
Chemical : NO3N (Nitrate as N) 6.3 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 2021-06-14
Chemical : NO3N (Nitrate as N) 4.6 MG/L
CAS Number : N/R

Map Id: 6
Direction: SSE
Distance: 0.019 mi., 103 ft.
Elevation: 256 ft.
Relative: Higher

Site Name : 3901435-007 | CA3901435_007_007
37.64166, -121.397886
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 23673826
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Reporting Limit : N/R

Samp Collection Date : 2021-03-15
Chemical : NO3N (Nitrate as N) 4.5 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 2020-12-21
Chemical : NO3N (Nitrate as N) 4.5 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 2020-09-14
Chemical : NO3N (Nitrate as N) 4.9 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 2020-06-08
Chemical : NO3N (Nitrate as N) 4.9 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 2020-03-09
Chemical : NO3N (Nitrate as N) 6.4 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 2019-12-09
Chemical : NO3N (Nitrate as N) 6.4 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 2019-06-10
Chemical : NO3N (Nitrate as N) 6 MG/L
CAS Number : N/R
Reporting Limit : N/R

Source Details
Datum : N/R
Well Depth (Ft.) : N/R
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.64166
Longitude : -121.397886

Map Id: 6
Direction: SSE
Distance: 0.019 mi., 103 ft.
Elevation: 256 ft.
Relative: Higher

Site Name : 3901435-007 | CA3901435_007_007
37.64166, -121.397886
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 23673826
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Source Chemicals

Samp Collection Date-Time :	2021-12-30 11:58:00
Chemical :	1040 5.12 MG/L
Analytical Method :	EPA 300.0
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	2021-09-20 13:10:00
Chemical :	1040 6.3 MG/L
Analytical Method :	EPA 300.0
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	2021-06-14 13:10:00
Chemical :	1040 4.6000000 MG/L
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	2021-03-15 13:00:00
Chemical :	1040 4.5000000 MG/L
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	2020-12-21 13:55:00
Chemical :	1040 4.5000000 MG/L
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	2020-09-14 12:30:00
Chemical :	1040 4.9000000 MG/L
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	2020-06-08 12:45:00
Chemical :	1040 4.9000000 MG/L
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	2020-03-09 13:15:00
Chemical :	1040 6.4000000 MG/L
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R

Map Id: 6
Direction: SSE
Distance: 0.019 mi., 103 ft.
Elevation: 256 ft.
Relative: Higher

Site Name : 3901435-007 | CA3901435_007_007
37.64166, -121.397886
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 23673826
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date-Time :	2019-12-09 12:00:00
Chemical :	1040 6.4000000 MG/L
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R

Samp Collection Date-Time :	2019-06-10 13:35:00
Chemical :	1040 6.0000000 MG/L
Analytical Method :	N/R
Reporting Limit :	N/R
Lab Note :	N/R

Map Id: 7
Direction: WNW
Distance: 0.022 mi., 115 ft.
Elevation: 228 ft.
Relative: Higher

Site Name : 373957121260101 | USGS-373957121260101
37.665764, -121.434666
CA

Database(s) : [WELLS - GAMA - CA]

Envirosite ID: 9227944
EPA ID: N/R

WELLS - GAMA - CA

Well Details

Well ID :	373957121260101
Well Type :	DOMESTIC
Well Depth (Ft.) :	400.0
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Source :	N/R
Data Source :	NWIS
Source Name :	373957121260101
Other Names :	N/R
Latitude :	37.66576357
Longitude :	-121.4346659
Last Date in Agency List :	2023-08-08

GM Chemicals

Details for this site have been truncated due to the large number of available details for this site within this dataset. For the complete details for this site, contact your Envirosite account representative for a complimentary site report containing all of the details available.

Samp Collection Date :	1985-03-28
Chemical :	CR (Chromium) 4 UG/L
CAS Number :	N/R
Reporting Limit :	N/R

Map Id: 7
Direction: WNW
Distance: 0.022 mi., 115 ft.
Elevation: 228 ft.
Relative: Higher

Site Name : 373957121260101 | USGS-373957121260101
37.665764, -121.434666
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9227944
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date :	1985-03-28
Chemical :	TOCH (Total Organic Carbon) .1 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1985-03-28
Chemical :	NA (Sodium) 170 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1985-03-28
Chemical :	LI (Lithium) 48 UG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1985-03-28
Chemical :	SE (Selenium) 2 UG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1985-03-28
Chemical :	MG (Magnesium) 32 MG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1985-03-28
Chemical :	HG (Mercury) < .1 UG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1985-03-28
Chemical :	PROMETON (Prometon) < .1 UG/L
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1985-03-28
Chemical :	O18O16RAT (delta O18/O16 in water) -7.3 per mil
CAS Number :	N/R
Reporting Limit :	N/R
Samp Collection Date :	1985-03-28
Chemical :	DCA12 (1,2 Dichloroethane (1,2 DCA)) < 3 UG/L
CAS Number :	N/R
Reporting Limit :	N/R

Map Id: 7
Direction: WNW
Distance: 0.022 mi., 115 ft.
Elevation: 228 ft.
Relative: Higher

Site Name : 373957121260101 | USGS-373957121260101
37.665764, -121.434666
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9227944
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Source Details

Datum :	NAD83
Well Depth (Ft.) :	400
Top of Screen (Ft.) :	N/R
Screen Length (Ft.) :	N/R
Latitude :	37.66576357
Longitude :	-121.4346659

Source Chemicals

Samp Collection Date-Time :	1985-03-28 11:30
Chemical :	Chromium, water, filtered, micrograms per liter 4 ug/l
Analytical Method :	CX004
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30
Chemical :	Organic carbon, water, unfiltered, milligrams per liter .1 mg/l
Analytical Method :	OX009
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30
Chemical :	Sodium, water, filtered, milligrams per liter 170 mg/l
Analytical Method :	PLA11
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30
Chemical :	Lithium, water, filtered, micrograms per liter 48 ug/l
Analytical Method :	PLA11
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30
Chemical :	Selenium, water, filtered, micrograms per liter 2 ug/l
Analytical Method :	HY011
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30
Chemical :	Magnesium, water, filtered, milligrams per liter 32 mg/l
Analytical Method :	PLA11
Reporting Limit :	N/R
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30
Chemical :	Mercury, water, filtered, micrograms per liter < .1 ug/l
Analytical Method :	CV013

Map Id: 7
Direction: WNW
Distance: 0.022 mi., 115 ft.
Elevation: 228 ft.
Relative: Higher

Site Name : 373957121260101 | USGS-373957121260101
37.665764, -121.434666
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9227944
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30
Chemical : Prometon, water, unfiltered, recoverable, micrograms per liter < .1 ug/l
Analytical Method : GCNP1
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30
Chemical : delta oxygen-18/oxygen-16, water, unfiltered, per mil -7.3 per mil
Analytical Method : N/R
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30

Chemical : 1,2-Dichloroethane, water, unfiltered, recoverable, micrograms per liter < 3 ug/l

Analytical Method : GCM61
Reporting Limit : N/R
Lab Note : N/R

Well Details
Well ID : USGS-373957121260101
Well Type : Domestic
Well Depth (Ft.) : 400.0
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Source : N/R
Data Source : NWIS
Source Name : USGS-373957121260101
Other Names : N/R
Latitude : 37.66576357
Longitude : -121.4346659
Last Date in Agency List : 2024-10-21

GM Chemicals
Samp Collection Date : 1985-03-28
Chemical : BZ (Benzene) < UG/L
CAS Number : N/R
Reporting Limit : 3

Samp Collection Date : 1985-03-28
Chemical : F (Fluoride) = 0.2 MG/L
CAS Number : N/R
Reporting Limit : N/R

Map Id: 7
Direction: WNW
Distance: 0.022 mi., 115 ft.
Elevation: 228 ft.
Relative: Higher

Site Name : 373957121260101 | USGS-373957121260101
37.665764, -121.434666
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9227944
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Samp Collection Date : 1985-03-28
Chemical : NO3NO2N (Nitrate+Nitrite) = 1.4 MG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1985-03-28
Chemical : DCE11 (1,1 Dichloroethylene (1,1 DCE)) < UG/L
CAS Number : N/R
Reporting Limit : 3

Samp Collection Date : 1985-03-28
Chemical : MN (Manganese) = 2 UG/L
CAS Number : N/R
Reporting Limit : N/R

Samp Collection Date : 1985-03-28
Chemical : DCPA12 (1,2 Dichloropropane (1,2 DCP)) < UG/L
CAS Number : N/R
Reporting Limit : 3

Samp Collection Date : 1985-03-28
Chemical : DBCME (Dibromochloromethane (THM)) < UG/L
CAS Number : N/R
Reporting Limit : 3

Samp Collection Date : 1985-03-28
Chemical : HG (Mercury) < UG/L
CAS Number : N/R
Reporting Limit : .1

Samp Collection Date : 1985-03-28
Chemical : NO2 (Nitrite as N) < MG/L
CAS Number : N/R
Reporting Limit : .01

Samp Collection Date : 1985-03-28
Chemical : B (Boron) = 3 MG/L
CAS Number : N/R
Reporting Limit : N/R

Source Details
Datum : NAD83
Well Depth (Ft.) : 400
Top of Screen (Ft.) : N/R
Screen Length (Ft.) : N/R
Latitude : 37.66576357
Longitude : -121.4346659

Map Id: 7
Direction: WNW
Distance: 0.022 mi., 115 ft.
Elevation: 228 ft.
Relative: Higher

Site Name : 373957121260101 | USGS-373957121260101
37.665764, -121.434666
CA

Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9227944
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Source Chemicals

Samp Collection Date-Time : 1985-03-28 11:30:00
Chemical : Benzene, water, unfiltered, recoverable, micrograms per liter Not Detected
Analytical Method : GCM61
Reporting Limit : 3
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30:00
Chemical : Fluoride, water, filtered, milligrams per liter 0.2 mg/l
Analytical Method : ISE05
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30:00
Chemical : Nitrate plus nitrite, water, filtered, milligrams per liter as nitrogen 1.4 mg/l as N
Analytical Method : CL045
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30:00
Chemical : 1,1-Dichloroethene, water, unfiltered, recoverable, micrograms per liter Not Detected
Analytical Method : GCM61
Reporting Limit : 3
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30:00
Chemical : Manganese, water, filtered, micrograms per liter 2 ug/l
Analytical Method : PLA11
Reporting Limit : N/R
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30:00
Chemical : 1,2-Dichloropropane, water, unfiltered, recoverable, micrograms per liter Not Detected
Analytical Method : GCM61
Reporting Limit : 3
Lab Note : N/R

Samp Collection Date-Time : 1985-03-28 11:30:00

Map Id: 7
Direction: WNW
Distance: 0.022 mi., 115 ft.
Elevation: 228 ft.
Relative: Higher

Site Name : 373957121260101 | USGS-373957121260101
37.665764, -121.434666
CA
Database(s) : [WELLS - GAMA - CA] *(cont.)*

Envirosite ID: 9227944
EPA ID: N/R

WELLS - GAMA - CA *(cont.)*

Chemical :	Dibromochloromethane, water, unfiltered, recoverable, micrograms per liter Not Detected
Analytical Method :	GCM61
Reporting Limit :	3
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30:00
Chemical :	Mercury, water, filtered, micrograms per liter Not Detected
Analytical Method :	CV013
Reporting Limit :	.1
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30:00
Chemical :	Nitrite, water, filtered, milligrams per liter as nitrite Not Detected
Analytical Method :	ALGOR
Reporting Limit :	.033
Lab Note :	N/R
Samp Collection Date-Time :	1985-03-28 11:30:00
Chemical :	Boron, water, filtered, micrograms per liter 3000 ug/l
Analytical Method :	DCP03
Reporting Limit :	N/R
Lab Note :	N/R

Map Id: 8
Direction: N
Distance: 0.362 mi., 1911 ft.
Elevation: 134 ft.
Relative: Lower

Site Name : 0407700385
37.678108, -121.402397
CA
Database(s) : [OIL & GAS WELLS - CA]

Envirosite ID: 9903673
EPA ID: N/R

OIL & GAS WELLS - CA

Spud Date :	1959-11-18
API Number :	0407700385
Well Status :	Plugged
Well Type :	Dry Hole
Operator Code :	04729
Operator Name :	John M. Young
Lease Name :	Lease by John M. Young
Field Name :	Any Field
Area Name :	Any Area
District :	Northern
County :	San Joaquin
Section/Township/Range :	SEC 15, TWP 03S, RNG 05E
Base Meridian :	Mount Diablo
GIS Source :	hud

Map Id: 8
Direction: N
Distance: 0.362 mi., 1911 ft.
Elevation: 134 ft.
Relative: Lower

Site Name : 0407700385
37.678108, -121.402397
CA
Database(s) : [OIL & GAS WELLS - CA] *(cont.)*

Envirosite ID: 9903673
EPA ID: N/R

OIL & GAS WELLS - CA *(cont.)*

Confidential Well :	No
Directionallly Drilled :	No
Latitude :	37.678108
Longitude :	-121.402397
Last Date in Agency List :	2024-05-29

Map Id: 9
Direction: NW
Distance: 0.376 mi., 1987 ft.
Elevation: 166 ft.
Relative: Lower

Site Name : 0407700386
37.67091, -121.418373
CA
Database(s) : [OIL & GAS WELLS - CA]

Envirosite ID: 9821577
EPA ID: N/R

OIL & GAS WELLS - CA

Spud Date :	1959-12-04
API Number :	0407700386
Well Status :	Plugged
Well Type :	Dry Hole
Operator Code :	04729
Operator Name :	John M. Young
Lease Name :	Lease by John M. Young
Field Name :	Any Field
Area Name :	Any Area
District :	Northern
County :	San Joaquin
Section/Township/Range :	SEC 16, TWP 03S, RNG 05E
Base Meridian :	Mount Diablo
GIS Source :	hud
Confidential Well :	No
Directionallly Drilled :	No
Latitude :	37.67091
Longitude :	-121.418373
Last Date in Agency List :	2024-05-29

Map Id: 10
Direction: WNW
Distance: 0.456 mi., 2409 ft.
Elevation: 210 ft.
Relative: Higher

Site Name : 0407720393
37.673495, -121.435306
CA
Database(s) : [OIL & GAS WELLS - CA]

Envirosite ID: 52343820
EPA ID: N/R

OIL & GAS WELLS - CA

Spud Date :	1982-06-18
API Number :	0407720393
Well Status :	Plugged

Map Id: 10
Direction: WNW
Distance: 0.456 mi., 2409 ft.
Elevation: 210 ft.
Relative: Higher

Site Name : 0407720393
37.673495, -121.435306
CA

Database(s) : [OIL & GAS WELLS - CA] *(cont.)*

Envirosite ID: 52343820
EPA ID: N/R

OIL & GAS WELLS - CA *(cont.)*

Well Type :	Dry Hole
Operator Code :	02151
Operator Name :	Diamond Shamrock Expl. Co.
Lease Name :	Peterson Fee
Field Name :	Any Field
Area Name :	Any Area
District :	Northern
County :	San Joaquin
Section/Township/Range :	SEC 17, TWP 03S, RNG 05E
Base Meridian :	Mount Diablo
GIS Source :	hud
Confidential Well :	No
Directionallly Drilled :	No
Latitude :	37.673495
Longitude :	-121.435306
Last Date in Agency List :	2024-05-29

Map Id: 11
Direction: SE
Distance: 0.565 mi., 2984 ft.
Elevation: 255 ft.
Relative: Higher

Site Name : 0407700388
37.629971, -121.371544
CA

Database(s) : [OIL & GAS WELLS - CA]

Envirosite ID: 9821583
EPA ID: N/R

OIL & GAS WELLS - CA

Spud Date :	1960-08-09
API Number :	0407700388
Well Status :	Plugged
Well Type :	Dry Hole
Operator Code :	00705
Operator Name :	Bell Petro. Co.
Lease Name :	Bell Petroleum Elissagaray
Field Name :	Any Field
Area Name :	Any Area
District :	Northern
County :	San Joaquin
Section/Township/Range :	SEC 36, TWP 03S, RNG 05E
Base Meridian :	Mount Diablo
GIS Source :	hud
Confidential Well :	No
Directionallly Drilled :	No
Latitude :	37.629971
Longitude :	-121.371544
Last Date in Agency List :	2024-05-29

Map Id: 12
Direction: NNE
Distance: 0.819 mi., 4324 ft.
Elevation: 119 ft.
Relative: Lower

Site Name : 0407700384
37.678509, -121.392937
CA

Database(s) : [OIL & GAS WELLS - CA]

Envirosite ID: 10271984
EPA ID: N/R

OIL & GAS WELLS - CA

Spud Date :	1960-10-24
API Number :	0407700384
Well Status :	Plugged
Well Type :	Dry Hole
Operator Code :	04729
Operator Name :	John M. Young
Lease Name :	Gerlach
Field Name :	Any Field
Area Name :	Any Area
District :	Northern
County :	San Joaquin
Section/Township/Range :	SEC 14, TWP 03S, RNG 05E
Base Meridian :	Mount Diablo
GIS Source :	hud
Confidential Well :	No
Directionallly Drilled :	No
Latitude :	37.678509
Longitude :	-121.392937
Last Date in Agency List :	2024-05-29

RADON DATA:

STATE SOURCE: CA

Radon Test Results:

Zip:	Total Sites:	Cnt >=4 pCi/L:	Pct >= 4 pCi/L:	Max Result (pCi/L):
95304	7	0	0	2.7

FEDERAL AREA RADON INFORMATION FOR: 95304

NUMBER OF SAMPLE SITES: No Available Data

FEDERAL EPA RADON ZONE FOR: No Available Data

WELLS - GAMA - CA
California Groundwater Ambient Monitoring Assessment
State Water Resources Control Board
916-341-5791
Brings together datasets from California state agencies including: Public Health Water Resources and Pesticide Regulation as well as from the US Geological Survey Lawrence Livermore National Laboratory and the Water Boards. It shows results for untreated raw water in different types of wells for naturally-occurring and man-made chemicals.

OIL & GAS WELLS - CA
Oil and Gas Well Data
State of California Department of Conservation
916-327-1042
Oil and gas well locations and detail for all 6 districts

RADON - CA
Radon tested locations in California
California Department of Health Services
(916) 449-5674
A table of long term and short term indoor radon measurments

Appendix D:
Historical Research Documentation

Historical Aerial Photo Report | 2025

Order Number: 104550
Report Generated: 01/09/2025

Project Name: Basin
Project Number: 10555.0259.0

Basin
S Tracy Blvd
Tracy, CA, 95304

Contact us at:
(866) 211-2028
envirositecorp.com

Historical Aerial Photo Report 2025

Envirosite's Historical Aerial Photo Report is designed to assist in evaluating a subject property resulting from past activities. Envirosite's Historical Aerial Photo Report includes a search of available historical aerial photographs, dating back to the 1930s, or earliest available photographs.

ENVIROSITE SEARCHED SOURCES

SUBJECT PROPERTY:

Basin
S Tracy Blvd
Tracy, CA, 95304

YEAR:	***SCALE:***	***SOURCE:***
1937	1" = 1,500'	U.S.D.A
1954	1" = 1,500'	U.S.G.S
1957	1" = 1,500'	U.S.D.A
1967	1" = 1,500'	U.S.G.S
1968	1" = 1,500'	U.S.G.S
1970	1" = 1,500'	U.S.G.S
1971	1" = 1,500'	U.S.G.S
1973	1" = 1,500'	U.S.G.S
1974	1" = 1,500'	U.S.G.S
1982	1" = 1,500'	NHAP
1983	1" = 1,500'	U.S.G.S
1985	1" = 1,500'	U.S.G.S
1987	1" = 1,500'	NAPP
1993	1" = 1,500'	DOQ
1998	1" = 1,500'	NAPP
2005	1" = 1,500'	NAIP
2009	1" = 1,500'	NAIP
2010	1" = 1,500'	NAIP
2012	1" = 1,500'	NAIP
2014	1" = 1,500'	NAIP
2016	1" = 1,500'	NAIP
2018	1" = 1,500'	NAIP
2020	1" = 1,500'	NAIP
2022	1" = 1,500'	NAIP

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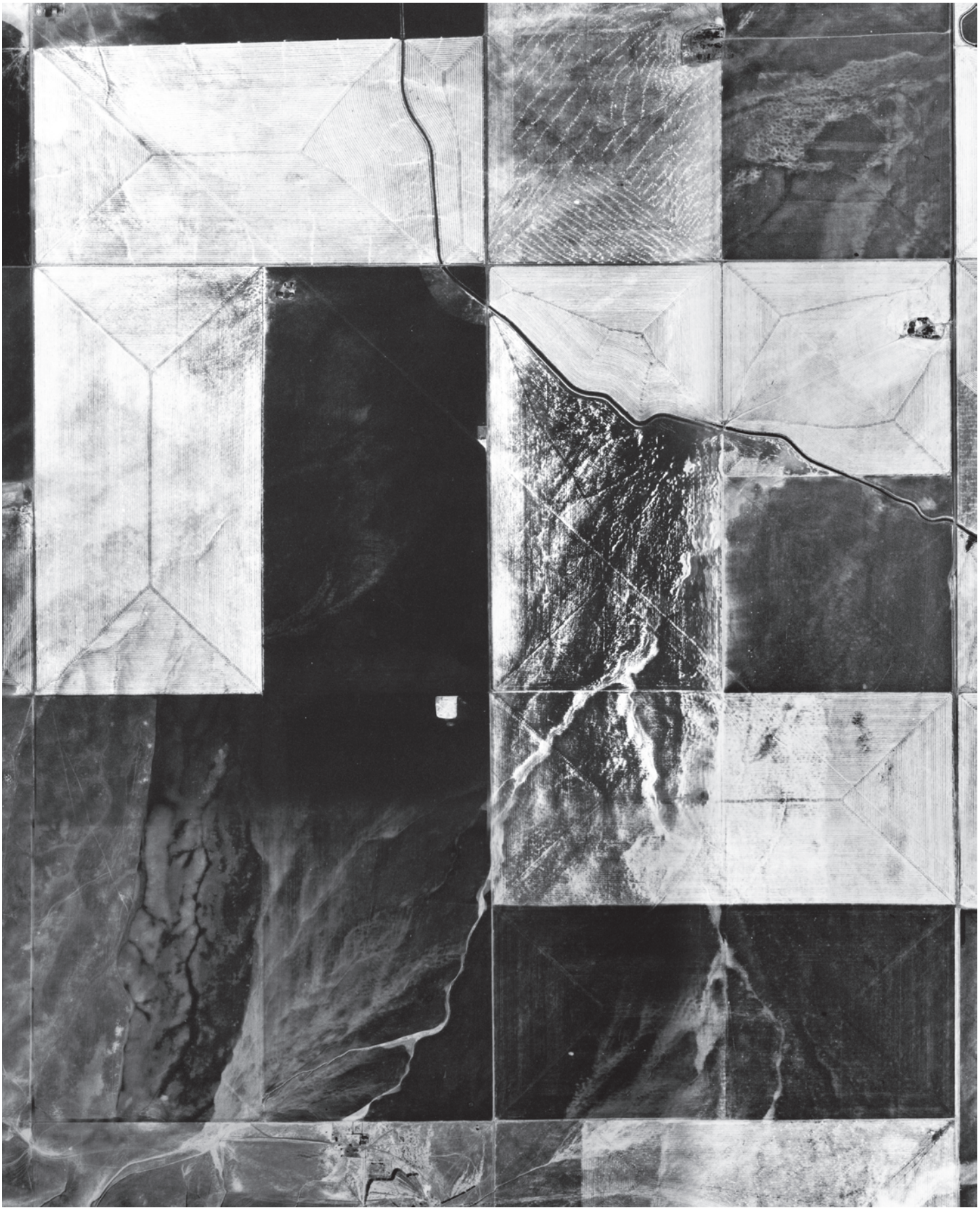
FLIGHT YEAR:
1937

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1937

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1954

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1954

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1957

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1957

East Portion

N
W E
S

Scale: 1" = 1,500'

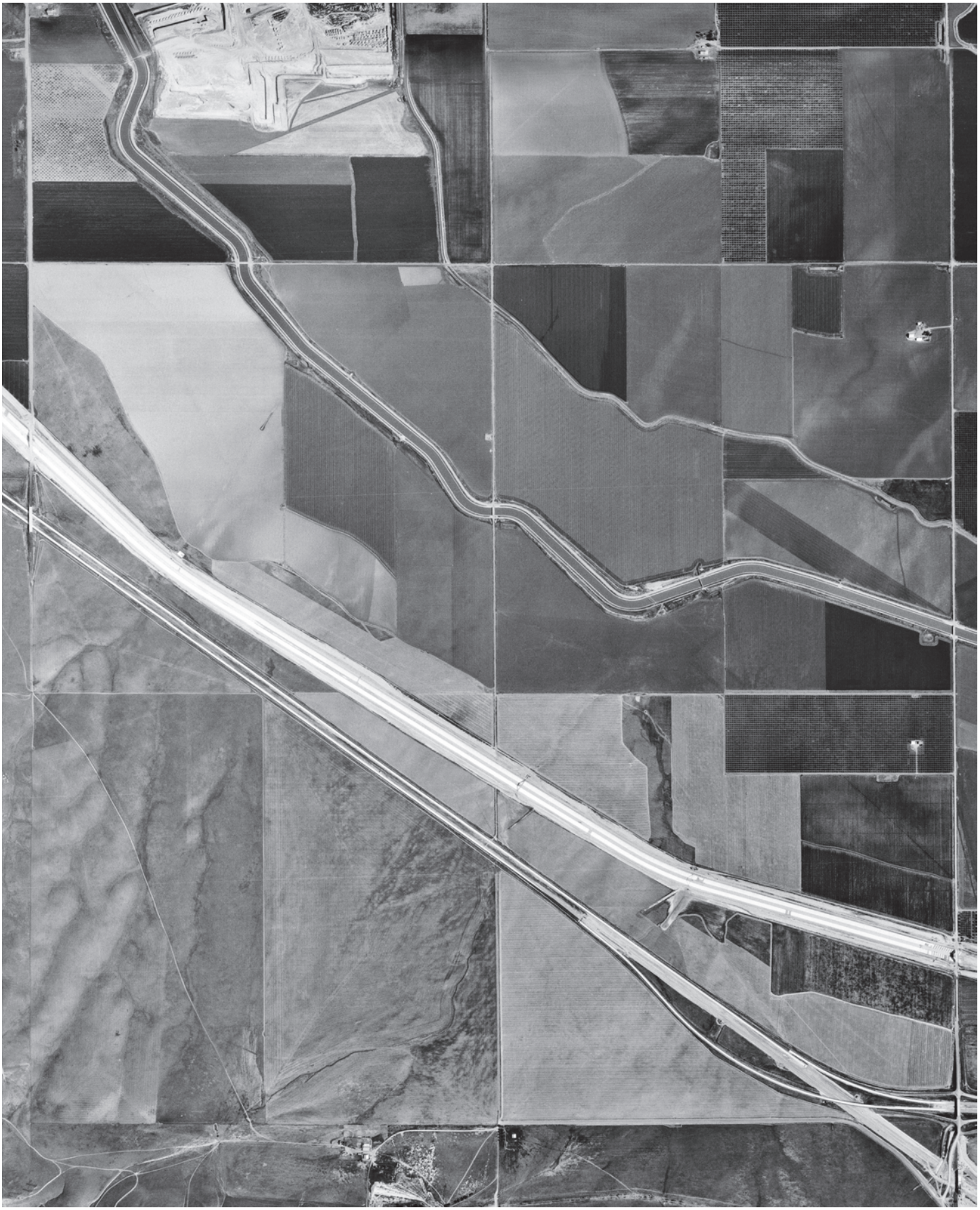


FLIGHT YEAR:
1967

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1967

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1968

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1968

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1970

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1970

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1971

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1971

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1973

West Portion

N
W E
S

Scale: 1" = 1,500'

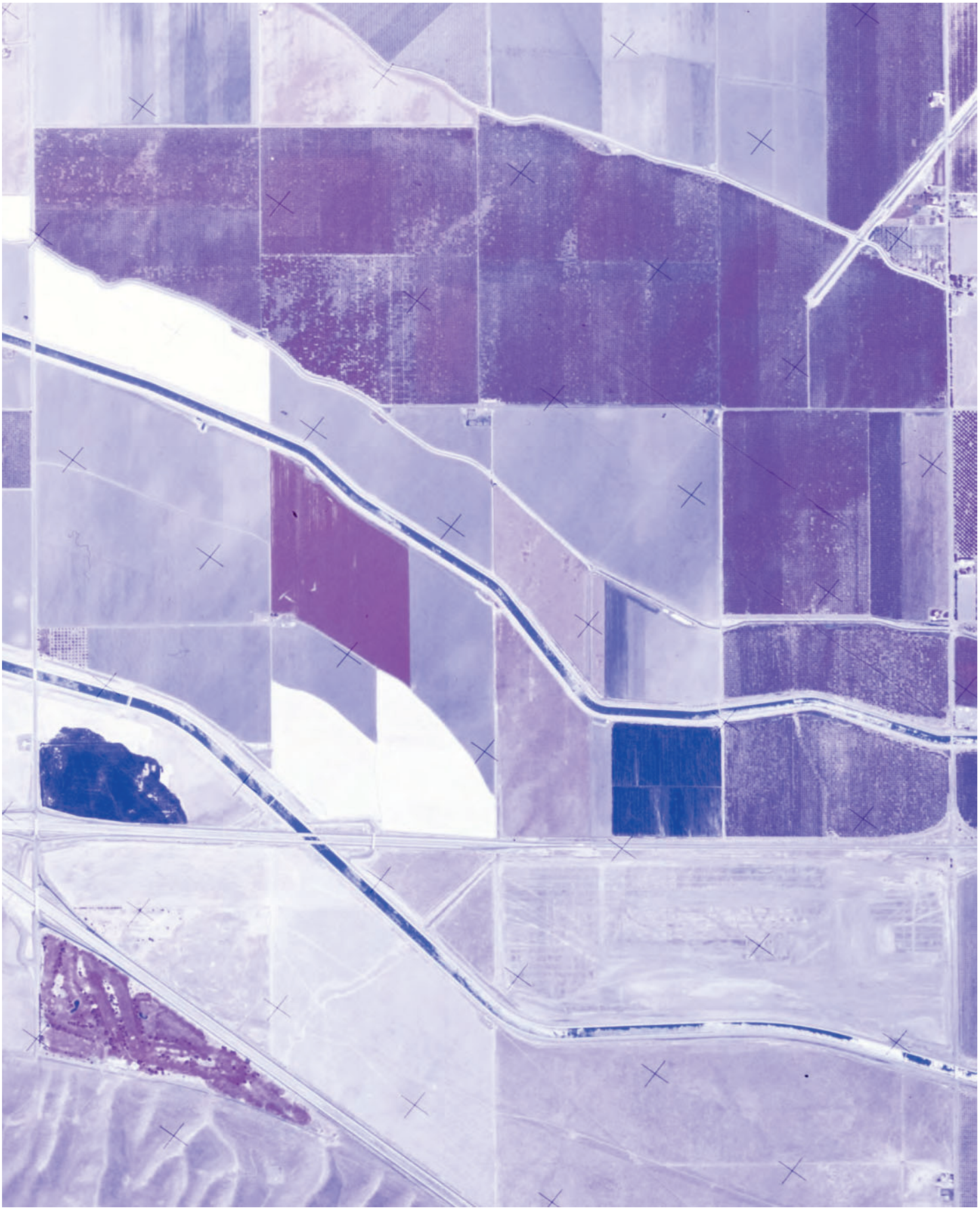


FLIGHT YEAR:
1973

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1974

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1974

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1982

West Portion

N
W E
S

Scale: 1" = 1,500'

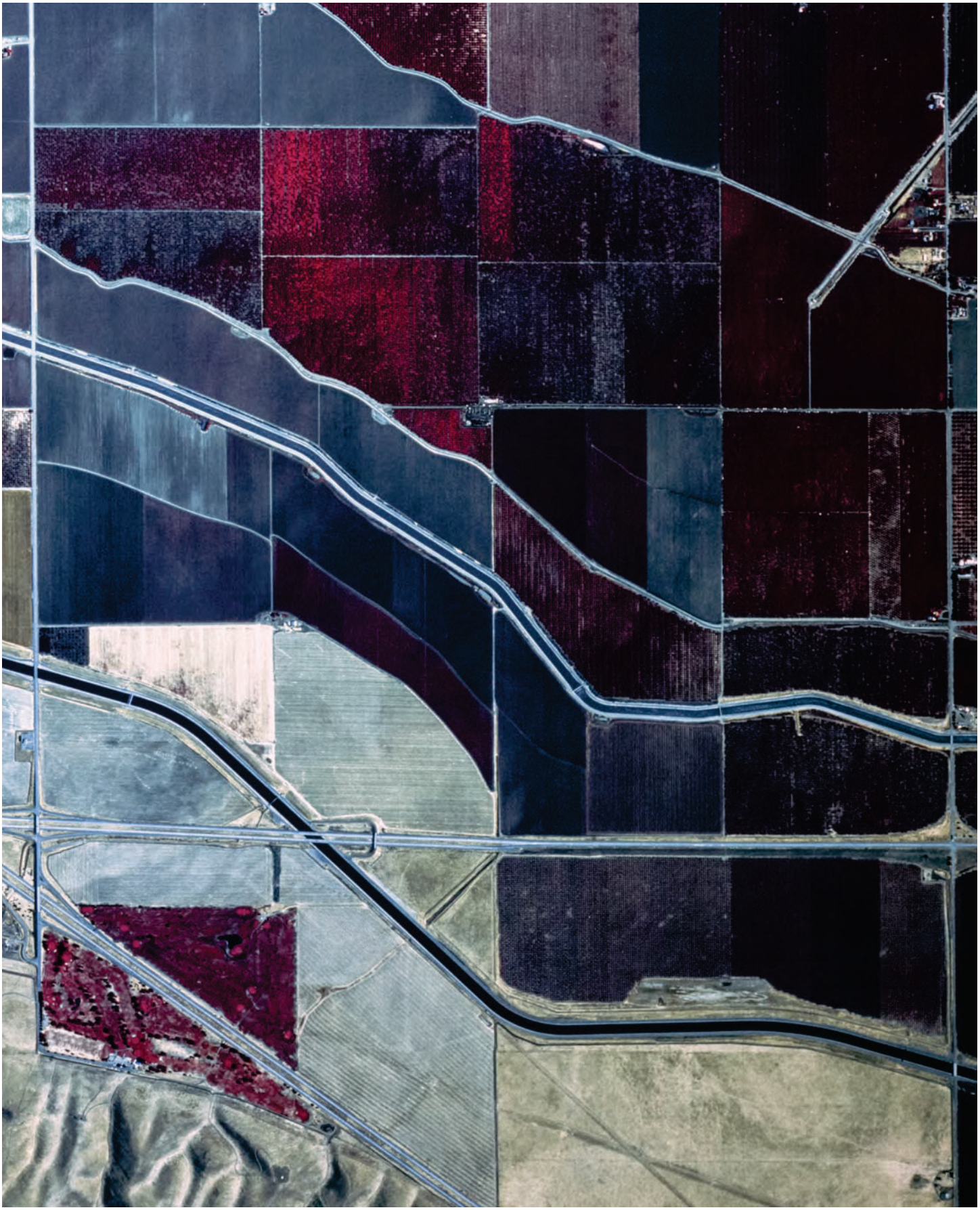


FLIGHT YEAR:
1982

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1983

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1983

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1985

West Portion

N
W E
S

Scale: 1" = 1,500'

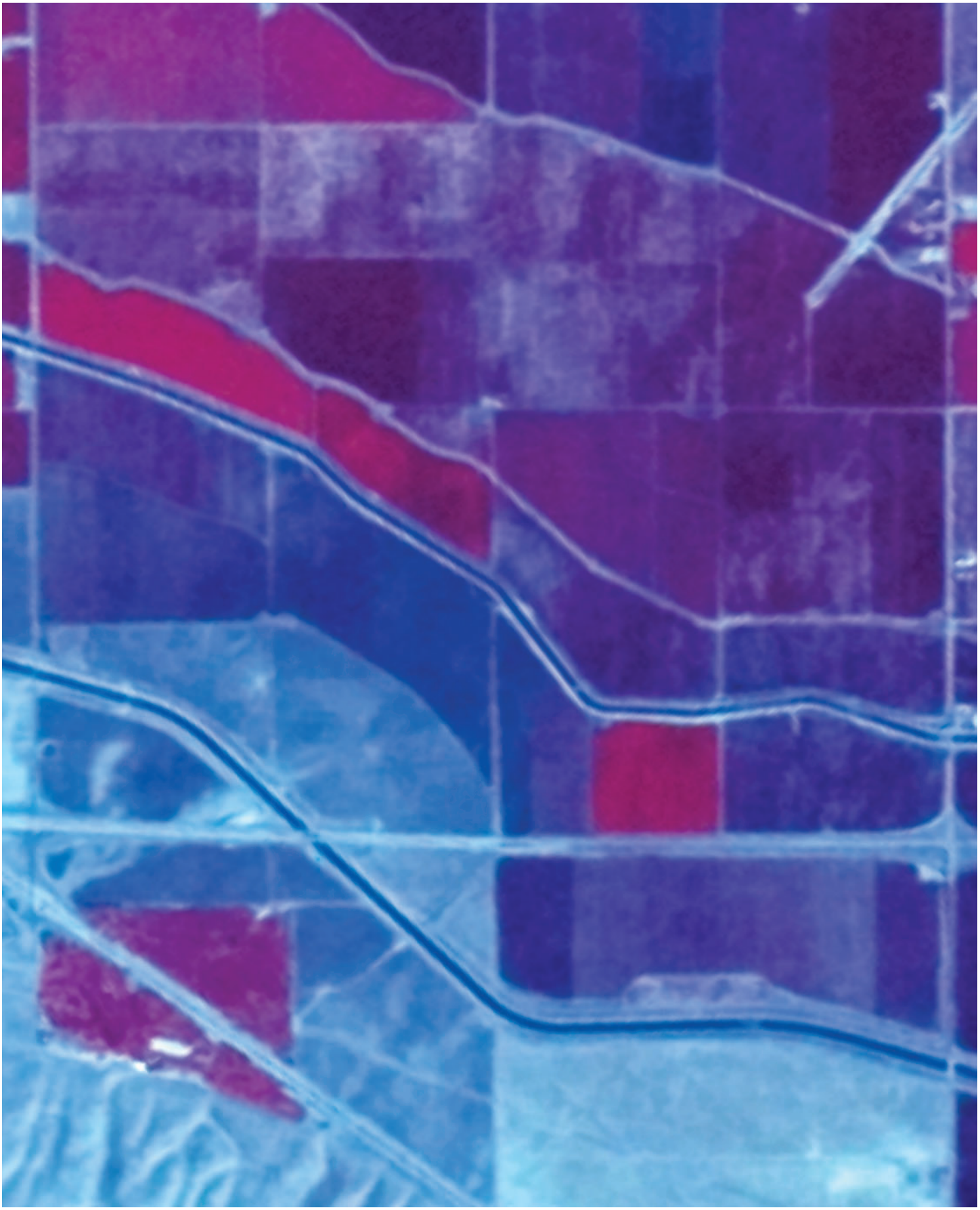


FLIGHT YEAR:
1985

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1987

West Portion

N
W E
S

Scale: 1" = 1,500'

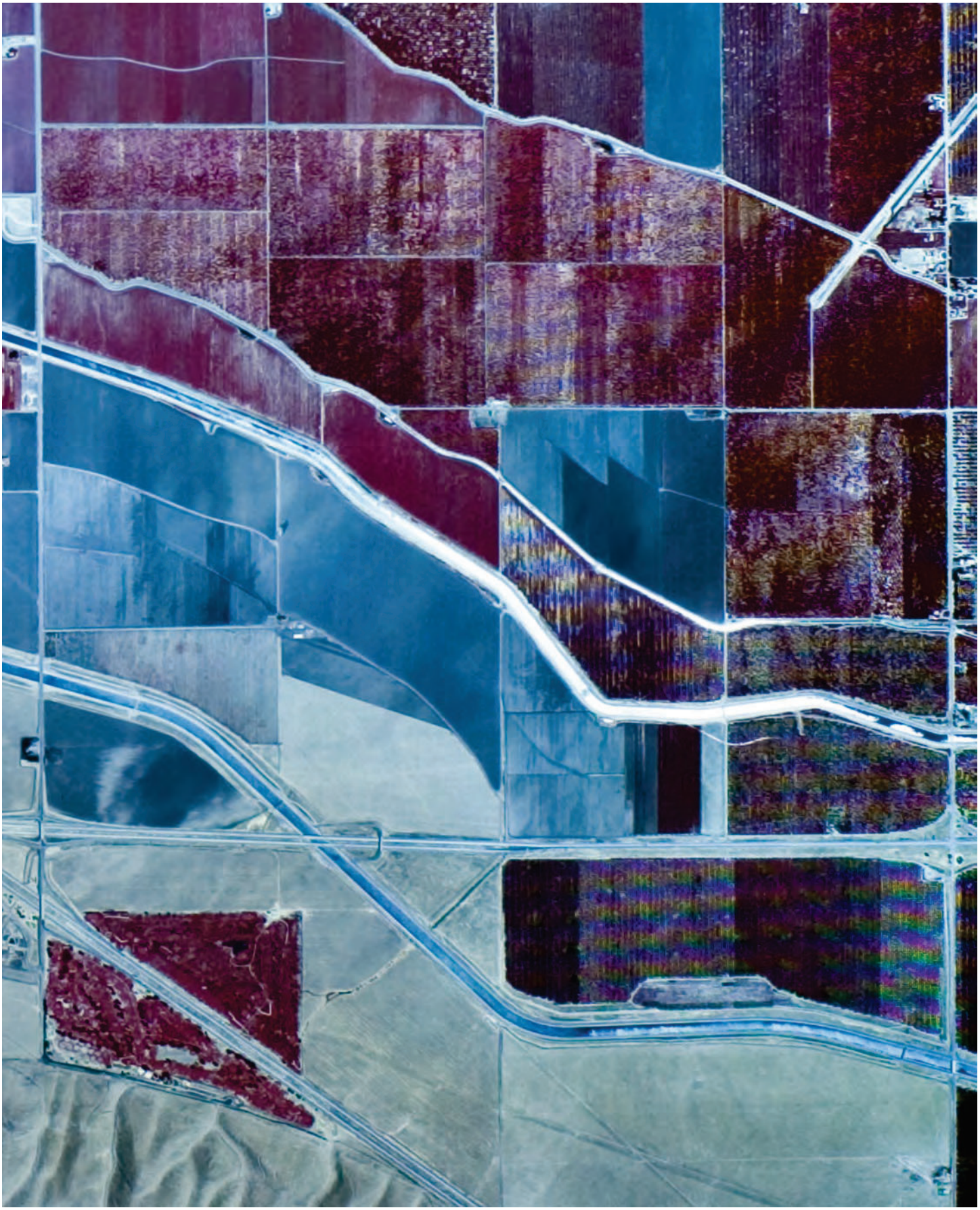


FLIGHT YEAR:
1987

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1993

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1993

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1998

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
1998

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2005

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2005

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2009

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2009

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2010

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2010

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2012

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2012

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2014

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2014

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2016

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2016

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2018

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2018

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2020

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2020

East Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2022

West Portion

N
W E
S

Scale: 1" = 1,500'



FLIGHT YEAR:
2022

East Portion

N
W E
S

Scale: 1" = 1,500'



Historical Topographic Map Report | 2025

Order Number: 104550

Report Generated: 01/08/2025

Project Name: Basin

Project Number: 10555.0259.0

Basin
S Tracy Blvd
Tracy, CA 95304

Contact us at:
(866) 211-2028
envirositecorp.com

Envirosite's Historical Topographic Map Report is designed to assist in evaluating a subject property resulting from past activities. Envirosite's Historical Topographic Map Report includes a search of USGS historical topographic maps, dating back to the early 1900s.

TOPOGRAPHIC MAPS FOUND:

	Map Name:	Year:	Revision Year:	Scale:
1.	Vernalis	1915	N/R	1 : 31680
2.	Tracy	1916	N/R	1 : 31680
3.	Carbona	1922	N/R	1 : 62500
4.	Carbona	1942	N/R	1 : 62500
5.	Vernalis	1952	N/R	1 : 24000
6.	Tracy	1954	N/R	1 : 24000
7.	Tracy	1954	1968	1 : 24000
8.	Tracy	1954	1981	1 : 24000
9.	Vernalis	1969	N/R	1 : 24000
10.	Vernalis	1969	1980	1 : 24000
11.	Vernalis	1991	N/R	1 : 24000
12.	Tracy	2012	N/R	1 : 24000
13.	Vernalis	2012	N/R	1 : 24000
14.	Tracy	2015	N/R	1 : 24000
15.	Vernalis	2015	N/R	1 : 24000
16.	Tracy	2018	N/R	1 : 24000
17.	Vernalis	2018	N/R	1 : 24000
18.	Tracy	2021	N/R	1 : 24000
19.	Vernalis	2021	N/R	1 : 24000

The USGS 7.5 minute series includes scales 1:24,000 / 1:25,000 / 1:31,680. The USGS 15 minute series includes scales 1:48,000 / 1:62,500 / 1:63,360. The USGS 30x60 minute series scale is 1:100,000.

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SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 1915 REVISION YEAR: N/R

SCALE: 1 : 31680 Part 1

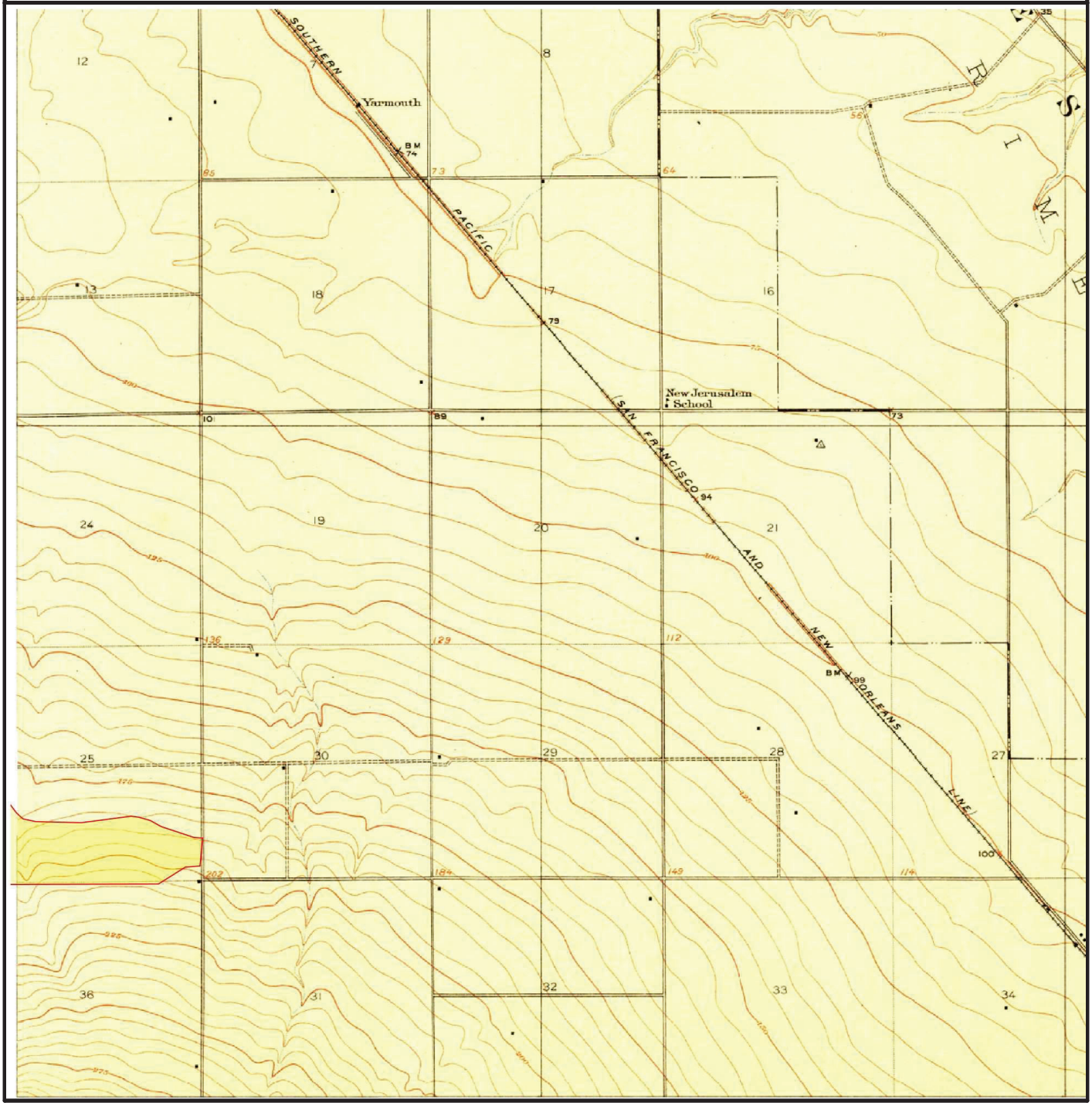

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 1916
REVISION YEAR: N/R
SCALE: 1 : 31680
Part 1

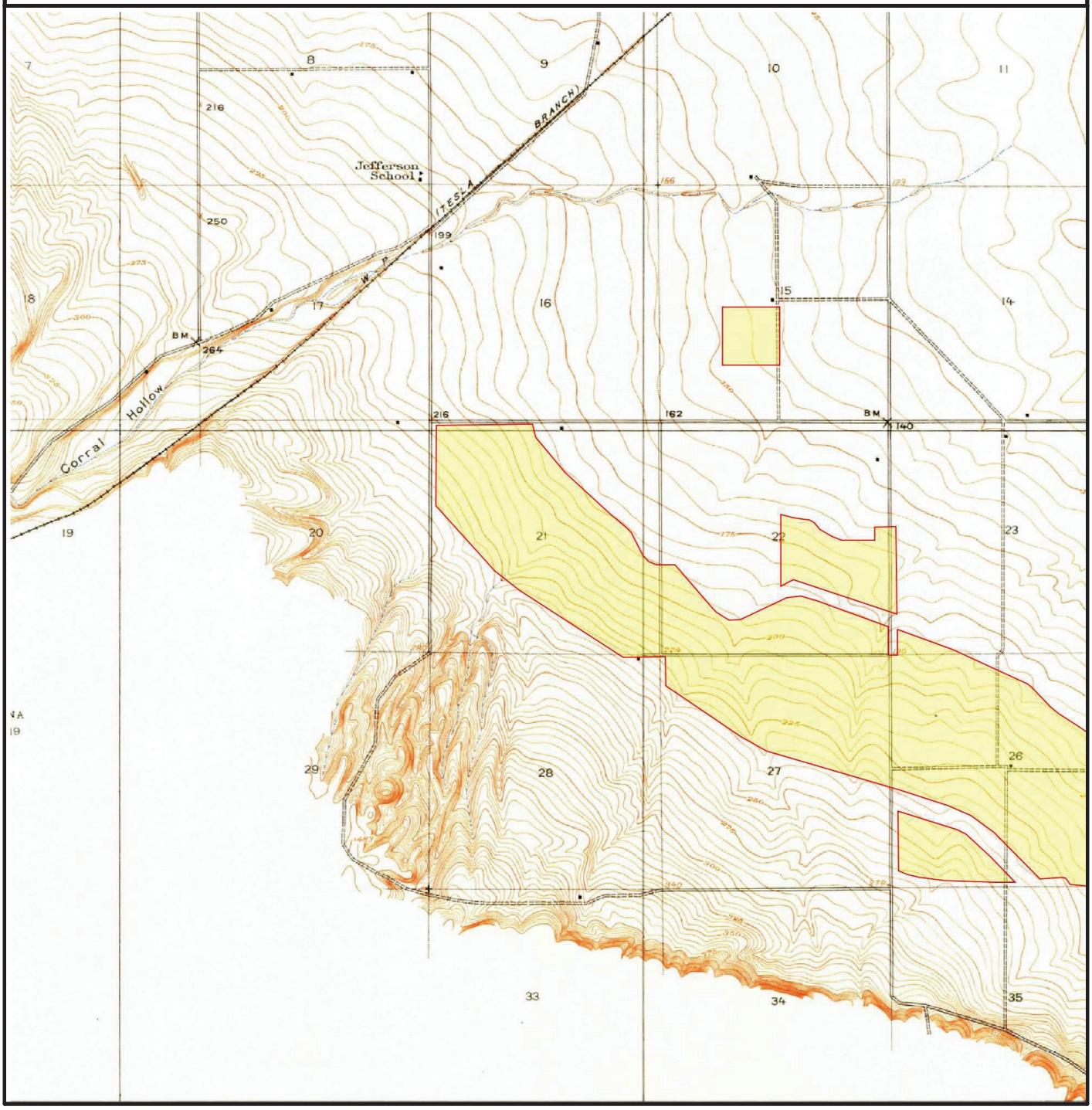

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 1916
REVISION YEAR: N/R
SCALE: 1 : 31680
Part 2

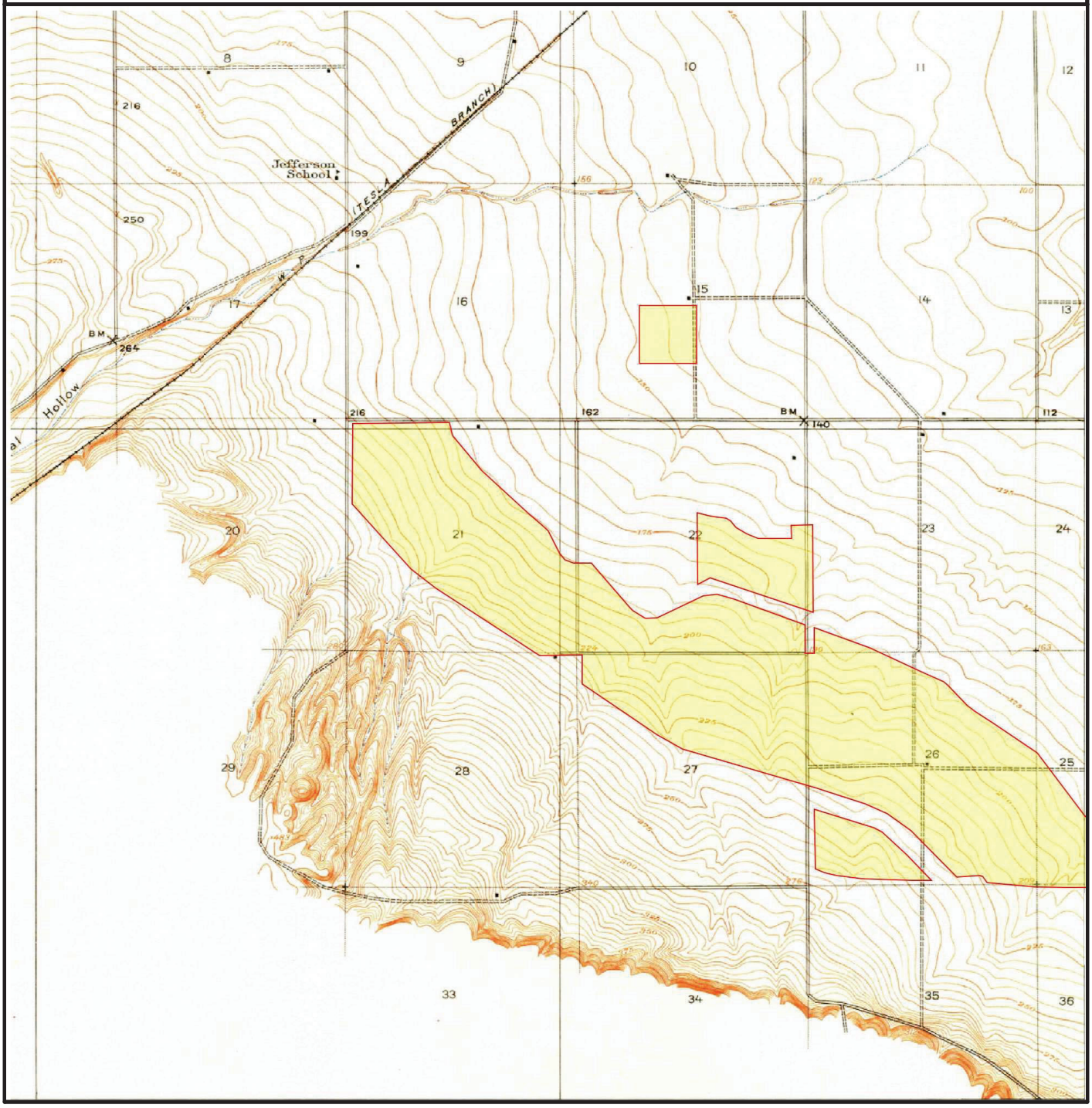

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Carbona MAP YEAR: 1922 REVISION YEAR: N/R

SCALE: 1 : 62500 Part 1

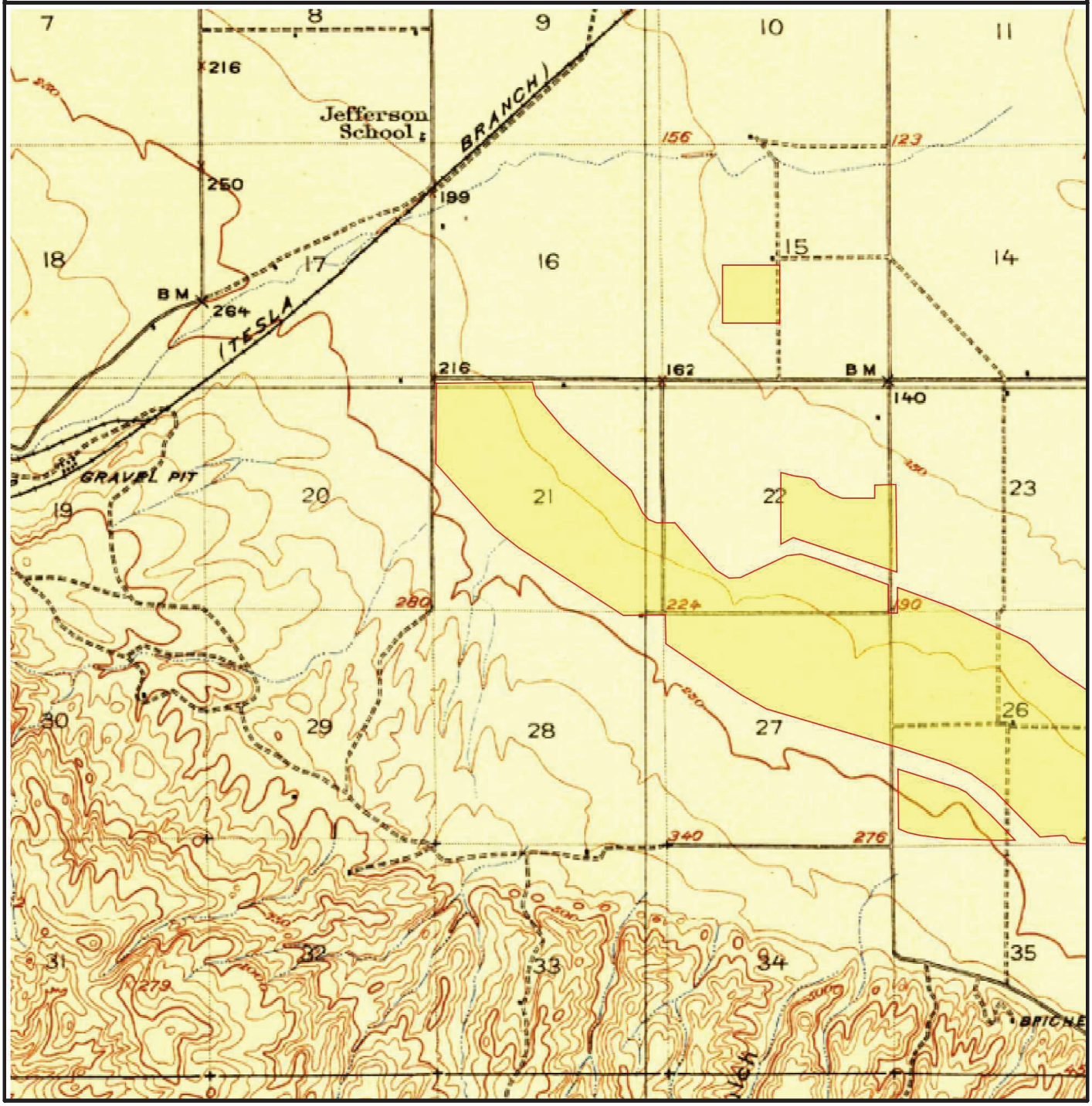

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Carbona MAP YEAR: 1922 REVISION YEAR: N/R

SCALE: 1 : 62500 Part 2

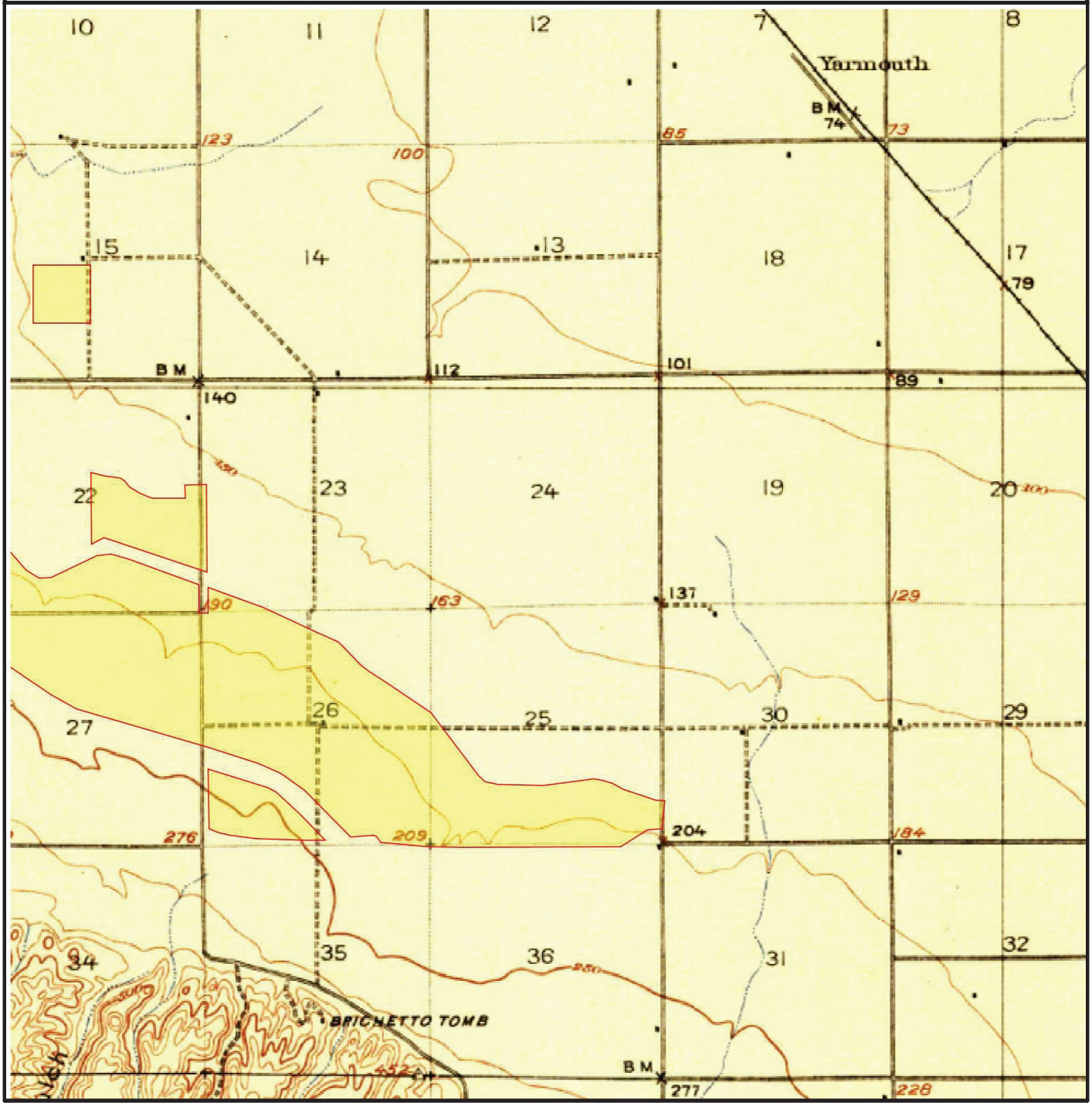

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME:	Carbona	MAP YEAR:	1942	REVISION YEAR:	N/R
SCALE:	1 : 62500	Part	1		

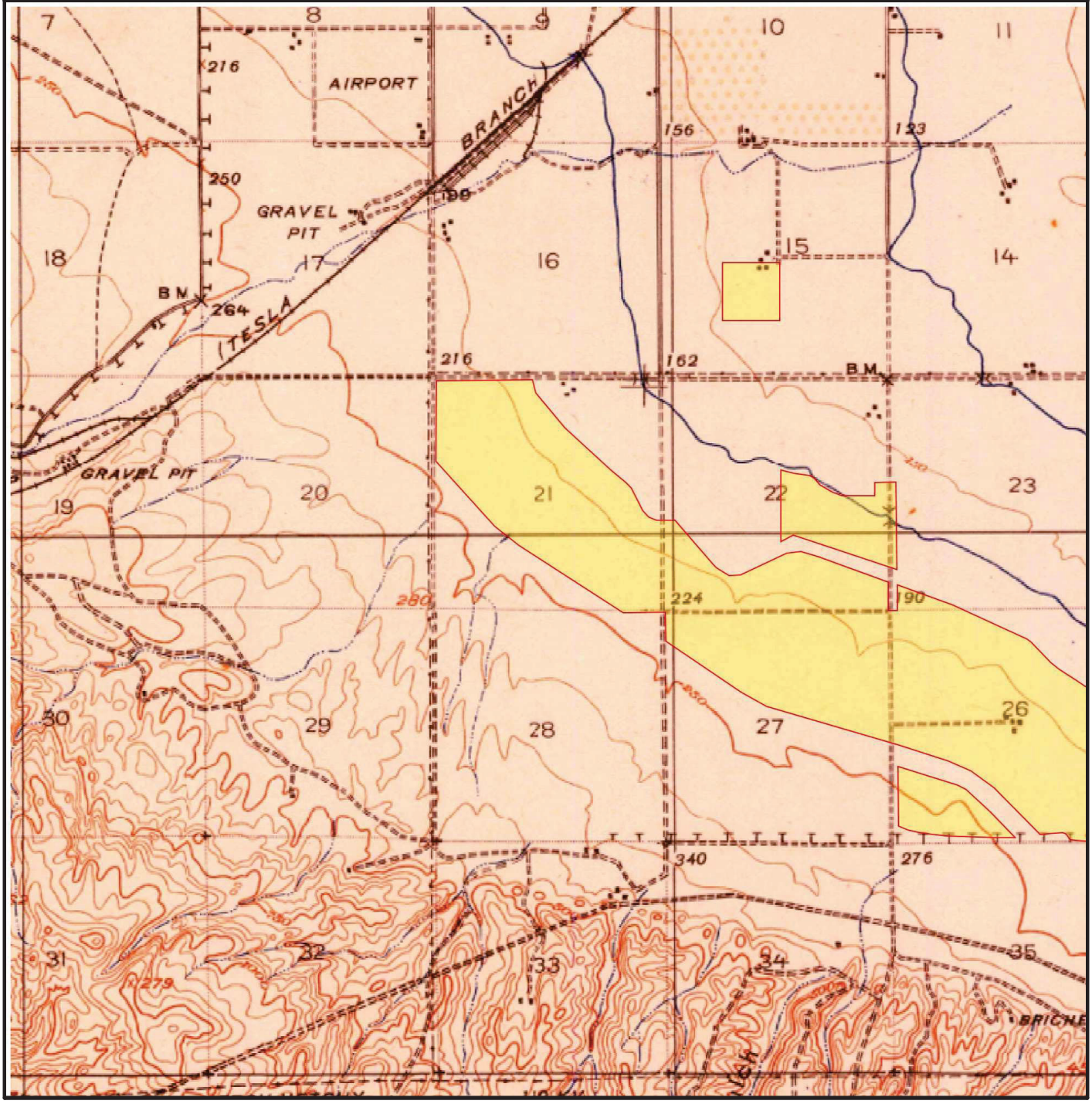

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME:	Carbona	MAP YEAR:	1942	REVISION YEAR:	N/R
SCALE:	1 : 62500	Part	2		

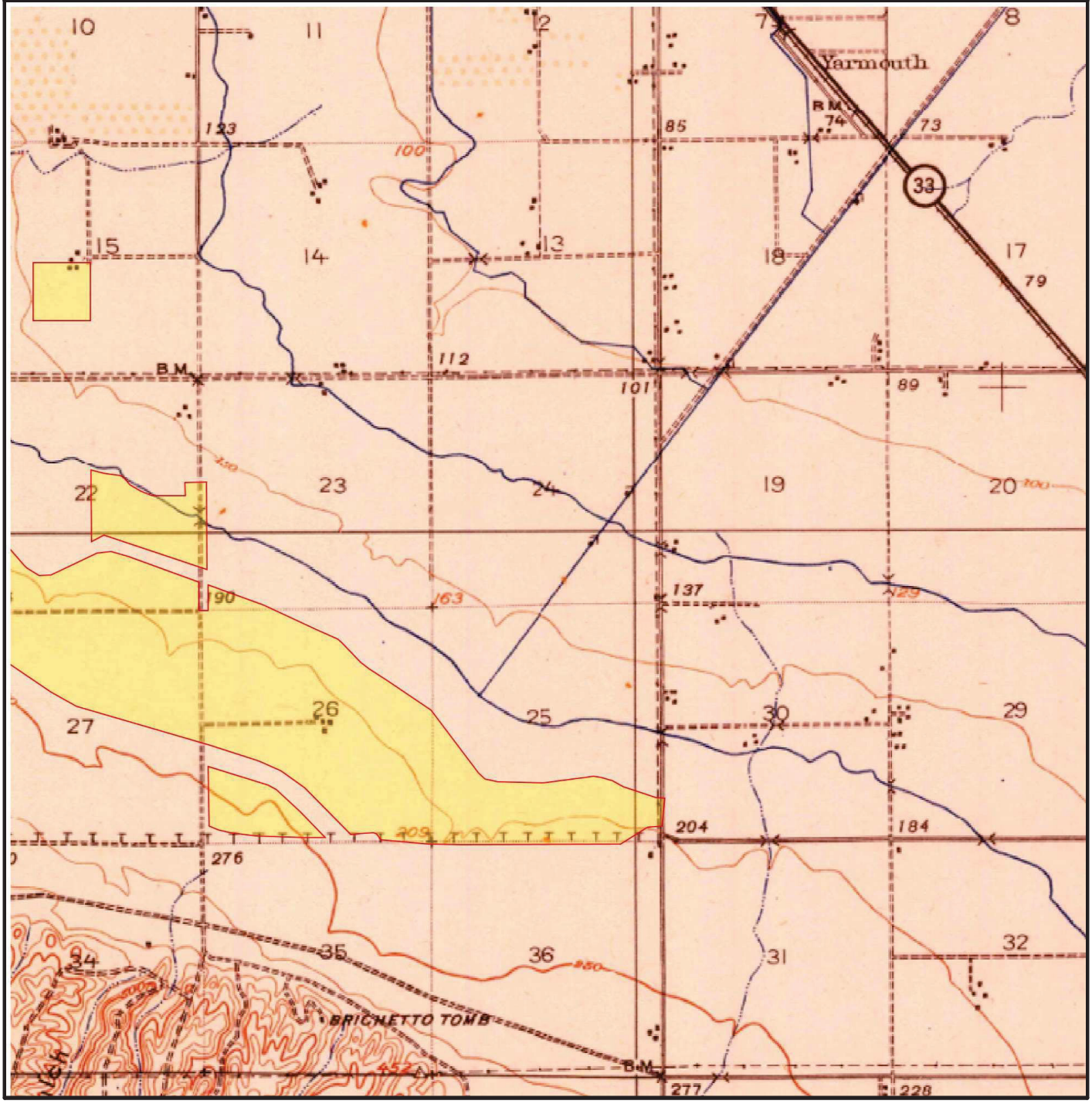

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 1952 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1



*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy MAP YEAR: 1954 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

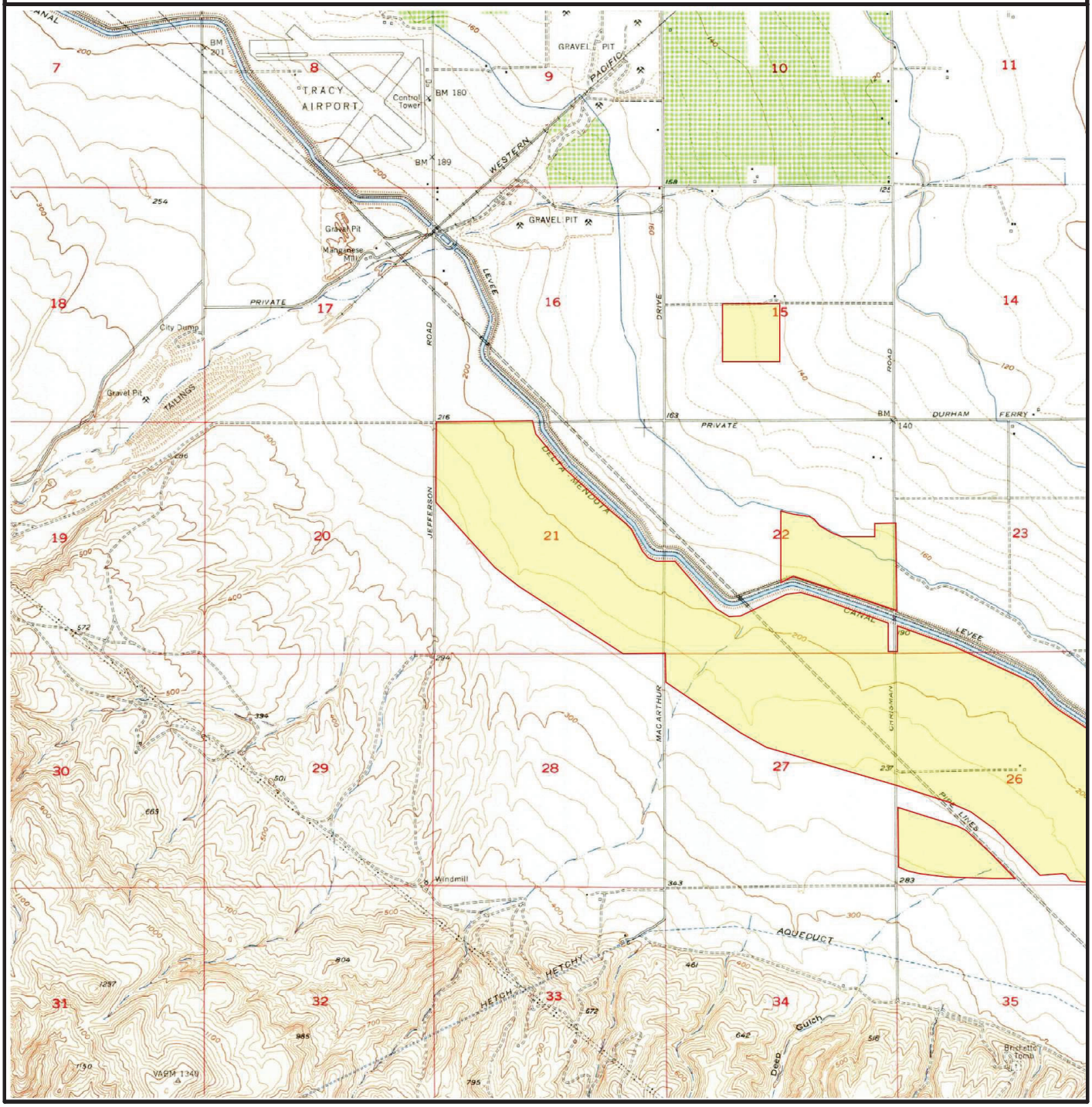

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy MAP YEAR: 1954 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 2

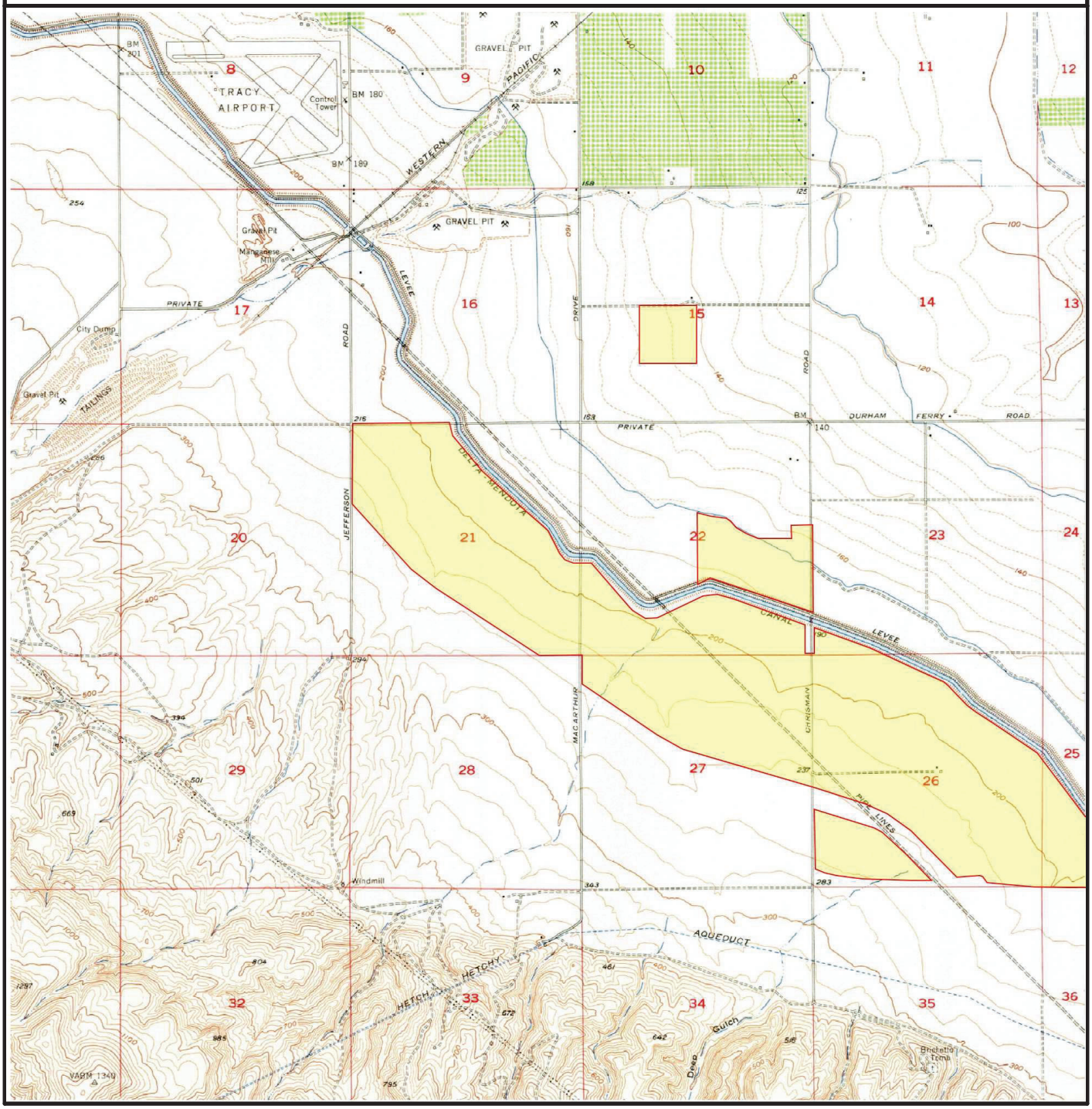

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 1954
REVISION YEAR: 1968
SCALE: 1 : 24000
Part 1

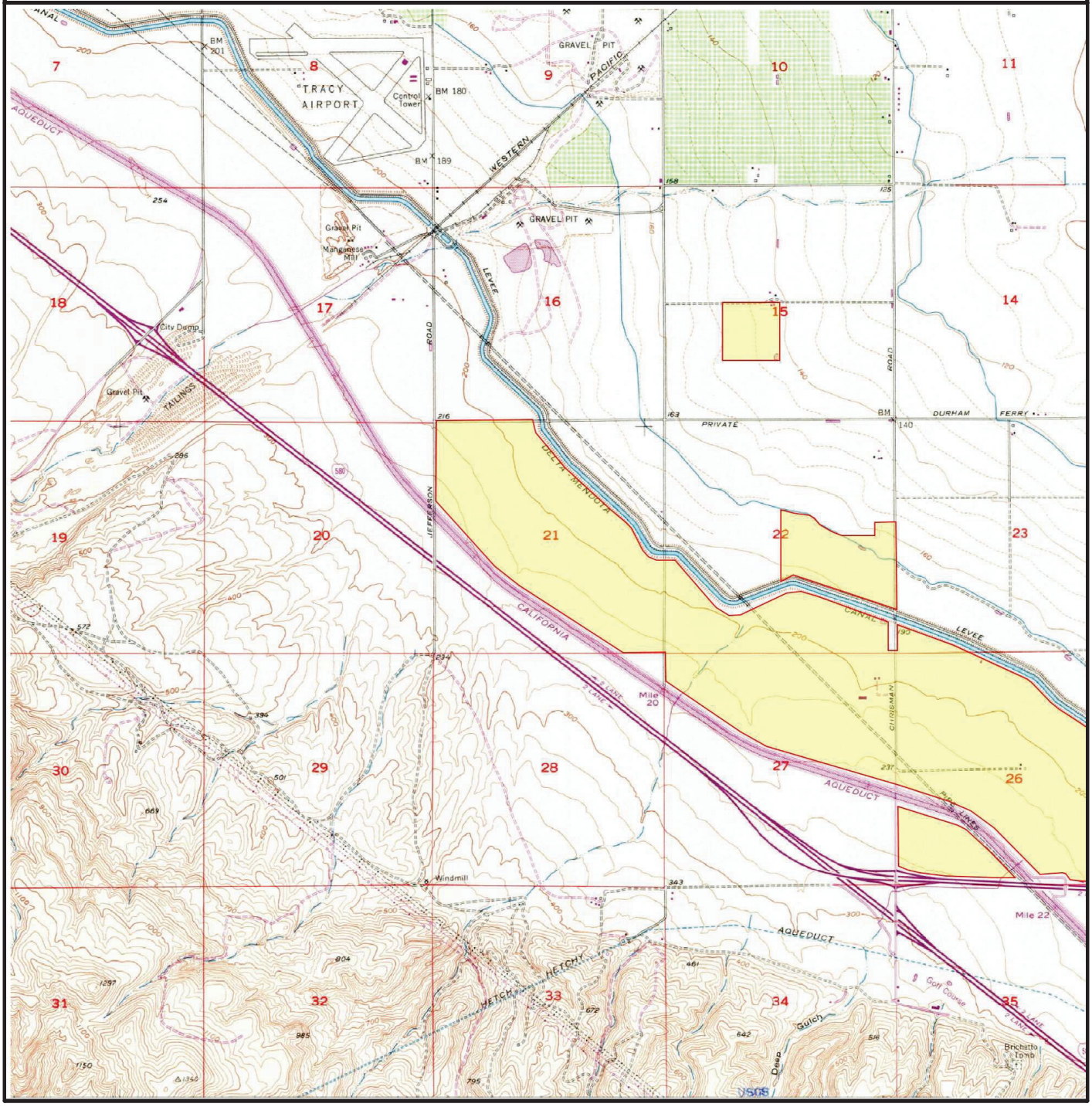

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 1954
REVISION YEAR: 1968
SCALE: 1 : 24000
Part 2

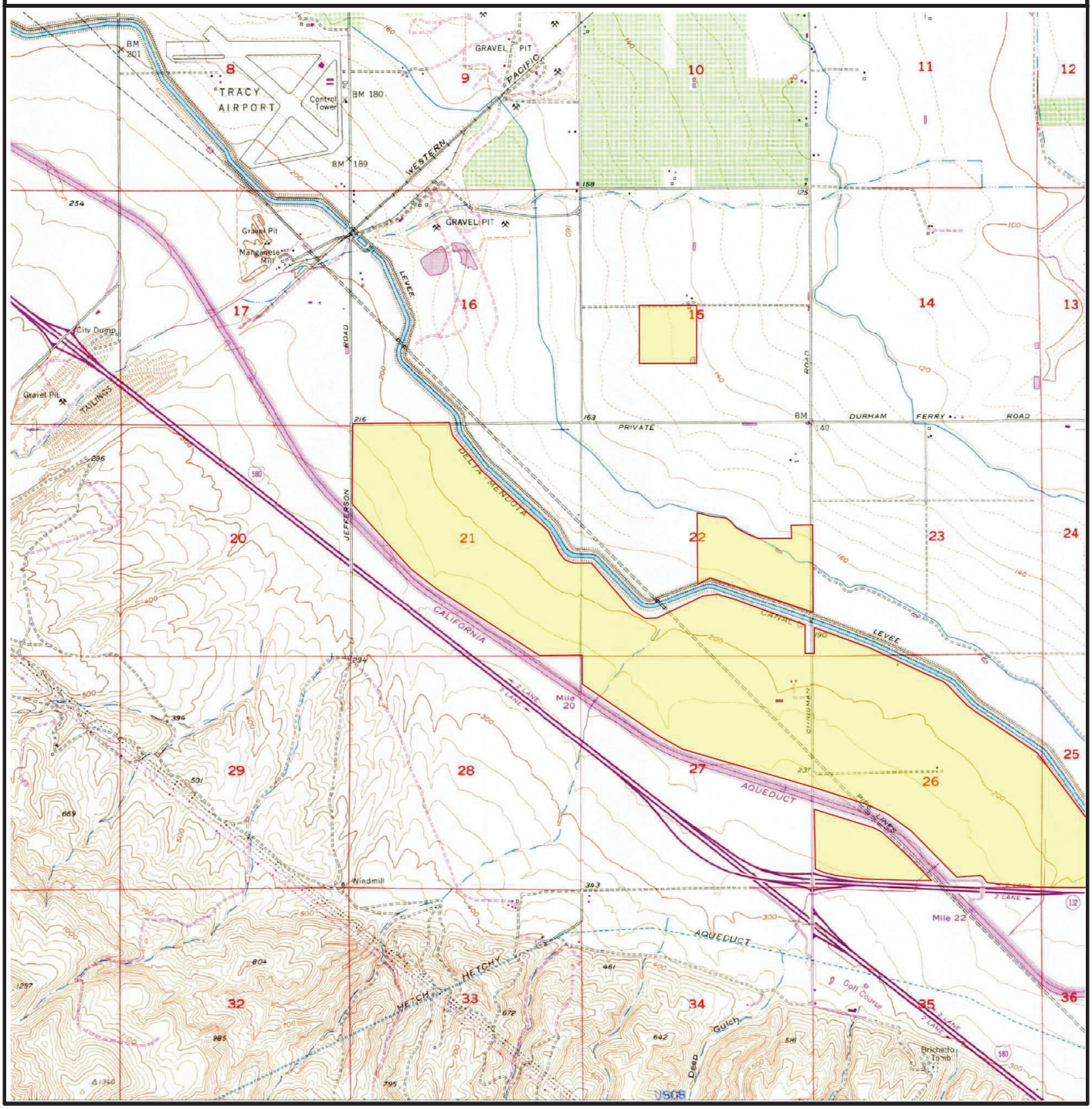

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 1954
REVISION YEAR: 1981
SCALE: 1 : 24000
Part 1

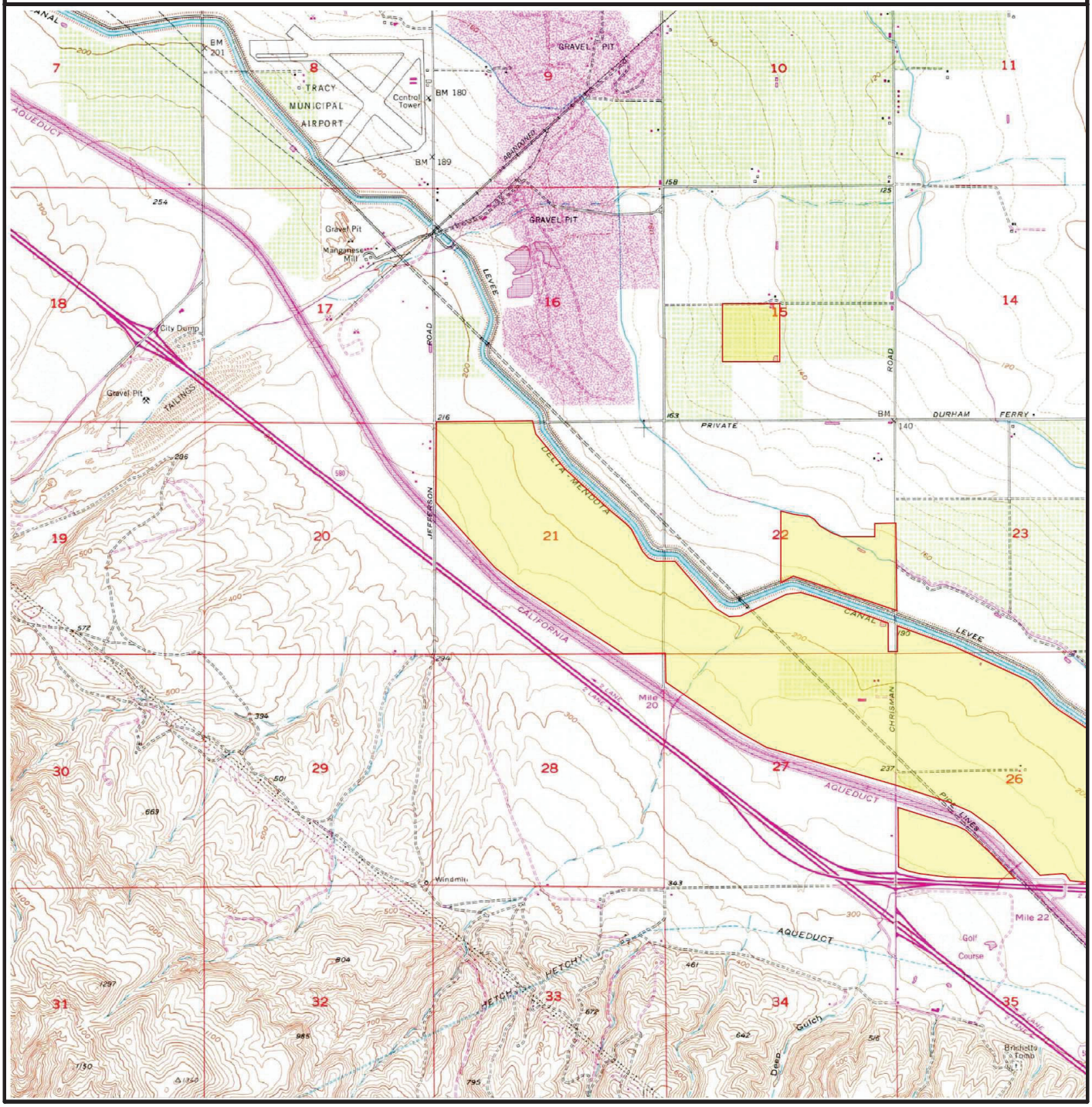

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 1954
REVISION YEAR: 1981
SCALE: 1 : 24000
Part 2

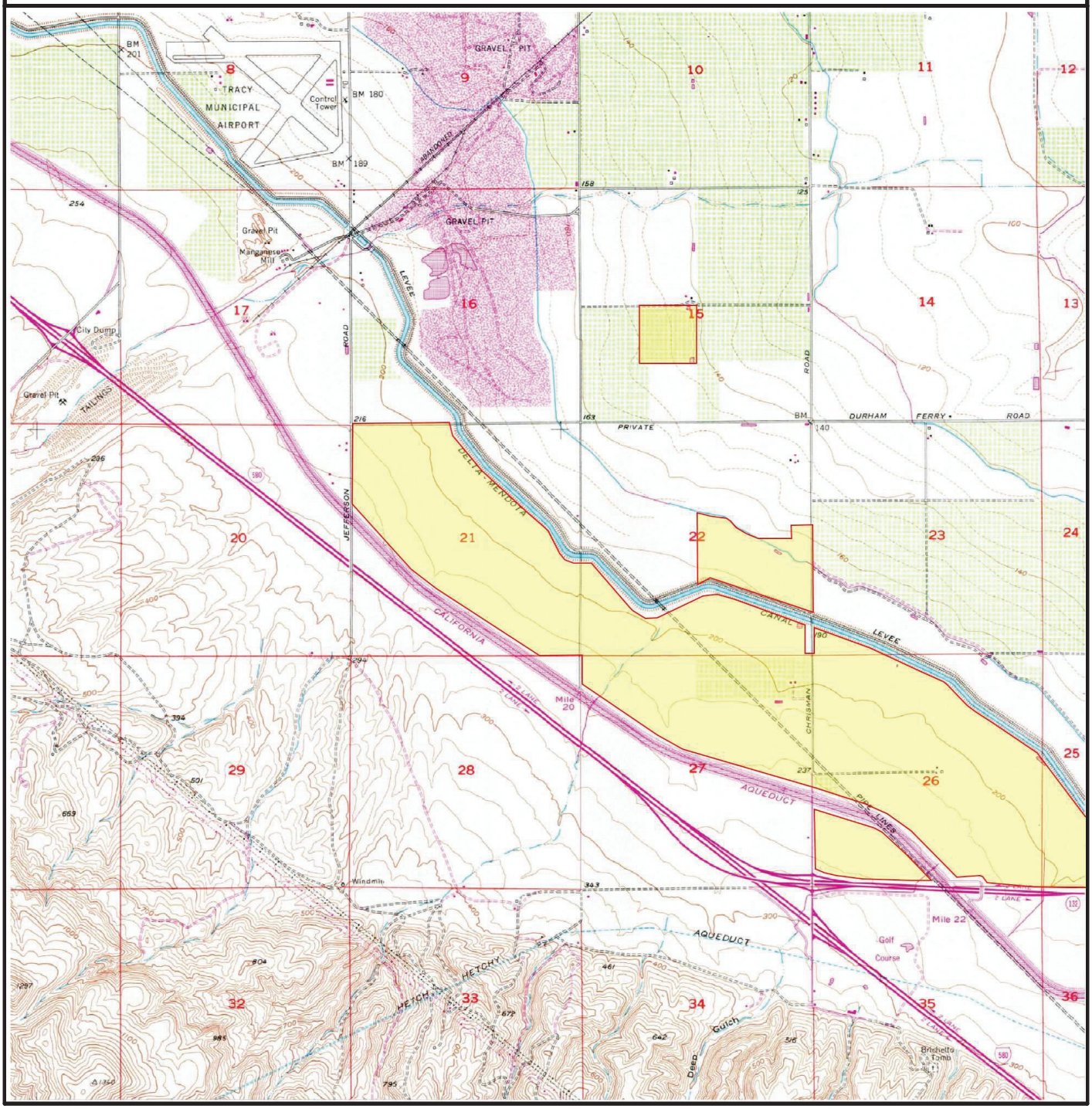

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 1969 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

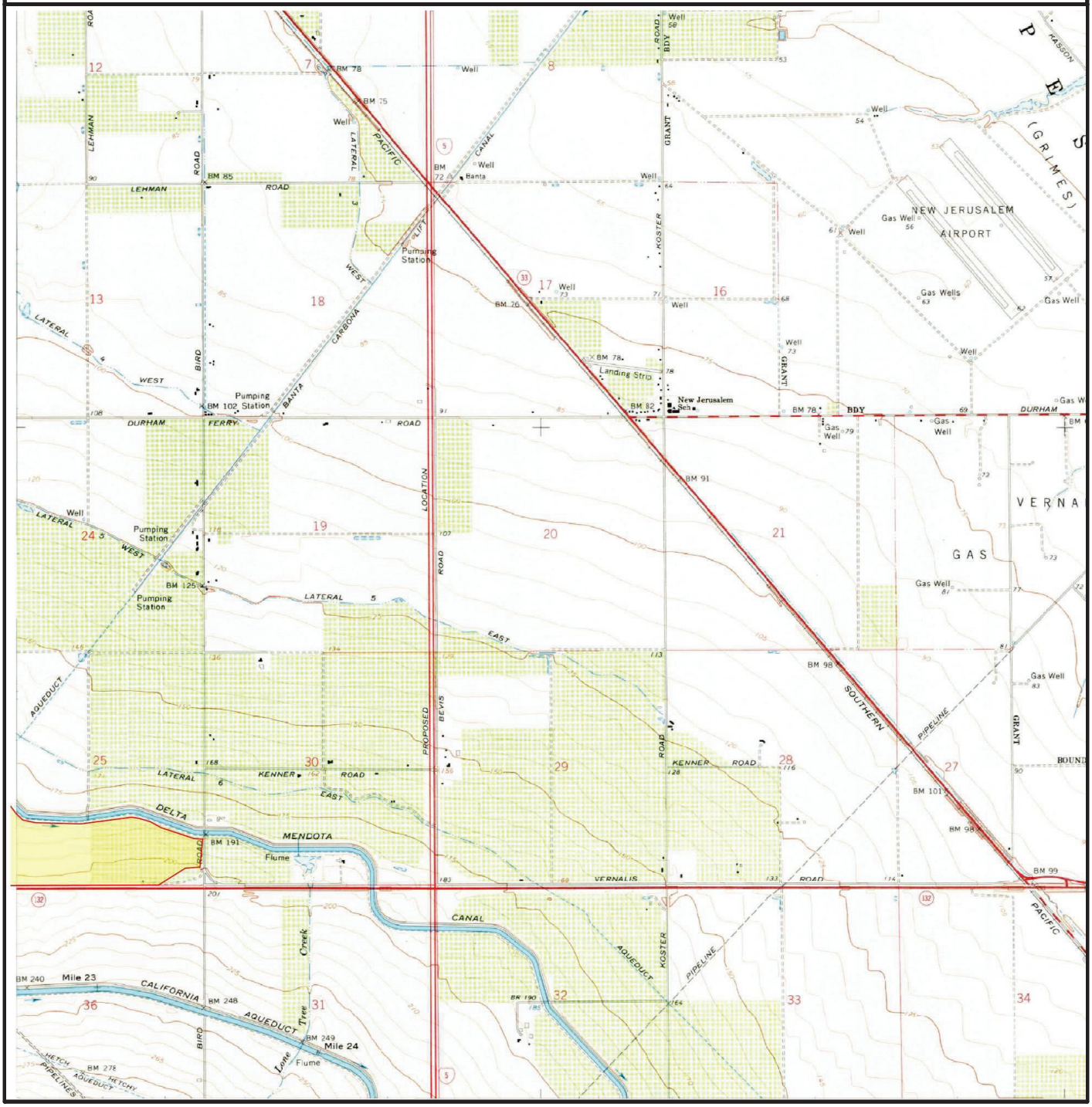

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 1969 REVISION YEAR: 1980

SCALE: 1 : 24000 Part 1

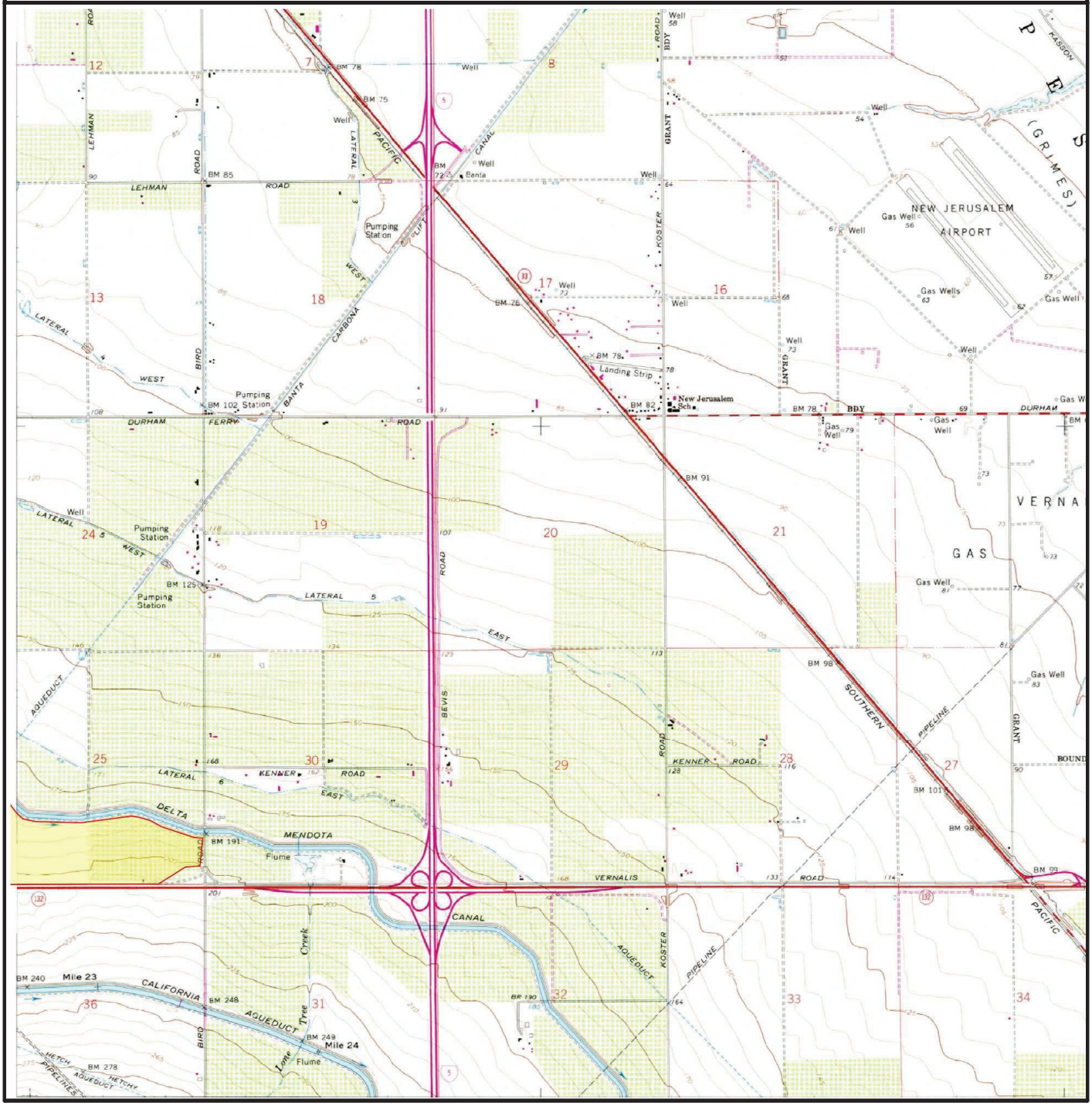

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 1991 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

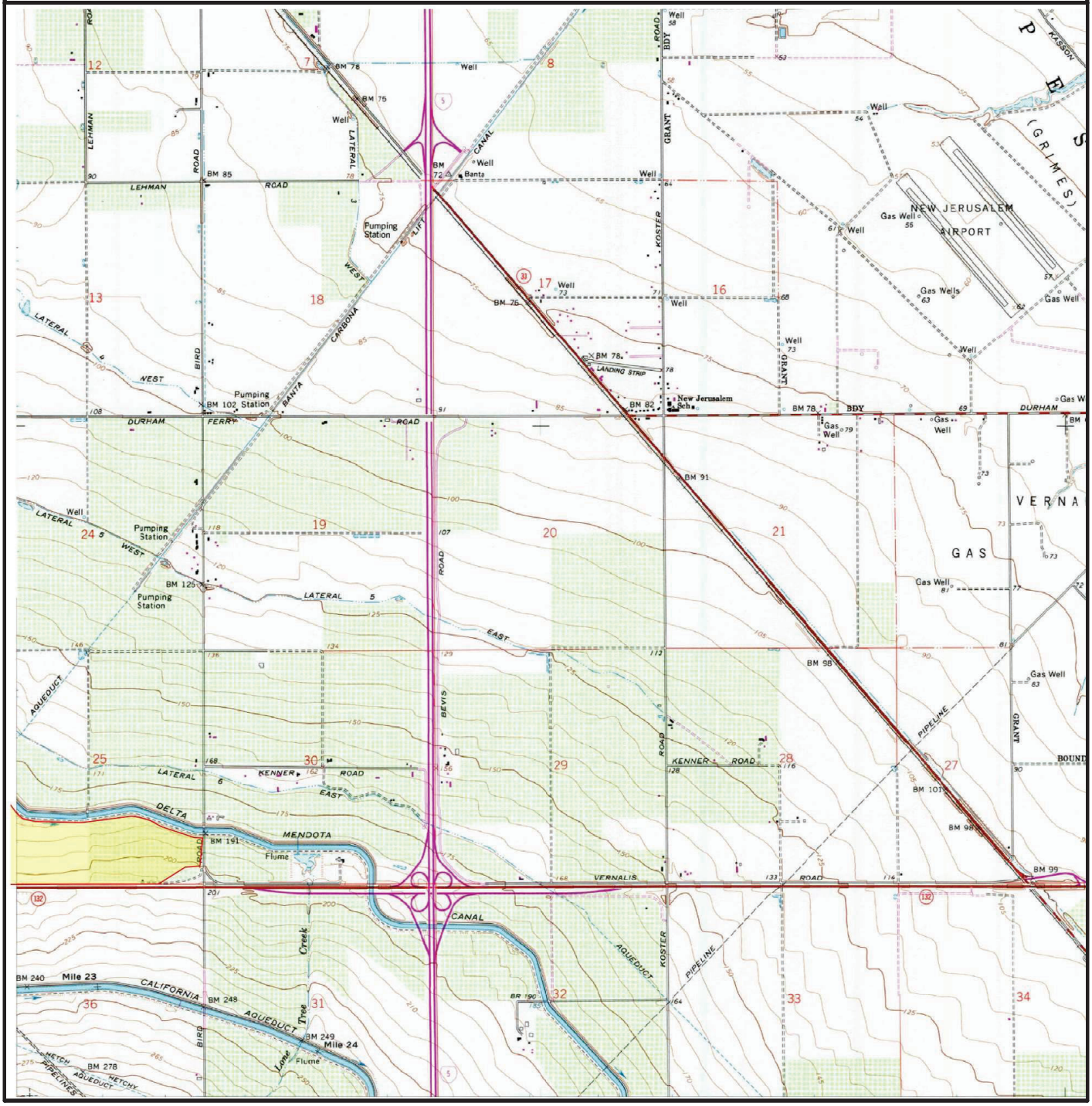

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 2012
REVISION YEAR: N/R
SCALE: 1 : 24000
Part 1

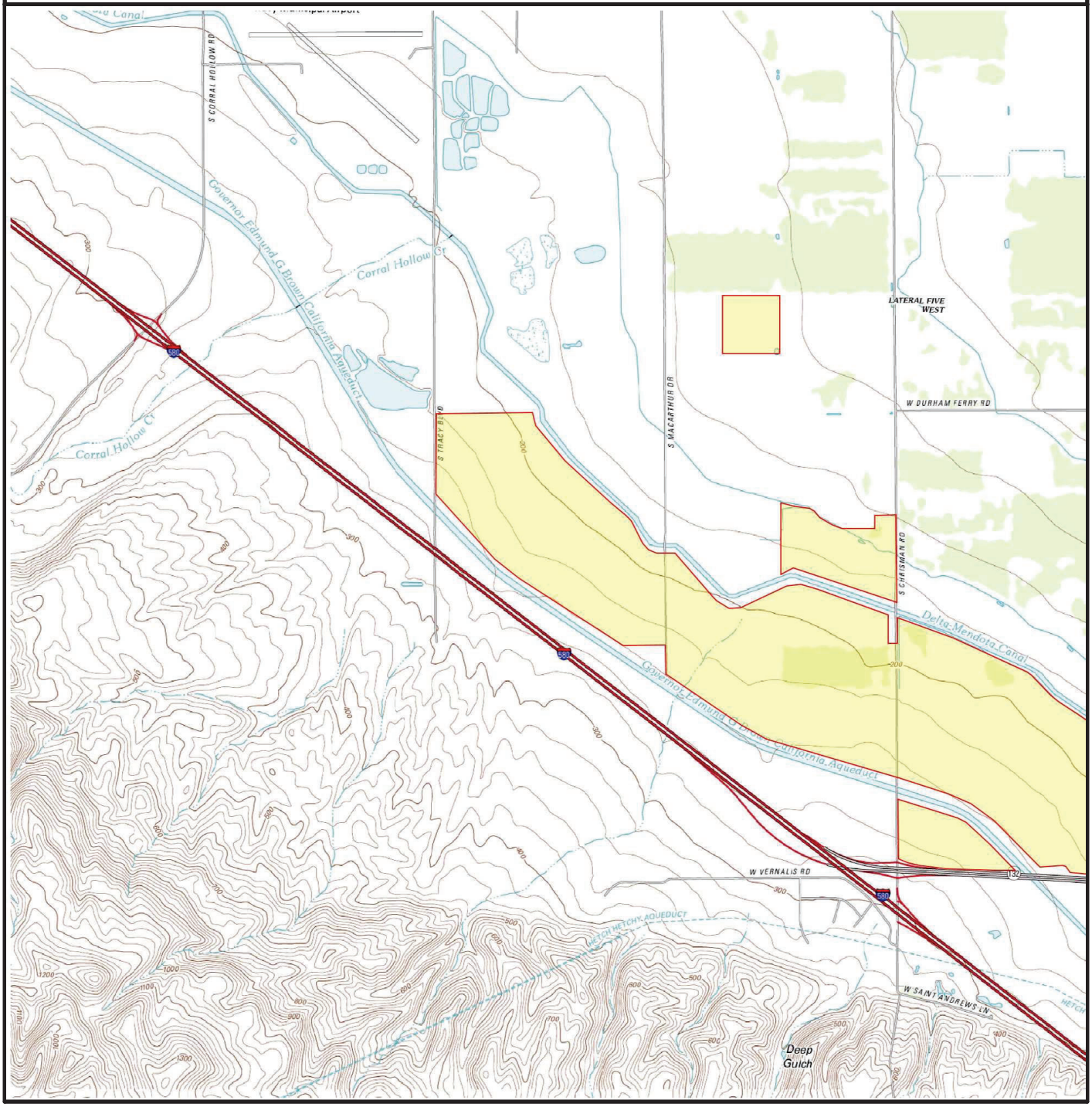

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME:	Tracy	MAP YEAR:	2012	REVISION YEAR:	N/R
SCALE:	1 : 24000	Part	2		

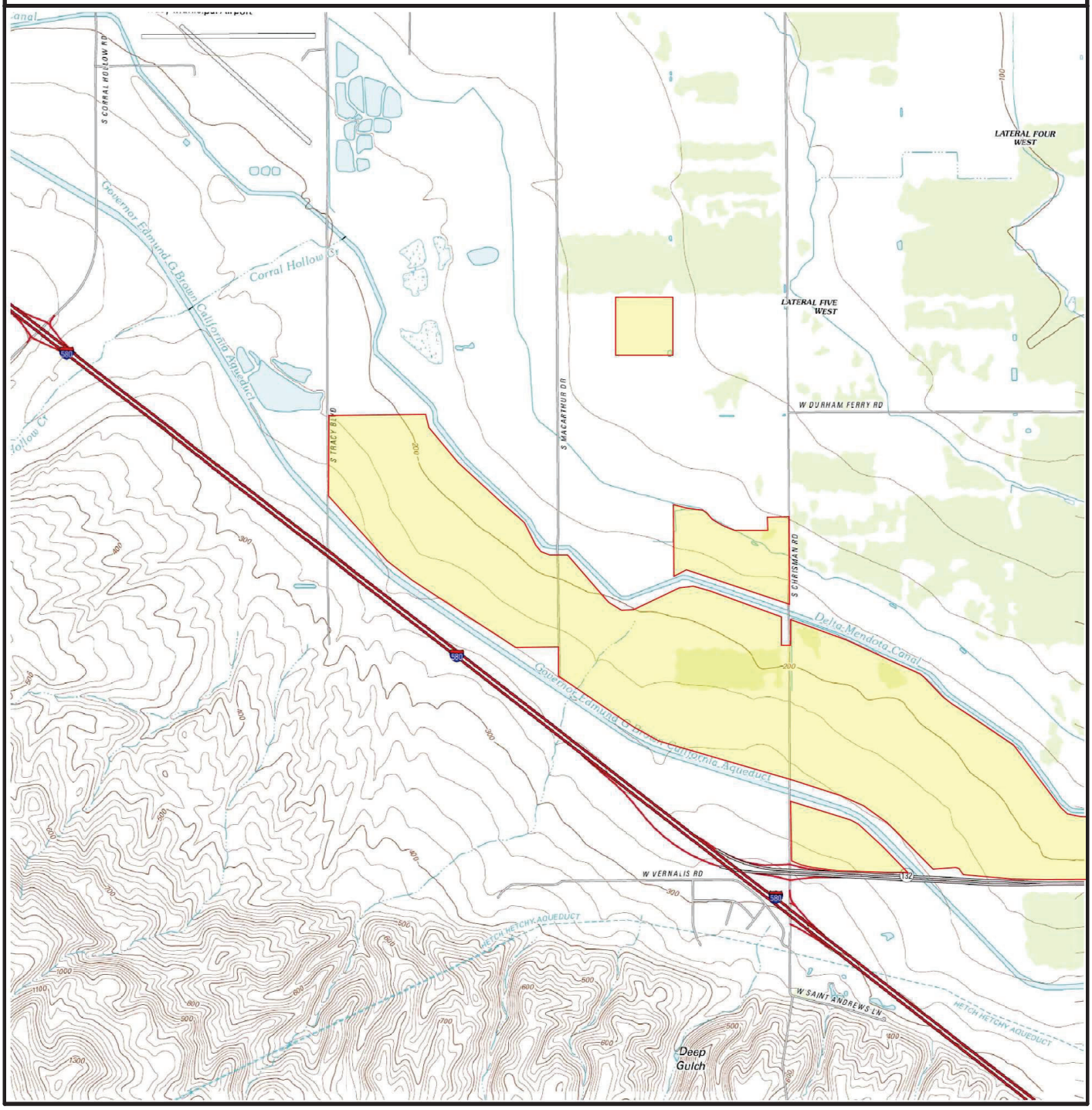

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 2012 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

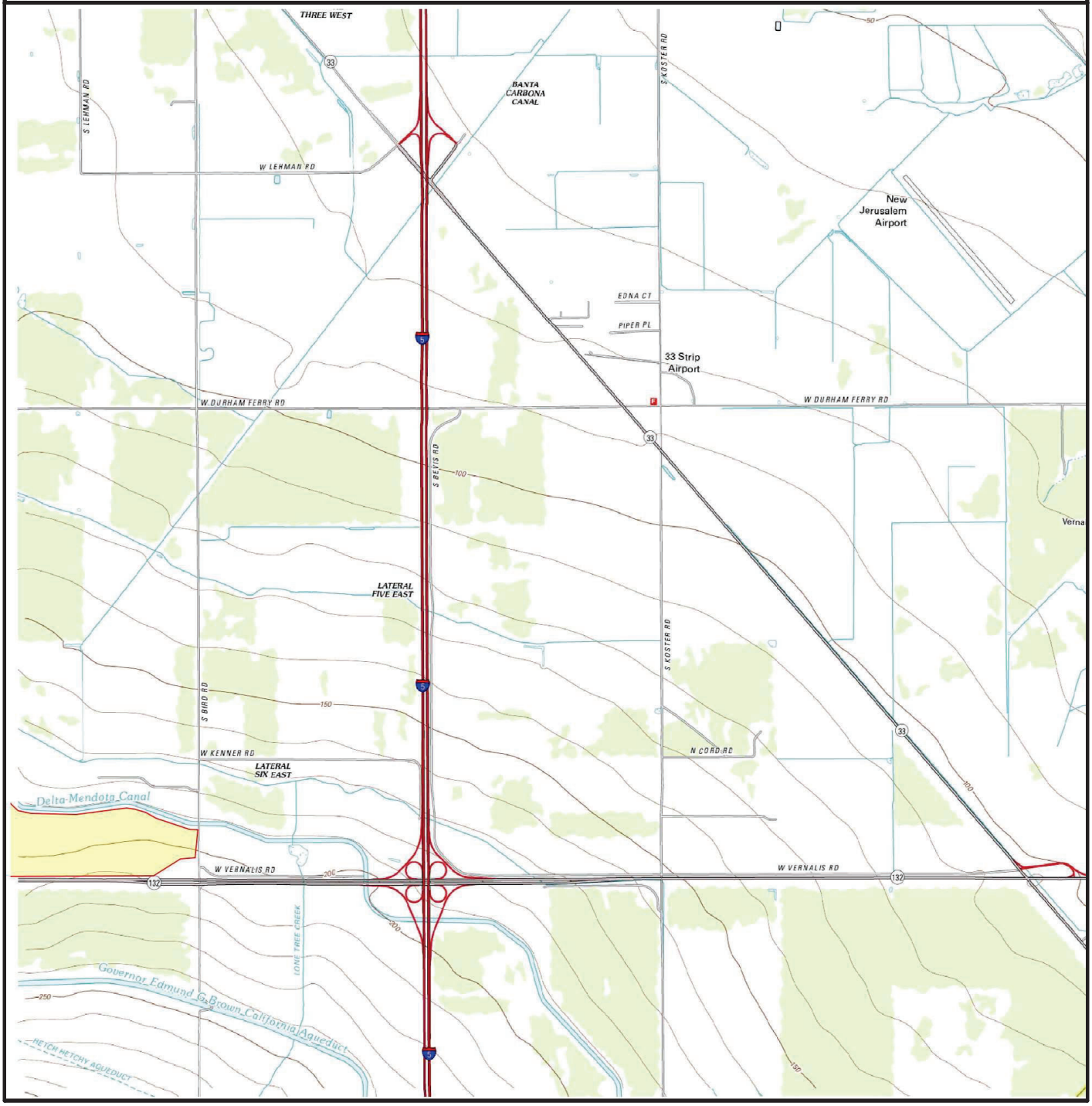

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 2015
REVISION YEAR: N/R
SCALE: 1 : 24000
Part 1

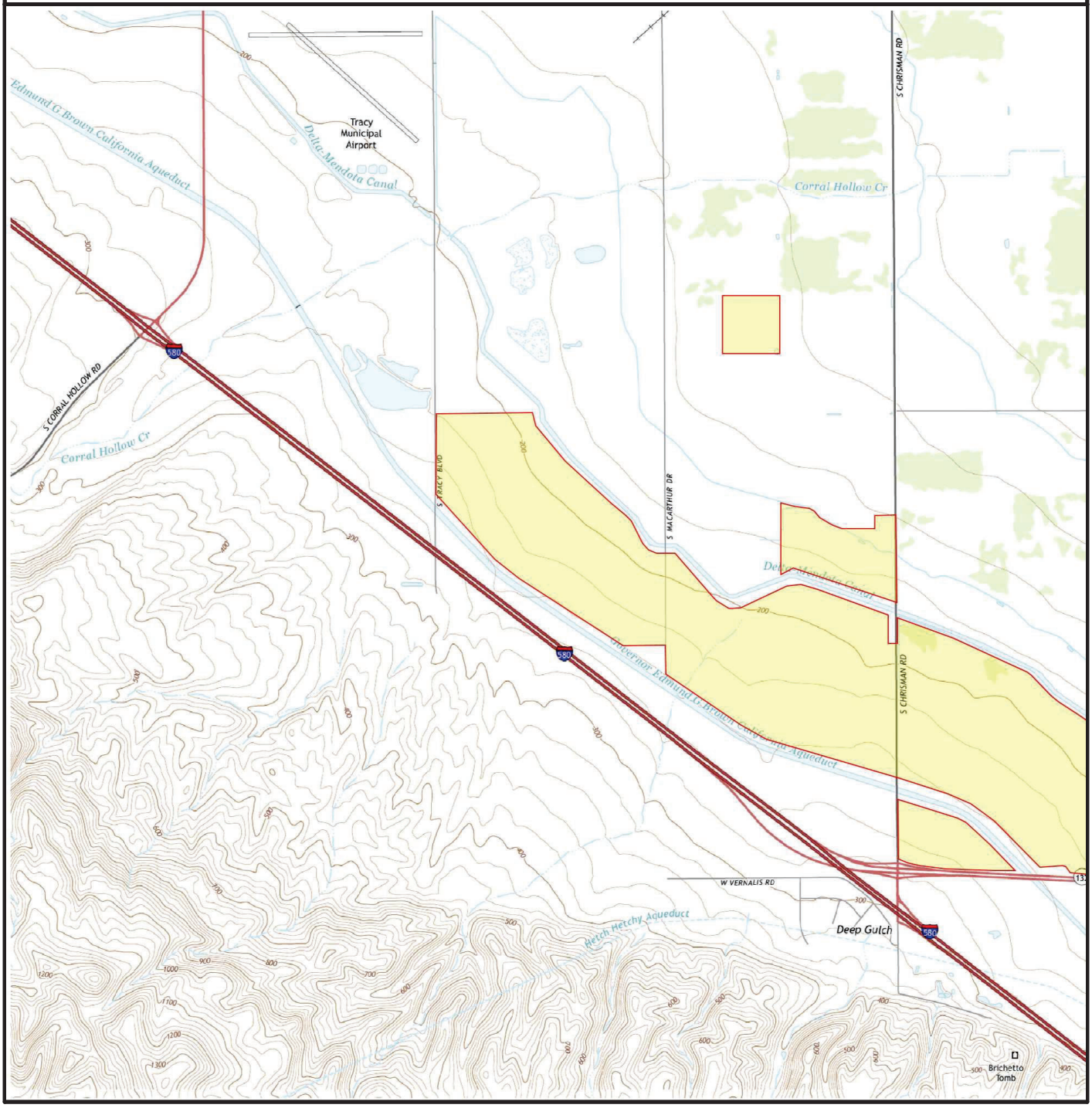

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 2015
REVISION YEAR: N/R
SCALE: 1 : 24000
Part 2

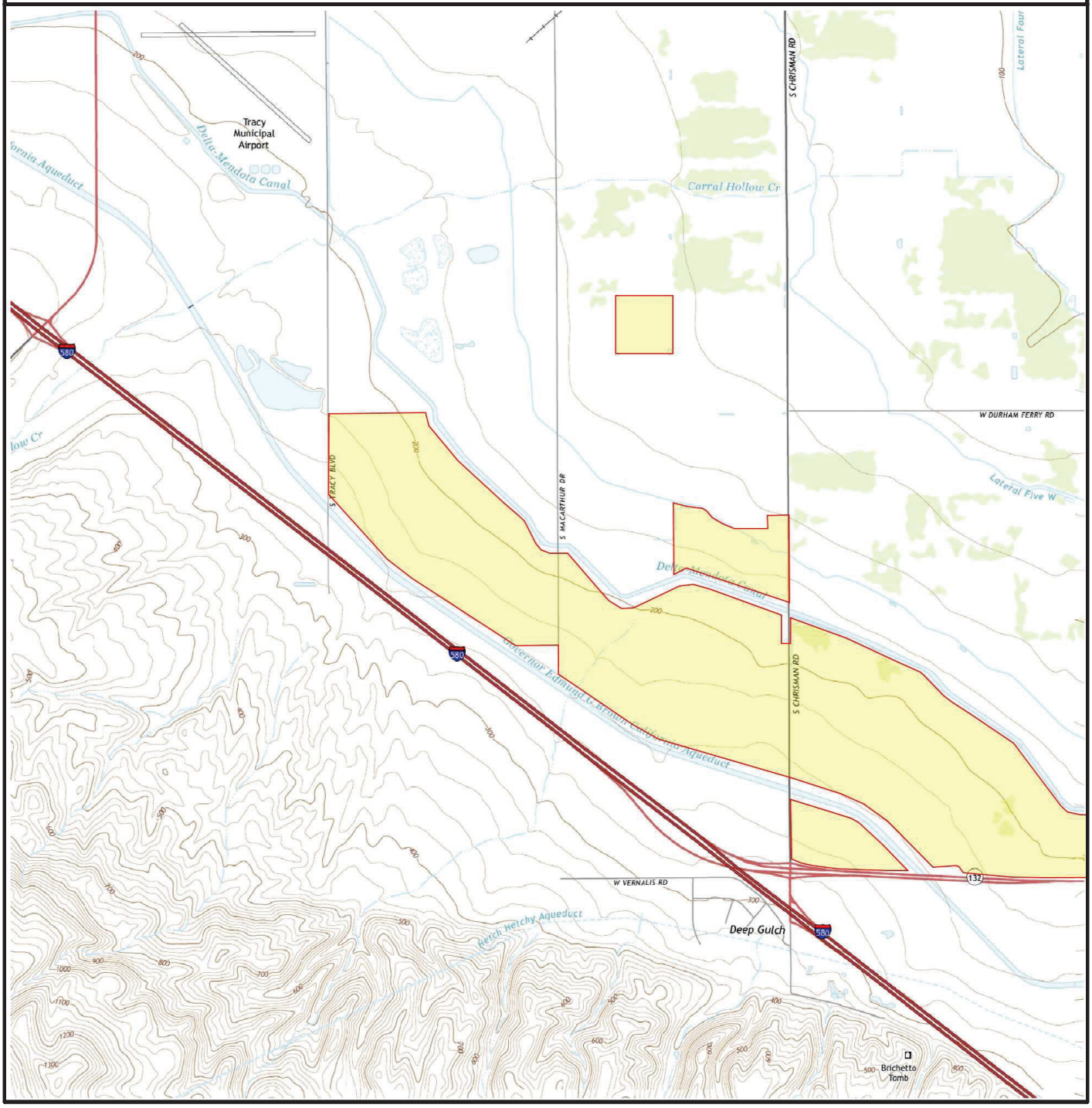

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 2015 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

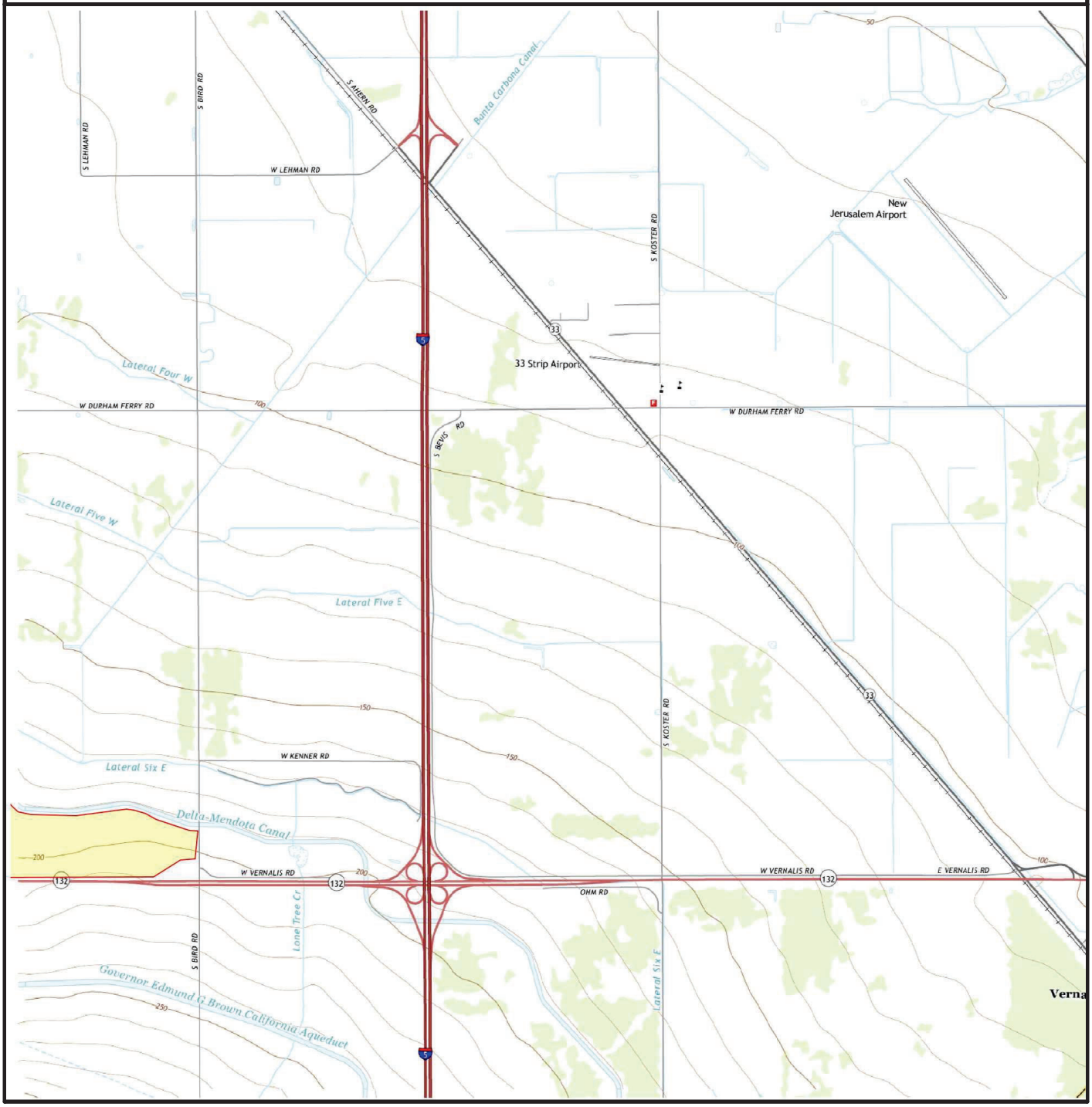

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy MAP YEAR: 2018 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

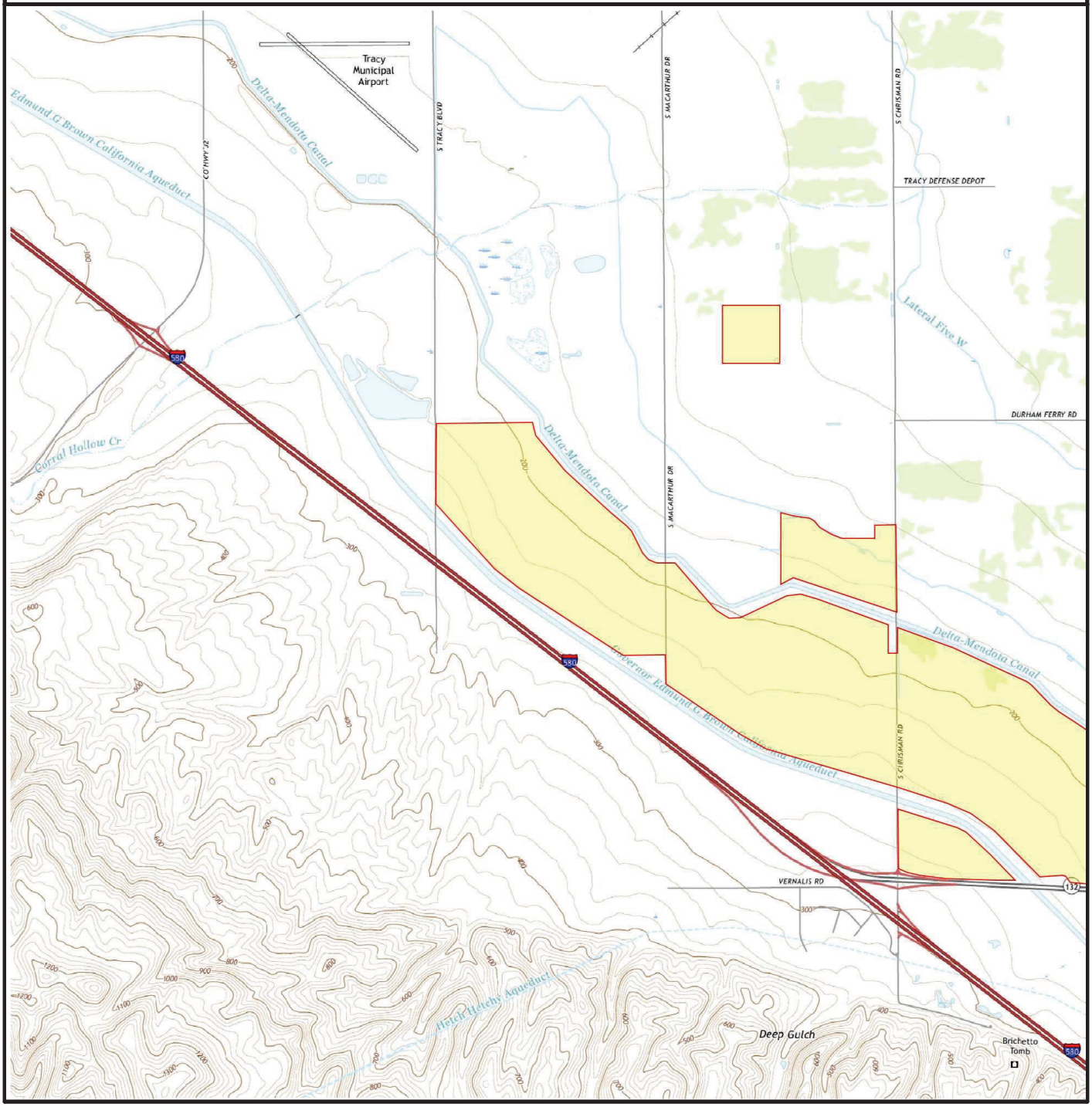

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy MAP YEAR: 2018 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 2

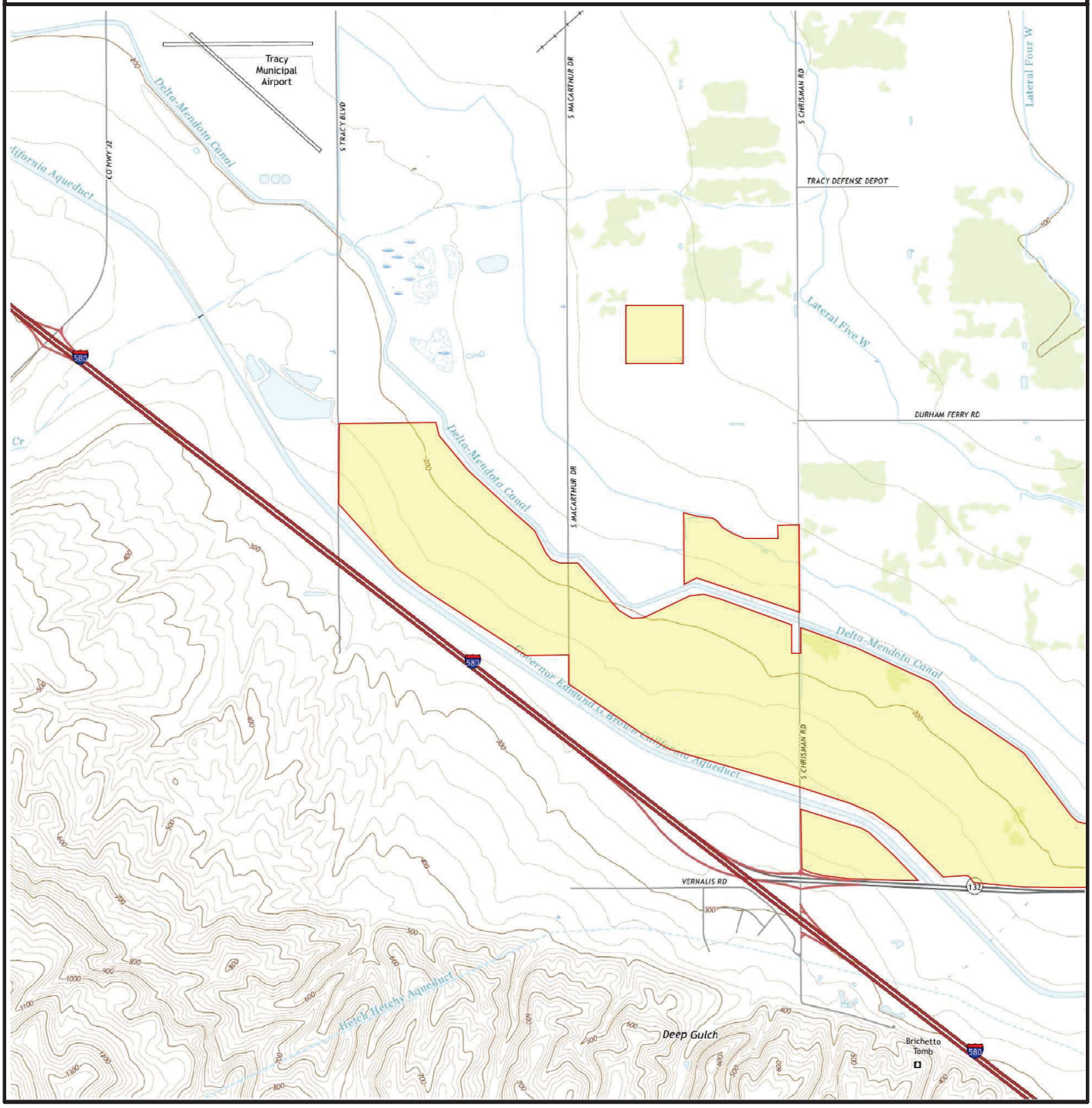

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 2018 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

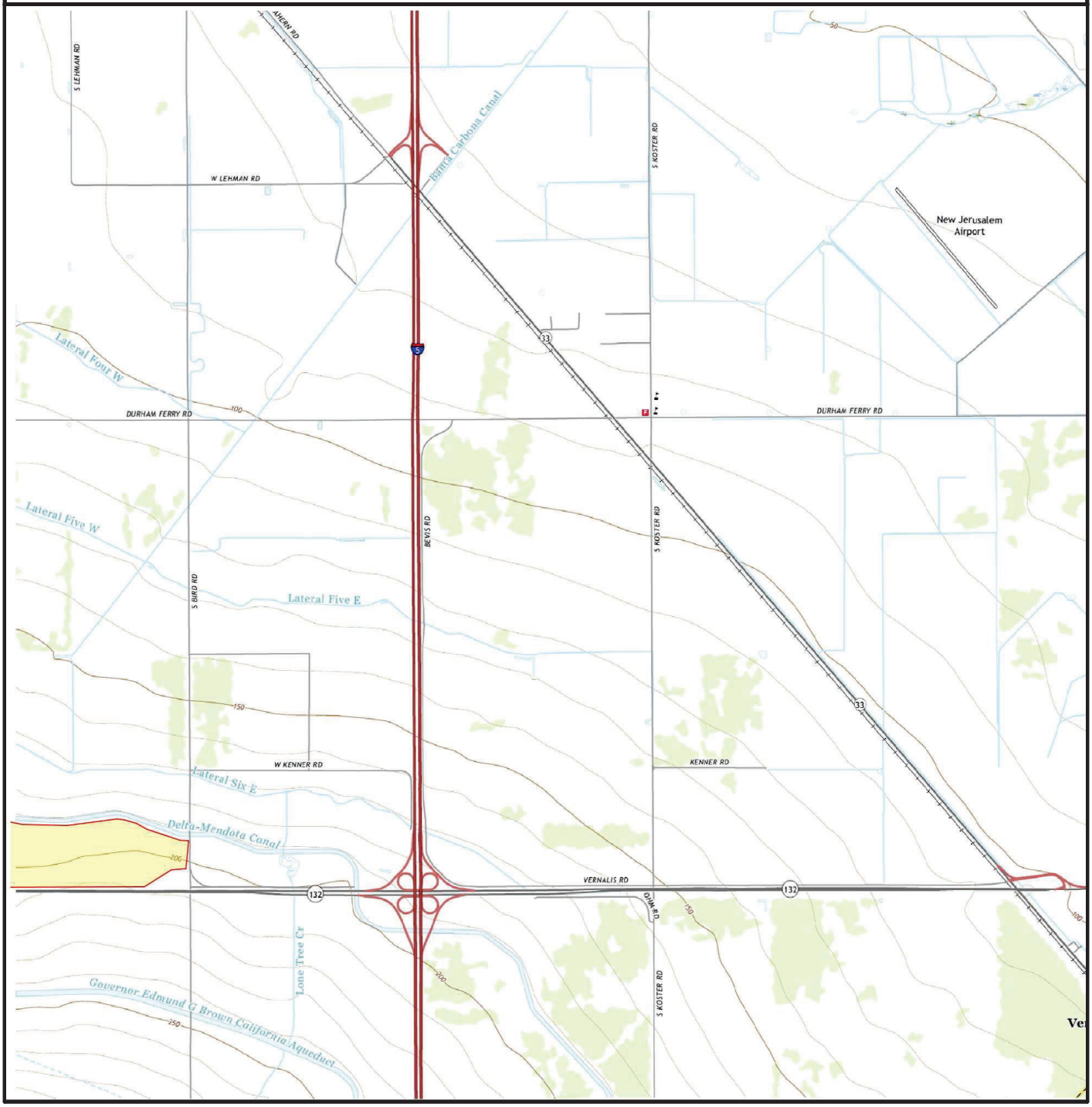

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 2021
REVISION YEAR: N/R
SCALE: 1 : 24000
Part 1

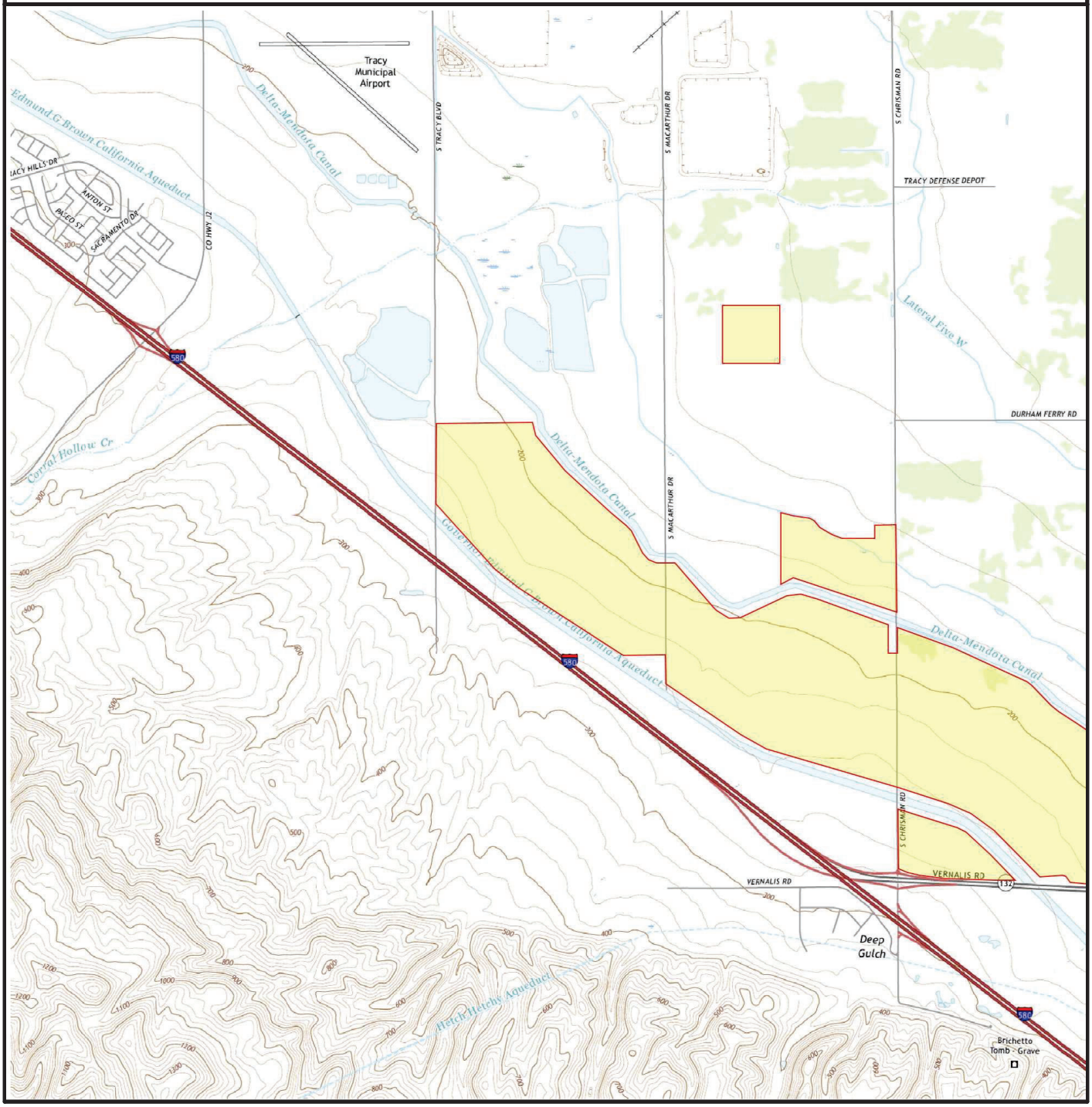

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Tracy
MAP YEAR: 2021
REVISION YEAR: N/R
SCALE: 1 : 24000
Part 2

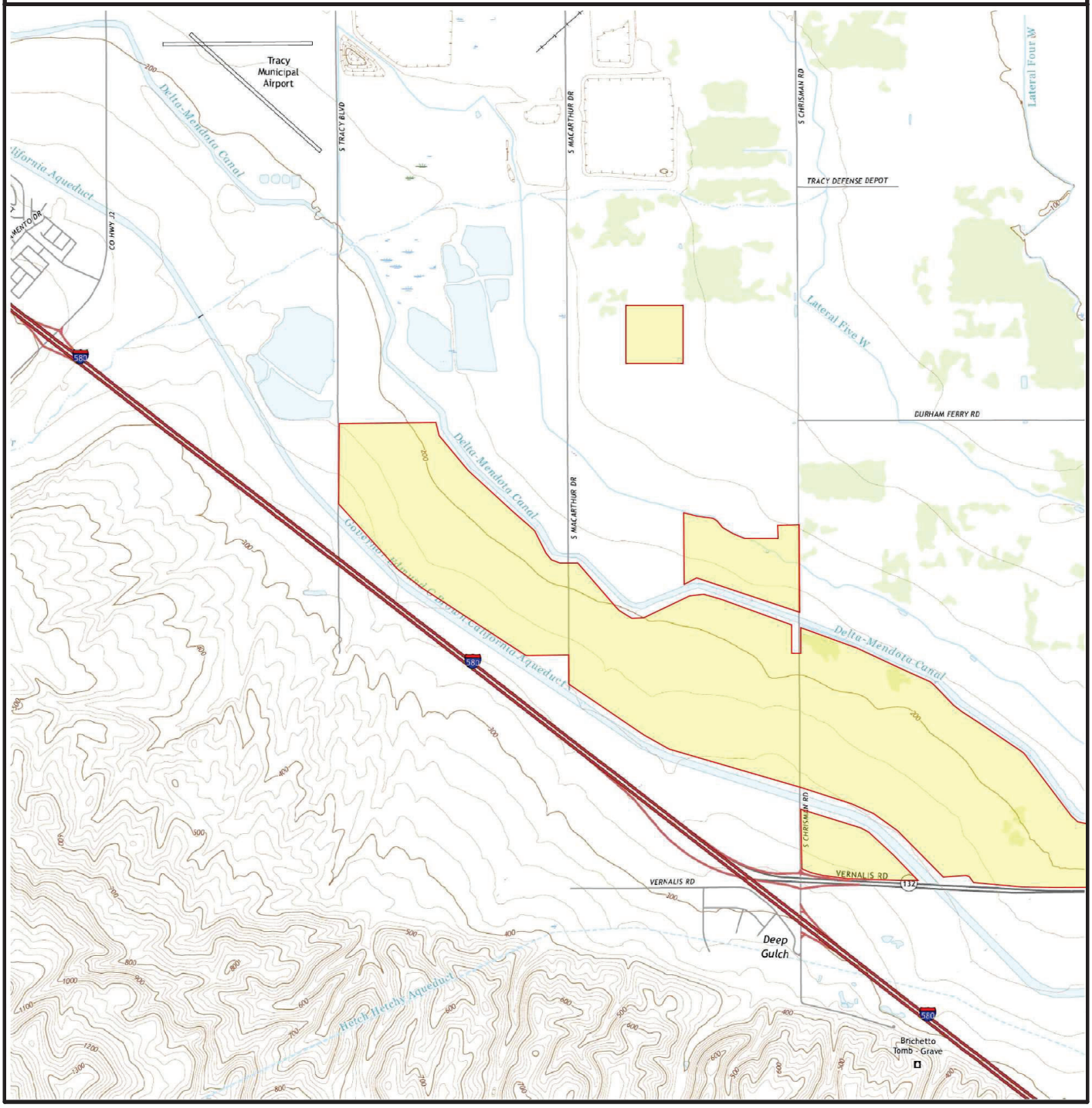

*Figure not OCR compatible

SUBJECT NAME: Basin
ADDRESS: S Tracy Blvd, Tracy, CA, 95304
LAT/LONG: 37.651076 / -121.401085

PREPARED FOR: Cameron-Cole - Pensacola
ORDER #: 104550
REPORT DATE: 01/08/2025

SUBJECT QUAD:

MAP NAME: Vernalis MAP YEAR: 2021 REVISION YEAR: N/R

SCALE: 1 : 24000 Part 1

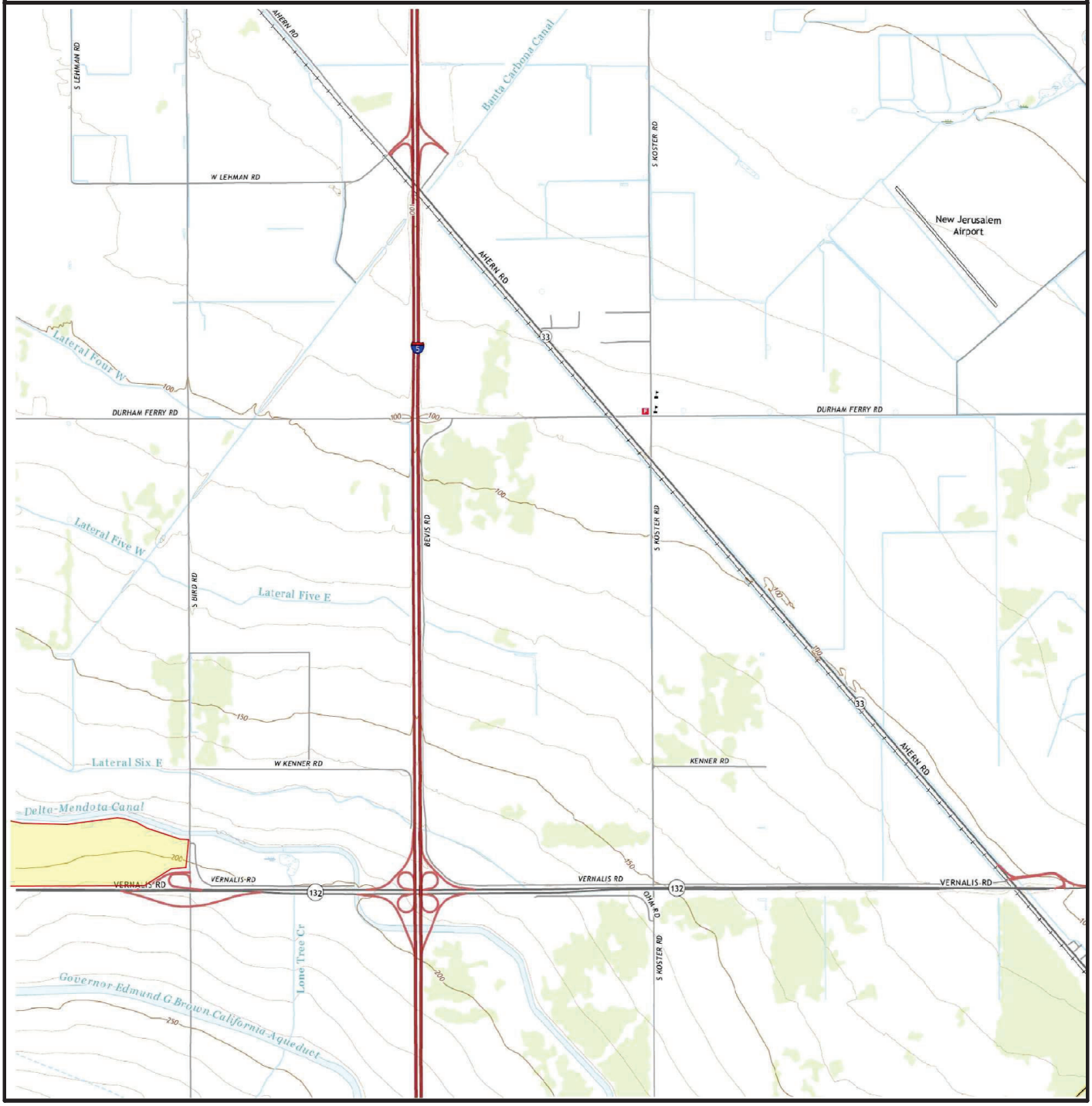

*Figure not OCR compatible

HIG Research Summary

Site Location
Basin
S Tracy Blvd
Tracy, CA

Requested by
Envirosite Corporation
56 Broome Corporate Parkway
Conklin, NY

HIG Project #
2088174
Client Project #
104550
Date Created
01/08/2025

Historical Information Gatherers

This Research Summary identifies the products and services provided by Historical Information Gatherers, Inc. (HIG) for the above referenced site location. All products are provided as PDFs unless otherwise noted.

FIM+ Maps

The HIG Historical Map Collection and the United States Library of Congress Map Collection were searched for fire insurance maps (FIMs), real estate atlases and similar maps for the site location and adjoining properties. No FIMs or similar maps were identified for the site location and/or adjoining properties.

Disclaimer & Limitation of Liability

This Research Summary and the related documents and images provided by Historical Information Gatherers (hereafter referred to as the "Site Specific HIG Data") contain information obtained from a variety of public and private sources. Additional information for the site and surrounding properties may exist. Accordingly, there can be no guaranty or warranty that the information provided is complete for its particular intended purpose. No warranty expressed or implied, is made whatsoever in connection with the Site Specific HIG Data. Historical Information Gatherers specifically disclaims the making of any such warranties, including without limitation, merchantability or fitness for a particular purpose. Historical Information Gatherers, its officers, employees and independent contractors cannot be held liable to anyone for any loss or damage, whether arising out of errors or omissions, negligence, accident or any other cause, resulting directly or indirectly from any information provided or any information not provided in the Site Specific HIG Data. Any liability on the part of Historical Information Gatherers is strictly limited to a refund equal to the amount paid for the Site Specific HIG Data.

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Fire Insurance Maps No Coverage Statement

Site Location
Basin
S Tracy Blvd
Tracy, CA

Requested by
Envirosite Corporation
56 Broome Corporate Parkway
Conklin, NY

HIG Project #
2088174
Client Project #
104550
Date Created
01/08/2025

Historical Information Gatherers

FIM+ Maps

The HIG Historical Map Collection and the United States Library of Congress Map Collection were searched for fire insurance maps (FIMs), real estate atlases and similar maps for the site location and adjoining properties. No FIMs or similar maps were identified for the site location and/or adjoining properties.

City Directory Report | 2025

Order Number: 104550

Report Generated: January 9, 2025

Basin

S Tracy Blvd
Tracy, CA 95304

56 Broome Corporate Parkway
Conklin, NY 13748

Toll Free: 866-211-2028
www.envirositecorp.com

Prepared for Envirosite Corporation By:

Property Archives

City Directory Report

Envirosite's Standard City Directory Report is a screening tool designed to assist in historical use determination of a subject property and adjacent properties. It includes a search of Property Archives digital datasets and national book collections including the Library of Congress and/or the Allen County Public Library at five year intervals or the closest available intervals.

RESEARCH SUMMARY:

The following research sources were consulted in the preparation of this report:

SOURCE:	***YEAR:***
Property Archives	2020, 2015, 2011, 2010, 2006, 2002, 2001, 1998, 1993
Tracy City Directory	1987, 1981, 1976, 1971, 1966, 1963, 1959

Property Archives is a proprietary and comprehensive dataset of over 1.5 billion commercial, industrial and residential records, business names and uses and occupant records for every city and town in the United States, from recent years to the early 1990s. Property Archives dataset is wholly owned and operated by Property Archives, LLC

This report was prepared by Property Archives, LLC for Envirosite Corporation

Property Archives

SUBJECT PROPERTY:

S Tracy Blvd , Tracy, CA 95304

ADJOINING PROPERTIES:

30100 - 34442 S MacArthur Dr, Tracy, CA

31000-32300 S Tracy Blvd, Tracy, CA 95304

Disclaimer - Copyright and Trademark Notice

All information contained in this report is based on data available from various public, government and other sources and are based upon the best data available from those sources. The information available in this report may be available from other sources and is not exclusive or the exclusive property of Property Archives, LLC

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2020 31000-32300 S Tracy Blvd, Tracy, CA 95304

JESSE RAMIREZ	31619 S Tracy Blvd
CIRCLE H KENNELS	31619 S TRACY BLVD
TRAVELING PONY PARTIES	31619 S TRACY BLVD
RICHARD POMBO	32221 S Tracy Blvd

2015 31000-32300 S Tracy Blvd, Tracy, CA 95304

CIRCLE H KENNELS	31619 S TRACY BLVD
TRAVELING PONY PARTIES	31619 S TRACY BLVD
BLANCA AGUILAR	31801 S TRACY BLVD
JOSE MARTINEZ	31801 S TRACY BLVD

2010 31000-32300 S Tracy Blvd, Tracy, CA 95304

MARJORIE LAYMON	31619 S TRACY BLVD
YVONNE LAYMON	31619 S TRACY BLVD
BLANCA AGUILAR	31801 S TRACY BLVD
MARIA AGUILAR	31801 S TRACY BLVD
MICHAEL RENTERIA	31809 S TRACY BLVD

2006 31000-32300 S Tracy Blvd, Tracy, CA 95304

Marjorie Laymon	31619 S TRACY BLVD
Yvonne Laymon	31619 S TRACY BLVD

2002 31000-32300 S Tracy Blvd, Tracy, CA 95304

Circle H Kennels	31619 S Tracy Blvd

1998 31000-32300 S Tracy Blvd, Tracy, CA 95304

Circle H Kennels	31619 S Tracy Bl

1993 31000-32300 S Tracy Blvd, Tracy, CA 95304

BERGERON LEO T	31809 S TRACY BLVD
BERGERON/DOROTHY A	31809 S TRACY BLVD

SOURCE: Tracy City Directory
STREET: 31000-32300 S Tracy Blvd, Tracy, CA 95304
YEAR: 1987
INFO: Address not listed (31000-32300).

SOURCE: Tracy City Directory
STREET: 31000-32300 S Tracy Blvd, Tracy, CA 95304
YEAR: 1981
INFO: Address not listed (31000-32300).

SOURCE: Tracy City Directory
STREET: 31000-32300 S Tracy Blvd, Tracy, CA 95304
YEAR: 1976
INFO: Address not listed (31000-32300).

SOURCE: Tracy City Directory
STREET: 31000-32300 S Tracy Blvd, Tracy, CA 95304
YEAR: 1971
INFO: Address not listed (31000-32300).

SOURCE: Tracy City Directory
STREET: 31000-32300 S Tracy Blvd, Tracy, CA 95304
YEAR: 1966
INFO: Address not listed (31000-32300).

SOURCE: Tracy City Directory
STREET: 31000-32300 S Tracy Blvd, Tracy, CA 95304
YEAR: 1963
INFO: Address not listed (31000-32300).

SOURCE: Tracy City Directory
STREET: 31000-32300 S Tracy Blvd, Tracy, CA 95304
YEAR: 1959
INFO: Address not listed (31000-32300).

2020: **S MacArthur Dr, Tracy, CA**

TRACY MATERIAL RECOVERY INC	30703 S MACARTHUR DR
WEST VALLEY DISPOSE RCYCLNG	30703 S MACARTHUR DR
WASTE TRANSFER INC	30703 S MACARTHUR DR

2015: **S MacArthur Dr, Tracy, CA**

TRACY MATERIAL RECOVERY INC	30703 S MACARTHUR DR
WASTE TRANSFER INC	30703 S MACARTHUR DR
WEST VALLEY DISPOSE & RCYCLNG	30703 S MACARTHUR DR

2011: **S MacArthur Dr, Tracy, CA**

Mike Repetto	30703 S MACARTHUR DR
Mike Repetto	30703 S MACARTHUR DR
ALICIA LOPEZ	30707 S MACARTHUR DR
CANDIDO LEON	30707 S MACARTHUR DR
LOPEZ LEON	30707 S MACARTHUR DR
MANUEL LOPEZ	30707 S MACARTHUR DR

2006: **S MacArthur Dr, Tracy, CA**

Mike Repetto	30703 S MACARTHUR DR
Mike Repetto	30703 S MACARTHUR DR
Henry Shea	30707 S Macarthur Dr

2001: **S MacArthur Dr, Tracy, CA**

Henry Shea	30707 S Macarthur Dr
William H Wheelus	32932 S Macarthur Dr

1998: **S MacArthur Dr, Tracy, CA**

Tracy Material Recovery & Solid Waste Transfer Inc	30703 S Macarthur Dr
Henry Shea	30707 S Macarthur Dr

1993: **S MacArthur Dr, Tracy, CA**

SHEA HENRY	30707 S MACARTHUR DR
FRANCO ARTHUR E	32932 S MACARTHUR DR

SOURCE: Tracy City Directory
STREET: S MacArthur Dr, Tracy, CA
YEAR: 1987
INFO: Address not listed (30100-34442).

SOURCE: Tracy City Directory
STREET: S MacArthur Dr, Tracy, CA
YEAR: 1981
INFO: Address not listed (30100-34442).

SOURCE: Tracy City Directory
STREET: S MacArthur Dr, Tracy, CA
YEAR: 1976
INFO: Address not listed (30100-34442).

SOURCE: Tracy City Directory
STREET: S MacArthur Dr, Tracy, CA
YEAR: 1971
INFO: Address not listed (30100-34442).

SOURCE: Tracy City Directory
STREET: S MacArthur Dr, Tracy, CA
YEAR: 1966
INFO: Address not listed (30100-34442).

SOURCE: Tracy City Directory
STREET: S MacArthur Dr, Tracy, CA
YEAR: 1963
INFO: Address not listed (30100-34442).

SOURCE: Tracy City Directory
STREET: S MacArthur Dr, Tracy, CA
YEAR: 1959
INFO: Address not listed (30100-34442).

U.S. Fish and Wildlife Service
National Wetlands Inventory

National Wetlands Inventory - Tracy CA



January 29, 2025

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

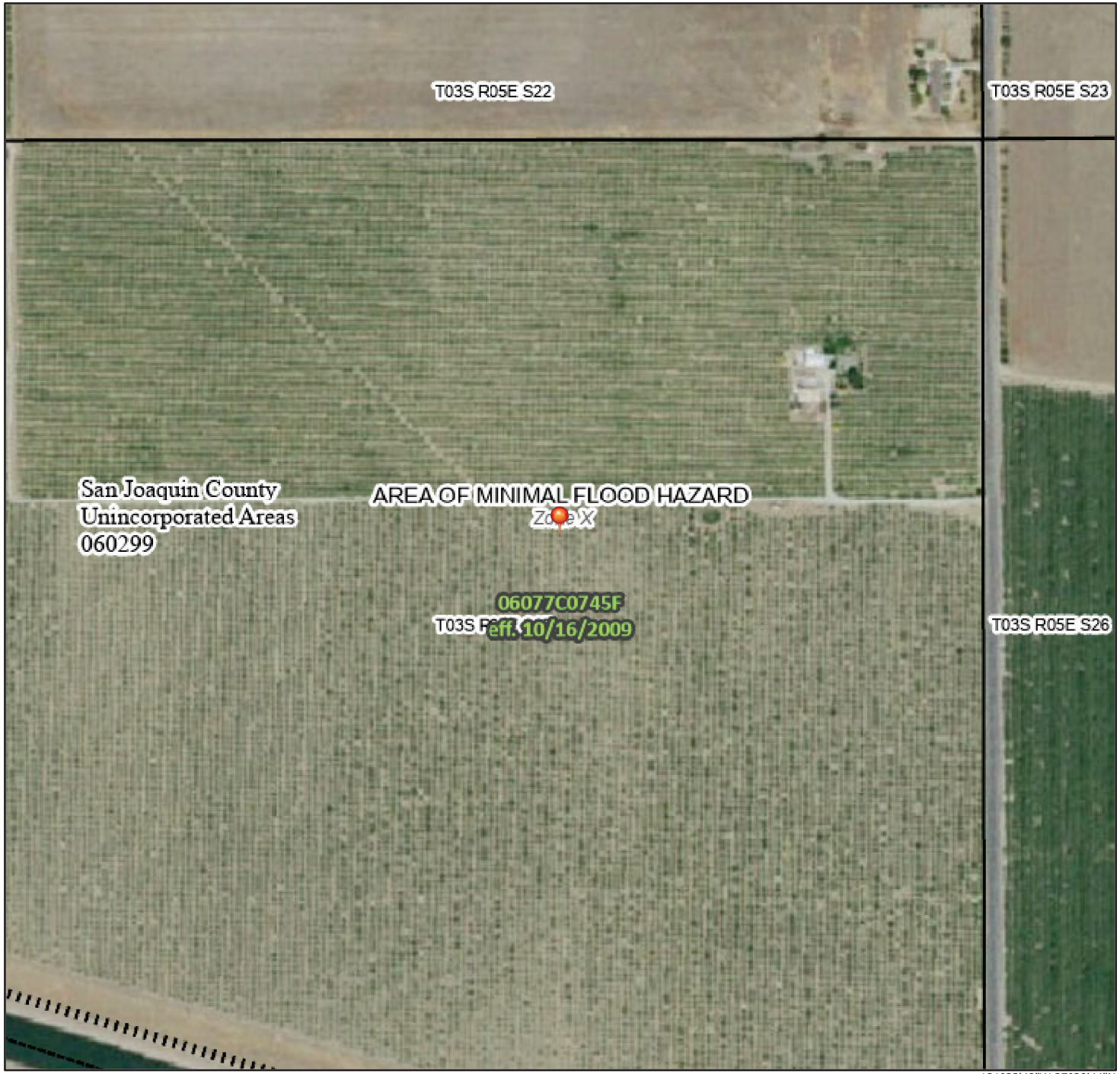
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

*Figure not OCR compatible

National Flood Hazard Layer FIRMette

FEMA

121°24'25"W 37°39'13"N



121°23'48"W 37°38'44"N

Feet

0 250 500 1,000 1,500 2,000

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

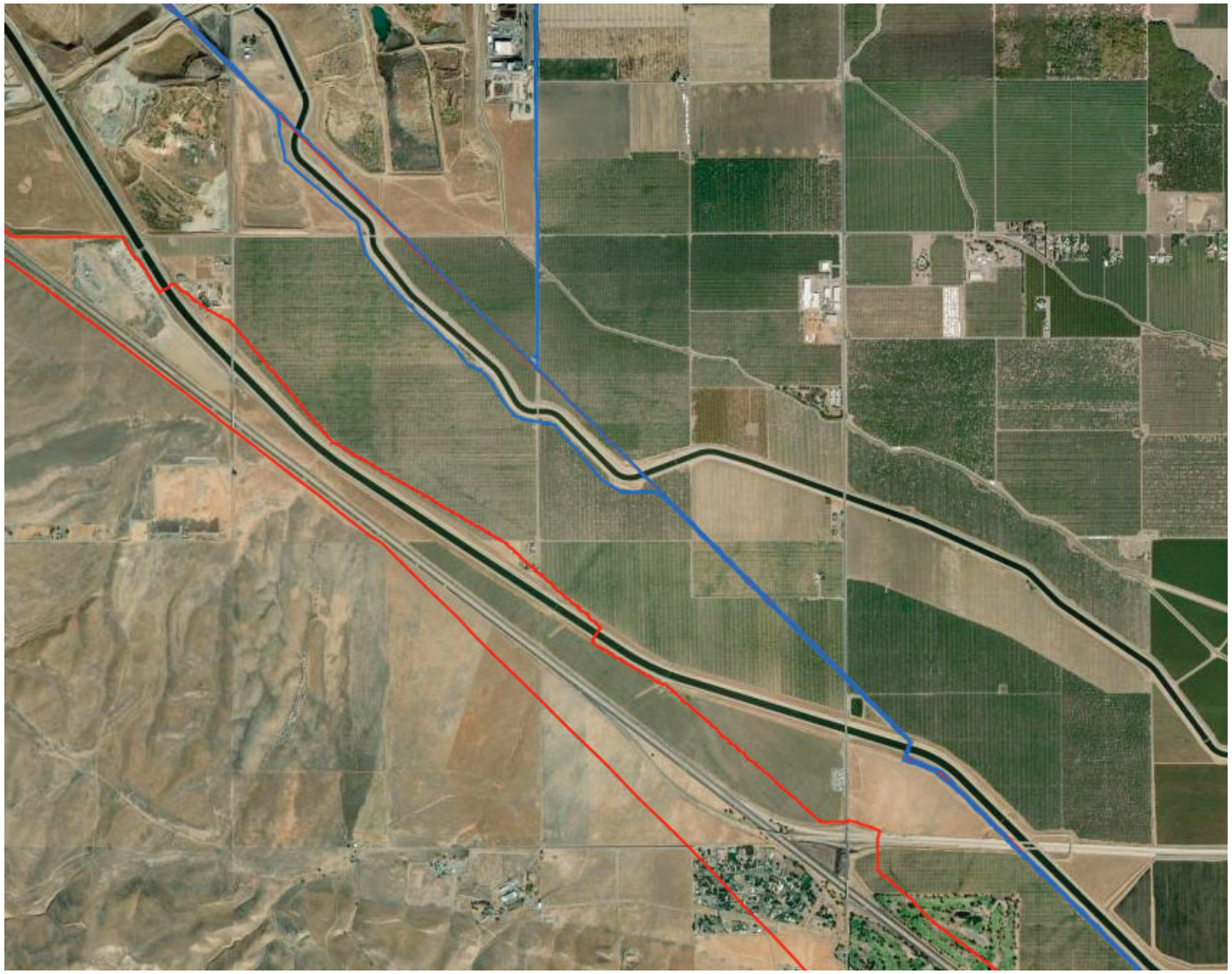
The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/29/2025 at 4:12 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

*Figure not OCR compatible

Pipeline and Hazardous Materials Safety Administration

NATIONAL PIPELINE MAPPING SYSTEM



Legend

- Gas Transmission Pipelines
- Hazardous Liquid Pipelines

500 m
1000 ft

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

Questions regarding this map or its contents can be directed to npms@dot.gov.

Projection: Geographic

Datum: NAD83

Map produced by the Public Viewer application at www.npms.phmsa.dot.gov

World Imagery map service data is attributed to Esri, Maxar, Earthstar Geographics, and the GIS User Community.

Date Printed: Jan 28, 2025

811 Know what's below. Call before you dig

Appendix E:
Interview Documentation

Interview with User Representative

Date: January 8, 2025

Name: Mr. Kolten Booher

Title: Associate, Affinius Capital

Interviewed by: Matthew Allen, MS, Environmental Scientist II, Cameron-Cole, LLC

Mr. Kolten Booher, Associate with Affinius Capital, indicated via a completed User Questionnaire that he is not aware of any AULs, such as engineering controls, land use restrictions, or institutional controls, that have been filed or recorded in connection with the subject property. Mr. Booher indicated he does not possess any specialized knowledge or experience regarding the subject property. Mr. Booher was asked to provide any commonly known or reasonably ascertainable information within the local community that would be material to identifying RECs in connection with the subject property. Mr. Booher indicated he was aware of the previous use of the subject property as agricultural land for almond farming. Mr. Booher indicated he was aware of fertilizers used in agricultural on the subject property and that he is not aware of any previous spills or releases on the property that required environmental cleanup. Mr. Booher indicated he has no reason to believe that the purchase price for the property has been reduced in comparison with the fair market value due to contamination known or believed to be present at the property. Mr. Booher indicated via a User Questionnaire completed on January 8, 2025, that the reason for performing the Phase I ESA is to satisfy one of the requirements for the innocent landowner defense under CERCLA and/or to understand potential environmental conditions that could materially impact the operations of the business associated with the parcel of commercial real estate.

Interview with Key Site Manager

Date: January 20, 2025

Name: Ms. Siva Saini

Title: Property Owner Representative

Interviewed by: Matthew Allen, MS, Environmental Scientist II, Cameron-Cole, LLC

The identified Key Site Manager and property owner representative, Ms. Siva Saini, indicated via a completed Pre-Site Questionnaire that he was not aware of any previous ESAs, compliance audits, geotechnical studies, or registrations for underground or aboveground tank associated with the subject property. Ms. Saini did indicate he was aware of a septic tank located on the subject property, and that electrical and water services are provided by PG&E, and the Del Puerto Water District. Ms. Saini indicated he is aware of hazardous materials used on the subject property, including agricultural chemical sprays such as pesticides and herbicides. Ms. Saini indicated he is not aware of any pending or past violations, environmental issues, spills, or other environmental concerns associated with the subject property.

Date: January 10, 2025

Name: Mr. Branden Mendes

Title: Operations Manager, A.B. Fab. Inc.

Interviewed by: Ryan Barry, Environmental Scientist II, Cameron-Cole, LLC

Mr. Branden Mendes, Operations Manager with A.B. Fab, Inc., completed a Pre-Site Questionnaire during the site reconnaissance on January 10, 2025. Mr. Mendes indicated he is aware of previous ESAs that were completed for the facility as well as permits that have been regularly maintained. Mr. Mendes indicated he is not aware of registrations for underground or aboveground tanks associated with the subject property. Mr. Mendes indicated he is aware of a septic tank located on the subject property, and that electrical and water service are provided by PG&E, and the Del Puerto Water District. Mr. Mendes indicated he is aware of compressor oil, motor oil, WD-40, diesel fuel, hydraulic fluid, waste oil, and fire suppression water tanks located on the property associated with facility operations.

Interview with Local Officials

Date: January 24, 2025

Name: San Joaquin County Fire Authority

Title: N/A

Interviewed by: Matthew Allen, MS, Environmental Scientist II, Cameron-Cole, LLC

Cameron-Cole contacted the San Joaquin County Fire Authority on January 24, 2025, requesting records pertaining to fires or responses to incidents, spills, or releases of hazardous substances or petroleum products associated with the property. A response was not received within the time frame for completion of this report.

Date: January 24, 2025

Name: San Joaquin County Health Services Agency

Title: N/A

Interviewed by: Matthew Allen, MS, Environmental Scientist II, Cameron-Cole, LLC

Cameron-Cole contacted the San Joaquin County Public Health Services Agency via email on January 24, 2025, for records pertaining to the registration, use, storage, or handling of hazardous substances or petroleum products, including storage tanks or any other environmental concerns associated with the property or in the immediate vicinity of the property. A response was not received within the time frame for completion of this report.

Date: January 24, 2025

Name: California Office of Environmental Health Hazard Assessment

Title: N/A

Interviewed by: Matthew Allen, MS, Environmental Scientist II, Cameron-Cole, LLC

Cameron-Cole contacted the California OEHHA via email on January 24, 2025 requesting records regarding the registration, use, storage, or handling or hazardous substances or petroleum products, including storage tanks or any other environmental concerns, associated with the property. A response received indicated this department does not have any records for the subject property.

Appendix F:
Professional Qualifications

Qualifications of Professionals

Matthew Allen, MS, Environmental Scientist II

Mr. Allen graduated from the University of West Florida where he completed studies in biology, chemistry, geography, and hydrology. Mr. Allen supports Cameron-Cole's Real Estate Support Services group by conducting Phase I ESAs in accordance with ASTM International Standard E1527-21 and 40 CFR 312, All Appropriate Inquiry. He has experience in conducting various elements of site assessment, including monitoring well installation, soil borings, and the collection of soil and groundwater samples for laboratory analysis. His project management responsibilities include assisting with development of proposals, project scheduling, regulatory agency notification, client coordination, and preparing technical reports for submittal to regulatory agencies.

Education:
- MS Environment Science, University of West Florida, Pensacola, FL, 2022
- BS Environmental Management/Science, University of West Florida, Pensacola, FL, 2019

Certification: 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) Training

John H. Bondurant, MBA, Vice President & Director

Mr. Bondurant serves as Director and Vice President of Cameron-Cole and has more than 30 years of professional experience as an environmental consultant. As a Director, he is responsible for managing teams of EPs, which execute a diverse portfolio of environmental permitting, assessment, and remediation projects. Mr. Bondurant has broad experience with brownfields redevelopment, environmental compliance, permitting, and risk management consulting. Mr. Bondurant also currently serves as a Principal Level EP overseeing Cameron-Cole's National Real Estate Support Services practice, which provides environmental due diligence, and risk management support to clients throughout the US. He has extensive experience in performance of Phase I and Phase II ESAs prepared in accordance with the ASTM International Standard Practice and 40 CFR 312 All Appropriate Inquiry. He has conducted or supervised subsurface investigations at hundreds of contaminated properties throughout the country with an emphasis in Florida. He also has extensive experience with redevelopment of environmentally impaired properties, including management of construction and remediation projects from initial assessment through regulatory closure and site redevelopment.

Education:
- BS Biology, Spring Hill College, Mobile, Alabama 1986
- BS Chemistry, University of West Florida, Pensacola, Florida 1989
- MBA Finance, University of West Florida, Pensacola, Florida 1999

Certifications:
- Master Level Certified Hazardous Materials Manager, CHMM No. 6981 (Inactive)
- 40-hour HAZWOPER Training
- 8-hour HAZWOPER Refresher(s)
- Level I Anti-Terrorism Training
- Current Operations Security Awareness Training

Affiliations

- American Chemical Society—Division of Environmental Chemistry
- Air & Waste Management Association
- Florida Association of Environmental Professionals
- Environmental Bankers Association

Appendix K

WATER SUPPLY ASSESSMENT

PACIFIC GATEWAY

SAN JOAQUIN COUNTY, CALIFORNIA

August 2025



TODD GROUNDWATER

1301 Marina Village Parkway, Suite 320
Alameda, CA 94501
510.747.6920
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1. INTRODUCTION

This Water Supply Assessment (WSA) was prepared for the Pacific Gateway project (Project), proposed for an unincorporated area in southwest San Joaquin County near the City of Tracy (**Figure 1**). The land is currently used for agriculture, including vineyards and almond and cherry orchards and two agricultural processing and manufacturing facilities. The Project site is outside the city limits of Tracy but partially within its planning area. The Project will comprise a 1,577-acre mixed-use logistics hub with five districts (**Figure 2**). These will include a university campus, industrial buildings, Veterans of Foreign Wars (VFW) post, business park, retail commercial areas, and parks. The proposed Project will be developed in phases. The initial phase will include buildings totaling 3,998,500 square feet of industrial, the VFW post, and a university.

A Specific Plan for the Pacific Gateway Project has been developed to guide the land use planning (Ridgeline, 2024). As part of the Environmental Impact Report (EIR) for the Specific Plan, a WSA is required to assess the adequacy of water supply for the proposed demand. The Project is located near County Service Area 16 (CSA-16), and it is possible the Project could be added to the service area of CSA-16, which would entail delivery of surface water to existing uses within CSA-16 that are currently served by groundwater. As a result, this WSA considers supply and demand for the proposed Project as well as existing uses within CSA-16. The discussion of the Project site includes, where relevant, the current geographic boundary of CSA-16.

This WSA provides technical support to the County of San Joaquin (County), the lead agency, in complying with the California Environmental Quality Act (CEQA) and developing an EIR for the Project. The WSA focuses on the availability of sustainable water supply for the proposed Project. The property currently uses surface water deliveries from two irrigation districts and groundwater from wells. The new development is planning to secure surface water as the primary supply source, with recycled water for irrigation purposes, and new wells to supplement supply as needed.

1.1. BACKGROUND

The California Water Code Section 10910 (also termed Senate Bill 610 or SB610) requires that a Water Supply Assessment (WSA) be prepared for a project that is subject to the California Environmental Quality Act (CEQA) and is considered a project subject to SB610 as defined in Water Code Section 10912. Under the California Water Code Section 10912, a residential or commercial "project" includes the following:

- A proposed residential development of more than 500 dwelling units
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space
- A mixed-use project that includes one or more of the projects specified in Section 10912
- A project that would demand an amount of water equal to, or greater than, the amount of water required by a 500-dwelling unit project.

The Pacific Gateway Project includes approximately 26,307,150 square feet of floor space and therefore a WSA is required for this Project.

1.2. PURPOSE AND ORGANIZATION

The purpose of this WSA is to document the current water demand of the Project site, including demands at CSA-16, and the projected demand for the Project (including demand at CSA-16) and to summarize the area's supply, including that of the proposed Project. This comparison, conducted for both normal and drought conditions in five-year increments to 2050, is the basis for an assessment of water supply sufficiency in accordance with California Water Code Section 10910 (SB610).

The WSA incorporates current and future water supply and demand information from the City of Tracy 2020 Urban Water Management Plan (UWMP), Groundwater Sustainability Plans (GSPs), and other available regional documents regarding water supplies, current water use, and estimated water use of the Project. The analysis extends to 2050, addresses water demands in five-year increments, and provides information consistent with SB610 WSA requirements.

This WSA is organized to be easily read and understood, as follows:

- Section 1 introduces the Project and provides background information.
- Section 2 focuses on the current and proposed water demands of the Project that is the subject of this WSA.
- Section 3 documents the proposed Project water supply and the area's existing and future supplies.
- Section 4 contains a comparison of water supply and demand (in normal and drought years) that fulfills the intent of SB610.
- Section 5 summarizes the WSA conclusions.

2. WATER DEMANDS

This section addresses water demands for the existing property and presents water demand estimates for the proposed Project, along with the area's current and projected demands. While this WSA assumes that the existing demand for CSA-16 will continue to be met with existing groundwater pumping, there is a potential that surface water secured by the proposed Project could be used to offset the existing groundwater pumping for CSA-16. The residential and irrigation demands for these existing uses are presented in the future water demand tables for reference.

2.1. CLIMATE

Climate has a considerable influence on water demand on a seasonal and annual basis and is regularly tracked and reported in UWMPs, among other documents. Climate change effects also are identified.

Climate data are available from the Western Regional Climate Center (WRCC) station, Tracy Carbona (048999). Average annual precipitation in the area from 1950-2022 was approximately 10.15 inches (WRCC, 2023). Evapotranspiration (ETo) data are available from the California Irrigation Management Information System (CIMIS) at the nearby Modesto station #71 (CIMIS 2023). **Table 1** summarizes representative climate data from the WRCC and CIMIS, including average monthly and annual rainfall, temperature, and ETo. The groundwater basin recently experienced several years of drought; for the years 2018-2022, the average precipitation was only 6.5 inches compared to the 10.15 inches recorded as the long-term average.

In addition to short-term variability, climate change affects global and local climate patterns. The City of Tracy has a Local Hazard Mitigation Plan (Wood, 2019a) to assess and respond to droughts. The City views groundwater sustainability as key to having a reliable water supply during future droughts.

2.2. POPULATION

Current and projected population estimates are a key factor in the projected water demand of a region. Population projections for the Tracy Planning Area are shown in **Table 2**. While the planning area does not encompass the entire Project area, the table illustrates general regional trends. These estimates are from the Tracy UWMP 2020 which in turn relied on the methodology in the Wastewater Master Plan (Carollo, 2021). The projected population at buildout (assumed to be in 2045) was based on assumptions about the number of dwelling units for each development and planning area, the number of people expected per residential unit, and possible employment growth. The Project proposes to include 1,600 dormitory beds for university students to reside on campus. The projected population growth of the project is shown in **Table 2**.

2.3. CURRENT SITE WATER USE

The Project site currently is used for agricultural purposes, including almond and cherry orchards, and two agricultural processing and manufacturing facilities. The 1,577 acres of existing agriculture currently rely on groundwater wells and on surface water deliveries from two irrigation districts. The current agricultural operator estimates that irrigation is applied at the rate of 3.0 to 3.5 acre-feet per acre per year and has provided estimates of groundwater pumping and measured surface water deliveries. This WSA assumes 3.0 AF/Ac. Groundwater pumping is not metered and this a reasonable estimate based on the expected consumptive use of the crop, applied surface water, and irrigation efficiency. **Table 3** shows the existing water demand by assessor's parcel (APN) with the estimated groundwater pumping subdivided by groundwater basin and the surface water deliveries defined by irrigation district. Surface water deliveries were provided by the current landowner. The estimated average existing water demand is 4,538 AFY. The water demand of Par County Estates and Hillside Greens (CSA-16) also is listed.

The irrigation estimate was verified independently using OpenET, a publicly available tool to map satellite-based evapotranspiration (ET) data for agricultural parcels. According to OpenET, parcels in the Project area have an average ET from 33 to 48 inches, common for cherry and almond trees in this region. The estimated 3.0 acre-feet per acre of irrigation demand (36 inches of ET) is reasonable, acknowledging that irrigation is generally applied in excess of the ET needs of the crop; additional applied water will result in percolation to groundwater.

This is a conservative estimate because the focus of the WSA is on the incremental change in water demand between existing and proposed Project conditions. Accordingly, assumption of a relatively low existing water demand conservatively increases the change.

2.4. PROPOSED PROJECT WATER DEMAND

The proposed Project water demand includes three main land uses including commercial, industrial, and landscape irrigation area. The types of water uses are subdivided into four main categories: light industrial, commercial, university, and landscape irrigation. The Project will be developed in phases, based on market demand. Project water demand in this Water Supply Assessment is based on the Schaaf & Wheeler August 2025 Technical Memorandum (Appendix A).

Table 4 summarizes the phasing of the five districts with land uses, including the total square feet, start and end dates, and estimated years to development. Given the area of the Project and the estimated square footage, this appears to be a reasonable estimate of building coverage.

Table 5 shows the water demand of the proposed Project for industrial, hotel/commercial, VFW and university land uses (zoning) plus landscape irrigation

demand as evaluated for this WSA. Water demands are listed by Project area names, along with the respective groundwater basin, acreage, and estimated building area. Water demand is reported in terms of gallons per day per acre (gpd/ac), gallons per day (gpd), and acre-feet per year (AFY).

For industrial land uses, actual water demands depend on the specific industrial activity and vary widely, as do estimates of industrial water demand. For example, the San Joaquin Public Works (SJPW) Improvement Standard recommends a relatively high general value of 1,800 gpd/ac to evaluate all industrial water demand regardless of the specific activity (County, 2014). Another estimate is from the City of Tracy Wastewater Master Plan, which assumes 750 gpd/ac for industrial land uses to estimate wastewater generation for the plan.

For the proposed Project, which involves warehouses with relatively low water demand, the Schaaf & Wheeler estimate was based on observed measurements for nearby light industry. Similar projects in the county have been approved at this lower water use, including the Schulte Road Logistics Center that estimated water use at 7.5 gpd per employee and one employee per 1,500 square feet of warehouse, or 208 gpd/ac (Schaaf & Wheeler 2020). For this WSA, the reasonableness of this estimate was additionally verified with other industry standards. For example, the U.S. Energy Information Administration shows water use ranging from 405 to 6,000 gpd/ac (including outdoor irrigation) for warehouses to healthcare facilities respectively (EIA, 2023). Monterey Peninsula Water Management District (MPWMD) uses 23 gpd per acre for their water supply planning reflecting new warehouse construction (MPWMD, undated). The light industrial warehouses planned for this Project are likely in the lower range for industry. The Schaaf & Wheeler September 2025 TM estimates 10 gpd for 1,500 sq-ft of industrial space and 10 gpd per 250 sq-ft of office space; these are per shift estimates, and it is assumed that industrial developments are 95% warehouse and 5% office space, with two shifts per day. This results in a demand of 726 gpd/ac, which is a reasonable estimate for this type of development.

For proposed hotel/commercial and VFW uses, the Schaaf & Wheeler TM estimates water demand of 2,000 gpd/ac, from the SJPW Improvement Standard (County, 2014).

For the university, the Schaaf & Wheeler TM presents an estimated indoor water demand based on 12.81 gpd/student. This estimate was assessed independently with reference to reports on water use at various colleges published by the Association for Advancing Sustainability in Higher Education. In brief, community colleges report usage on the Sustainability Tracking, Assessment & Rating System (STARS) and indicate similar water use (8.65 to 17.24 gpd/student). As shown in **Table 5**, a rate of 12.81 gpd/student is assumed as a reasonable estimate and applied to a total of 5,000 students expected when the university reaches buildout. The Project also includes 1,600 dorm beds for students to live on-campus. These students are assumed to have an additional demand of 67.19 gpd/student for a total 80 gpd/student for on-campus students, also shown in **Table 5**.

In addition to indoor demand, **Table 5** summarizes the landscape irrigation demand as estimated in the Schaaf & Wheeler TM, which assumes that 15 percent of the total parcel area would be irrigated. Table 5 also shows residential demand for CSA-16. As discussed above, the CSA-16 existing demands are presented here as these demands may be served by the Project's proposed surface water supply, offsetting existing pumping, when surface water is available. It should be noted the nearby golf course is not expected to be served as part of CSA-16 and is not included in this WSA. The methodology to determine irrigation demand is based on an evapotranspiration (ETo) from the City of Tracy (48.4 inches per year) and an Evapotranspiration Adjustment Factor (ETAF) to accommodate the expected landscape palette. California's Model Water Efficient Landscape Ordinance requires that an ETAF of 0.45 be used for commercial, industrial, and institutional landscaping uses. This is incorporated in ET Demand values in **Table 5**. Irrigation demand is shown separately on Table 5 because it could be satisfied by recycled water if available.

Given the above, total water use for the proposed Project is estimated to be 92 AFY, with an additional 138.1 AFY of existing demand from CSA-16 that will continue along with the Project if the above two systems are combined.

3. WATER SUPPLY

This section addresses current surface water and groundwater supply sources to the Project area. The Project proposes to use surface water, groundwater and recycled water.

3.1. CURRENT SITE WATER SUPPLY OVERVIEW

As detailed in **Table 3**, the existing water demand in the Project area is served by groundwater from two subbasins and by surface water from two irrigation districts: Byron-Bethany Irrigation District (BBID), and Del Puerto Water District (described in the next section). **Table 3** shows the source of supply for each parcel, based on the estimated water demand of 3.0 AF per acre. At the parcel level, groundwater ranges from 0 to 100 percent of the total existing supply, but averages about 57 percent of the overall supply. The average estimated annual groundwater use was 2,101 AF and 279 AF for the Tracy and Delta Mendota Subbasins, respectively, and the reported average annual surface water use was 2,158 AF.

Groundwater is pumped from 18 wells with capacities ranging from 50 gpm to 1,500 gpm. **Figure 3** shows the location of wells.

3.2. PROPOSED PROJECT SURFACE WATER SUPPLY

The Project proposes to use surface water, groundwater and recycled water, prioritizing surface water use to the maximum extent possible. The Project will drill one or more new wells and will not continue pumping the existing wells. The existing wells on the Project site will be properly abandoned as the Project is developed. Groundwater pumping to support existing agricultural uses on the Project site would be eliminated or substantially reduced as a result of the switch from primarily groundwater use to surface water, and the substantially reduced demand associated with the proposed Project (compared to existing agricultural uses) would thereby reduce groundwater pumping in the two subbasins. It is assumed that the respective irrigation districts will supply other growers in the area with this water and thus reduce their demand on the groundwater basins, which could decrease overall groundwater production. Treated recycled water from the Project will be used for on-site irrigation.

3.2.1. Surface Water Supply

Surface water currently is available from two irrigation districts: Byron-Bethany Irrigation District (BBID) and Del Puerto Water District (DPWD). These are described below, and the local extent of each is shown in **Figure 4**.

Byron-Bethany Irrigation District (BBID) – BBID is a special district that provides water supply to the cities of Mountain House and Tracy, as well as agricultural customers in their service area, which spans portions of three counties and includes the project area. BBID has a varied portfolio of water supply sources, including pre-1914 and licensed post-1914 surface water rights in the Delta, water purchased through transfers, and Central Valley Project (CVP) water delivered to agricultural, municipal and industrial customers in BBID's

CVP service area. BBID also has Warren Act contracts allowing for the conveyance of certain surface water supplies through specific CVP infrastructure.

BBID holds two appropriative water rights: (a) a vested pre-1914 appropriative water right; and (b) a post-1914 licensed appropriative water right acquired when BBID consolidated with the former West Side Irrigation District.

BBID's pre-1914 water right is based on a 1914 Notice of Appropriation of Water recorded by its predecessor in interest, the Byron-Bethany Irrigation Company (Company), in Contra Costa County. The Company perfected its pre-1914 appropriative right to divert water from a channel off of the west bank of Old River in the Delta, to provide domestic and irrigation water service to its landowners by May 18, 1914. BBID succeeded to the Company's property and interests in 1919, including this senior appropriative water right.

BBID's point of diversion is now (and has been since 1964) located within Clifton Court Forebay (the reservoir constructed as part of the State Water Project (SWP)) at the intake channel of the Banks Pumping Plant, the first pumping plant for the California Aqueduct, which conveys water from the Delta to the south. The only diverters downstream of BBID's pre-1914 water right point of diversion receive water through the SWP and are junior in terms of the hierarchy of appropriative water rights in relation to BBID. Pursuant to agreements with the Department of Water Resources, BBID has the right divert up to 50,000 AFY at BBID's diversion facilities located on the intake channel of the State Water Project.

BBID's post-1914 licensed appropriative water right, for 27,000 AFY, has a priority date of April 17, 1916. Its point of diversion is located in "Wicklund Cut," which is in an irrigation inlet off of Old River, a tributary to the San Joaquin River.

BBID's holds two CVP contracts for irrigation and M&I purposes totaling 23,100 AFY (20,600 AFY and 2,500 AFY respectively). Groundwater also has been pumped during drought to augment surface supplies. Additionally, BBID also has Warren Act contracts allowing for the conveyance of certain surface water supplies through specific CVP infrastructure. Lastly, BBID holds contracts for supplemental water that it may call on if needed and has received supplemental surface water supplies via temporary transfers during dry years.

Over the last two decades, certain portions of BBID's service area have been fallowed, removed from agricultural production, and developed for commercial and/or residential uses as part of the urbanization of Tracy and the surrounding area. Accordingly, BBID provides more M&I water to customers now than it has previously. BBID expects this trend will continue. As agricultural land is fallowed and replaced with M&I uses, per acre water demand decreases, increasing BBID's ability to reliably serve M&I uses.

Del Puerto Water District (DPWD) – DPWD, founded in 1947, is also a CVP contractor with a contractual entitlement of up to 140,210 AFY. The project does not plan to use water from DPWD.

3.2.2. Reliability of Surface Water Supply

The main source of water for BBID is surface water diverted from the Delta pursuant to its senior appropriative rights, along with surface water delivered to BBID under its CVP water service contracts. BBID also purchases surface water from time to time. Due to the seniority

of BBID's appropriative water rights, its CVP contractual rights, anticipated Warren Act contractual rights, and ability to acquire supplemental water during dry years, BBID's overall water supply appears reliable. CVP contract water is the primary source of surface water for DPWD. The future reliability of these surface water sources is uncertain, due to potential curtailments during dry years, and future regulations that may further limit diversions from surface water. The Project does not propose to use water from DPWD.

The State Water Resources Control Board (SWRCB) is currently considering the Bay-Delta Plan Amendment Phase 2, affecting surface water supplies diverted from the Sacramento-San Joaquin Delta and its tributaries. Two options currently being discussed are the unimpaired flow requirements (UIF) and an alternative now referred to as Healthy Rivers and Landscapes (HRL) (previously named Voluntary Agreements). Under either option the potential exists for reductions in surface water diversions; the UIF alternative, if adopted as proposed, could result in substantial reductions in available surface water supply due to the proposed requirement that a high percentage of river flow be left in stream. Given that the objectives of HRL are to provide fishery improvements while protecting water supply through-flow and non-flow measures, the surface water supply shortfalls under the HRL would be less than those under the UIF alternative.

The SWRCB-approved UIF for Phase 1 is currently being challenged in court. Phase 2 has not yet been adopted and the SWRCB recently indicated that plan implementation could take at least 5 years from adoption. The specific outcomes, including the amount and timing of any reductions in diversions, are uncertain. BBID's appropriative water rights are among the most senior in the system, and reduced diversions generally only occur, if at all, in critical dry years. BBID can seek exemptions from curtailment in times of shortage to meet public health and safety needs for M&I water. Under either the HRL or UIF alternatives, there would be minimum health and safety allocations for M&I uses, and M&I water suppliers likely would engage in water transfers to make up any critical shortfall in supply. In the litigation challenging the Phase 1 plan, the court upheld those assumptions in challenges citing CEQA and the Porter-Cologne Water Quality Act.

BBID may have sufficient surface water available to meet Project demands in all water year types, provided that such supply may be used and/or conveyed to the Project under its CVP and/or Warren Act contracts, respectively. Thus, because BBID has senior water rights, CVP water supply and Warren Act contracts, a demonstrated ability to acquire supplemental supplies during times of shortage, and the ability to receive minimum health and safety exemptions for M&I uses in dry years, a BBID surface water supply may be sufficient to meet existing and future demands. Under the most extreme conditions, surface water supply would be limited to public health and safety, which accounts for most of the non-irrigation water demand. In the event that surface water from BBID is unavailable (low probability), groundwater is available as a back up supply.

3.3. GROUNDWATER SUPPLY

As shown in **Figure 1**, the Project site overlies portions of two groundwater subbasins: the Delta-Mendota Subbasin and the Tracy Subbasin of the San Joaquin Valley Groundwater Basin. These groundwater subbasins are being managed in accordance with the Sustainable

Groundwater Management Act (SGMA). SGMA provides a framework for sustainable management of groundwater resources by local agencies and lays out a process and timeline for local agencies to achieve sustainability. In 2018, the Tracy Subbasin was categorized as a medium priority basin and Delta-Mendota Subbasin was categorized as a high priority basin (and as critically overdrafted), making both subbasins subject to SGMA (DWR, 2018). In response, local agencies have organized into Groundwater Sustainability Agencies (GSAs) and have prepared GSPs, which provide basic documentation of groundwater conditions and management planning.

The Project site is addressed in several water supply-related planning documents including the County of San Joaquin General Plan and two GSPs. The City of Tracy Urban Water Management Plan (UWMP) (EKI, 2021) addresses the City service area and sphere of influence but does not include the Project site.

Groundwater for the Project site currently is pumped from the underlying Tracy Subbasin and Delta-Mendota Subbasin of the San Joaquin Valley Groundwater Basin (see **Figure 3**). Groundwater is planned to remain a source of supply, including during drought periods when surface water allocations may be reduced, but the future demand for groundwater will be far less than the current groundwater use.

According to the Water Code, if groundwater is a source of water supply for a project, then the SB610 Water Supply Assessment must include specific groundwater information, summarized below:

- Description of the groundwater basin (e.g., basin boundaries, aquifers).
- Availability of an adopted groundwater management plan for the basin and discussion of how it affects the water supplier's use of the basin.
- Groundwater level trends and overdraft status.
- If overdrafted, management actions and projects to eliminate overdraft.
- Location and amount of groundwater extraction by the water supplier for the past five years, based on available data.
- Analysis of the location, amount, and sufficiency of groundwater that is projected to be pumped by the water supplier.

3.3.1. Groundwater Subbasin Descriptions

The Delta-Mendota Subbasin lies along the western margin of the San Joaquin Valley and spans five counties from Fresno County in the south to San Joaquin County on the north. It is bounded on the north by the Tracy Subbasin, on the east generally by the San Joaquin River and Fresno Slough, on the south by a local agency boundary, and on the west by the older geologic formations of the Coast Range. The Tracy Subbasin is bounded on northwest by the Old River, on the east by the San Joaquin River, on the west by the Coast Range and on the south by its boundary with Delta-Mendota Subbasin. The boundary between the two subbasins was modified in 2016 to include the entire DPWD in the Delta-Mendota Subbasin, resulting in a small cut out from the Tracy Subbasin (DWR 2023).

The subbasins are characterized by an alluvial groundwater system with two major aquifers separated by the low permeability Corcoran Clay; a semi-confined aquifer occurs above the

Corcoran Clay layer (Upper Aquifer) and a confined aquifer below (Lower Aquifer). The Corcoran Clay layer largely inhibits vertical flow between aquifers. It is generally pervasive throughout the Delta-Mendota Subbasin. In the Tracy Subbasin, its extent is not fully defined, and it may be absent near the foothills and beneath the Delta islands in the north.

The Tracy Subbasin GSP distinguishes Delta and Non-Delta management areas; the Tracy subbasin portion of the proposed Project is in the Non-Delta management area.

As shown on **Figures 1 and 3**, the Project overlaps the boundary between the Delta-Mendota and Tracy subbasins. This boundary is institutional in nature—based on local agency service areas—and not based on hydrologic or hydrogeologic features. Accordingly, there is general continuity of hydrogeologic layers and groundwater levels, flow, and quality across the boundary.

3.3.2. Groundwater Management Planning Status

SGMA provides a framework for sustainable management of groundwater resources by local agencies. SGMA lays out a required process, scope, and timeline and provides local agencies with broad groundwater management powers to achieve groundwater sustainability. Groundwater sustainability is defined in terms of six indicators including not only groundwater levels and storage but also subsidence, seawater intrusion, groundwater quality, and impacts on connected surface water and associated environmental benefits. SGMA is directed at groundwater basins or subbasins that have been designated by the California Department of Water Resources (DWR) as medium- or high-priority.

The Pacific Gateway Project overlies portions of two groundwater basins defined by the DWR. These are the Delta-Mendota Subbasin (DWR No. 5-022.07) and the Tracy Subbasin (DWR No. 5-022.15) of the San Joaquin Valley (see **Figure 1**). The Delta-Mendota Subbasin has been designated as high priority and as critically overdrafted. The Tracy Subbasin has been assigned medium priority by DWR and has not been designated as overdrafted.

Both subbasins are subject to and being managed in accordance with SGMA. In response to SGMA, local agencies in each subbasin have organized into GSAs and have prepared and adopted their respective GSPs. Six GSPs were prepared for Delta-Mendota Subbasin and one GSP was developed for Tracy Subbasin. The GSPs directly relevant to the Project area are:

- Delta-Mendota Subbasin Groundwater Sustainability Plan, Revised June 2024
- Tracy Subbasin Groundwater Sustainability Plan, November 2021

Because of the critically-overdrafted status of the Delta-Mendota Subbasin, completion of those GSPs was mandated for submittal to DWR by January 2020. GSPs are reviewed by DWR on a subbasin-wide basis for consistency with SGMA, so all six Delta-Mendota GSPs were reviewed jointly. DWR's initial review of the Delta-Mendota GSPs is summarized in its Consultation Initiation Letter (dated January 21, 2022), which identified deficiencies, mostly concerning lack of documentation for coordinated and consistent data, methodologies, definitions, and criteria. The GSPs were revised and resubmitted in June/July 2022.

In March 2023, DWR informed the Delta-Mendota GSAs that the actions taken to correct the deficiencies were not sufficient and that the Delta-Mendota Subbasin GSPs remain inadequate. According to SGMA, once DWR determines that a GSP is inadequate, primary jurisdiction shifts from DWR to the State Water Resources Control Board (SWRCB), which may designate the basin as probationary and intervene with an interim plan potentially including restrictions on groundwater extractions (Water Code § 10735.8). However, a GSA remains obligated to continue monitoring, annual reporting, and updating the GSP and is encouraged to continue implementation of GSP projects and management actions. The GSAs submitted a draft GSP for the Subbasin to the State Water Resources Control Board (SWRCB) in June 2024 and the GSP is currently under review.

The Tracy Subbasin GSP was approved by DWR on January 18, 2024. This indicates that the Plan includes the required components of a GSP, demonstrates an understanding of the Subbasin based on what appears to be the best available science and information, sets supported and reasonable sustainable management criteria to prevent undesirable results as defined in the Plan, and proposes a set of projects and management actions that if appropriately implemented will likely achieve the sustainability goal defined for the Subbasin. While approving the GSP, DWR also identified seven recommended corrective actions generally focusing on:

1. Revising current water budget information.
2. Clarifying and providing additional details related to management areas.
3. Refining and providing additional information related to chronic lowering of groundwater levels sustainable management criteria.
4. Refining criteria used to determine whether undesirable results due to degraded water quality are occurring.
5. Refining criteria used to determine whether undesirable results due to land subsidence are occurring.
6. Continuing to fill data gaps, collecting additional monitoring data, coordinating with resources agencies and interested parties to understand beneficial uses and users that may be impacted by depletions of interconnected surface water caused by groundwater pumping, and potentially refining sustainable management criteria.
7. Providing additional details and discussion related to the monitoring networks.

DWR staff will continue to monitor and evaluate changes in conditions in the Subbasin, including the Subbasin's progress toward achieving the sustainability goal, through annual reporting and periodic evaluations of the GSP. While the GSPs are evolving, they and the associated annual reporting are the best available documentation of groundwater conditions and management planning and thus provide the basis for the following sections.

3.3.3. Groundwater Levels, Storage, and Overdraft Condition

As described in the GSP for the Delta-Mendota Subbasin, groundwater levels show variable geographic patterns with some areas showing declines and others indicating stable or increasing levels in recent years. Groundwater levels also have varied through time, affected by factors including expansion of irrigated agriculture and increased

pumping, importation of surface water, and occurrence of drought. The GSP provides groundwater level hydrographs for selected wells; the closest to the Project Area are in San Joaquin County south of Highway 132. The two well hydrographs, representing the Upper and Lower Aquifers respectively, indicate variable groundwater levels with increases from about 1997 to 2015.

The 2019 GSP for the Northern and Central Delta-Mendota Region characterized the water balance in the area near the project site. The old GSP, which may be replaced by the revised Subbasin wide GSP submitted to the SWRCB in 2024, presents water budget analyses for the Upper Aquifer and Lower Aquifer, respectively, for historical (2003 – 2012), current (2013) and projected periods (2014-2070). Under projected conditions (with climate change but without projects and management actions), average annual change in storage is projected to persist at rates of -42,000 AFY in the Upper Aquifer and -6,000 AFY in the Lower Aquifer. The GSP notes that average outflows are greater than inflows, meaning that overdraft conditions persist.

As documented in the GSP for the Tracy Subbasin, groundwater levels generally have been stable, and recover after periods of pumping with only a few areas indicating declining groundwater levels. While groundwater levels in most of the subbasin are stable or rising, the GSP identified five wells in the Non-Delta Management area with declining groundwater levels based on long-term records (1998-2020). Two of these wells are located south of Tracy and east of the Project Area; these appear to be constructed in both the Upper and Lower aquifers. New replacement monitoring wells are planned that will distinguish the aquifers and level trends.

The change in groundwater storage was estimated for the entire Tracy Subbasin using groundwater modeling; cumulative change in groundwater storage for 1975 through 2015 increased on average by about 3,000 AF per year. Water budgets presented in the GSP for the Non-Delta management area indicate a slight surplus for the historical water budget. The projected water budget with climate change but without projects or management actions shows a slight deficit. The deficit, about 800 acre-feet per year (AFY), is occurring in the Upper Aquifer, with the lower Aquifer showing a slight surplus of about 100 AFY.

3.3.4. Groundwater Management Actions and Projects

Consistent with SGMA, both GSPs provide documentation of groundwater conditions in terms of the six indicators of groundwater sustainability. These indicators are groundwater conditions occurring throughout the Subbasin that, when significant and unreasonable, cause undesirable results. The undesirable results include chronic groundwater level decline, groundwater storage depletion, seawater intrusion, groundwater quality degradation, land subsidence, and depletion of interconnected surface water.

Each GSP presents a sustainability goal (absence of undesirable results within 20 years) and ways to measure sustainability indicators including minimum thresholds and measurable objectives. Both have monitoring programs for sustainability and annual reporting.

The GSP for the Northern and Central Delta-Mendota Region provides projects and management actions to achieve subbasin-wide sustainability, including elimination of overdraft. Projects involve recharge and recovery, stormwater recharge, drain water reuse, recycled water development and use, and reservoir expansion. Management actions include drought contingency planning in urban areas, monitoring to fill data gaps, well permitting procedures, and minimization of subsidence. Currently, no pumping restrictions have been proposed for the Northern and Central Delta-Mendota Region; however, the GSAs maintain the flexibility to implement such demand management actions if needed. It is expected that municipal and industrial water suppliers may be able to seek relief from future pumping restrictions to satisfy minimum health and safety requirements. However, the Delta-Mendota GSAs are still working actively with the SWRCB to revise their GSP and additional projects and management actions for demand management may be added to the Subbasin GSP.

The GSP for the Tracy Subbasin provides a summary of sustainability, noting that the Delta management area will not require active groundwater management by the GSAs to maintain sustainability. The Non-Delta management area (where the Project Area is located) is where most agricultural, domestic, and municipal wells are present and where groundwater is used; this area may require active management to be sustainable.

Accordingly, the GSP provides a summary of sustainability in the Non-Delta area. While no seawater intrusion has occurred, there has been some lowering of groundwater levels, a slight reduction in storage, and land subsidence due to groundwater extraction. There may be surface water depletion, and groundwater quality is naturally poor quality. One project is proposed to reduce groundwater pumping by 1,000 AFY. This involves expanding Banta Carbona Irrigation District (BCID) capabilities to provide surface water in lieu of groundwater pumping. Management actions involve modification of the San Joaquin County Well Ordinance to create surface water protection zones near rivers, canals, and sloughs in the Non-Delta Management Area. Improvements to the numerical groundwater model have been identified to reduce uncertainties in water budgets.

3.4. RECYCLED WATER

The Project will have an irrigation water system that consists of a recycled water storage tank and booster station, located at the wastewater treatment plant, and supplemental irrigation wells to offset demands in excess of recycled water capacity. **Table 6** summarizes the estimation of recycled water supply. Based on the Schaaf & Wheeler calculations of wastewater generation (493,160 gpd), as much as 552 AFY of recycled water could be generated and used for irrigation on site. Wastewater is generally consistent over the course of the year, whereas ET and irrigation demands generally peak during the hot summer months. **Table 6** shows the possible volume of irrigation demand that could be satisfied by recycled water assuming 1) that most of the wastewater generated can be treated to recycled water standards, 2) wastewater generation is even through the year, and 3) water can be used within the month it is generated. Up to 266 AFY of recycled water could satisfy the non-potable irrigation demand of the project.

3.5. PROPOSED PROJECT WATER SUPPLY

3.5.1. Surface Water

The Project proposes to continue use of available surface water supply from BBID. Projected potable water demand for the Project is proposed to be satisfied with surface water from BBID, as a first priority, supplemented by groundwater as needed. The future reliability of the surface water source delivered by BBID is discussed in more detail in Section 3.2.

The development is in the process of obtaining a will-serve letter from BBID for up to 1,100 AFY of surface water deliveries. BBID has indicated that it may have adequate water supply to meet Project demands in any year type, assuming such supply can be used and/or conveyed under its CVP and/or anticipated Warren Act contracts. This conclusion is supported by the fact that the Project, including any future surface water delivered to CSA-16, will require substantially less water than BBID historically has provided to the Project site, and that BBID has the ability to prioritize uses of water in times of shortage, including to ensure that sufficient water is available for public health and safety purposes. Additional treatment of surface water will be required for M&I uses, and the Project is working with the County Public Works to obtain the proper permits.

There is potential to combine the Project's water system with that of the nearby community water system, CSA-16. The existing CSA demand currently served by groundwater would be served with available additional surface water.

The difference between existing surface water use and future use under the Project would be available for other uses, as determined by BBID and DPWD, including use by other local growers. Because surface water is less expensive than groundwater, it is reasonable to assume that growers currently relying on groundwater for agricultural irrigation would switch from groundwater to surface water to the extent it is available.

3.5.2. Groundwater

The potable water system proposes to use surface water, with groundwater serving as backup supply if needed. The Project well will be equipped with a wellhead treatment system, if deemed necessary from water quality testing. Depending on surface water availability, and production capacity of the initial well, additional backup wells may be added to the distribution system as the Project expands.

Preliminary hydrogeologic and water quality testing have not been performed, so well location details beyond the initial well are undetermined at this time. The Project will comply with all GSP and County regulations to properly site and permit the well(s). The project applicant has identified a well location in Delta Mendota but given the sensitive nature of the critically overdrafted basin, the applicant is actively looking for well locations in the Tracy subbasin. Currently, a well has been identified in the Tracy Subbasin and is being tested to assess water quality. It is expected that the well will be drilled below the Corcoran Clay in either basin, as the clay layer is relatively shallow in this area (approximately 200 ft).

Table 3 shows the existing groundwater use by subbasin based on the crop area. Based on location of irrigated fields, 2,253 AFY is currently pumped from the Tracy subbasin and 279 AFY is pumped in Delta-Mendota. While most of the irrigated fields are in the Tracy subbasin, they may be supplied by wells pumping in the Delta Mendota subbasin.

If, in the event of surface water interruption and the project is unable to find a suitable well site in the Tracy subbasin, and additional groundwater is needed from the Delta Mendota Subbasin, then additional pumping reduction in that subbasin would be needed.

The project is currently in negotiations with the landowner for possible changes in land use outside the project area. The landowner is willing to limit groundwater pumping from existing volumes (by reducing crop area or increasing surface water purchases). This is documented in a letter, included as Appendix B. The landowner would designate wells #4, #5, and #6 as Curtailment Wells and limit use during dry years. Further documentation will be developed if surface water proves unreliable.

Actions would need to be taken to reduce existing pumping in the subbasin to ensure there is net zero pumping increase in this critically overdrafted basin. Such actions could include one or more of the following actions: temporary or permanent fallowing of crop acres; crop substitution; water conservation; or a replacement water supply for agriculture.

3.5.3. Recycled Water

Projected non-potable (irrigation) water demands will be served with recycled water, supplemented with groundwater and surface water when demand is higher than available recycled water supply. The recycled water will be generated by the Project. Wastewater from the Project will be treated onsite at a package wastewater treatment facility with a drying sludge press system for solids. The wastewater treatment site will also house recycled water facilities, including a pump station and above ground storage tank. The Project plans on continuing to use BBID water for irrigation demands to supplement the recycled water supplies with the added benefit of reducing the summertime salt and nitrate concentrations in the recycled water. Recycled water demand and availability are shown in **Table 6**. An estimated 266 AFY of recycled water will be available to meet non-potable irrigation demand.

3.5.4. Other Supplies

While not a direct source of supply, the Project has several stormwater detention basins to recharge storm water to the aquifer. This recharge will replenish the local groundwater and help to improve groundwater levels in the vicinity of any Project pumping.

3.6. CURRENT AND PROJECTED GROUNDWATER DEMAND FOR THE REGION

The historical groundwater demands and supplies for the Tracy and Delta Mendota (North Central region) subbasins are shown in **Table 7 and 8**, respectively. Both GSPs document the demand and supply by source in different types of water years (e.g., wet, dry). The Tracy Subbasin relies on groundwater for 37 percent of the total demand on

average, increasing to 39 percent during dry years when surface water allocations are reduced. The Delta Mendota Subbasin relies on groundwater for 20 percent of total demand on average.

Both GSPs focus on groundwater demand and the associated change in storage into the future for their respective subbasins. The forecasted pumping and storage with climate change (including the groundwater management projects outlined in the GSP) are shown in **Table 9**, for both Tracy and Delta Mendota (North Central) subbasins.

As indicated in **Table 9**, both GSPs anticipate an increase in groundwater pumping over the next 10 years (to 2033) but ultimately envision a decrease in groundwater pumping as new supplies, projects, and management actions are implemented. Tracy Subbasin shows an increase in storage under all years indicating a sustainable groundwater supply to meet demand. The Delta Mendota Subbasin forecasts a negative change in storage during dry years. The subbasin is already deemed to be critically overdrafted, and the continued negative storage change indicates that overdraft conditions are not likely to improve without additional action in the future.

4. COMPARISON OF SUPPLY AND DEMAND

The WSA must compare supply and demand for the groundwater basin where the Project is located. **Table 10** summarizes water demand and supply projections for the Project in five- year increments to 2050 for normal years, respectively. The table shows the current (2025) water demand and supply at the Project site including the agricultural water demand. As the project is developed, the agricultural water demand is incrementally phased out. During construction, some water demand may be needed for construction but is not included here. Finally, the future phasing is based on the economic analysis projections but may differ based on market demand.

Agricultural uses are expected to continue on parcels in the project area that have not yet begun construction. Once under development, the agricultural demand will be replaced by construction water demand and then finally project demand. Because the existing demand of the agricultural parcels are significantly higher than the project demand, the project will also result in substantial decrease in water demand. On average, agricultural water use is 3.0 AFY/ac whereas project area water demand is 1.45 AFY/ac (excluding landscape irrigation that is expected to be satisfied by recycled water). Construction water is expected to be negligible, short term, potentially trucked in on a temporary basis, and will be significantly less than the replaced agricultural water use. As such, construction water demand is not included in the five-year interval phasing projections.

Project water demand is not expected to change in dry or multiple dry years. Much of the demand is for commercial and industrial uses that would remain constant and already include water conservation measures. Outdoor irrigation demand is primarily met by recycled water, which would not be affected by drought conditions.

The future demand for groundwater depends on surface water availability, which can vary by water year type. During wet and normal years, all the Project demand may be met with surface water. Depending on future regulatory requirements, surface water supplies may be sufficient to meet Project demands in dry and critically dry years. Based on the sustainability projections in the relevant GSPs, and the Project's total water demand, the Project demand also can be met with groundwater. As shown on **Table 10**, the projected future demand of the project for primary supply sources (not including recycled water) is 8 AFY, which is below the current demand of existing uses at the Project site of 4,538 AFY and below the total existing groundwater use within the Project site of 2,380 AFY. (See **Table 3**). The Project's maximum groundwater use would be within the sustainable yield estimates under both adopted GSPs. By reducing surface water use on the site, the Project also will allow additional surface water supplies to serve growers currently relying on groundwater in the Delta Mendota and Tracy Subbasins ; because surface water is typically less expensive than groundwater, it is reasonable to assume the project will result in a net reduction in pumping in the Project area, which will contribute to the long-term sustainability of the basins.

Groundwater pumping from the Delta Mendota Subbasin will need to comply with any restrictions on groundwater extractions imposed by the GSAs or by SWRCB, unless specifically excluded. Neither GSP currently proposes limits on groundwater pumping for

M&I uses. The currently proposed supply well is located within the Delta Mendota Subbasin; however the project proponent is assessing an existing well location in the Tracy Subbasin pending water quality testing. If the water supply well for the project relies on the Delta Mendota Subbasin, steps will be taken to reduce existing water demand in the Subbasin so that there is no net increase in groundwater demand. Three existing wells in Delta Mendota Subbasin will become curtailment wells and pumping will be reduced as needed (Appendix B).

Accordingly, it can be concluded that adequate groundwater is available to supply the Project, even if no surface water were available, as long as the existing pumping in the Delta Mendota Subbasin is decreased to allow for no net increase.

5. CONCLUSIONS

Findings of this WSA are summarized below.

- The Pacific Gateway Project is in a currently unincorporated area of San Joaquin County.
- The proposed developed area is a 1,577-acre mixed-use logistics hub including a university campus, VFW post, business park, retail commercial, and a park. The proposed project will be developed in phases.
- A WSA as per SB610 is required because of the extent of development.
- The water demand of the Pacific Gateway Project is expected to be 2 AFY as estimated by Schaaf & Wheeler; this is a reasonable estimate.
- The Project's proposed supply portfolio prioritizes the use of surface water. The surface water demand of 8 AFY for the Project is lower than the existing demand of 2,158 AFY. Reduced surface water demand below existing demand will free up additional surface water for other uses.
- The Project's irrigation demand, 266 AFY, will be satisfied with recycled water.
- The Project area overlies both the San Joaquin Valley – Tracy Subbasin (5-022.15) and the San Joaquin Valley – Delta-Mendota Subbasin (5-022.07).
- Existing water use for the Project site is greater than proposed future uses.
- Water source options for the Project include surface water from BBID and local groundwater, as well as recycled water. BBID has stated that it may have sufficient supply to meet Project demand in all years, assuming such supply can be used and/or conveyed under its CVP and/or anticipated Warren Act contracts, respectively. Surface water previously delivered to the agricultural uses on site that exceed Project demand will be used elsewhere in the subbasin and may offset existing groundwater pumping.
- Total groundwater use is expected to be substantially less than the current groundwater demand. If needed, additional demand from the Delta Mendota Subbasin will be mitigated such that there is no net increase in groundwater pumping from the Subbasin.
- The Project proponent is actively assessing well locations in the Tracy Subbasin, pending water quality testing.
- Sufficient groundwater supplies are available to serve the Project's demands, and pumping at the projected Project level is consistent with the Tracy GSP and the Delta-Mendota GSP.

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TABLES

Table 1
Climate Data

	Average Rainfall (inches)	Average ETo (inches)	Average Temperature (°F)
January	2.21	1.0	45.06
February	1.62	1.5	50.41
March	1.43	2.9	54.33
April	0.79	4.5	59.49
May	0.44	6.1	65.56
June	0.09	7.3	71.91
July	0.02	7.9	75.43
August	0.07	6.7	74
September	0.19	5.3	71.08
October	0.49	3.2	63.59
November	1.08	1.3	53.55
December	1.72	0.7	45.59
Average Calendar Year Total	**10.15**	**48.40**	**60.8**
Monthly Average	**0.85**	**4.03**	**60.8**

Source:
(a) Temperature and precipitation data from Western Regional Climate Center Tracy Carbona Station (048999) updated April 2023
(b) Reference evapotranspiration data from Tracy UWMP 2020 Table 3-3 (California Code of Regulations, Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.)

Table 2
Population Projections

	2020	2025	2030	2035	2040	2045
Tracy Planning Area*	96,345	109,900	120,367	130,833	141,300	166,700
Project	0	0	0	533	1,067	1,600

*Source: Tracy UWMP 2020 Table 3-1

Table 3
Existing Site Water Demand

APN	Acreage (Ac)	Groundwater* (AFY)		Surface Water Deliveries (AFY)		Total (AFY)
		Tracy	Delta Mendota	BBID	Del Puerto	
East Industrial Area						
253-140-09	3.06	9.18				9.2
253-140-10	37.06	14.25		96.93		111.2
253-140-11	40.13	15.43		104.96		120.4
253-140-13	25.9	77.70				77.7
253-140-14	14.17	5.45		37.06		42.5
253-140-15	12.92	38.76				38.8
253-140-16	27.09	10.42		70.85		81.3
253-140-17	40.11	15.43		104.90		120.3
253-140-19	6.2	18.60				18.6
253-140-20	34.11	13.12		89.21		102.3
253-140-21	40.09	15.42		104.85		120.3
253-140-22	17.83	53.49				53.5
253-140-23	22.3	8.58		58.32		66.9
253-140-24	9.26	27.78				27.8
253-140-25	30.86	11.87		80.71		92.6
Central Industrial Area						
253-180-02	60.03	180.09				180.1
253-180-11	182.85	548.55				548.6
253-900-110	61.7	0.00		185.10		185.1
253-190-21	39.91		88.65		31.08	119.7
253-190-22	39.98		88.80		31.14	119.9
253-180-060	4.47	13.41				13.4
East Industrial Area						
253-260-090	119.46	239.38		119.00		358.4
253-260-120	119.46	115.48		242.90		358.4
253-260-130	202.83	194.49		414.00		608.5
253-290-050	103	121.50		187.50		309.0
253-290-110	40.01	107.08			12.948	120.0
253-290-120	14.92	39.32			5.441	44.8
253-290-130	19	50.34			6.662	57.0
Gateway Center						
253-260-050 (Not Planted)	0.99	0.00				0.0
253-260-140 (Not Planted)	59.1	0.00				0.0
University Center						
253-190-05 (Not Planted)	7.65	0.00		0.00		0.0
253-190-04	66.05	156.30		41.85		198.2
253-190-19	37.94		84.27		29.55	113.8
Off-Site Basin						
253-200-190	40		17.47		102.53	120.0
Subtotal Project Area	**1,580**	**2,101**	**279**	**1,938**	**219**	**4,538**
Par County Estates (CSA-16)						
Par County Estates	191	151.70				151.7
TOTAL	**1,772**	**2,253**	**279**	**1,938**	**219**	**4,690**

*Groundwater pumping is estimated

Table 4
Project Phasing

District	Use	Square Feet	Start	End	Years
Initial Phase					
Pacific Gateway East	Industrial	3,962,000	2026	2032	6
University Center	VFW	11,500	2026	2028	2
University Center	University	25,000	2026	2028	2
Subtotal		**3,998,500**			
Balance of East District					
Pacific Gateway East		7,162,274	2032	2039	7
University Center		1,239,150	2028	2048	20
Total Development					
Pacific Gateway East	Industrial	11,124,274	2026	2039	13
Pacific Gateway Central	Industrial	6,856,474	2038	2047	9
Pacific Gateway West	Industrial	6,168,882	2047	2056	9
Gateway Center	Industrial	525,370	2042	2046	4
University Center	University	1,264,150	2026	2046	20
	University (Expansion)	115,000	2046	2048	2
	University - Dorm Beds (# beds)	1,600	2030	2045	15
	Industrial Park (Business)	93,000	2028	2034	6
	Commercial Retail/Service	38,908	2030	2038	8
	VFW	11,500	2026	2028	2
Gateway Center	EV Charging Lot	-	2032	2033	1
	Hotel	60,000	2030	2032	2
	Commercial Retail/Service/Hotel	49,592	2026	2032	6
Total		**26,307,150**	**2026**	**2056**	**30**

Source: Ridgeline Property Group, Pacific Gateway Development Phasing Plan, October 2024

Table 5
Project Water Demands

Area Name	Groundwater Subbasin	Zoning	Building Area (ac)	Rate	Unit	Average Daily Demand (gpd)	Indoor Use (AFY)	Estimated Irrigation Area (ac)	ET Demand (AFY)	Total Water Demand (AFY)
Pacific Gateway East	Delta-Mendota/Tracy	Industrial	255.4	726	gpd/ac	185,405	207.7	100.0	112.6	320.3
Pacific Gateway Central	Delta-Mendota/Tracy	Industrial	157.4	726	gpd/ac	114,275	128.0	61.7	69.4	197.4
Pacific Gateway West	Tracy	Industrial	141.6	726	gpd/ac	102,815	115.2	55.5	62.4	177.6
Gateway Center	Delta-Mendota/Tracy	Industrial	12.1	726	gpd/ac	8,756	9.8	4.7	5.3	15.1
Gateway Center	Delta-Mendota/Tracy	Hotel/Commercial	2.5	2,000	gpd/ac	5,032	5.6	1.0	1.1	6.7
University Center	Delta-Mendota/Tracy	University	31.7	12.81	gallons per student per day	64,050	71.7	12.4	14.0	85.7
University Center	Delta-Mendota/Tracy	University	N/A	67.19	gallons per student per day	107,504	120.4	N/A	N/A	120.4
University Center	Delta-Mendota/Tracy	VFW	0.3	2,000	gpd/ac	528	0.6	0.1	0.1	0.7
University Center	Delta-Mendota/Tracy	Industrial	2.1	726	gpd/ac	1,550	1.7	0.8	0.9	2.7
University Center	Delta-Mendota/Tracy	Commercial	0.9	2,000	gpd/ac	1,786	2.0	0.3	0.4	2.4
Subtotal Project Demand:			**603.9**				**662.8**	**236.6**	**266.2**	**929.0**
CSA-16	Tracy	Residential	N/A	N/A		123,290	138.1	-	-	138.1
Total			**603.9**				**800.9**	**236.6**	**266.2**	**1,067.1**

Source: Schaaf & Wheeler, Pacific Gateway Water and Sewer Demands and System Requirements, August 2025.
Note: University demand assumes 12.81 GPD/student for 5,000 students. The 1,600 students living on campus are assumed to have an additional 67.19 GPD/student demand.

Table 6
Maximum Recycled Water Supply to Meet Irrigation Demands

Monthly Reference Evapotranspiration, ETo (inches)		Percent of Annual ET by Month	Expected Irrigation Demand by Month (AFM)	Max Recycled Water (AFM)	Available Recycled Water (AFM)
January	1.0	2%	6	46	6
February	1.5	3%	8	46	8
March	2.9	6%	16	46	16
April	4.5	9%	25	46	25
May	6.1	13%	34	46	34
June	7.3	15%	40	46	40
July	7.9	16%	43	46	43
August	6.7	14%	37	46	37
September	5.3	11%	29	46	29
October	3.2	7%	18	46	18
November	1.3	3%	7	46	7
December	0.7	1%	4	46	4
Total	**48.4**	**100%**	**266**	**552**	**266**

Table 7
Historical Water Demand and Supply for Tracy Subbasin

Component	*Wet*	*Above Normal*	*Below Normal*	*Dry*	*Critical*	All
Total Demand (AFY)	**363,090**	**379,703**	**356,239**	**400,306**	**430,139**	**392,407**
Total Surface Water Supplies	*277,530*	*279,349*	*257,007*	*279,357*	*303,248*	*285,603*
Total Groundwater Supplies	*149,385*	*161,391*	*152,962*	*178,608*	*186,106*	*167,400*
Urban Groundwater	25,887	27,033	25,172	26,878	23,908	25,471
Agricultural Groundwater	123,498	134,358	127,790	151,730	162,198	141,928
Total Water Supplies (AFY)	**426,915**	**440,740**	**409,969**	**457,965**	**489,354**	**453,002**

Source: Tracy GSP Table 7-2 (1974-2015),

Table 8
Historical Water Demand and Supply for Delta Mendota Subbasin (North Central Region)

Component	*Wet*	Normal	*Dry*	All
Total Demand (AFY)	**535,000**	**504,667**	**536,250**	**527,000**
Total Surface Water Supplies	*438,667*	*390,333*	*425,250*	*419,000*
Total Groundwater Supplies	*96,333*	*114,333*	*111,000*	*108,000*
Urban Groundwater	4,000	3,667	3,750	4,000
Agricultural Groundwater	92,333	110,667	107,250	104,000
Total Water Supplies (AFY)	**535,000**	**504,667**	**536,250**	**527,000**

Source: Delta Mendota GSP Table 5-20 (2003-2012)

Table 9
Future Groundwater Pumping by Subbasin (with Climate Change and Projects)

Subbasin	2020	2025	2030	2035	2040	2045
Tracy Subbasin						
Groundwater Pumping (AFY)	182,100	200,477	240,325	217,861	201,081	167,655
Change in Storage (AFY)	221,012	32,076	15,510	16,828	197,505	149,414
Delta Mendota Subbasin (North Central)						
Groundwater Pumping	115,000	78,000	144,000	61,000	100,000	84,000
Change in Storage (AFY)	-129,000	60,000	-90,000	68,000	-74,000	37,000

From Table 5-33 and 5-34 of the Delta Mendota GSP and Appendix M of the Tracy Subbasin GSP

Table 10
Projected Total Water Demand and Supply for Project (AFY)

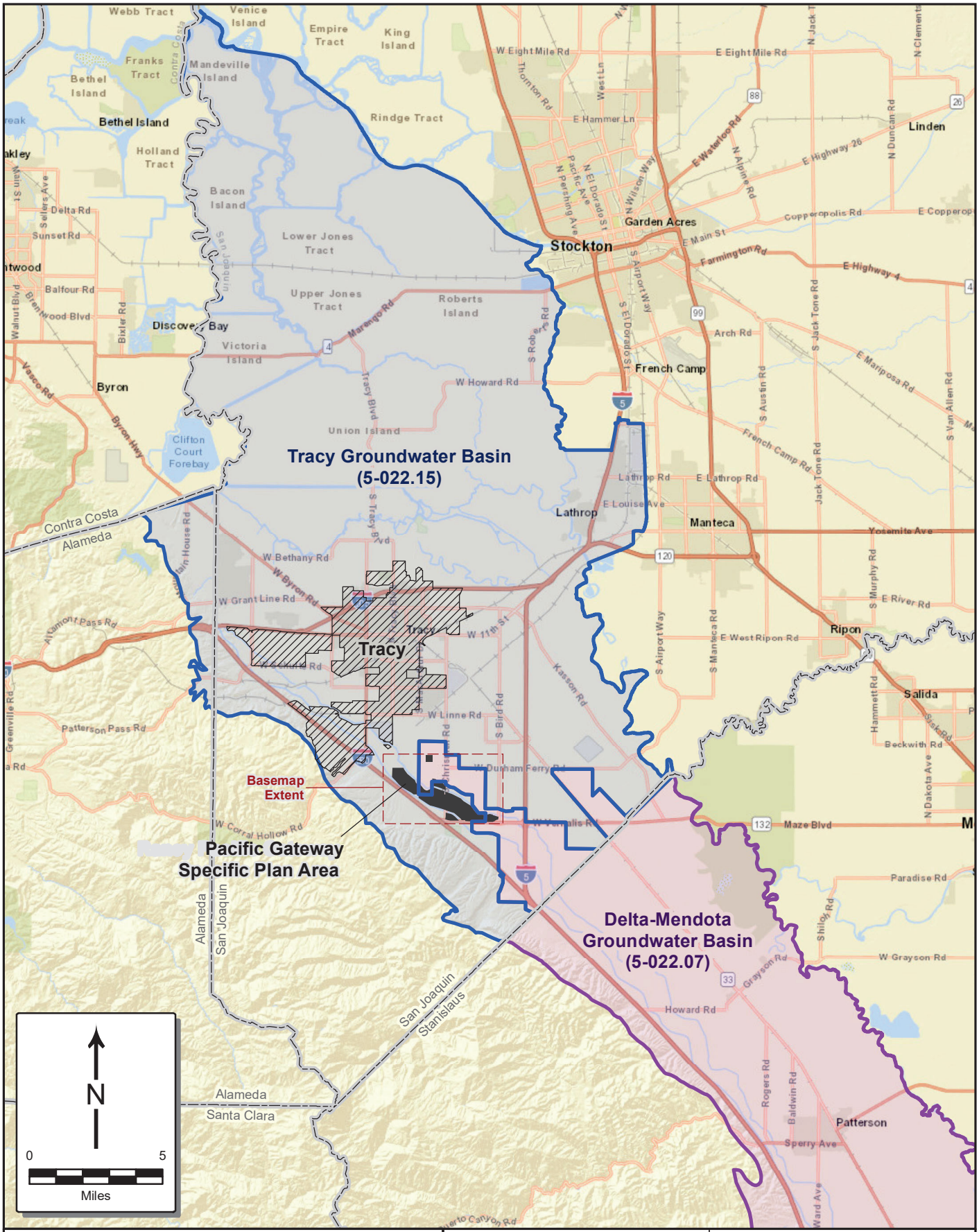
Source	2025 (Existing Uses)	2030*	2035	2040	2045	2050
Total Surface Water Supplies	2,158	2,158	1,704	1,228	1,201	801
Project	0	198	332	532	540	663
*CSA-16***	0	138	138	138	138	138
Agriculture	2,158	1,822	1,233	558	522	0
Total Groundwater Supplies	2,670	2,138	1,448	655	613	0
CSA-16 (Tracy Subbasin)	138	0	0	0	0	0
Agriculture (Tracy Subbasin)	*2,253*	1,902	1,288	583	546	0
Agriculture (Delta-Mendota Subbasin)	*279*	236	160	72	68	0
Total Recycled Water Supplies	0	41	114	197	202	266
Subtotal Project Water Supplies (AFY)* **	**0**	**378**	**585**	**868**	**880**	**1,067**
Total All Water Supplies (inc. Agriculture)	**4,828**	**4,338**	**3,266**	**2,081**	**2,016**	**1,067**

* Construction use not included, assumed negligible

** CSA-16 Future demand is shown as possible surface water supply. Existing demand is included in the groundwater supply. Higher surface water demand in 2030 is due to lower availability of recycled water while project is developed.

***Subtotal Project Water Supplies includes Project, CSA-16, and Recycled Water (shaded)

FIGURES



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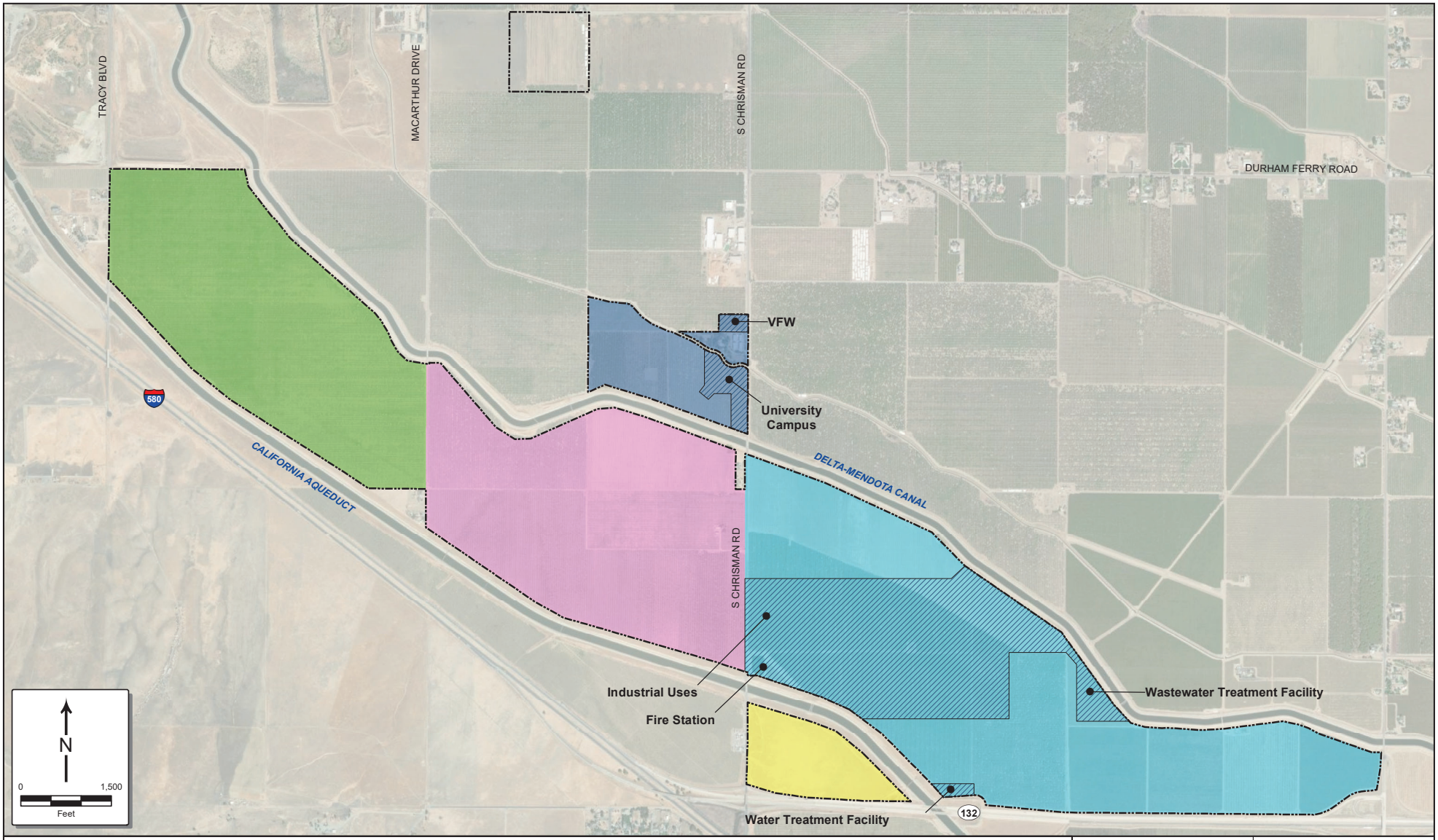
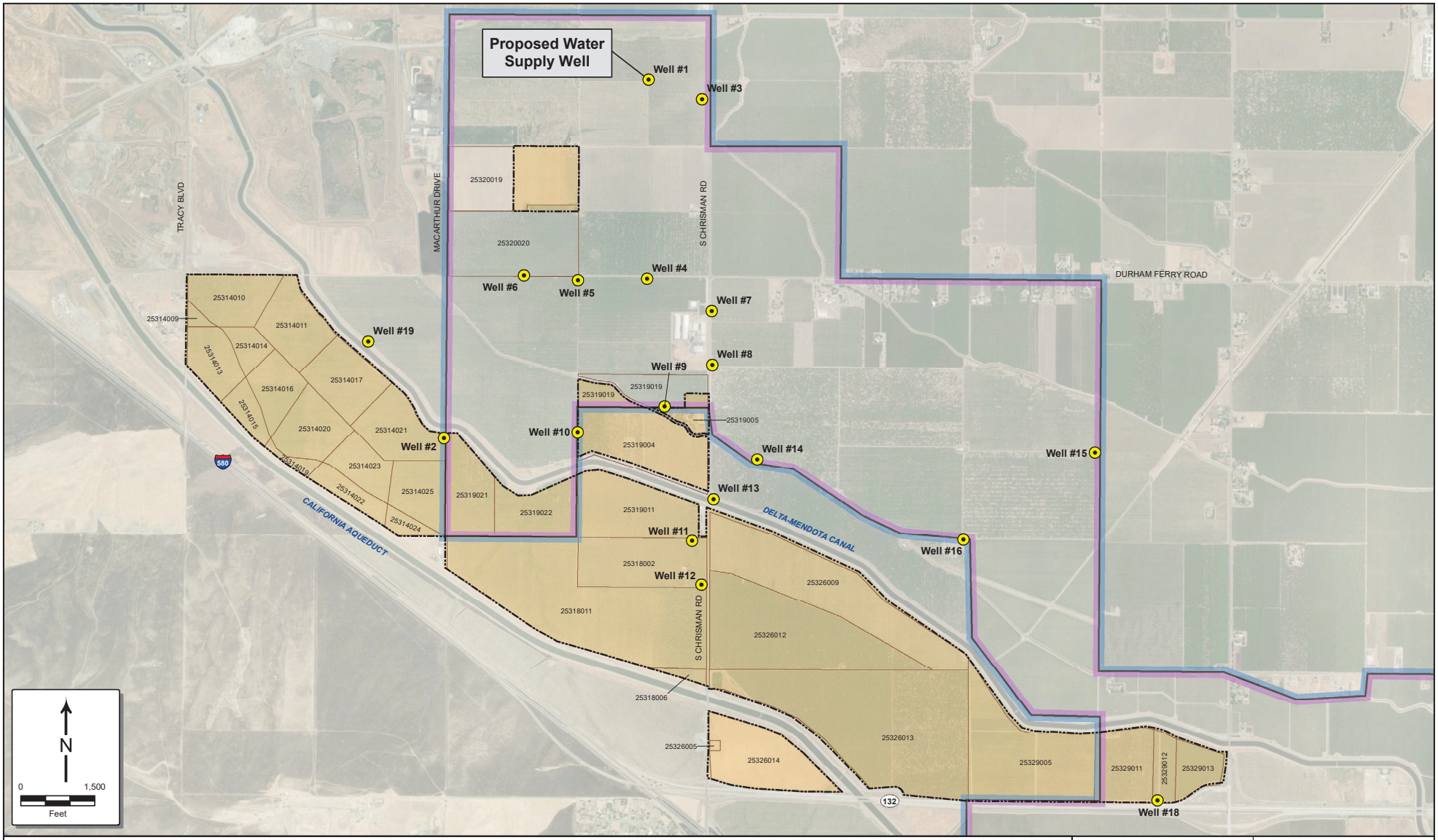


August 2025

TODD GROUNDWATER

Figure 2
Pacific Gateway
Land Use Types



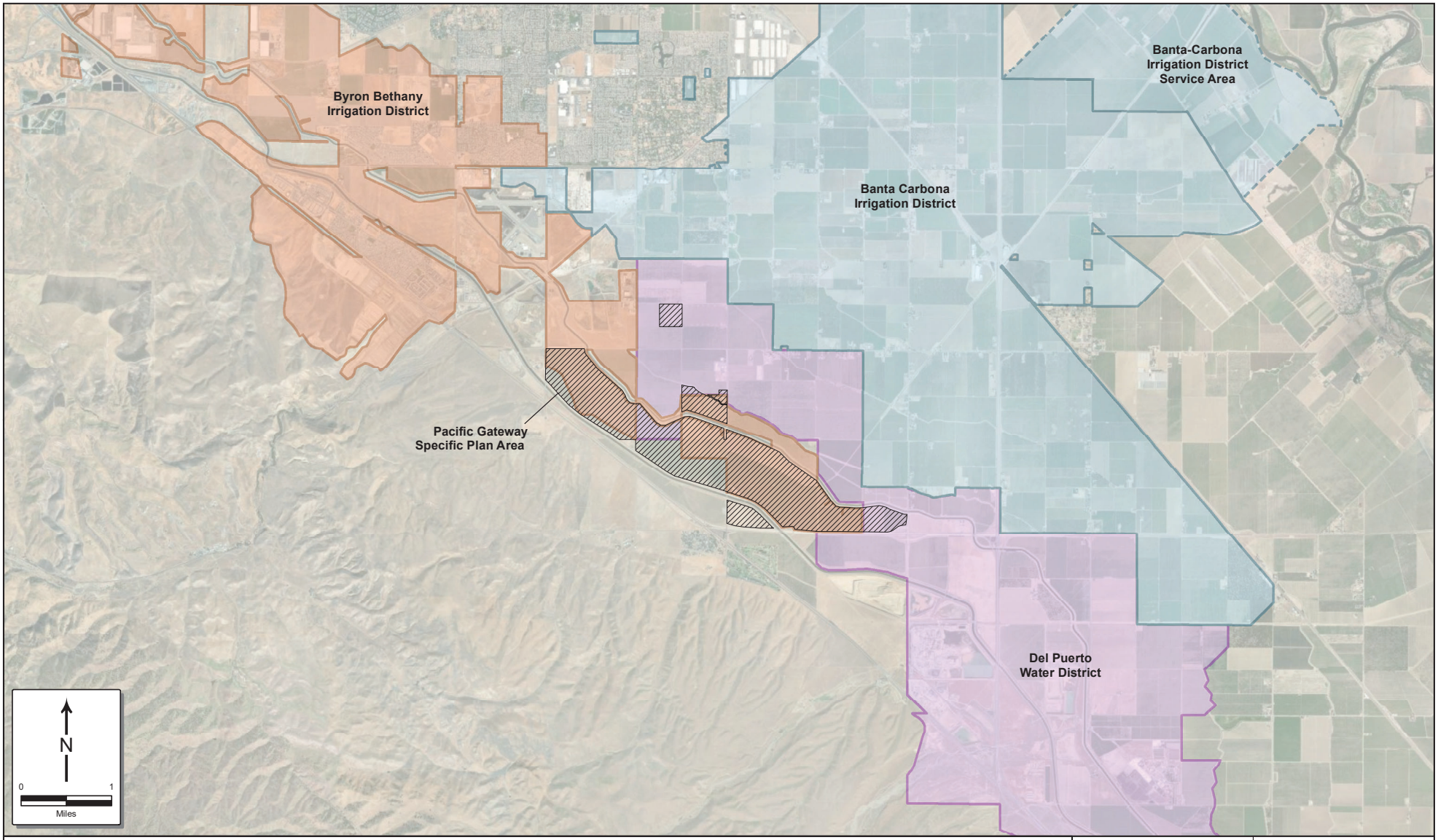
Groundwater Basin

- Tracy (5-022.15)
- Delta-Mendota (5-022.07)
- Project Boundary
- Parcel Boundary
- Existing Well Location
- Raney Pacific Gateway Specific Plan Area

August 2025

TODD GROUNDWATER

Figure 3
Raney Pacific Gateway
Current Well Locations



Banta Carbona Irrigation District
Banta-Carbona Irrigation District Service Area
Byron Bethany Irrigation District
Del Puerto Water District
Pacific Gateway Specific Plan Area

August 2025

TODD GROUNDWATER

Figure 4
Irrigation District Service Areas

APPENDIX A

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

4699 Old Ironsides Drive, Suite 350
Santa Clara, CA 95054
(408) 246-4848
ganderson@swsv.com

TECHNICAL MEMORANDUM

DATE: August 21, 2025
TO: Carter Reiff, PE
FROM: Glen M. Anderson, PE
SUBJECT: Pacific Gateway – Water and Sewer Demands and System Requirements

Introduction

As part of the preliminary development plans for the Pacific Gateway development (Project), Kier & Wright has contracted Schaaf & Wheeler to establish required water demands for the proposed development, and to provide recommendations on water system requirements. This memorandum serves to provide estimated water requirements for the development as well as preliminary water system infrastructure requirements.

The Project consists of developing existing farmland into industrial usage, as well as the addition of a university. The Project will convert approximately 1,577 acres of existing agriculture land into a mixed-use, master planned development consisting of modern industrial facilities, a university, business park, general commercial and the VFW Tracy post. The property is located in San Joaquin County, south of the city of Tracy. The project is enclosed by Tracy Blvd. on the west, S Bird Rd. on the east, and is predominantly located between the California Aqueduct and the Delta Mendota Canal excepting the University, AB FAB, and VFW sites north of the Delta Mendota Canal, and a portion south of the California Aqueduct, and north of Highway 132. The project area is shown in Figure 1.

WATER DEMANDS

Domestic Water Demand

The San Joaquin Public Works (SJPW) Improvement Standard, Section 4-2.0, establishes that industrial development site water demands shall be set at levels of similar facilities, or a minimum of 1,800 gallons per day per acre (gpd/ac). The 1,800 gpd/ac water demand is inconsistent with, and substantially greater than, demand assumptions recently approved by the County for industrial developments. Following the County-approved demand patterns of nearby industrial developments and based on developer expectations of the reasonably foreseeable future uses within the proposed project, Schaaf & Wheeler has established a proposed average day demand of 10 gpd per 1,500 square feet of industrial building per shift and 10 gpd per 250 square feet of office space within the industrial development, per shift. For this project, it is assumed that industrial developments will work two shifts per day and that the industrial development is 95% warehouse and 5% office space.

For commercial parcels, the SJPW Improvement Standard requires 2,000 gpd/ac.

Schaaf & Wheeler assumed the University would accommodate an average of 600 students per day initially and 5,000 students per day at buildout, each generating an average day water demand of 12.81 gallons per day per student based upon research conducted. At buildout, 1,600 student beds are anticipated, bringing the total water use per day for those 1,600 students to 80 gallons per day.

The proposed development is in discussions to join the water system that currently serves Community Service Area 16 (CSA 16), to the south of the development. CSA 16 serves a total of 55 connections within

Par Country Estates and Hillside greens. An estimate of CSA 16's water demands is included in the water demand estimates, based on historic water use.

Due to the size of the Project, it is anticipated that construction will occur in phases. Refer to shading in Figure 1 indicating the initial phase of development.

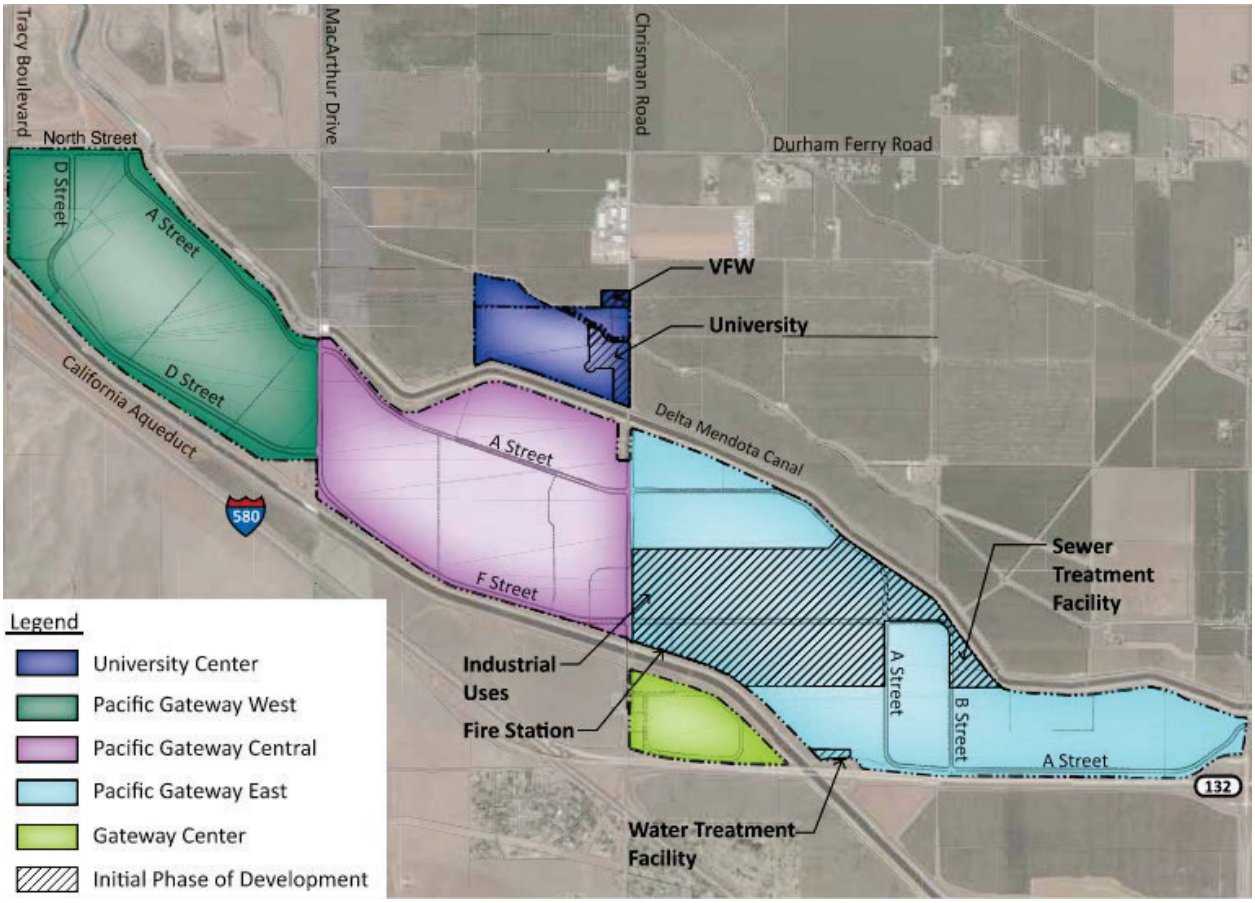


*Figure not OCR compatible

Figure 1. Project Area

Estimated building square footages are established for each of the areas identified. The estimated building size and associated average day water demands (ADD) for each area are summarized in Table 1.

The Maximum Day Demand (MDD) and Peak Hour Demand (PHD) are both essential when designing components of the overall water system for the project. Peaking factors of 2.2 (Maximum Day Demand) and 3.8 (Peak Hour Demand) were utilized from section 4-2.0 of the 2014 SJPW Standards.

Fire Water Demand

The expected fire flow demand requirements were established from the 2019 California Fire Code (CFC). With the large building sizes anticipated, a base fire flow of 8,000 gpm for 4 hours is assumed. However, it is presumed that the buildings will be equipped with fire suppression systems, that will allow for a significant reduction in fire flow to 2,000 gpm for 2 hours. To be conservative, the fire demand was set at 2,000 GPM for 4 hours. The final fire demand for the industrial warehouse buildings may be adjusted later in the planning process.

Table 1. Average Water Demands

Area	Landuse	Initial Phase Area (SF)	Buildout Area (SF)	Initial Phase Water Demand (GPD)	Buildout Water Demand (GPD)	Initial Phase Water Demand (AFY)	Buildout Water Demand (AFY)
Pacific Gateway East	Industrial	3,962,000	11,124,274	66,033	185,405	74.0	207.7
Pacific Gateway Central	Industrial	0	6,856,474	0	114,275	0.0	128.0
Pacific Gateway West	Industrial	0	6,168,882	0	102,815	0.0	115.2
Gateway Center	Industrial	0	525,370	0	8,756	0.0	9.8
Gateway Center	Hotel/Commercial	0	109,592	0	5,032	0.0	5.6
University Center	University*	25,000	1,379,150	7,686	171,554	8.6	192.2
University Center	VFW**	11,500	11,500	528	528	0.6	0.6
University Center	Industrial	0	93,000	0	1,550	0.0	1.7
University Center	Commercial	0	38,908	0	1,786	0.0	2.0
CSA-16	Residential***	NA	NA	123,290	123,290	138.1	138.1
	Total	3,998,500	26,307,150	197,537	714,990	221.3	800.9

*University Assumes 600 students in first phase and 5,000 at buildout, with each student accounting for 12.81 GPD. Also assumes that 1,600 student beds are included at buildout with and additional water demand of 67.19 GPD per bed (80 GPD per bed total).

**VFW treated as commercial

*** CSA-16 parcels presumed to be on Septic and treated at place of use. CSA-16 estimate is based on peak record water use for CSA-16.

Irrigation Water Demand

The anticipated irrigation demand for the project site was estimated using the Estimated Total Water Use (ETWU) calculations. It is assumed that fifteen percent (15%) of the total area will be designated as Landscape Area (LA). Additionally, since the project intends to join CSA 16, the irrigation calculation should include the required irrigation for the Golf Course served by CSA 16. In Total, the estimated landscape area is approximately 314 acres. The evapotranspiration (ETo) of 48 inches is used for the project to match the nearby City of Tracy, as directed by the County. The Evapotranspiration Adjustment Factor (ETAF) is 0.45 (non-residential). Table 2 displays the irrigation demand for the development totaling 266.2 ac-ft/year. To determine these values the formula ETWU = (Et) X (0.62) X [(ETAF X LA)] was used.

Table 2. Estimated Irrigation Demand

Pacific Gateway Irrigation Demand Estimates		
Total Area	1577	Acres
Landscape Area %	15	%
Landscape Area	236.6	Acres
Eto	48.4	in/year
Eto	4.03	ft/year
ETAF	0.45	unitless
Irrigation Demand	**266.2**	**ac-ft/year**

WATER SUPPLY

Capacity

As previously discussed, the Project site is currently used for agricultural purposes, with much of the land used for growing almonds. Water for the existing site is supplied through existing groundwater wells and surface water turnouts. Documentation on the existing wells indicate capacities ranging from 50 gpm to 1,500 gpm.

According to the University of California Drought Management program, almond trees require between 41 and 54 inches of water per year. This translates to between 3.4 and 4.5 acre-feet per acre. The Project's current land owner has indicated that the properties are currently watered at a rate between 3.0 and 3.5 acre-feet per acre With one acre-foot being equivalent to 325,851 gallons, and assuming the low end of required watering, this is an average flow of 2,678 gpd/acre (1.86 gpm/acre). For the proposed development, the predevelopment water demand is estimated at approximately 3.63 million gallons per day. Post development water demand is estimated at approximately 0.49 million gallons per day – approximately 1/7th the existing use.

Domestic Water Sources

It is anticipated that the Project's domestic water needs could be met through surface water supplies from the Byron-Bethany Irrigation District (BBID), use of existing groundwater wells, development of new groundwater wells, or some combination of these. The Project is located near County Service Area 16 (CSA-16), and it is possible the Project could be added and physically connect to the service area of CSA-16.

The Project's water source(s) will require treatment for domestic use to meet drinking water standards. Domestic water will be provided to the proposed project through a dedicated domestic water system.

Fire Water Sources

It is anticipated that the Project's fire water needs will be met through the domestic sources previously listed or through the construction of up to two groundwater wells, constructed in accordance with the State's standards or through an untreated surface water turnout. If untreated water is used for fire protection, it will be provided to the proposed project through a dedicated fire water system. If treated water is to be used for fire protection, it can be supplied through the domestic water system within the proposed project.

Irrigation Water Sources

It is anticipated that the Project's irrigation water needs will be met through use of recycled water in combination with untreated surface water from BBID. Irrigation water will be provided to the proposed project through a dedicated recycled water system.

WATER SYSTEMS

Domestic Water System

To determine required pipe sizing, a pipe network was created in EPANET, and peak hour water demands were placed strategically at locations to simulate maximum water demands at potential building location. In addition to the pipes, approximate booster pump station and storage tank sizes were determined.

Preliminary pipe sizes were determined using the EPANET model and vary between 6-inch through 12-inch pipe within the project. If domestic water is used for fire protection, it is assumed that the pipelines will be sized to meet the required fire flows as discussed later in this memorandum.

In addition to the system pipeline, storage tank(s) will be required for the domestic water system. State standards require a minimum storage volume equivalent to 8 hours of the MDD, plus the required fire flow demand. Since the fire system is entirely separate from domestic system, the domestic system is only required to store 8 hours of MDD flow. Table 3 summarizes the Project's required domestic storage in million gallons (MG). While only approximately 520,000 gallons of storage is required for domestic purposes, dead storage within tanks and commonly available storage tank requirements lead Schaaf & Wheeler to recommend a minimum of 700,000 gallons of domestic storage. This storage may be split between two reservoirs, depending on project phasing and ultimate pressure zone configuration. A booster pump system will be installed adjacent to the storage tank(s) to supply water to the domestic system.

Table 3. Required Domestic Storage

Area	Landuse	Initial Phase Area (SF)	Buildout Area (SF)	Initial Phase Water Storage (MG)	Buildout Water Storage (MG)
Pacific Gateway East	Industrial	3,962,000	11,124,274	0.0484	0.1360
Pacific Gateway Central	Industrial	0	6,856,474	0.0000	0.0838
Pacific Gateway West	Industrial	0	6,168,882	0.0000	0.0754
Gateway Center	Industrial	0	525,370	0.0000	0.0064
Gateway Center	Hotel/Commercial	0	109,592	0.0000	0.0037
University Center	University*	25,000	1,379,150	0.0056	0.1258
University Center	VFW**	11,500	11,500	0.0004	0.0004
University Center	Industrial	0	93,000	0.0000	0.0011
University Center	Commercial	0	38,908	0.0000	0.0013
CSA-16	Residential***	NA	NA	0.0904	0.0904
	Total	3,998,500	26,307,150	0.1449	0.5243

*University Assumes 600 students in first phase and 5,000 at buildout, with each student accounting for 12.81 GPD. Also assumes that 1,600 student beds are included at buildout with and additional water demand of 67.19 GPD per bed (80 GPD per bed total).

**VFW treated as commercial

*** CSA-16 parcels presumed to be on Septic and treated at place of use. CSA-16 estimate is based on peak record water use for CSA-16.

Fire Water System

Schaaf & Wheeler prepared a fire flow model, similar to the domestic model, using EPANET. The model revealed that for a fire flow of 2,000 gpm. 12-inch pipeline is sufficient.

As previously stated, the identified design fire flow assumed for this project is 2,000 gpm for a 4-hour duration. State standards require that the project store the fire flow, which will require 480,000 gallons of fire storage. Given dead volume within the storage tanks, it is estimated that a 600,000 gallon storage tank will be required. It may be possible to split this storage volume between multiple tanks, but a fire pump will be necessary at each tank location.

Irrigation Water System

Because little is known about the irrigation requirements at this time, no model has been created for the irrigation system. That said, because irrigation is a non-essential use, irrigation schedules can be adjusted to minimize system peaks and reduce system component size. It is estimated that 8-inch pipe will be sufficient to meet irrigation demands. The irrigation system will consist of a recycled water storage tank and booster station, located at the wastewater treatment plant.

WASTEWATER SYSTEMS

Sewage Collection System

The Project's wastewater will be collected from each parcel through a traditional wastewater gravity flow collection system that will be supplemented with lift stations at canal crossings and if dictated by the ultimate project design. Wastewater will be routed to the Project's wastewater treatment plant (WWTP), located at the south-eastern portion of the project. Figure 3 shows the conceptual layout of the collection system and the location of the WWTP.

Average day sewage flow is estimated to be 80% of the average daily potable water demand. Table 4 summarizes average daily sewage flow for the Project.

Manning's equation was used to generate a preliminary estimate of sewer pipe sizes within the project. It is estimated that 6-inch through 12-inch sewer pipes will be adequate for the Project.The Project's wastewater will be collected from each parcel through a traditional wastewater gravity flow collection system that will be supplemented with lift stations at canal crossings and if dictated by the ultimate project design. Wastewater will be routed to the Project's wastewater treatment plant (WWTP), located at the south-eastern portion of the project. Figure 3 shows the conceptual layout of the collection system and the location of the WWTP.

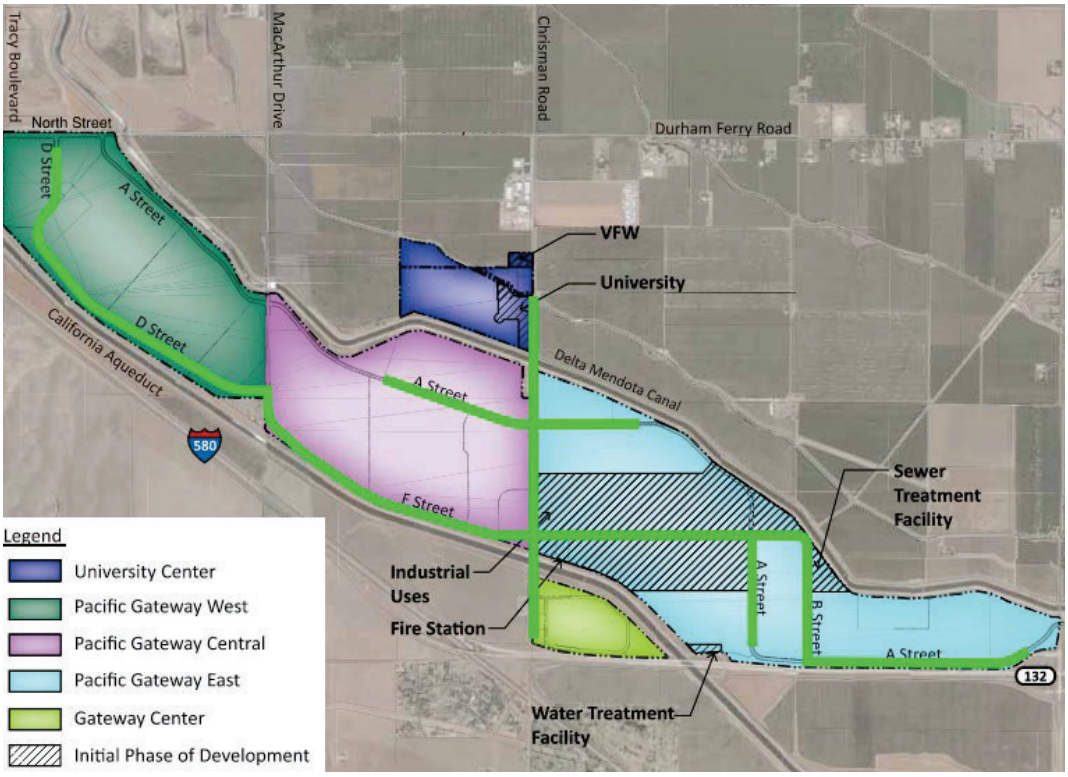


*Figure not OCR compatible

Figure 3. Wastewater Collection System

Table 4. Sewer Generation Rates

Area	Landuse	Initial Phase Area (SF)	Buildout Area (SF)	Initial Phase Water Demand (GPD)	Buildout Water Demand (GPD)	Initial Phase Sewage Generation (GPD)	Buildout Sewage Generation (GPD)
Pacific Gateway East	Industrial	3,962,000	11,124,274	66,033	185,405	52,827	148,324
Pacific Gateway Central	Industrial	0	6,856,474	0	114,275	0	91,420
Pacific Gateway West	Industrial	0	6,168,882	0	102,815	0	82,252
Gateway Center	Industrial	0	525,370	0	8,756	0	7,005
Gateway Center	Hotel/Commercial	0	109,592	0	5,032	0	4,025
University Center	University*	25,000	1,379,150	7,686	171,554	6,149	137,243
University Center	VFW**	11,500	11,500	528	528	422	422
University Center	Industrial	0	93,000	0	1,550	0	1,240
University Center	Commercial	0	38,908	0	1,786	0	1,429
CSA-16	Residential***	NA	NA	123,290	123,290	98,632	98,632
	Total	3,998,500	26,307,150	197,537	714,990	59,398	473,360

*University Assumes 600 students in first phase and 5,000 at buildout, with each student accounting for 12.81 GPD. Also assumes that 1,600 student beds are included at buildout with and additional water demand of 67.19 GPD per bed (80 GPD per bed total).

**VFW treated as commercial

*** CSA-16 parcels presumed to be on Septic and treated at place of use. CSA-16 estimate is based on peak record water use for CSA-16.

Sewage Treatment System

The project WWTP will be centered around a packaged membrane bioreactor wastewater treatment system with ultraviolet light disinfection. The WWTP will be expandable to accommodate phased construction, up to buildout. An operating permit issued by the Central Valley Regional Water Control Board (CVRWQB) will establish operating, performance, and reporting requirements for on-site treatment and disposal facilities.

It is proposed that the wastewater be treated to the Disinfected Tertiary Recycled Water Standard, suitable for use throughout the project site to irrigate landscaping and/or the surrounding farms in the area. The WWTP is proposed to include the following components, in quantities corresponding to the level of buildout:

1. A flow equalization system (sewage pump station wet well).
2. Rotary drum screens for screenings removal.
3. Compactor for screenings disposal at landfill.
4. Packaged MBR-based waste water treatment train.
5. Recycled water disinfection system.
6. Recycled water pump station.
7. Diesel engine-driven emergency generator.
8. Ancillary supporting equipment, as required.

Figure 4 depicts a preliminary WWTP site plan.

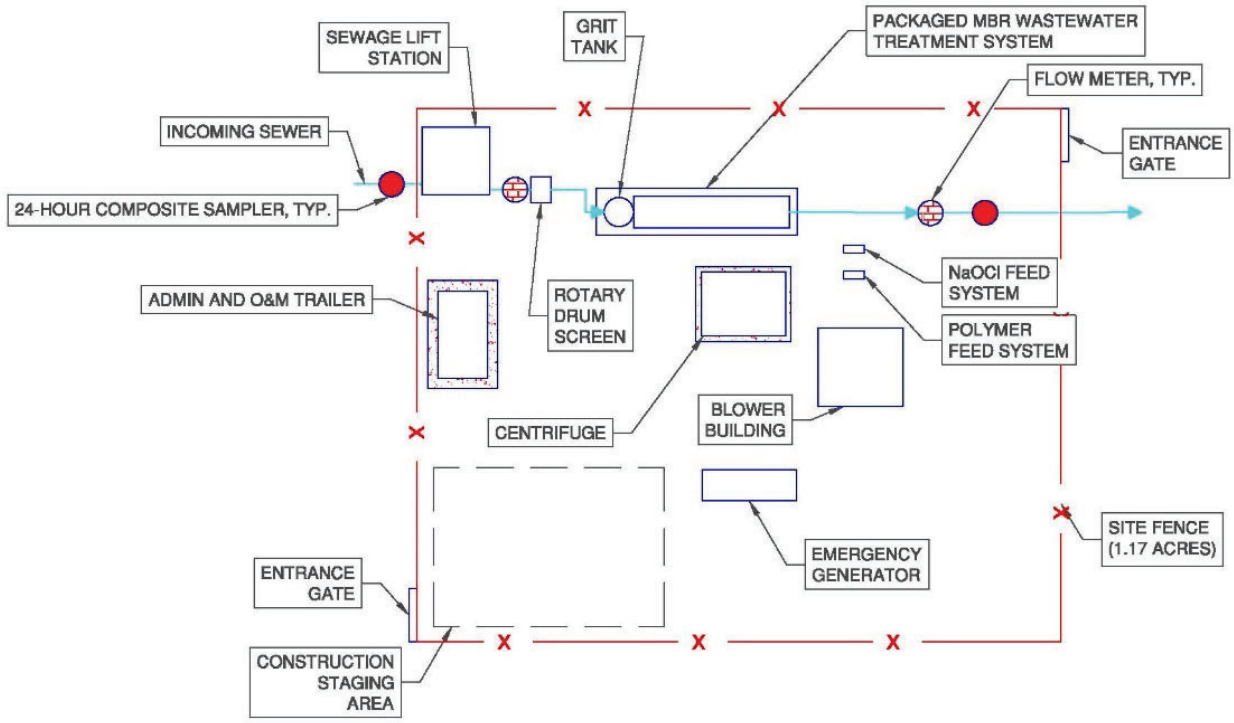


Figure 4. Preliminary WWTP Layout

*Figure not OCR compatible

APPENDIX B

RIDGELINE
PROPERTY GROUP

Integrity • Experience • Performance

May 12, 2025 **VIA EMAIL**

Mike Sandhu
230 Sterling Drive, Suite 233
Mountain House, CA 95391

Re: Pacific Gateway
Curtailment Wells
Potential Alternative Supply Well

Dear Mike,

As discussed, Raney Planning & Management, together with Todd Groundwater, are preparing the Environmental Impact Report and Water Supply Assessment, respectively, for Pacific Gateway. The Water Supply Assessment presumes use of the Proposed Water Supply Well shown on Exhibit A (attached). We have tested this well's potability and, with treatment, it will meet State public water quality drinking standards. However, the Proposed Water Supply Well is in the Delta Mendota Subbasin, which is currently over-drafted.

To memorialize our conversations, you own Wells #4, #5 and #6 (Curtailment Wells) indicated on Exhibit A, which are also located in the Delta Mendota Subbasin. I understand you are willing to limit use of the Curtailment Wells by taking one or two offline in dry years.

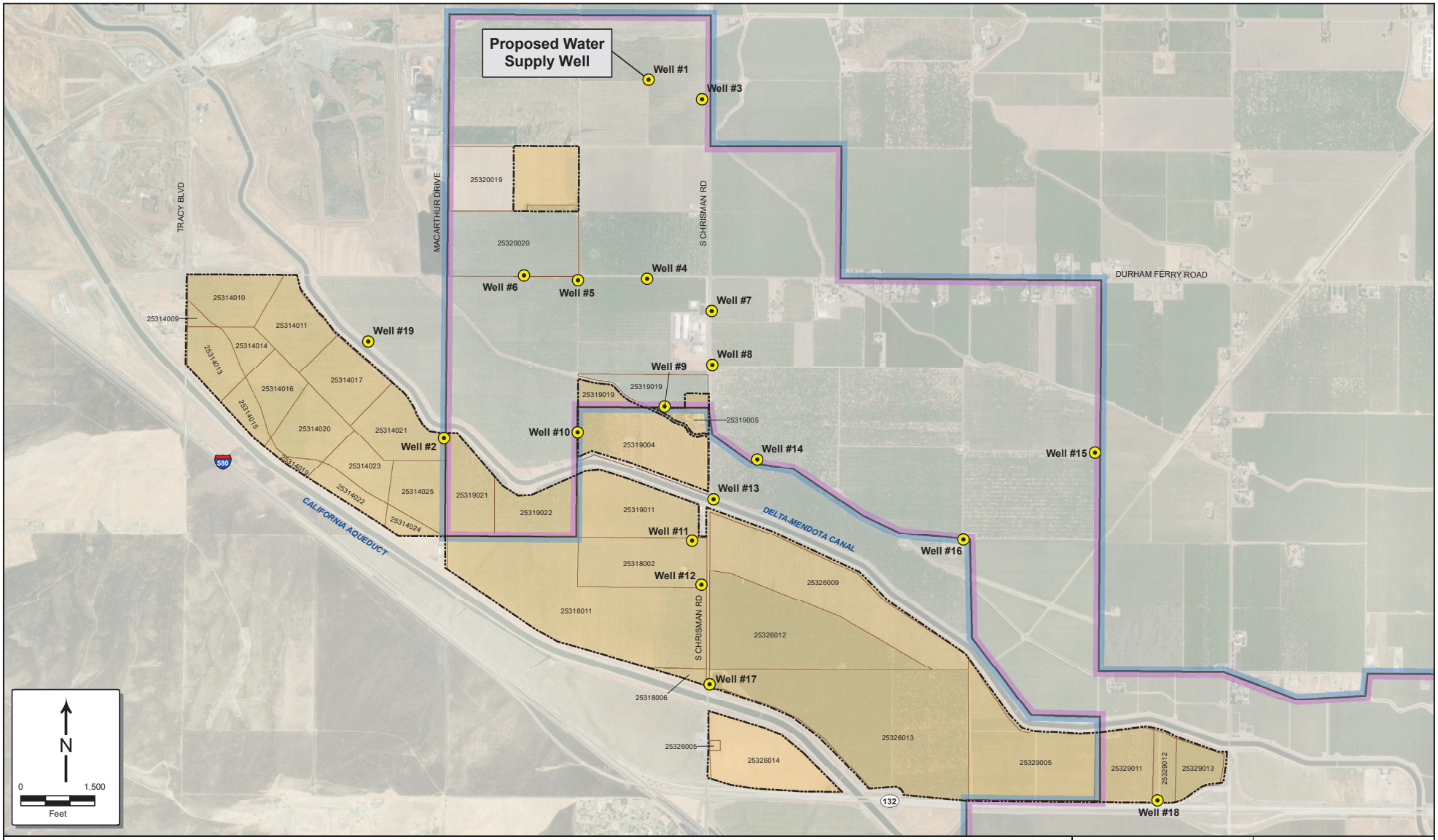
We also discussed a Potential Alternative Supply Well identified on Exhibit A, which is in the Tracy Subbasin. Should this well be determined suitable to treat to State public water quality drinking standards, I understand you will make this well available to the Project.

I appreciate your cooperation. Thank you.

Sincerely,
Ridgeline Property Group

Steve Arthur
Partner

Cc: Peggy Grillo, Ridgeline Property Group, VP Development



Groundwater Basin

- Tracy (5-022.15)
- Delta-Mendota (5-022.07)
- Project Boundary
- Parcel Boundary
- Existing Well Location
- Raney Pacific Gateway Specific Plan Area

May 2025

TODD GROUNDWATER

Figure 4
Raney Pacific Gateway
Current Well Locations

Appendix L



PACIFIC GATEWAY

Hydrology and Hydraulics Report

Job # K&WI.226

September 19, 2025

PREPARED FOR:

Kier + Wright
2850 Collier Canyon Road
Livermore, CA 94551

SCHAAF & WHEELER
CONSULTING CIVIL ENGINEERS

870 Market Street, Suite 1278, San Francisco, CA 94102
dschaaf@swsv.com

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List of Acronyms

Acronym	Description
ac-ft	Acre-Feet
AMC	Antecedent Moisture Condition
CA Aqueduct	California Aqueduct
cfs	Cubic Feet Per Second
CMP	Corrugated Metal Pipe
CN	Curve Number
DMA	Drainage Management Area
DMC	Delta Mendota Canal
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
ft	Feet
H&H	Hydrology and Hydraulics
HSG	Hydrologic Soil Group
in/hr.	Inches Per Hour
LiDAR	Light Detection and Ranging
NAVD88	North American Vertical Datum of 1988
RCBC	Reinforced Concrete Box Culvert
RCP	Reinforced Concrete Pipes
SCS	Soil Conservation Service
SR	Straight Row
S.R.	State Route

1. Introduction

This Pacific Gateway Project is a mixed-use development consisting of approximately 1,576.7 gross acres, in South San Joaquin County. The Project is bound by State Route 132 to the south, S Tracy Boulevard to the west, S Bird Road to the east, and the Delta-Mendota Canal to the north, except for the University Campus, VFW, Industrial Park, the Basin 4 area and approximately 5.88 acres of General Commercial located north of the Delta Mendota Canal and west of S Chrisman Rd. The area is bordered by open space to the west, orchards to the south and east, and quarries to the north. The location of the development site and the adjacent drainages are shown in Figure 1-1. Phase 1 of the project consists of developing a portion of the eastern side of Chrisman, VFW, and a portion of the University Campus.

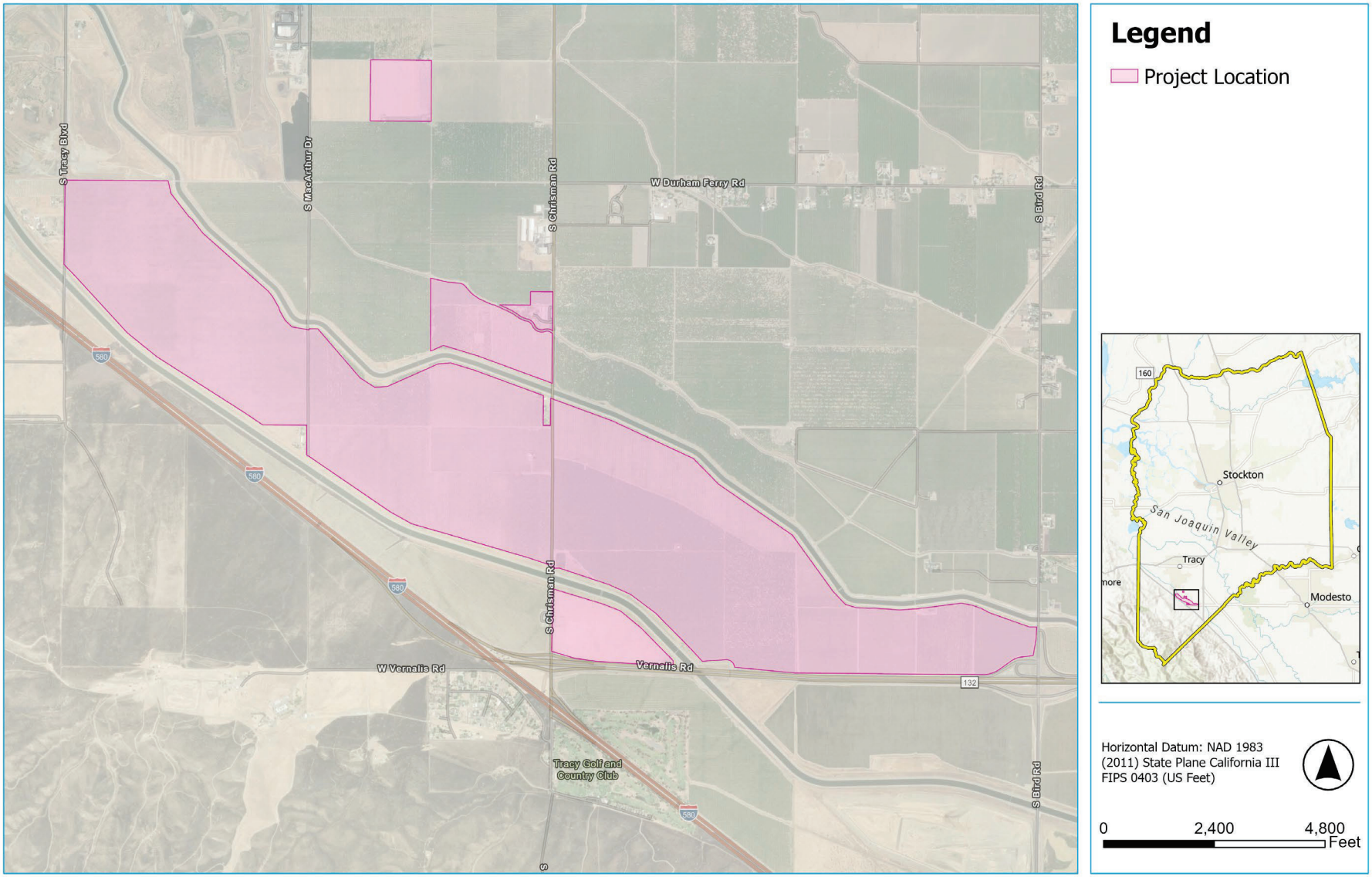

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Figure 1-1: Site Location

The Site is generally level and is currently developed with active agricultural uses, which include commercial-scale almond and cherry orchards, as well as an agricultural processing and manufacturing facility, separately operated by A.B. FAB, Inc.

This Hydrology and Hydraulics (H&H) Report evaluates the existing drainage conditions at the proposed Pacific Gateway development, including offsite areas that drain to the sites. The development will reduce the pervious area and change runoff conditions; therefore, this report sizes potential infrastructure to mitigate the development impacts. As part of the proposed project, several retention basins will be added to collect development runoff and infiltrate into native soils.

1.1 Design Event Criteria

The 100-year 24-hour event was used for sizing conveyance systems (e.g. piping). Additionally, the retention basins must be able to contain the 100-year, 10-day event and draw down within 10-days following a 48-hour storm. Small portions of the project are within the airport zone and basins within this zone must drain within 2 days instead of the typical 10-day draw down. A summary of rainfall sizing criteria and models used is shown in Table 1-1.

Table 1-1. Rainfall Design Criteria

Event	Criteria	Model
10-Year, 48-Hour	Basins must drain down in 2 days following 48- hr storm if located near airport (Basins 1 ,2 ,3A, 3B and 4 only), 10 days for all other basins.	Modeled existing and proposed in HMS
100-Year, 24-Hour	Conveyance (piping) systems	Modeled existing in HMS and HEC-RAS; Proposed conveyance piping shall be designed with hydraulic modeling software to carry runoff to retention basins, prevent flooding on development sites, and mitigate impacts upstream and downstream as sites develop
100-Year, 10-Day	Retention basin capacity	Modeled existing and proposed in HMS only

The watershed was divided into two regions with varying rainfall characteristics (Figure 1-2): a mountain region west of Highway 580 (with centroid coordinates of 37.622, -121.436) and a valley region east of the highway (with centroid coordinates of 37.649, -121.400). Schaaf & Wheeler obtained precipitation depths for all events (100-year, 10-day, 100-year, 24-hour, and 10-year, 48-hour) from *NOAA Atlas 14* for the mountain region and valley region.

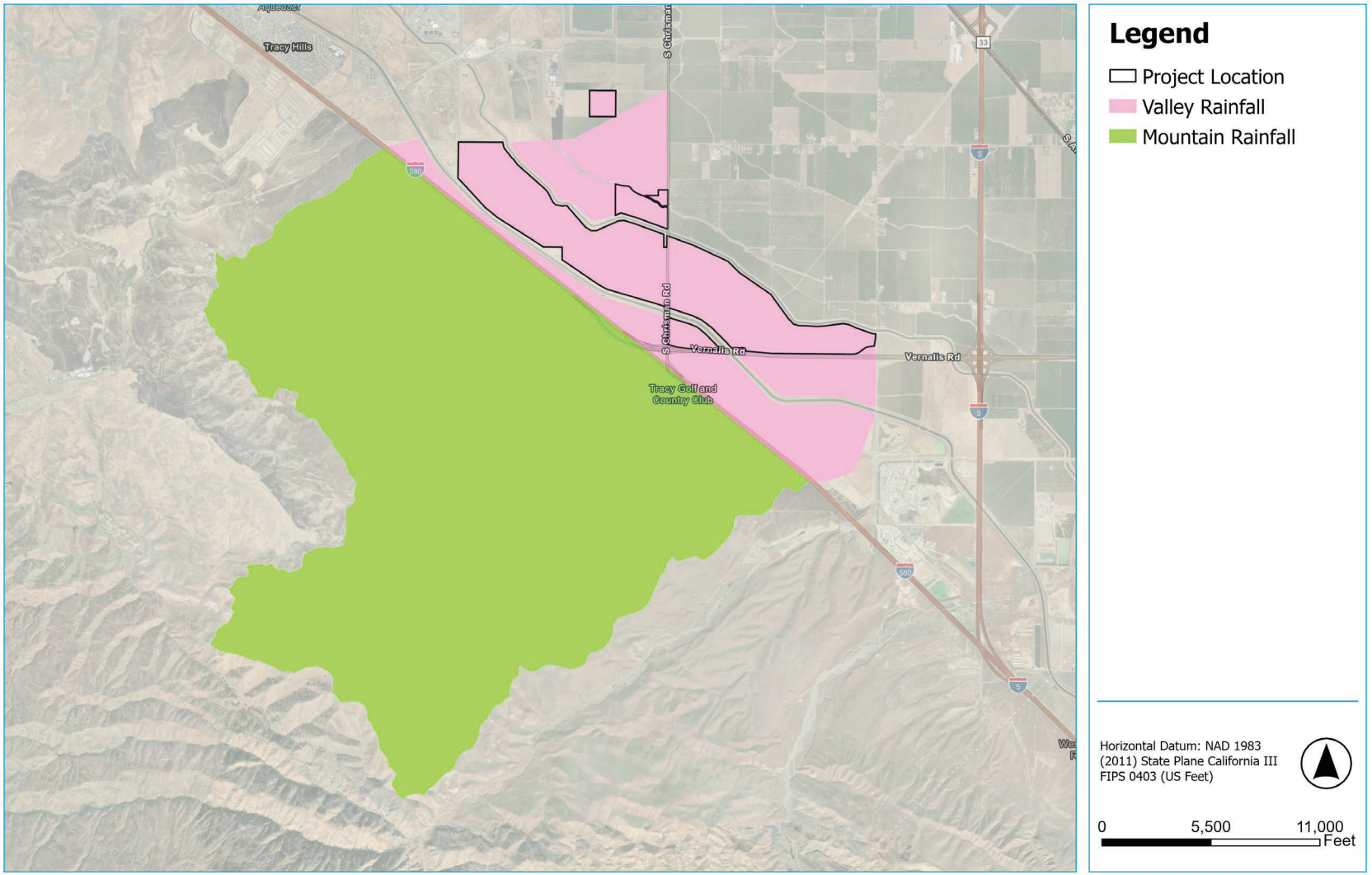

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Figure 1-2: Project Watershed Rainfall Regions

San Joaquin County standards require using a unit hydrograph method (TR-55) for areas over 200 acres. Schaaf & Wheeler applied the SCS Type I storm pattern to the 100-year, 24-hour and 10-year, 48-hour events to create a daily rainfall distribution at six-minute increments. The 100-year, 24-hour rainfall pattern is shown in Figure 1-3.

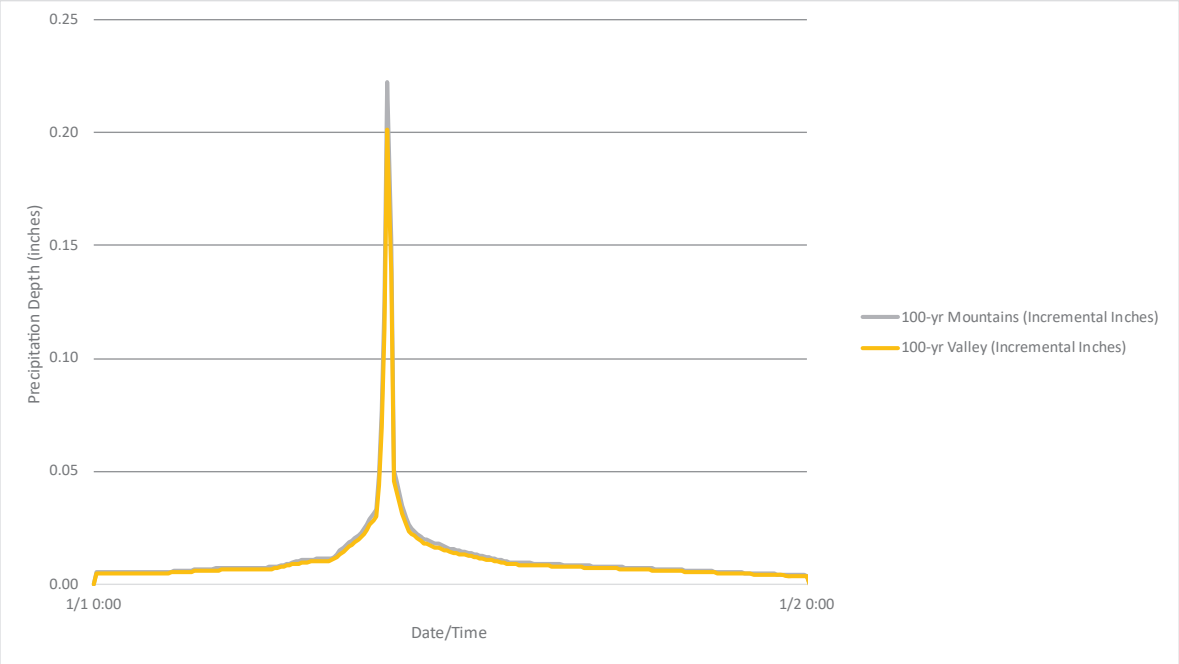

Figure 1-3: Rainfall Pattern: 100-year, 24-Hour

The 10-year, 48-hour incremental rainfall pattern is shown in Figure 1-4.

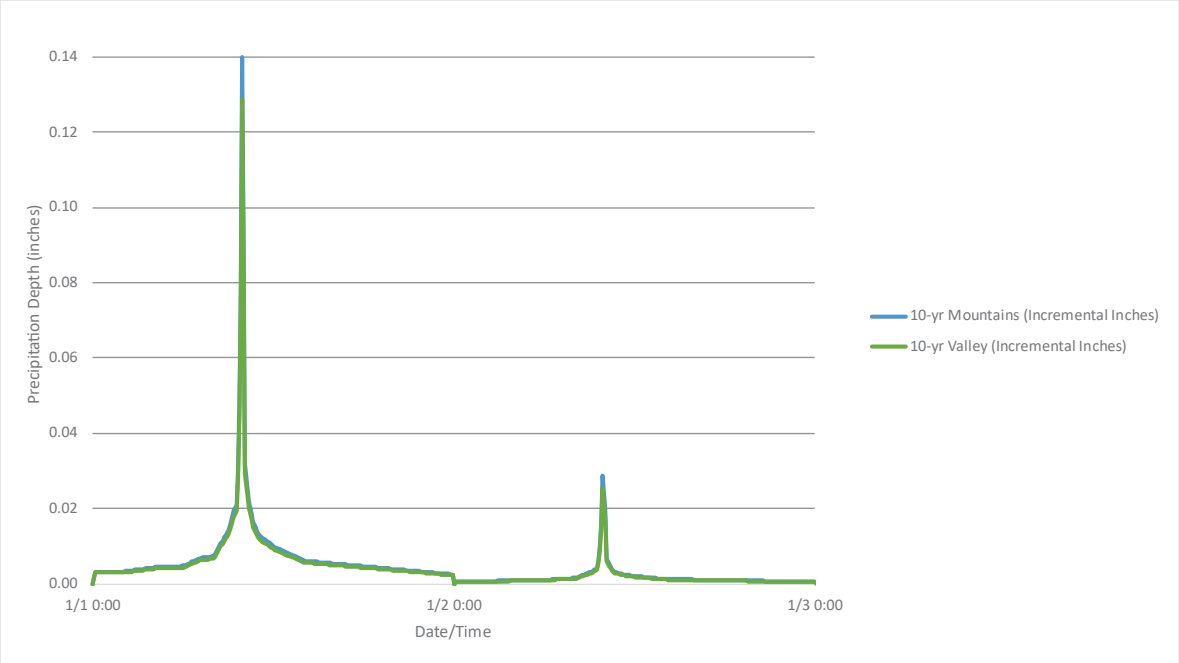

Figure 1-4: Rainfall Pattern: 10-year, 48-Hour

The hydrology for a 100-year 10-day storm event was developed in accordance with the Sacramento City/County Drainage Manual, Volume 2, dated December 1996 (Sacramento Drainage Manual). The 100-year, 10-day precipitation pattern follows Table 4-8 titled "10-Day Long-Duration Storm Precipitation as a Percent of Total Storm Depth" in the Sacramento Drainage Manual. The 100-year, 10-day design pattern is shown in Figure 1-5 for both the mountain and valley regions.

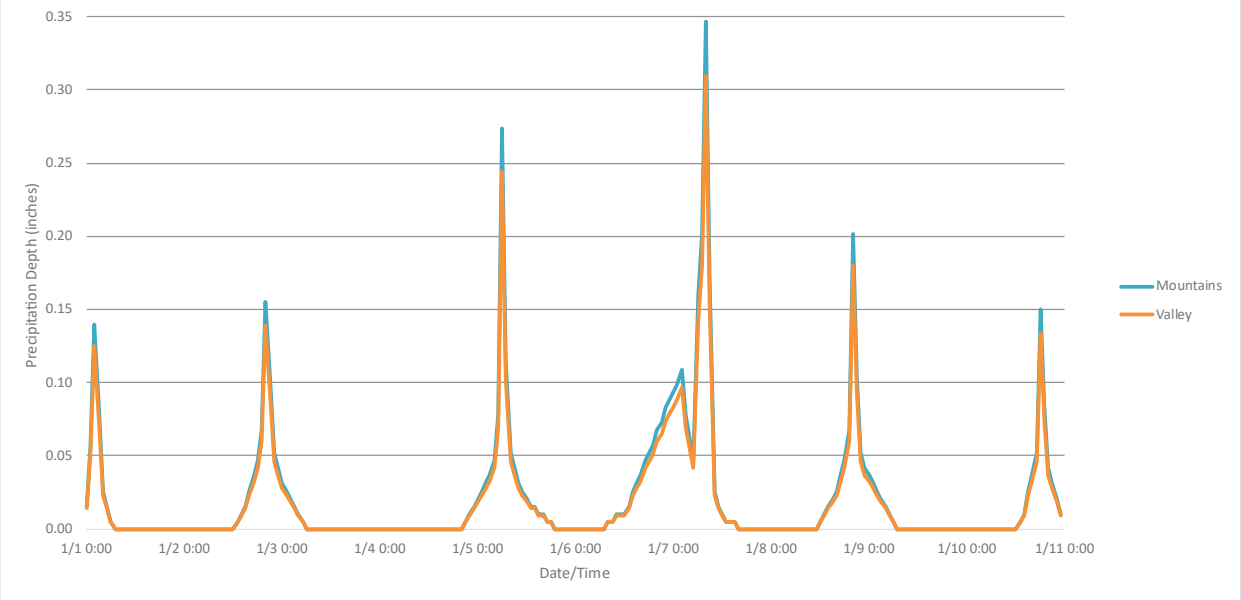

Figure 1-5: Rainfall Pattern: 100-Year, 10-Day

The total rainfall amounts utilized in this study are summarized in Table 1-2.

Table 1-2. Rainfall Amounts

Event	Mountain Region (inches)	Valley Region (Inches)
10-Year, 48-Hour	2.24	2.05
100-Year, 24-hour	2.95	2.67
100-Year, 10-Day	5.17	4.62

2. Existing Conditions

This section discusses existing hydrology and hydraulic conditions.

2.1 Hydrology

This section discusses site hydrology, which was entered as inputs to a HEC-HMS (Version 4.13) model. Flow hydrographs outputs for the 100-year, 24-hour event from HEC-HMS were input as boundary conditions for each catchment in HEC-RAS (Version 6.7), to model existing flow paths and proposed conveyance piping. The models have been included as Appendix E and Appendix F.

2.1.1 Existing Drainage

The Pacific Gateway project is in a relatively flat valley region, ranging in elevation from approximately 270 to 190 feet, and receives offsite runoff from an adjacent, steep mountain region west of Interstate 580 that ranges in elevation from approximately 1,400 feet at the summit to approximately 300 feet near Interstate 580. All elevations are in North American Vertical Datum 1988 (NAVD 88). The flow direction within the project area is to the northeast. The mountain region is bounded by the Corral Hollow Creek to the northwest, and Fork Lone Tree Creek to the southeast.

Runoff from the mountain regions accumulates at Interstate 580 before flowing through a series of culverts to a region located southwest of the California Aqueduct (referred to as the canal region in this report). In the eastern portion of the site, runoff also accumulates at Vernalis Road and State Route (S.R.) 132 within the canal region. Runoff is then conveyed via crossings or culverts past the California Aqueduct, where it mostly overland flows across existing farmland. The farmland properties between the California Aqueduct and the Delta Mendota Canal typically all have discharges to the Delta Mendota Canal or crossings over the Delta Mendota Canal, where runoff can overland across farm properties located northeast of the canal.

Catchments were initially delineated in HEC-HMS and manually revised (e.g. split or merged) based on the physical barriers noted above (I-580, California Aqueduct, Delta Mendota Canal, and contours based on the underlying terrain). The existing project catchments are shown in Figure 2-1.

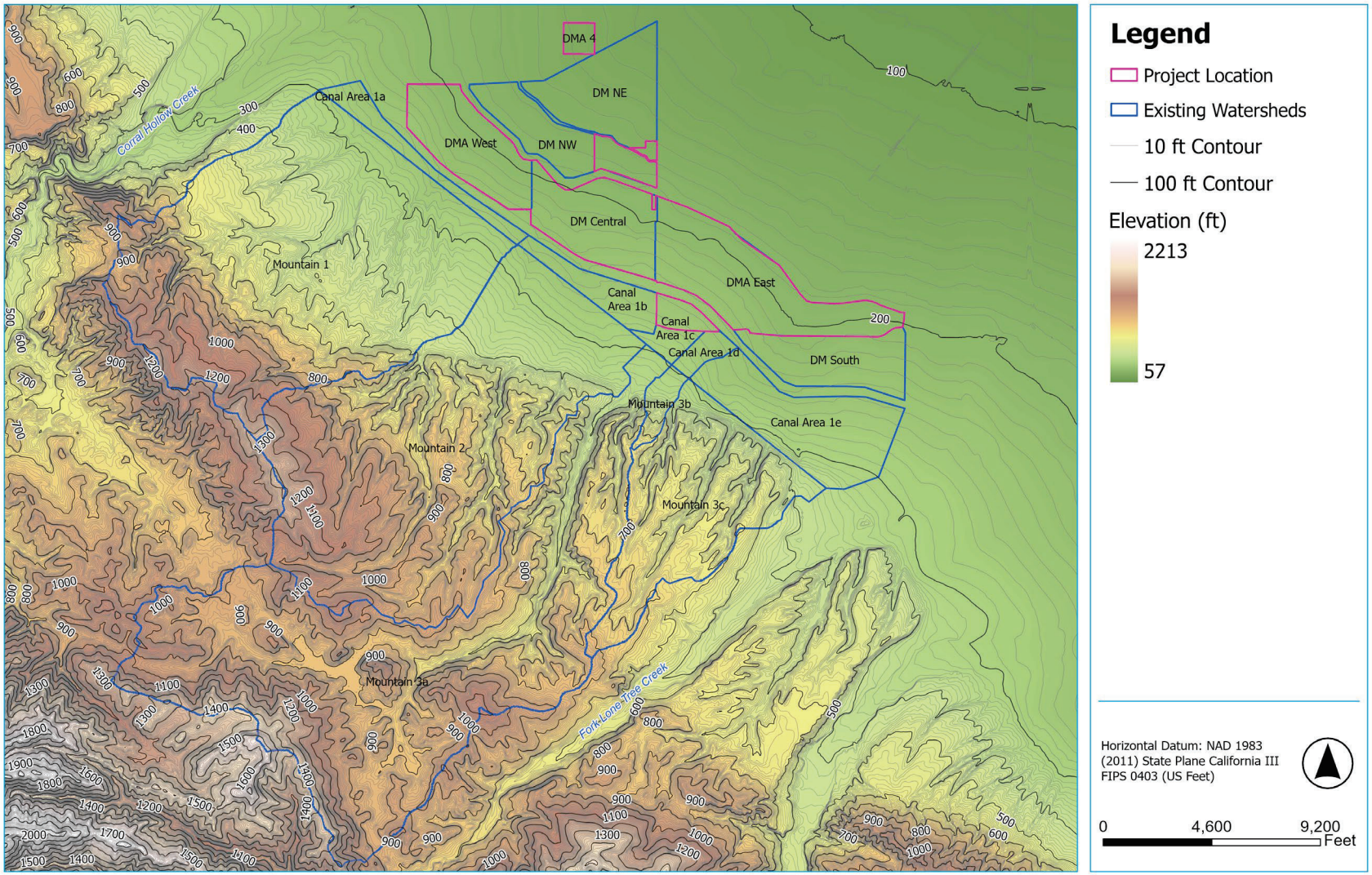

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Figure 2-1: Existing Catchments

2.1.2 Soil Types

USDA NRCS Hydrologic soil groups (HSGs) for the watershed are shown in Figure 2-2. Existing soils are primarily HSG C, with a portion of HSG D soils on the upper hillsides. HSGs A and B are interspersed sparingly throughout the area (e.g. within Mountain 1, DMA East, Mountain 3A, DM Central, and Mountain 2 for HSG A, and HSG B in Canal Area 1e).

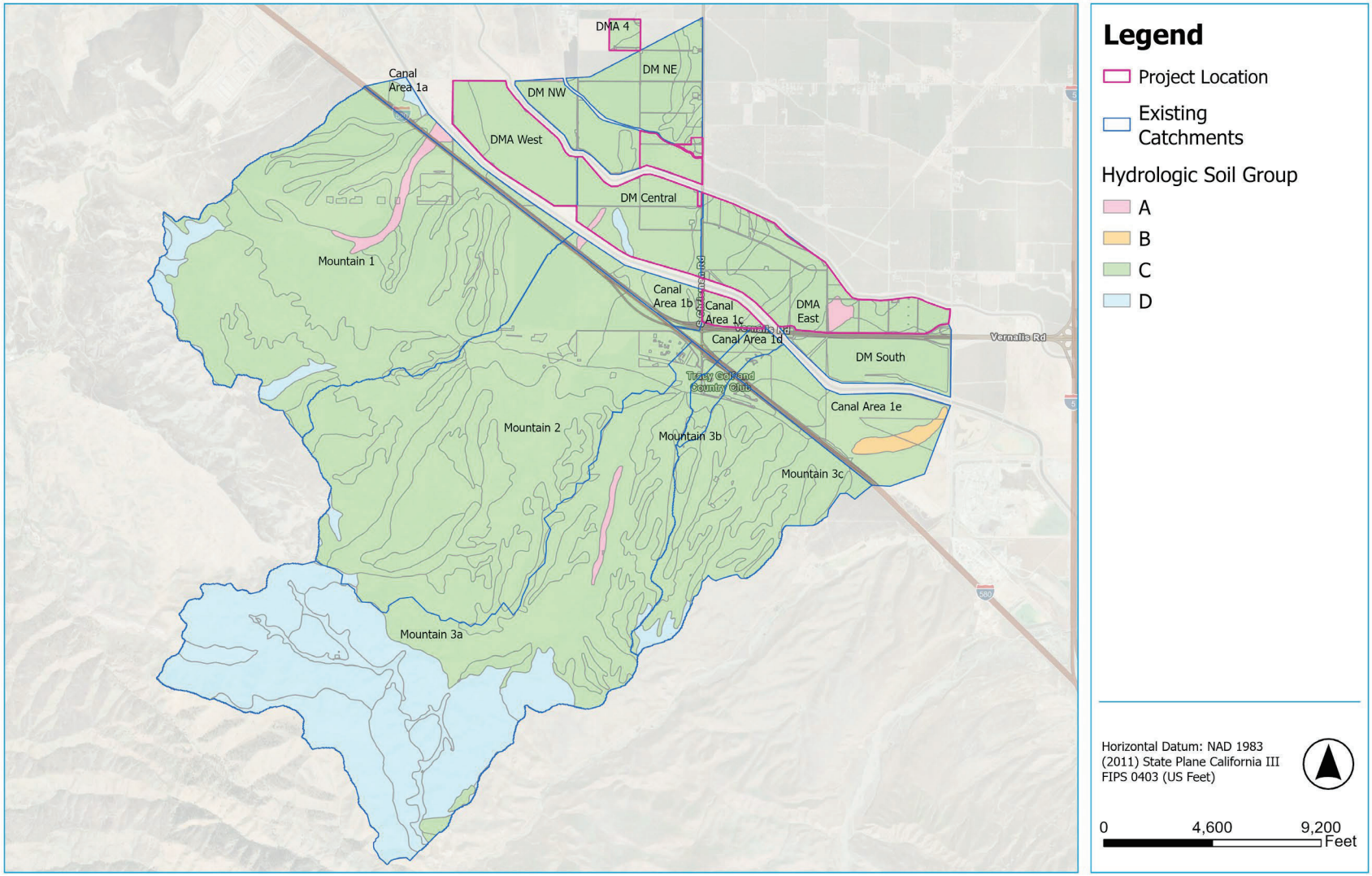

*Figure not OCR compatible **Figure 2-2: Hydrologic Soil Groups Overlaid with Existing Catchments**

2.1.3 Land Use

Land use by existing catchment is shown in Figure 2-3; the watershed area is primarily native vegetation (mountain regions), and agricultural in the valley, specifically deciduous fruits and nuts, citrus and subtropical, grain and hay crop, and urban landscape due to the golf course.

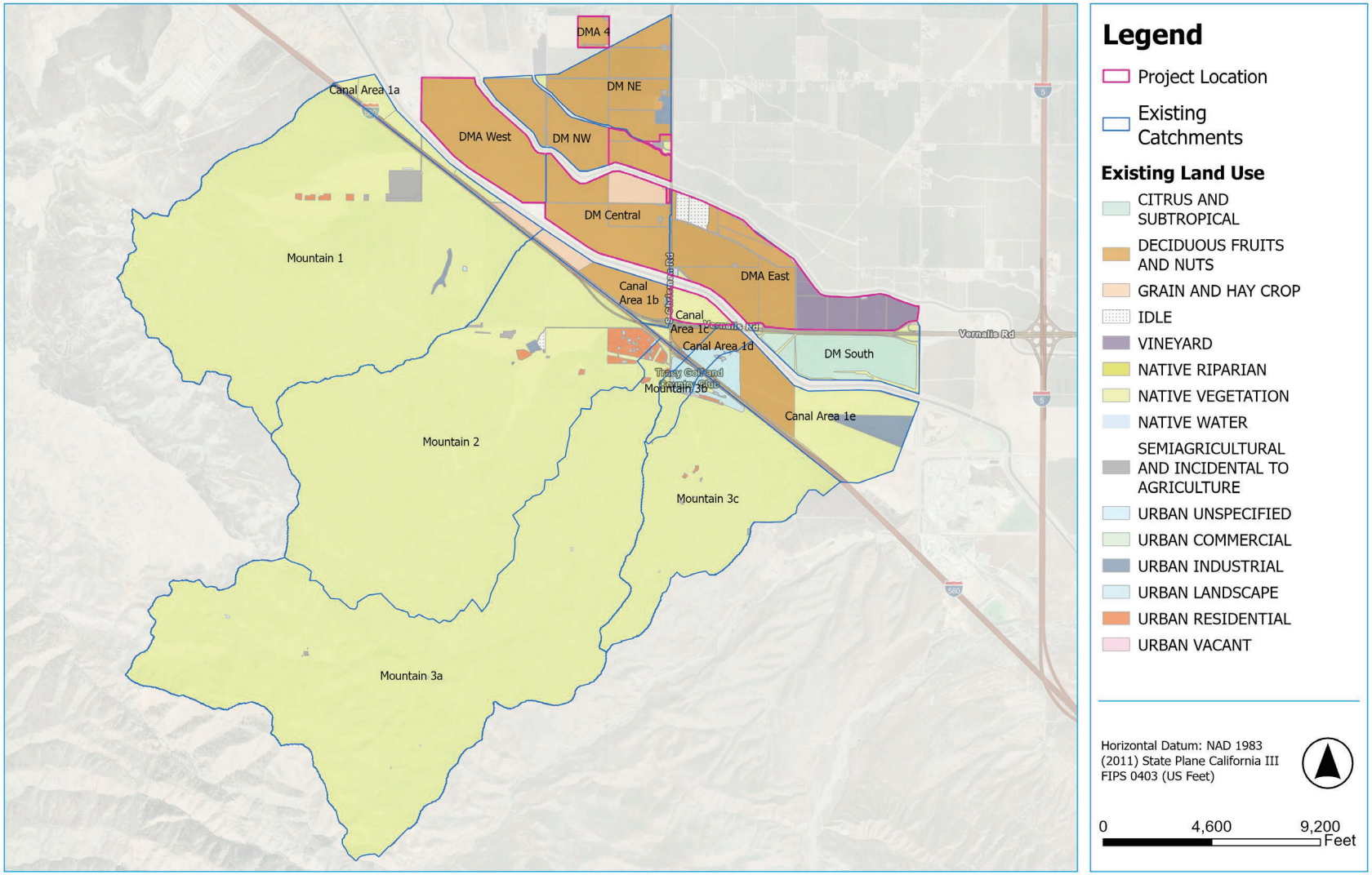

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Figure 2-3: 2017 San Joaquin Land Use by Existing Catchment

2.1.4 Curve Numbers

To estimate curve numbers for each catchment, the San Joaquin County 2017 Land Use Survey class 1 designations were correlated with the land use designations from tables 2-2a “Runoff curve numbers for urban areas”, 2-2b “Runoff curve numbers for cultivated agricultural lands”, and table 2-2c “Runoff curve numbers for other agricultural lands” in TR-55. Land use designations that were used to determine the SCS curve number (CN) for each catchment are shown in Table 2-1. No adjustments to the CN values were made, hence, an antecedent moisture condition (AMC) value of 2 was assumed. The SCS Curve Number loss method was utilized for the 10-year, 48-hour and 100-year, 24-hour events.

Table 2-1: 2017 San Joaquin Land Use Types Correlated with TR-55 Curve Numbers

2017 San Joaquin Class 1 Land Use Code	2017 San Joaquin Land Use Description	Cover Type and Hydrologic Condition per Table 2-2a of TR-55	% Impervious	Hydrologic Soil Group			
				A	B	C	D
C	Citrus and Subtropical	Straight row (SR) - Good (per aerials)	0	67	78	85	89
D	Deciduous Fruits and Nuts	Straight row (SR) - Good (per aerials)	0	67	78	85	89
G	Grain and Hay Crops	Straight row (SR) - Good (per aerials)	0	67	78	85	89
I	Idle	Straight row (SR) - Good (per aerials)	0	67	78	85	89
NR	Riparian vegetation	Brush - Good	0	30	48	65	73
NV	Native Vegetation	Brush - Fair	0	35	56	70	77
NW	Water Surface		0	100	100	100	100
S	Semiagricultural	Pasture, Fair	0	49	69	79	84
U	Urban	Residential - 1 acre (per aerials)	20	51	68	79	84
UC	Commercial	Urban districts - Commercial and business	85	89	92	94	95
UI	Industrial	Urban districts - Industrial	72	81	88	91	93
UL	Urban Landscape	Open space (lawns, parks, golf courses, cemeteries, etc.) - Good Condition (Grass Cover > 75%)	0	39	61	74	80
UR	Residential	Residential - 1 acre	20	51	68	79	84
UV	Vacant	Streets and Roads: Paved; Open Ditches (including Right-of-Way)	100	83	89	92	93
V	Vineyards	Straight row (SR) - Good (per aerials)	0	67	78	85	89

Curve numbers used in the model for each catchment are shown in Table 2-2. The Curve Numbers are weighted values that represent greater runoff from impervious areas (hence percent impervious values were left blank in the HMS model).

Table 2-2: Catchment Curve Numbers – Existing Conditions

Catchment	CN
Canal Area 1a	71.5
Canal Area 1b	83.7
Canal Area 1c	75.6
Canal Area 1d	81.0
Canal Area 1e	75.7
DM Central	84.7
DM NE	84.6
DM NW	84.3
DM South	82.5
DMA 4	84.4
DMA East	83.9
DMA West	84.9
Mountain 1	70.0
Mountain 2	70.4
Mountain 3a	73.8
Mountain 3b	72.5
Mountain 3c	70.5

2.1.5 Lag Time

The time of concentration was calculated using the watershed lag method.

$$Tc = l^{0.8}\frac{(S+1)^{0.7}}{1140Y^{0.5}}$$

Where:

- l = flow length, ft
- Y = average watershed land slope, percent
- S = maximum potential retention, in = $\frac{1{,}000}{cn'} - 10$. cn' is approximately the same as the curve number as defined in NEH630.09; therefore, CN was used.

Flow lengths and the average watershed land slope (basin slope) were obtained from the basin characteristics in HMS. Parameters used to calculate lag time are shown in Table 2-3.

Table 2-3: Parameters Utilized to Calculate Lag Time – Existing Conditions

Catchment	Flow Length (ft)	CN	Slope, Percent	Tc (minutes)
Canal Area 1a	1,871	71.5	3.39	36.5
Canal Area 1b	2,801	83.7	2.47	40.9
Canal Area 1c	2,990	75.6	3.11	49.4
Canal Area 1d	3,059	81.0	3.49	40.3
Canal Area 1e	5,832	75.7	3.63	77.8
DM Central	5,782	84.7	1.96	79.2
DM NE	7,244	84.6	1.13	125.4
DM NW	2,981	84.3	1.57	52.8
DM South	4,073	82.5	1.81	66.9
DMA 4	1,815	84.4	0.50	62.8
DMA East	4,678	83.9	1.94	69.0
DMA West	3,565	84.9	2.54	46.9

Catchment	Flow Length (ft)	CN	Slope, Percent	Tc (minutes)
Mountain 1	20,729	70.0	16.91	116.7
Mountain 2	24,225	70.4	22.88	112.4
Mountain 3a	38,296	73.8	29.18	130.6
Mountain 3b	4,725	72.5	13.89	36.8
Mountain 3c	14,158	70.5	21.84	74.6

The lag time was then determined by multiplying Tc by 0.6. Lag times used in the model for each catchment are shown in Table 2-4. The SCS Unit Hydrograph transform method was utilized for all modeled rainfall events.

Table 2-4: Catchment Lag Times – Existing Conditions

Catchment	Lag Time (Minutes)
Canal Area 1a	22
Canal Area 1b	25
Canal Area 1c	30
Canal Area 1d	24
Canal Area 1e	47
DM Central	48
DM NE	75
DM NW	32
DM South	40
DMA 4	38
DMA East	41
DMA West	28
Mountain 1	70
Mountain 2	67
Mountain 3a	78
Mountain 3b	22
Mountain 3c	45

2.1.6 Losses (100-year, 10-day)

The Initial and Constant loss method was utilized for the 100-year, 10-day event. An initial loss of 0.10 inches was used, corresponding to a recurrence interval of 100, per Table 5-1 “Initial Losses” of the Sacramento Drainage Manual. To estimate constant losses and percent impervious for each catchment, the San Joaquin County 2017 Land Use Survey class 1 designations were correlated with table 5-2 “Infiltration Rates by Hydrologic Soil-Cover Groups (inches/hour)” of the Sacramento Drainage Manual. Land use designations that were used to determine the constant losses for each catchment are shown in Table 2-5.

Table 2-5: 2017 San Joaquin Land Use Types Correlated with Constant Losses from the Sacramento Drainage Manual – Existing Condition

Class 1 Land Use Code	Land Use Description	Cover Type and Hydrologic Condition	% Impervious	Hydrologic Soil Group			
				A	B	C	D
C	Citrus and Subtropical	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07
D	Deciduous Fruits and Nuts	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07
G	Grain and Hay Crops	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07
I	Idle	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07
NR	Riparian vegetation	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07
NV	Native Vegetation	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07
NW	Water Surface		100	0.00	0.00	0.00	0.00
S	Semiagricultural	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07
U	Urban	Residential: 1-2.5 du/ha	15	0.18	0.18	0.10	0.07
UC	Commercial	Commercial, Offices	90	0.16	0.16	0.08	0.05
UI	Industrial	Intensive Industrial	85	0.162	0.162	0.082	0.052
UL	Urban Landscape	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07
UR	Residential	Residential: 1-2.5 du/ha	15	0.18	0.18	0.10	0.07
UV	Vacant	Highways, Parking	95	0.14	0.14	0.07	0.04
V	Vineyards	Open Space, Grassland, Ag	2	0.18	0.18	0.10	0.07

Notes:
1) Sacramento County does not contain significant areas of Type “A” soils; therefore, values for Type “B” soils were assumed for Type “A” soils.
2) The values for water surface were assumed (not provided in Table 5-2).
3) Cover Types per Table 5-2 of Sacramento Drainage Manual

Constant losses used in the model for each catchment are shown in Table 2-6.

Table 2-6: Catchment Constant Losses – Existing Conditions

Catchment	Constant Loss (inches/hour)	% Impervious
Canal Area 1a	0.10	8.1
Canal Area 1b	0.10	9.0
Canal Area 1c	0.10	10.0
Canal Area 1d	0.10	7.3
Canal Area 1e	0.11	13.8
DM Central	0.10	2.3
DM NE	0.10	5.2
DM NW	0.10	2.5
DM South	0.10	7.3
DMA 4	0.10	2.0
DMA East	0.10	2.6
DMA West	0.10	2.3
Mountain 1	0.10	2.6
Mountain 2	0.10	2.8
Mountain 3a	0.08	2.2
Mountain 3b	0.10	6.3
Mountain 3c	0.10	2.6

2.1.7 HEC-HMS Results

Catchment flow rates for the 10-year, 48-hour, 100-year, 24-hour, and 100-year, 10-day events are shown in Table 2-7.

Table 2-7: Catchment Peak Flow Rates – Existing Conditions

Catchment	Size (acres)	10-Year, 48-Hr Peak Flow (cfs)	100-Year, 24-Hr Peak Flow (cfs)	100-Year, 10-Day Peak Flow (cfs)
Canal Area 1a	154	7.4	23.2	32.7
Canal Area 1b	166	26.1	72.7	34.8
Canal Area 1c	116	6.0	23.9	23.8
Canal Area 1d	59	6.6	21.9	12.4
Canal Area 1e	559	22.9	91.2	99.5
DMA East	622	77.2	211.4	113.8
DMA West	364	62.6	162.4	72.8
DMA 4	40	5.5	14.6	7.5
DM Central	391	48.7	127.9	67.9
DM NE	409	38.8	102.4	59.9
DM NW	295	44.1	117.4	57.4
DM South	318	33.5	99.4	60.0
Mountain 1	3,246	94.3	314.5	583.5
Mountain 2	3,188	97.2	329.9	584.1
Mountain 3a	3,810	127.0	504.8	722.5
Mountain 3b	78	4.9	18.3	19.6
Mountain 3c	1,086	41.8	140.0	231.5

Catchment runoff volumes for the 10-year, 48-hour, 100-year, 24-hour, and 100-year, 10-day events are shown in Table 2-8.

Table 2-8: Catchment Runoff Volumes – Existing Conditions

Catchment	Size (acres)	10-Year, 48-Hr Runoff Volume (ac-ft)	100-Year, 24-Hr Runoff Volume (ac-ft)	100-Year, 10-Day Runoff Volume (ac-ft)
Canal Area 1a	154	3.9	7.6	12.7
Canal Area 1b	166	10.7	16.9	14.2
Canal Area 1c	116	4.2	7.4	10.3
Canal Area 1d	59	3.2	5.2	4.8
Canal Area 1e	559	20.5	35.7	52.9
DMA East	622	40.9	63.4	40.6
DMA West	364	25.5	39.3	23.4
DMA 4	40	2.7	4.2	2.5
DM Central	391	27.0	41.4	25.1
DM NE	409	28.1	42.4	30.1
DM NW	295	19.9	30.8	19.1
DM South	318	19.0	30.1	25.5
Mountain 1	3,246	93.0	175.4	278.5
Mountain 2	3,188	94.6	177.3	275.9
Mountain 3a	3,810	148.7	259.6	413.5
Mountain 3b	78	2.8	5.1	7.8
Mountain 3c	1,086	32.5	61.9	93.2

2.2 Hydraulics

The existing hydraulic conditions were modeled in HEC-RAS, Version 6.7. Flow hydrographs outputs from HEC-HMS were input as boundary conditions for each catchment. A normal depth outflow boundary condition of 0.05 was applied at the model extents. Only the 100-year, 24-hour rainfall event was modeled in HEC-RAS, to determine flow paths in the existing conditions based on the underlying terrain and where stage-storage curves were necessary to develop for the proposed 100-year, 10-day analysis in HMS, and to model the conveyance piping in the proposed conditions.

2.2.1 Terrain

The underlying terrain used in HEC-RAS was obtained from the following sources:

- OCM Partners, 2025: 2021 CA DWR Lidar DEM: San Joaquin Valley, CA, https://www.fisheries.noaa.gov/inport/item/76824.
- OCM Partners, 2025: 2017 CA DWR Lidar DEM: Sacramento Delta, CA, https://www.fisheries.noaa.gov/inport/item/65520/.

Per the metadata, LiDAR was collected in winter and spring 2021 (for the 2021 data set), while no snow was on the ground and rivers were at or below normal levels. Lidar was collected from December 9, 2017 through January 21, 2018 by Woolpert (for the 2017 data set), while no snow was on the ground and rivers were at or below normal levels.

Terrain channel modifications (50 foot deep, 100 feet wide for the canal and 124 feet wide for the aqueduct) were added at the California Aqueduct and Delta Mendota Canal to reflect that any flow overtopping existing levees, and discharging to the canal, would leave via the aqueduct and canal and not overtop the other side (apart from crossings, which were added as culverts across the aqueduct and canal). The terrain, boundary conditions, and perimeter utilized in the HEC-RAS model is shown in Figure 2-4.

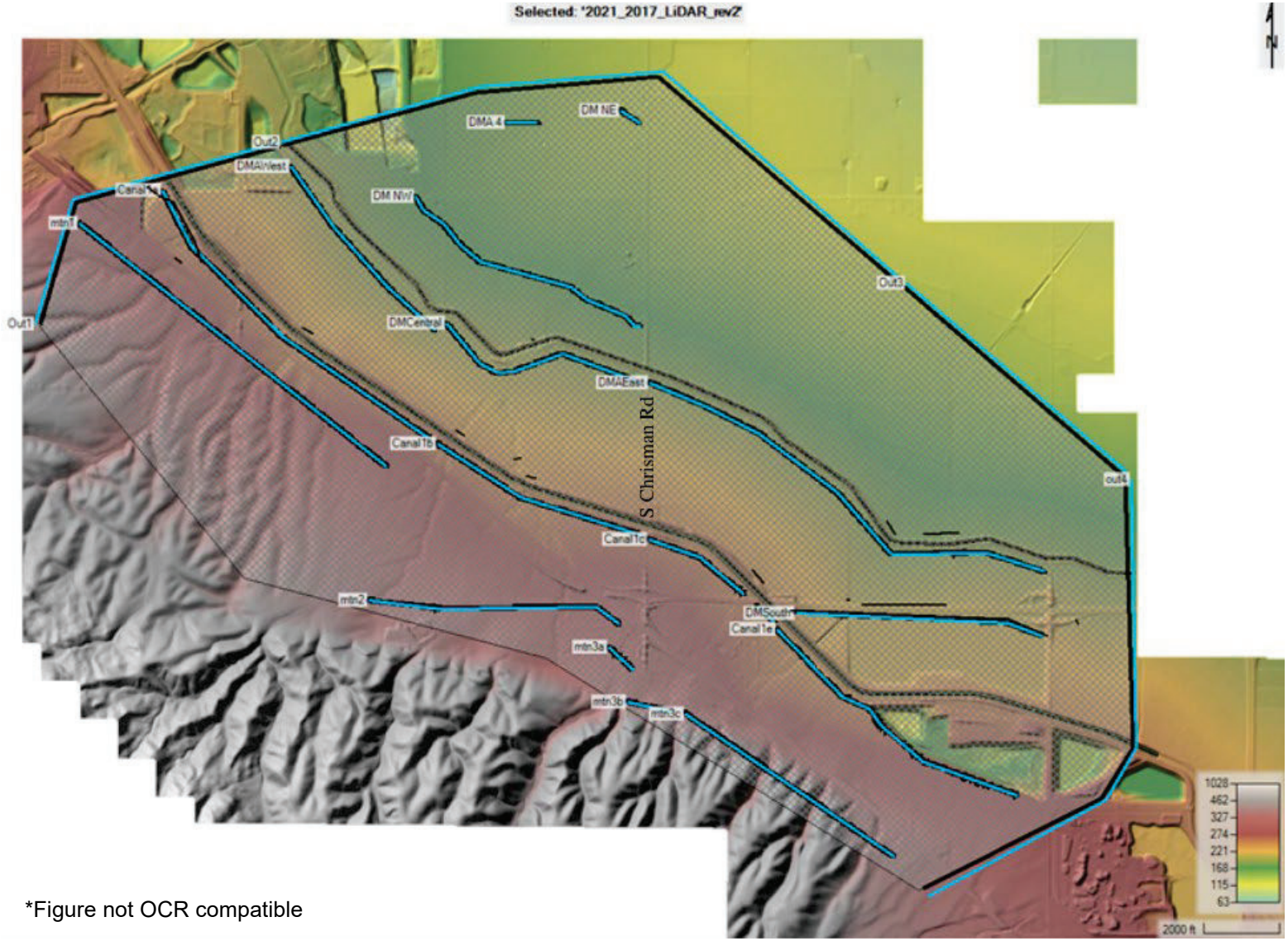

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Figure 2-4: Model Terrain, Perimeter, and Boundary Conditions – Existing Conditions

2.2.2 Culverts

Existing culverts were obtained from survey (Appendix A), California Aqueduct as-builts (Appendix B), and Caltrans as-builts (Appendix C). As-builts east of Chrisman Road were not available; assumed locations were determined based on initial model runs and then field verified. Modeled culverts are shown in Figure 2-5 (sizes were assumed based on aerials for culverts denoted with an asterisk). Manning's n values of 0.013 were used for all concrete culverts, and 0.024 for all corrugated metal pipe (CMP) culverts; culverts without specified pipe materials were assumed to be concrete (have a Manning's n value of 0.013). An entrance loss coefficient of 0.5 and exit loss coefficient of 1.0 were assumed for all culverts.

Four SA/2D connections were modeled for the CA Aqueduct: CACentral, CANorth, CASouth, and Levee (located further south than CASouth) and three SA/2D connections were modeled for the Delta Mendota Canal. In total, these areas have 19 culverts associated with them that are either discharges or crossings.

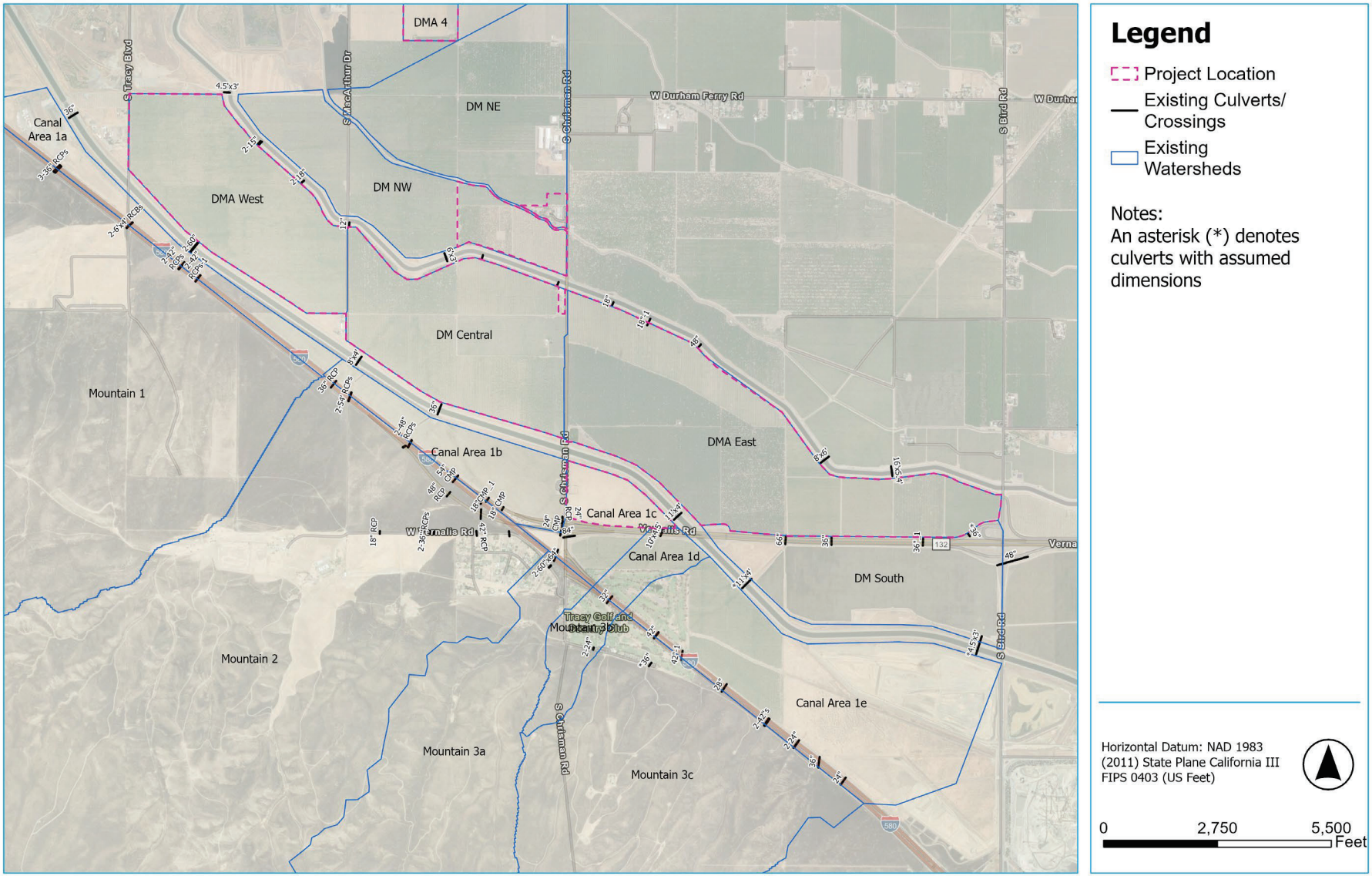

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Figure 2-5: Modeled Culverts – Existing Conditions

2.2.3 Summary of Existing Hydraulic Conditions

The modeled 100-year, 24-hour floodplain is shown in Figure 2-6.

A summary of the existing conditions flow pattern per the HEC-RAS model results is presented below.

2.2.3.1 Mountain 1

Runoff from the Mountain 1 catchment crosses I-580, from west to east, via:

- 3–36-inch (“) reinforced concrete pipes (RCP) culverts, accumulating in the westernmost property located in Canal Area 1a, before discharging to the California Aqueduct through a 36” culvert and north away from the project boundary.
- 2–6-foot (‘) x4’ reinforced concrete box culverts, and two sets of double 42” RCPs to Canal Area 1a. Within the Canal 1a area, water from the 2-6’x4’ culverts, and two sets of double 42” RCPs, is conveyed to two 60” culverts. Water then overland flows within DMA West and accumulates along the boundary of DMA West parallel to the Delta Mendota Canal and discharges to the Delta Mendota Canal at 2-15” culverts, 2-18” culverts, and a 12” culvert.

2.2.3.2 Mountain 2

Runoff from the Mountain 2 catchment crosses Vernalis Road via the following culverts, from west to east:

- An 18” RCP
- 2-36” RCPs
- A 42” RCP
- A 24” RCP.

Runoff from the Mountain 2 catchment crosses I-580 and/or State Route (S.R.) 132 (from west to east) via:

- A 36” RCP
- 2-54” RCPs
- 2-48” RCPs
- A 48” RCP over S.R. 132, then a 54” CMP over I-580
- A 42” RCP over S.R. 132, then a 48” CMP over I-580.

Two separate 18” culverts also drain the northern portion of S.R. 132 where it crosses I-580. Runoff from the Mountain 2 highway culverts then flows to Canal 1b, where it crosses the California Aqueduct via:

- An 8’x4’ culvert
- A 36” culvert.

At DM Central, runoff:

- Accumulates along the boundary of DM Central parallel to the Delta Mendota Canal
- Crosses the Delta Mendota Canal via a 6’x3’ over chute.
- Is discharged to the Delta Mendota Canal via an 18” culvert near the center of the site, and an 18” near the east of the site

2.2.3.3 Mountain 3a and 3b

Runoff from the Mountain 3a catchment becomes channelized before:

- Crossing Vernalis Road via 2-60”x64” culverts
- Crossing I-580 via 2-5’x5’ culverts
- Flowing through a ditch within Canal Area 1C
- Crossing S. Chrisman Road via an 84” pipe.
- Flowing to a ditch parallel to S.R. 132, where it flows into Canal Area 1d, then crosses S.R. 132 near the northern portion of Canal Area 1d via a 10’x4.5’ culvert to an 11’x4’ culvert over the Delta Mendota Canal to DMA East.
- At DMA East, runoff accumulates along the boundary of DMA East parallel to the Delta Mendota Canal and also discharges to the Delta Mendota Canal via two separate 18” culverts and a 48” culvert near the western border, and an 8’x6’ crossing and 16’x5.4’ bridge near the center of the site.

Runoff from the Mountain 3b catchment crosses I-580 via:

- 2-24” pipes at W St. Andrews Lane draining to the golf course
- A 32” culvert before joining runoff from Canal Area 1d and Canal Area 1c near the 10’x4.5’ culvert.

2.2.3.4 Mountain 3c

Runoff from the Mountain 3c catchment crosses W. St Andrews Lane via a 36” pipe (assumed), toward existing lagoons on the golf course. Runoff from the Mountain 3c catchment crosses I-580 via:

- Two separate 42” culverts
- A 28” culvert
- Double 42” culverts
- Double 24” culverts
- A 36” culvert
- A 24” culvert.

Runoff then accumulates at the California Aqueduct in Canal Area 1e, before discharging to an 11’x4’ culvert (size assumed) to the west; runoff does not appear to reach the 4.5’x3’ culvert (size assumed) located to the east. Runoff from the 11’x4’ culvert enters an existing channel on DM South, then discharges via a 66” pipe to DMA East. Runoff from DM South accumulates along the northern edge of DM South, parallel to S.R. 132. A portion of this runoff then flows through a 48” pipe across Bird Road to a channel parallel to S.R. 132 to the east and fills existing retention ponds at S.R. 132 west of Bird Road and flows through three separate 36” pipes to DMA East to the north. At DMA East, runoff overland flows onsite, and excess runoff crosses the Delta Mendota canal at the 8’x6’ and 16’x5.4’ crossings and flows east via the low spot at Bird Road.

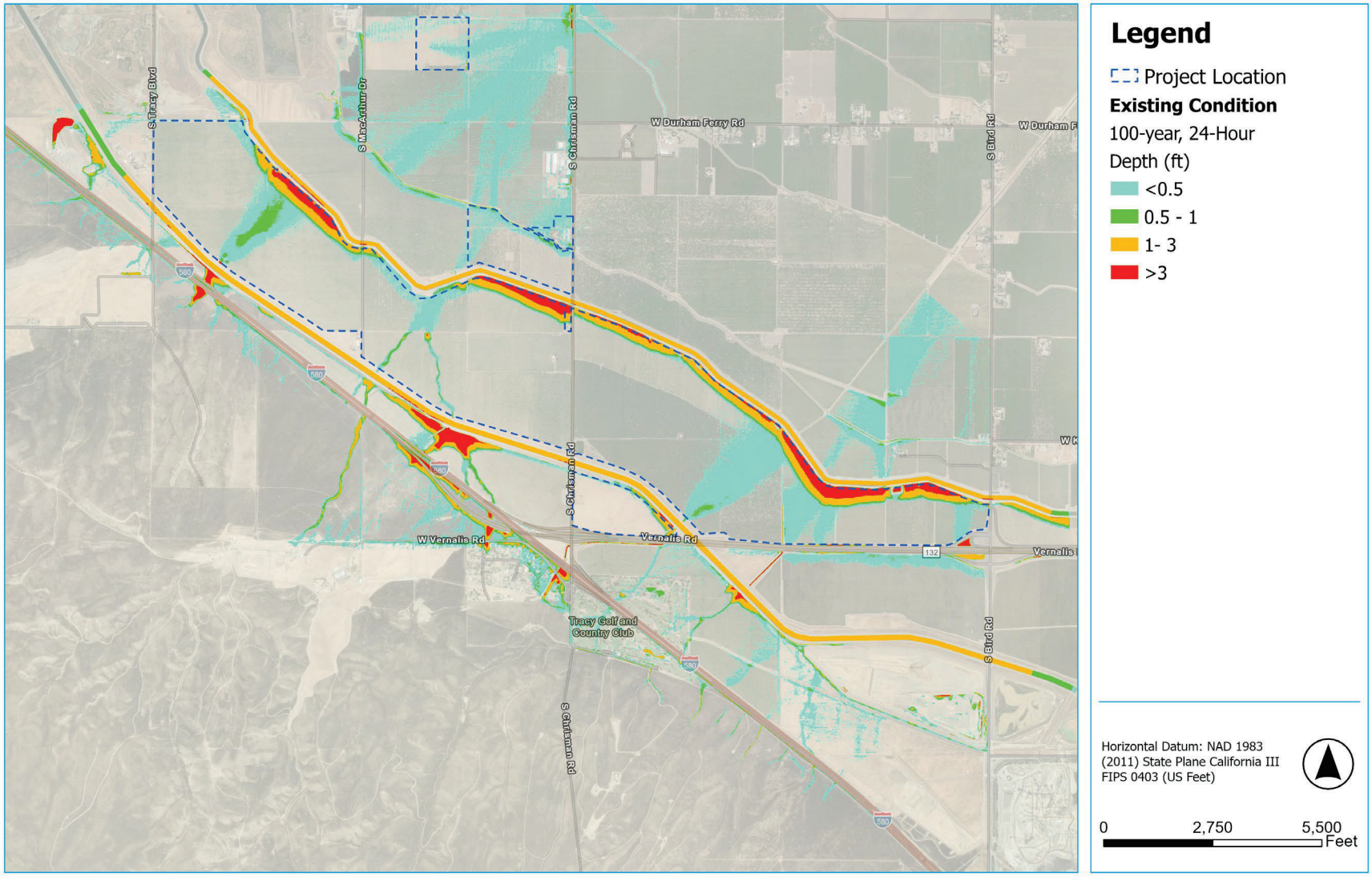

*Figure not OCR compatible

Figure 2-6: Modeled 100-Year, 24-Hour Floodplain – Existing Conditions

3. Proposed Conditions

The stormwater network from each development will discharge to a retention basin that meets County standards. Retention means no surface discharges from the basins, only percolation. This study assumes the basins will be sized to drawdown in either 2 days (Basins 1a, 1b, and 2 only) or 10 days (remaining basins) after the 10-year 48-hour capacity. Basins 1a, 1b, and 2 will be required to percolate in 2 days due to their proximity to the airport, according to the Federal Aviation Administration (FAA) regulations; the remaining basins will be required to percolate in 10 days after a 10-year 48-hour event per County standards. Additionally, the basins must be able to contain the 100-year, 10-day storm, and all conveyance piping must be sized for the 100-year, 24-hour event.

3.1 Proposed Drainage

The proposed project catchments are shown in Figure 3-1. In the proposed condition:

- DMA West was divided into DMAs 1A, 1B, and 2.
- DMA Central was divided into DMAs 2, 3A, and 3B.
- DMA East was divided into DMAs 5, 6, 7, and 8.
- Canal Area 1c was divided into Canal Area 1c and DMA 9.
- Canal Area 1e was divided into Canal Area 1e and 1f.

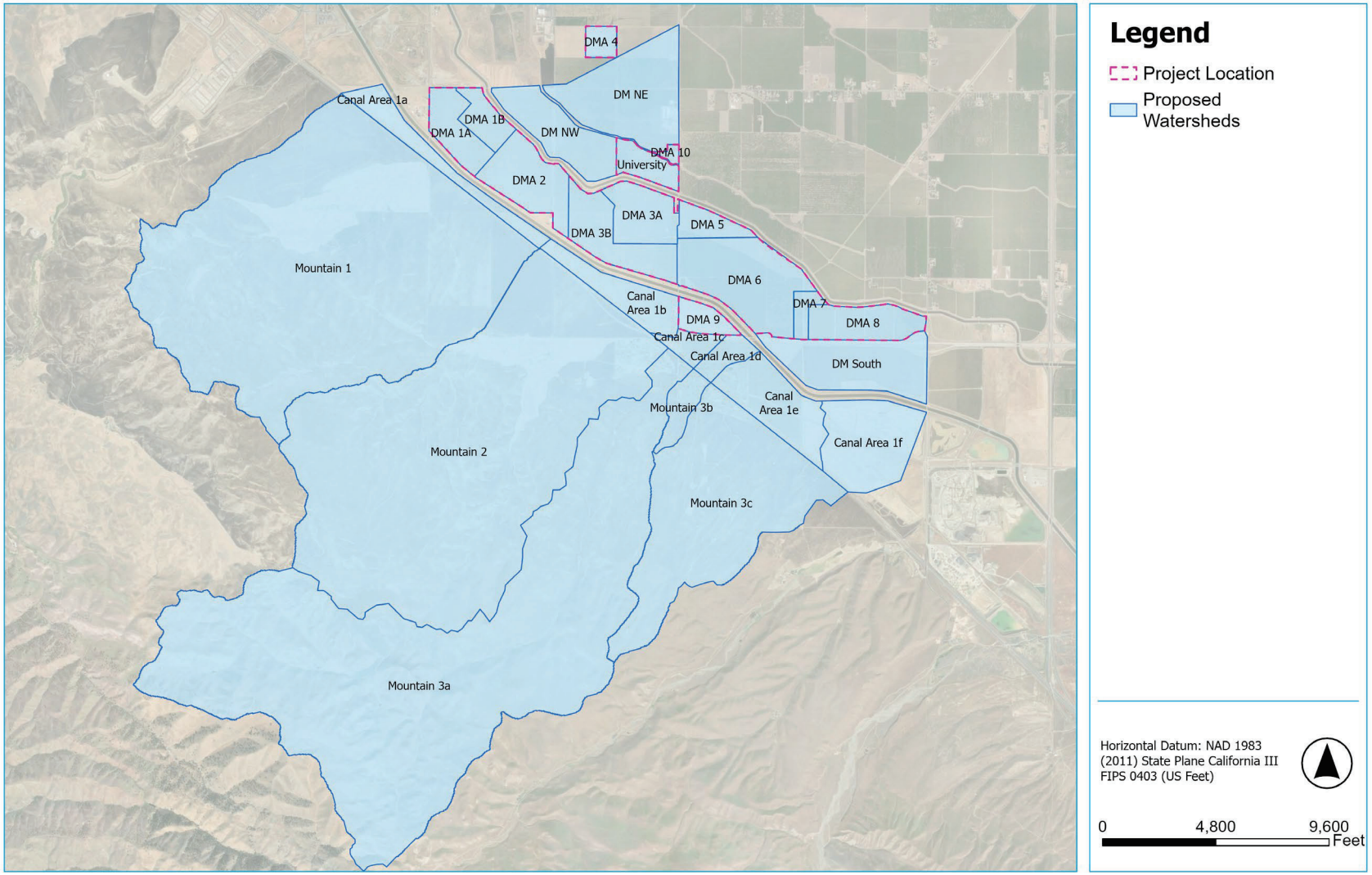

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Figure 3-1: Proposed Catchments

3.2 Soil Types

USDA NRCS Hydrologic soil groups (HSGs) overlaid with the proposed catchments are shown in Figure 3-2.

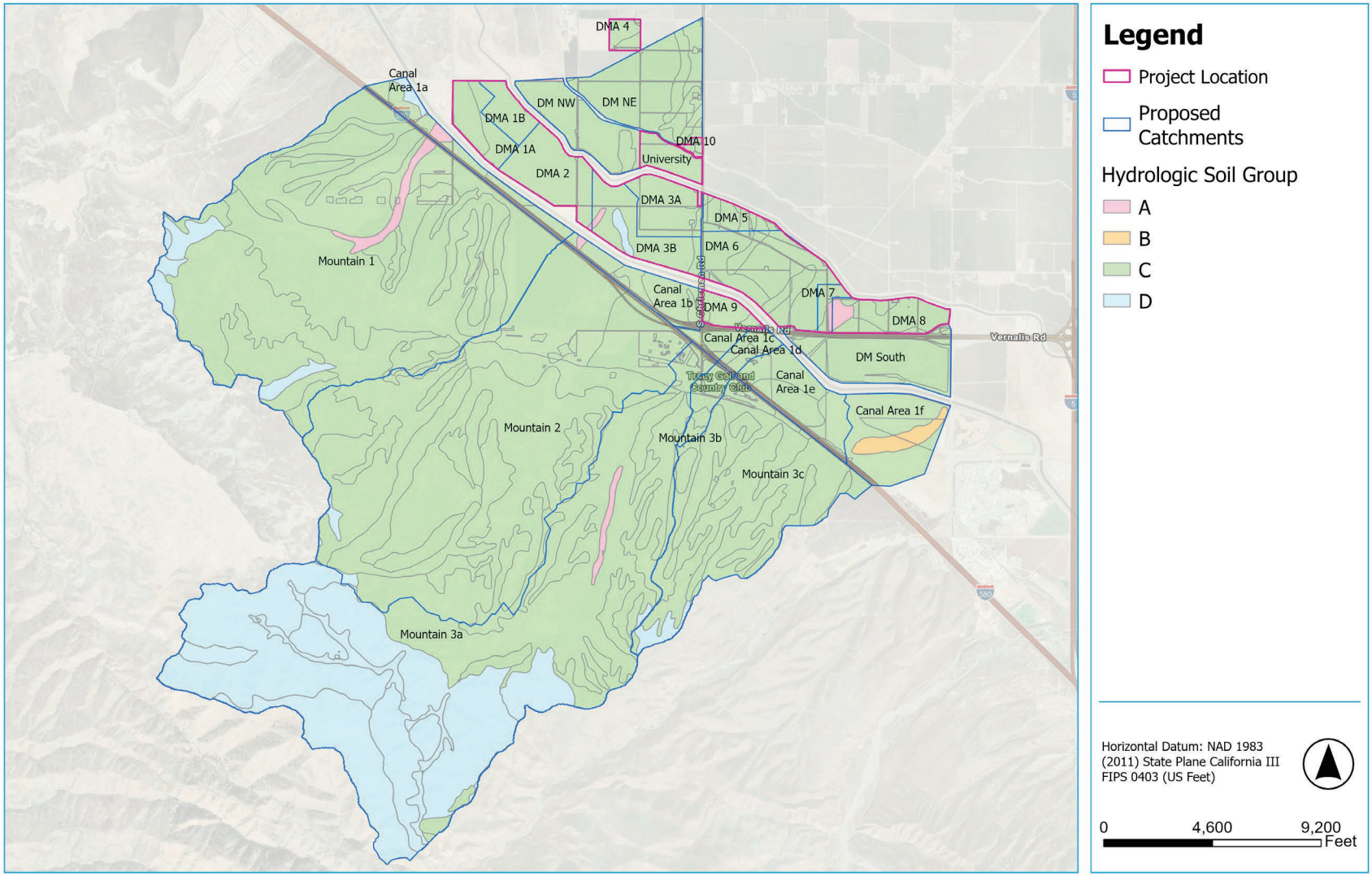

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Figure 3-2: Hydrologic Soil Groups Overlaid with Proposed Catchments

3.3 Land Use

2017 San Joaquin existing land use overlaid with proposed catchments is shown in Figure 3-3.

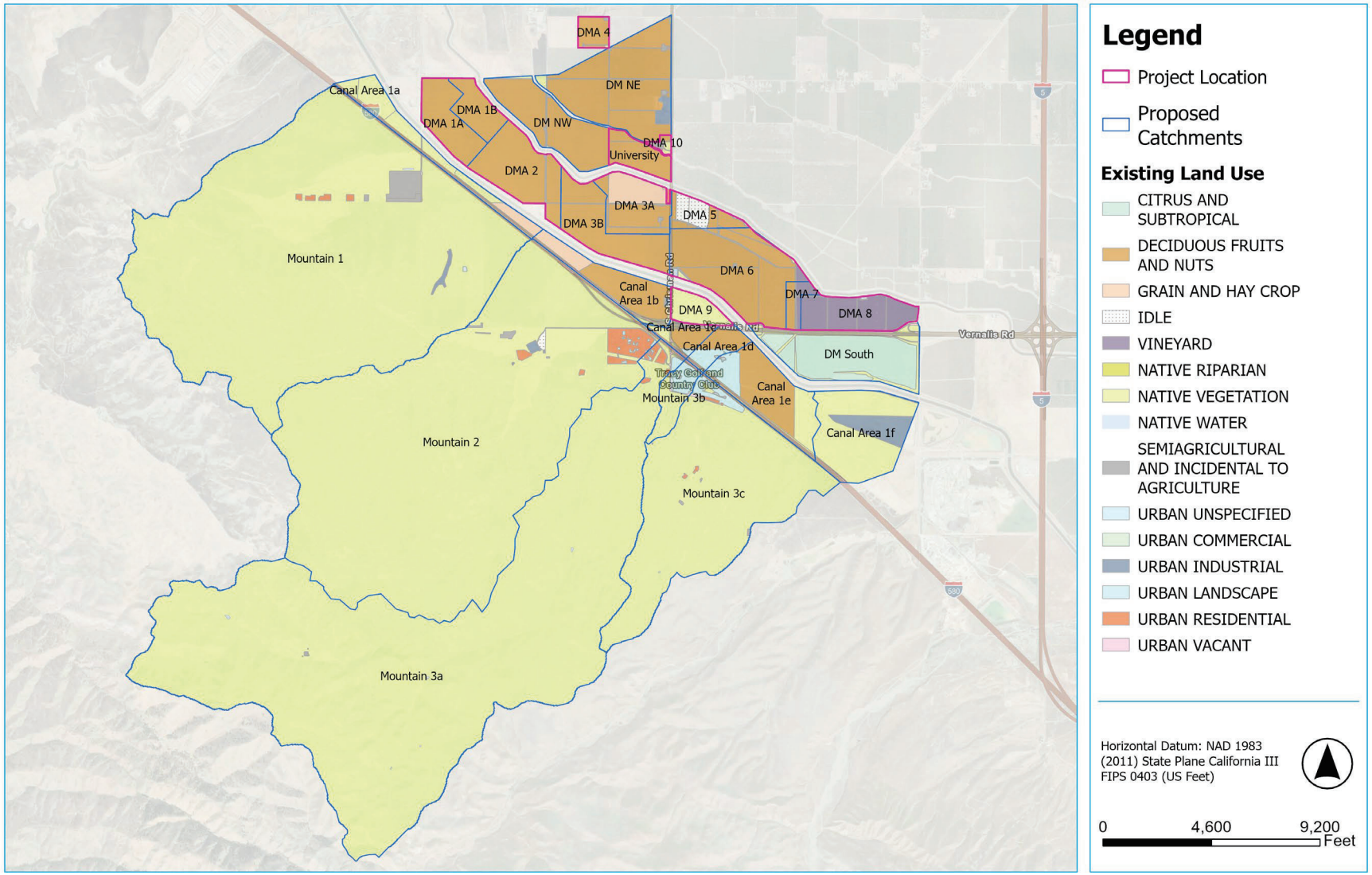

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Figure 3-3: 2017 San Joaquin Existing Land Use by Proposed Catchment

3.4 Proposed Catchment Sizes, Curve Numbers, and Lag Times

Curve numbers and lag times used in the model for each catchment are shown in Table 3-1. A CN of 90 and lag time of 20 minutes were assumed for developed areas (and DMA 4, which will be a pond in the proposed conditions). Basis for CN and lag times for offsite (existing) catchments are described in Section 2.1.2; soil types and 2017 San Joaquin land use overlaid with the proposed catchments are shown in Figure 3-2 and Figure 3-3. The CNs are weighted values that represent greater runoff from impervious areas (hence percent impervious values were left blank in the HMS model).

Table 3-1: Catchment Sizes, Curve Numbers, and Lag Times – Proposed Conditions

Catchment	Size (acres)	CN	Lag Time (Minutes)
Canal Area 1a	154	71.5	22
Canal Area 1b	166	83.7	25
Canal Area 1c	55	81.7	20
Canal Area 1d	59	81.0	24
Canal Area 1e	245	79.7	25
Canal Area 1f	314	72.6	57
DM NE	398	84.8	75
DM NW	218	84.1	29
DM South	318	82.5	40
DMA 10	11	77.3	20
DMA 1A	124	90.0	20
DMA 1B	79	90.0	20
DMA 2	202	90.0	20
DMA 3A	150	90.0	20
DMA 3B	197	90.0	20
DMA 4	40	90.0	10
DMA 5	73	90.0	20
DMA 6	360	90.0	20
DMA 7	37	90.0	20
DMA 8	153	90.0	20
DMA 9	61	90.0	20
Mountain 1	3246	70.0	70
Mountain 2	3189	70.4	67
Mountain 3a	3811	73.8	78
Mountain 3b	78	72.5	22
Mountain 3c	1086	70.5	45
University	76	90.0	20

3.5 Losses (100-year, 10-day)

The Initial and Constant loss method was utilized for the 100-year, 10-day event. An initial loss of 0.10 inches was used, corresponding to a recurrence interval of 100, per Table 5-1 “Initial Losses” of the Sacramento Drainage Manual. To estimate constant losses and percent impervious for each catchment, the San Joaquin County 2017 Land Use Survey class 1 designations were correlated with table 5-2 “Infiltration Rates by Hydrologic Soil-Cover Groups (inches/hour)” of the Sacramento Drainage Manual. Land use designations that were used to determine the constant losses for each catchment are shown in Table 2-5; the proposed development was assumed to have a hydrologic condition corresponding to “Commercial, Offices” shown in Table 2-5. Constant losses used in the model for each catchment are shown in Table 3-2; all proposed development DMAs have a constant loss rate of 0.08 inches/hour

corresponding to commercial HSG C soils except DMAs 7 and 8, due to the presence of HSG A soils.

Table 3-2: Catchment Constant Losses – Proposed Conditions

Catchment	Constant Loss (inches/hour)	% Impervious
Canal Area 1a	0.10	8.1
Canal Area 1b	0.10	9.0
Canal Area 1c	0.09	18.7
Canal Area 1d	0.10	7.3
Canal Area 1e	0.10	6.5
Canal Area 1f	0.11	19.6
DM NE	0.10	0.2
DM NW	0.10	2.5
DM South	0.10	7.3
DMA 10	0.08	5.4
DMA 1A	0.08	90.0
DMA 1B	0.08	90.0
DMA 2	0.08	90.0
DMA 3A	0.08	90.0
DMA 3B	0.08	90.0
DMA 4	0.08	90.0
DMA 5	0.08	90.0
DMA 6	0.08	90.0
DMA 7	0.10	90.0
DMA 8	0.09	90.0
DMA 9	0.08	90.0
Mountain 1	0.10	2.6
Mountain 2	0.10	2.8
Mountain 3a	0.08	2.2
Mountain 3b	0.10	6.3
Mountain 3c	0.10	2.6
University	0.10	2.6
Canal Area 1a	0.10	8.1
Canal Area 1b	0.10	9.0
Canal Area 1c	0.09	18.7
Canal Area 1d	0.10	7.3
Canal Area 1e	0.10	6.5
Canal Area 1f	0.11	19.6
DM NE	0.10	0.2

3.6 HEC-HMS

3.6.1 Storage Areas

Stage-storage curves developed in HEC-RAS (as a separate geometry called “Elev-Vol”) for areas where water is stored upgradient of existing culverts (I-580, S.R. 132, Vernalis Road, the California Aqueduct, and Delta Mendota Canal). These areas were modeled with outlet structures corresponding to the culverts that drain these areas. In total, 13 storage areas were created, as shown in Figure 3-4. These storage areas were modeled as outflow structures with the storage method corresponding to the elevation-storage curve, and the outlet corresponding to the associated culvert(s). The elevation-storage curves are available in the HMS model (Appendix E).

1. CA Aq Central
2. CA Aq West
3. Canal1b_CA Aq
4. Canal1c_DMC
5. Canal1e_DMC
6. Canal1f_DMC
7. DMC_South
8. Mtn1_I-580
9. Mtn2_I-580
10. Mtn2_SR 132
11. Mtn2_VernalisRd
12. Mtn3a_I-580
13. Mtn3a_Vernalis.

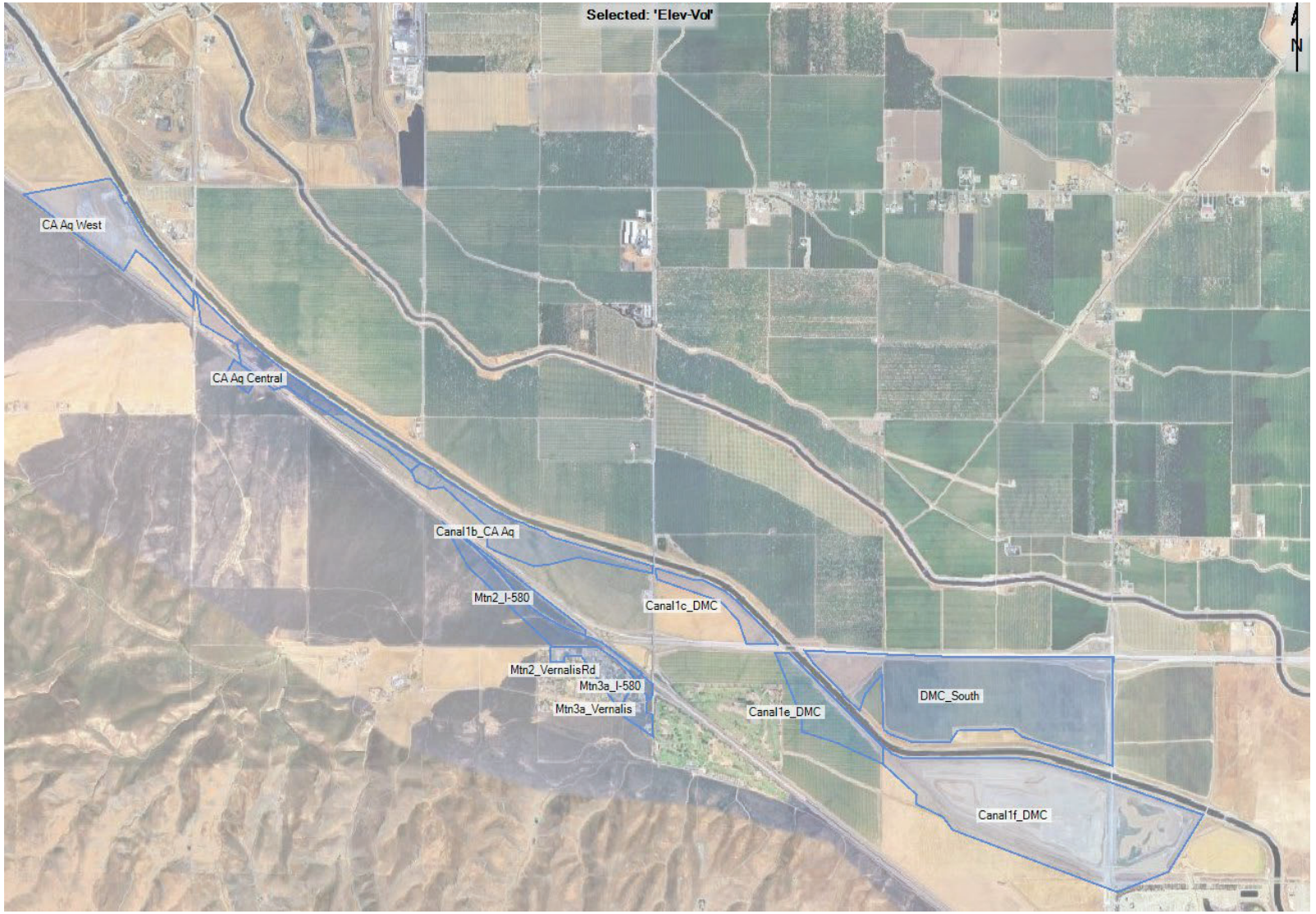


*Figure not OCR compatible

Figure 3-4: Offsite Storage Areas Modeled in HMS for Proposed Conditions

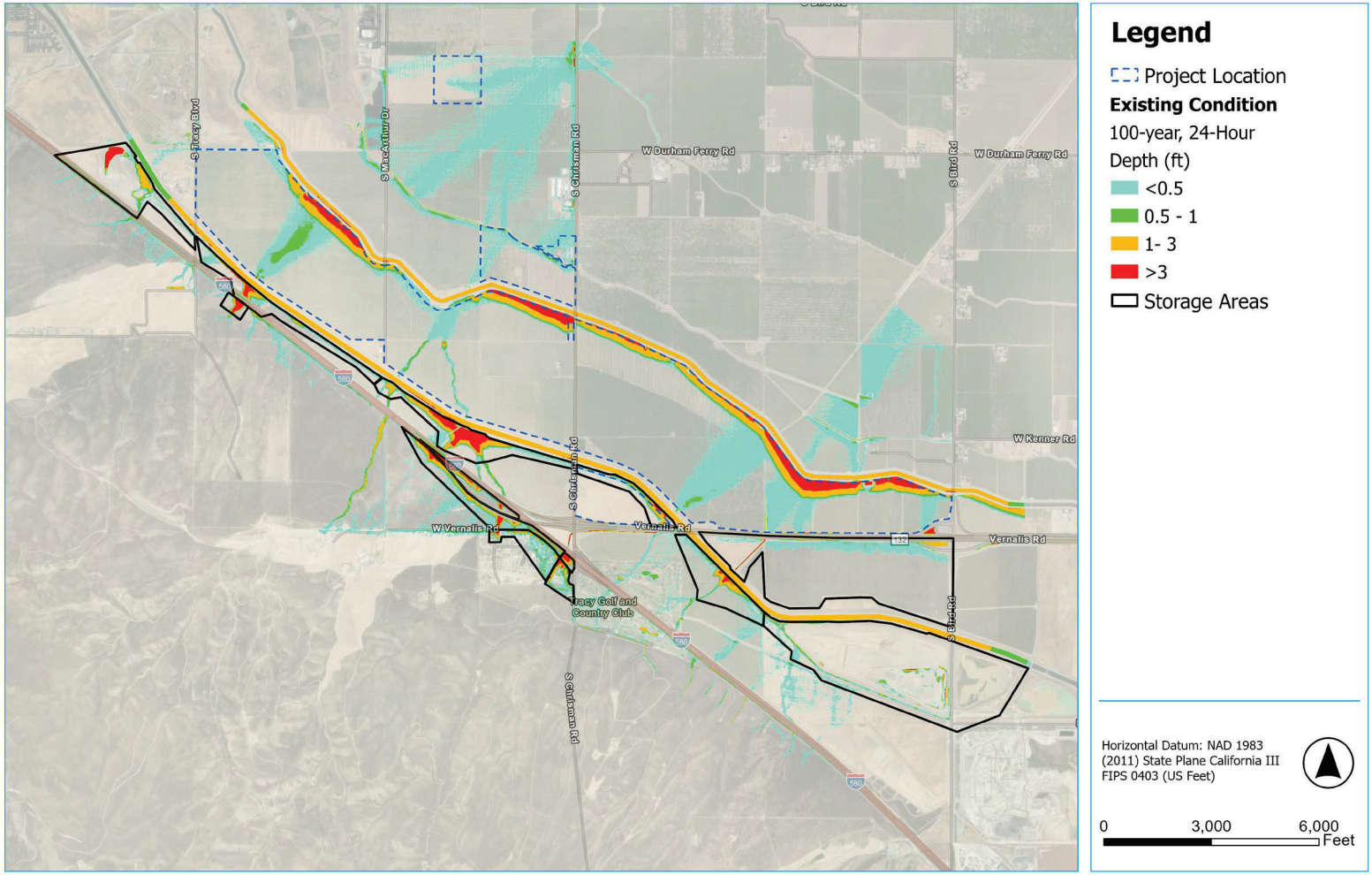


Figure 3-5: Offsite Storage Areas Modeled in HMS for Proposed Conditions Overlaid with Existing Depth Map

*Figure not OCR compatible

3.6.2 Proposed HMS

A summary of the proposed offsite flow patterns that were modeled in HMS is presented below.

3.6.2.1 Mountain 1

The portion of Mountain 1 runoff that is conveyed to 3–36” RCP culverts, accumulating in the westernmost property located in Canal Area 1a, before discharging to the California Aqueduct through a 48” culvert (assumed size), was represented as a diversion called CA Aq West. CA Aq West diverts 15% of the flow from Mountain 1 to the 3-36” culverts and property to the northwest, away from the project site, based on a comparison of total volume accumulation behind I-580 at Mountain 1 with the total flow out of the 3-36” culverts in the existing conditions model.

Remaining flow not diverted northwest accumulates at I-580 (represented as storage area Mtn1_I-580), and CA Aq Central (storage area representing ponding at the California Aqueduct). Canal Area 1A also drains to CA Aq Central, before being routed to Basin 4.

3.6.2.2 Mountain 2

Runoff from the Mountain 2 catchment that accumulates at Vernalis Road was represented as Mtn2_VernalisRd, which then accumulates at S.R. 132 (represented as Mtn2_SR132), which then accumulates at I-580 (Mtn2_I-580).

From here, runoff from Mtn2_I-580 and Canal Area 1b combine and accumulate at the California Aqueduct near Canal 1b (Canal1b_CA Aq), before being routed to Basin 4.

3.6.2.3 Mountain 3a and 3b and Canal Areas 1c and 1d

Runoff from Mountain 3a accumulates at Vernalis Road (represented as Mtn3a_Vernalis), which then accumulates at I-580 (Mtn3a_I-580), before being routed to Basin 8. Canal Area 1c also drains to Basin 8. Runoff from Mountain 3b and Canal Area 1d combine and flow to Basin 8.

3.6.2.4 Mountain 3c and Canal Areas 1e and 1f

Runoff from Canal Area 1e accumulates at the Delta Mendota Canal (represented as Canal1e_DMC). Runoff from Canal Area 1f accumulates at the Delta Mendota Canal (represented as Canal1f_DMC). Runoff from Canal Areas 1e and 1f then combined with runoff from Mountain 3c. Runoff then flows to DMSouth, where it accumulates along with runoff from DM South (represented as storage area DMC_South), before discharging to Basin 8.

3.6.2.5 Basins 1a, 1b, 4, and 9

All basins were modeled with elevation-area and elevation-discharge curves. Basins 1A, 1B, 4, and 9 were modeled as receiving onsite flow only (e.g. DMA 1A, 1B, 4, and 9) with discharge equal to the infiltration rate of the basins (no pumping). DMA 9

3.6.2.6 Basins 2, 3a, 3b

All basins were modeled with elevation-area and elevation-discharge curves. Basins 2, 3a, and 3b were modeled as receiving onsite flow only (e.g. DMA 1A, 1B, 4, and 9) with discharge equal to the infiltration rate plus the pumping rate to Basin 4. A diversion (e.g. called Basin2_Infiltration) was modeled to represent flow lost via infiltration with the remaining discharge (pump rate) going to Basin 4.

3.6.2.7 Basins 5 and 6, and 7

All basins were modeled with elevation-area and elevation-discharge curves. Basin 5 and 6 were modeled as receiving onsite flow only (e.g. DMAs 5, DMA 6, and DMA 7) with discharge equal to the infiltration rate plus the pumping rate to Basin 7. A diversion (e.g. called Basin5_Infiltration and Basin6_Infiltration) was modeled to represent flow lost via infiltration with the remaining discharge (pump rate) going to Basin 7.

3.6.2.8 Basin 8

Basin 8 was modeled with an elevation-area and elevation-discharge curve. A diversion (called Basin8_Infiltration) was modeled to represent flow lost via infiltration in Basin 8.

Basin 8 receives onsite flow from DMA 8 and offsite flow from Mountain 3c, Canal Area 1e, Canal Area 1f, and DM South. Runoff from Mountain 3c, Canal Area 1e, Canal Area 1f, and DM South will be conveyed to Basin 8 by a proposed 60” pipe downstream of the existing 66” culvert and a proposed 36” pipe downstream of the existing 36” culvert, north of S.R. 132.

Offsite flows From Mountain 3a, 3b, Canals Area 1c, and Canal Area 1d, which ultimately flow to a 10’x4.5’ culvert near DMA 9, are proposed to be captured by a 66” pipe over the existing 11’x4’ crossing, to a proposed splitter structure upgradient of Basin 8, and will be discharged to the Delta Mendota Canal at a an approximate flow rate of 80 cfs. The splitter structure was modeled as “Discharge_to_DMC” in HMS.

3.6.3 Retention Basin Dimensions and Infiltration Rates

The basin dimensions (areas, elevations, depths, volumes, and design infiltration or discharge rates provided by Kier + Wright) are listed in Table 3-3.

Table 3-3: Retention Basin Dimensions, provided by K&W and Used in the Model

Basin	Basin Bottom Area (acres)	Basin Top Area (acres)	Basin Bottom Elevation (ft)	Basin Top Elevation (ft)	Basin Depth (ft)	Basin Volume (ac-ft)	Design Infiltration Rate (cfs)[1]
1a	4.9	7.4	193.0	205.0	12	73.8	2.46
1b	2.9	4.8	181.5	193.5	12	46.0	1.45
2	1.9	3.5	182.5	194.5	12	32.5	1.16
3a	1.8	3.4	184.5	196.5	12	31.1	0.82
3b	0.8	2.3	184.5	196.5	12	18.7	0.38
4	29.8	35.0	130.0	142.0	12	388.4	225.14
5	1.3	2.7	174.0	189.0	15	29.5	0.19
6	6.1	8.9	173.0	189.0	16	119.9	0.31
7	2.1	3.5	173.0	189.0	16	45.0	4.26
8	10.8	15.4	171.0	191.0	20	261.6	7.52
9	1.8	3.3	234.0	249.0	15	38.1	0.27

Notes:

1. The design infiltration rate is the infiltration rate provided by ENGEO (see Table 3-4) applied to the bottom area of the basin, with a factor of safety of two applied as recommended in the 2014 San Joaquin Improvement Standards. Example calculation for Basin 1a: 0.50 in/hr. x 4.9 acres x 1.0 = 2.46 cfs. The conversion to cfs from in-acres/hr. is 1 [43,560 SF/acre) / (12 in./ft x 3600s/hr.)]

Infiltration rates provided by ENGEO are listed in Table 3-4; the design infiltration rates will likely change as development planning progresses and additional borings are collected within the proposed basin locations. Basin sizes assume that percolation (from the rates provided by ENGEO) will occur along the bottom of the basins only (not side slopes). The geotechnical reports have been included as Appendix D.

Table 3-4: Infiltration Rates

Test Location	Basin Identification	Depth Below Existing Ground Surface (ft)	Soil Type	Estimated Infiltration Rate (in/hr)	Design Infiltration Rate (in/hr)[1]	Source
DR-1	Basin 1a & 1b	7	Sandy Silt	1.8	0.50	See note 2
DR-2	Basin 1a & 1b	12	Silty Sand	1.0		
DR-3	Basin 2	5	Lean Clay	0.3	0.60	
DR-4	Basin 2	11 ½	Sandy Lean Clay	1.2		
DR-5	Basin 3a & 3b	3	Lean Clay	0.3	0.45	
DR-6	Basin 3a & 3b	9 ½	Sandy Lean Clay	0.9		
DR-7	Basin 4	9	Poorly Graded Gravel with Silt and Sand	15.0	7.50	
DR-8	Basin 4	12	Poorly Graded Gravel with Silt and Sand	15.0		
2-P07	Basin 5	8½	Clayey Gravel with Sand	8.8	0.15	See note 3
2-P06	Basin 5	12½	Silty Sand	0.3		
2-P05	Basin 6	11¼	Sandy Lean Clay	0.6	0.05	
2-P04	Basin 6	12½	Sandy Lean Clay	0.1		
2-P08	Basin 7	7½	Silty Sand	1.5	2.00	
2-P03	Basin 7	12	Silty Sand	4		
2-P02	Basin 8	8	Silty Gravel with Sand	7.2	0.70	
2-P09	Basin 8	12	Silty Sand with Gravel	1.4		
2-P01	Basin 9	12½	Sandy Lean Clay	0.3	0.15	
2-P10	Basin 10	8	Sandy Lean Clay	0.5	0.25	

Notes

1. The design infiltration rate is the infiltration rate provided by ENGEO, with a factor of safety of two applied as recommended in the 2014 San Joaquin Improvement Standards.
2. From ENGEO report titled *Double Ring Infiltration Testing Results*, dated December 20, 2022.
3. From ENGEO report titled *Infiltration Rate Test Results* dated September 4, 2024.

A figure showing the basins and proposed pipe routing (both between basins and to manage offsite flows) is shown in Figure 3-6.

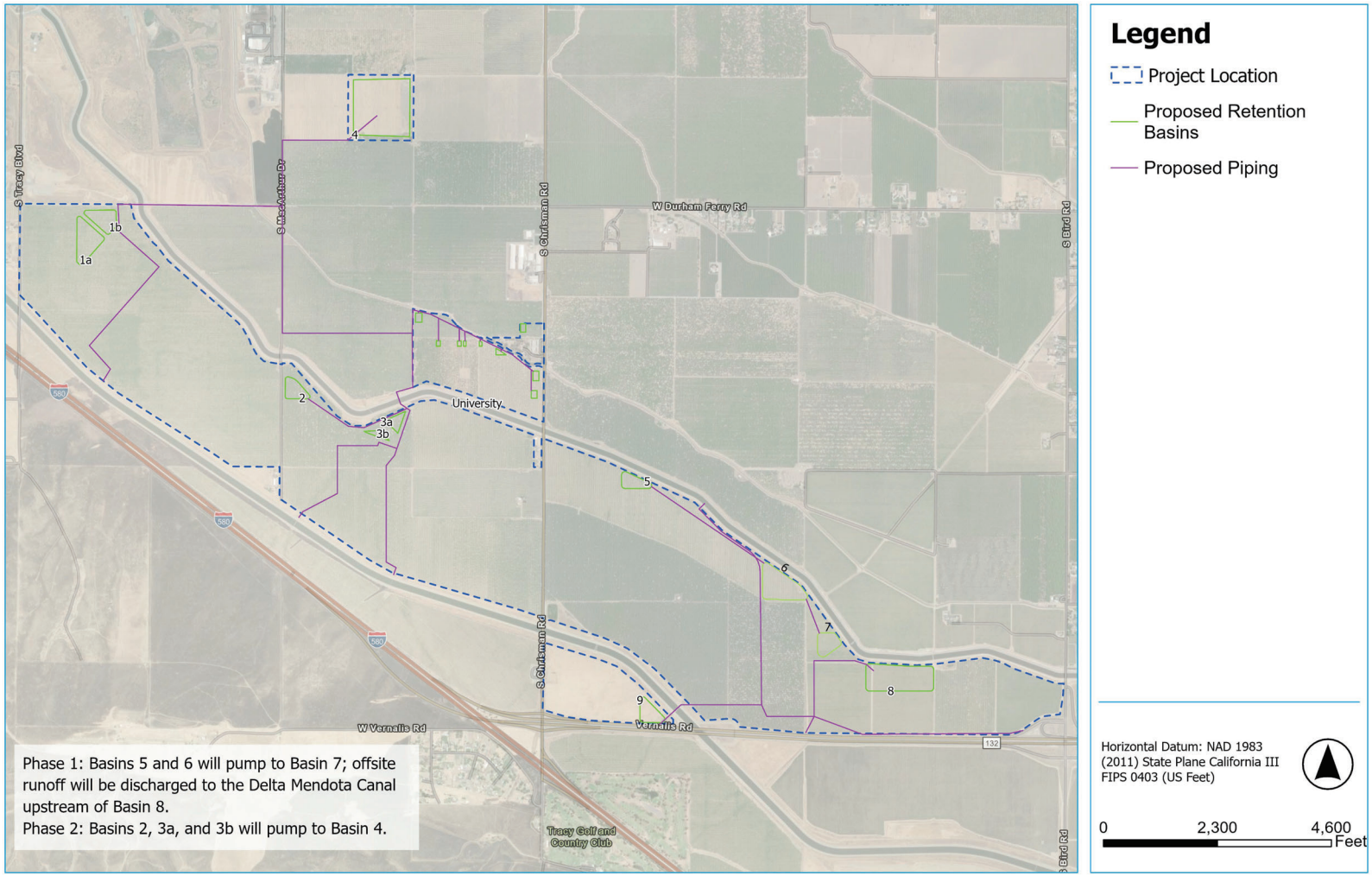
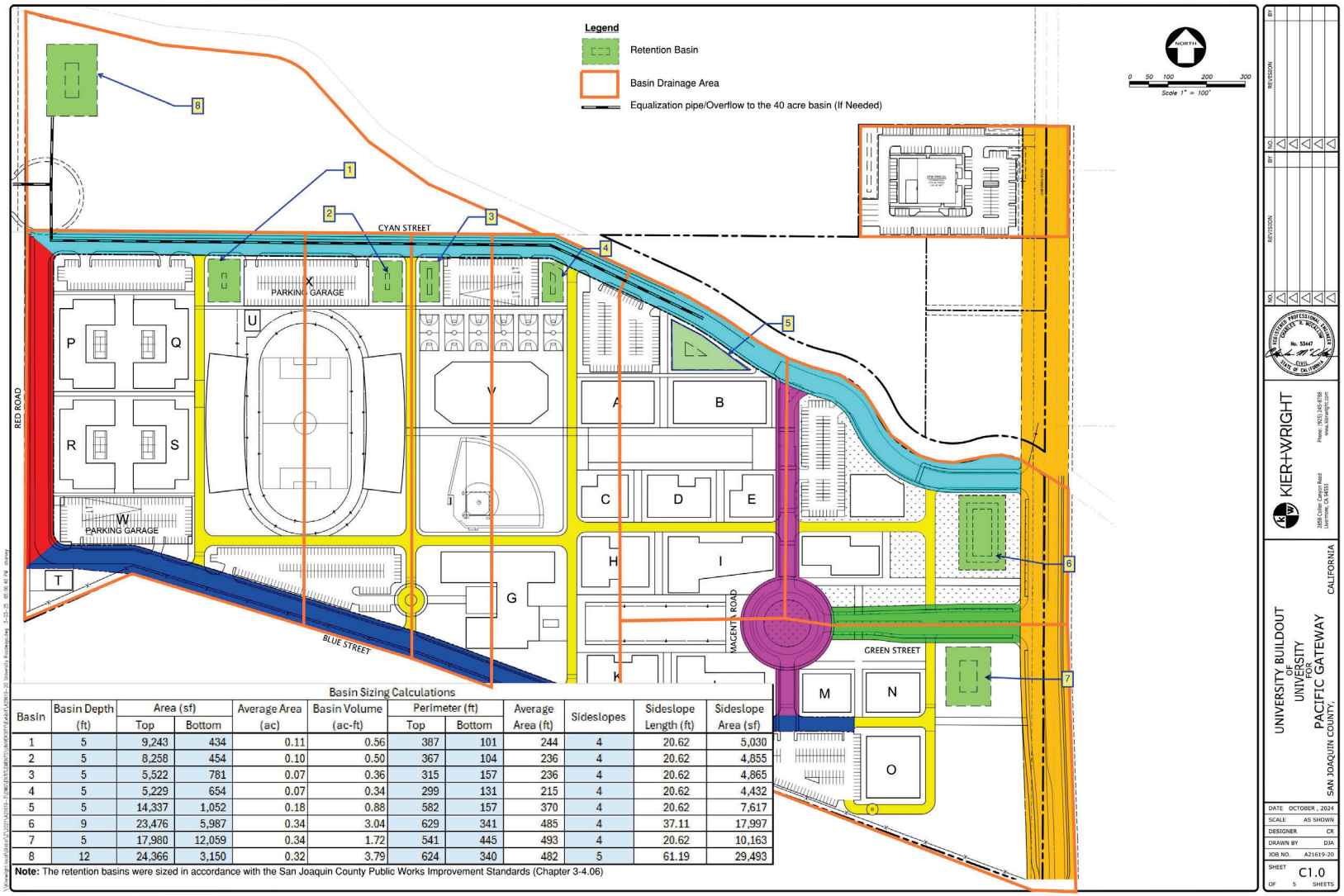


Figure 3-6: Proposed Retention Bains and Piping

*Figure not OCR compatible

3.6.4 University Basins

The sizing for the basin shown as DMA 10 and the basins within the University were designed based off of the County's retention basin standards using a back to back 10-year storm event and 100-year storm event with the back to back 10-year storm event controlling the size of the basins. The localized drainage areas are contained within their respective properties with the possibility to drain into the 40-acre basin if needed. Figure 3-7 shows the drainage management areas (DMAs) that correspond to the County calculations.



Basin Sizing Calculations

Basin	Basin Depth (ft)	Area (sf) Top	Area (sf) Bottom	Average Area (ac)	Basin Volume (ac-ft)	Perimeter (ft) Top	Perimeter (ft) Bottom	Average Area (ft)	Sideslopes	Sideslope Length (ft)	Sideslope Area (sf)
1	5	9,243	434	0.11	0.56	387	101	244	4	20.62	5,030
2	5	8,258	454	0.10	0.50	367	104	236	4	20.62	4,855
3	5	5,522	781	0.07	0.36	315	157	236	4	20.62	4,865
4	5	5,229	654	0.07	0.34	299	131	215	4	20.62	4,432
5	5	14,337	1,052	0.18	0.88	582	157	370	4	20.62	7,617
6	9	23,476	5,987	0.34	3.04	629	341	485	4	37.11	17,997
7	5	17,980	12,059	0.34	1.72	541	445	493	4	20.62	10,163
8	12	24,366	3,150	0.32	3.79	624	340	482	5	61.19	29,493

Note: The retention basins were sized in accordance with the San Joaquin County Public Works Improvement Standards (Chapter 3-4.06)

*Figure not OCR compatible

Figure 3-7: Proposed University Retention Basins with Dimensions

4. Corral Hollow Creek Floodplain Evaluation

All drainage and flood control components of the Pacific Gateway project are outside of the 100-year and 500-year floodplains of Corral Hollow Creek, which flows north of the project. The closest component of the development to the floodplain is Basin 4 (Figure 4-1). The limit of the FEMA study on Corral Hollow Creek is at Chrisman Road north of W Durham Ferry Road. San Joaquin County provided a Flood Risk Reduction Reconnaissance Study of Corral Hollow Creek, which was prepared for the County of San Joaquin by R&F Engineering, and dated February 7, 2024. The observed flooding extents during the winter of 2023 from that study, which extended beyond the mapped FEMA flood zone limits, were also overlaid with the proposed basins in Figure 4-1. Basin 4 is outside of the observed flooding during winter 2023. Therefore, the project should not adversely affect that floodplain. However, overflow release to the existing culverts discharging to the Delta Mendota Canal should be considered (e.g. at the 2-15” culverts at DMA 1B or the 2-18” culverts at DMA 2).

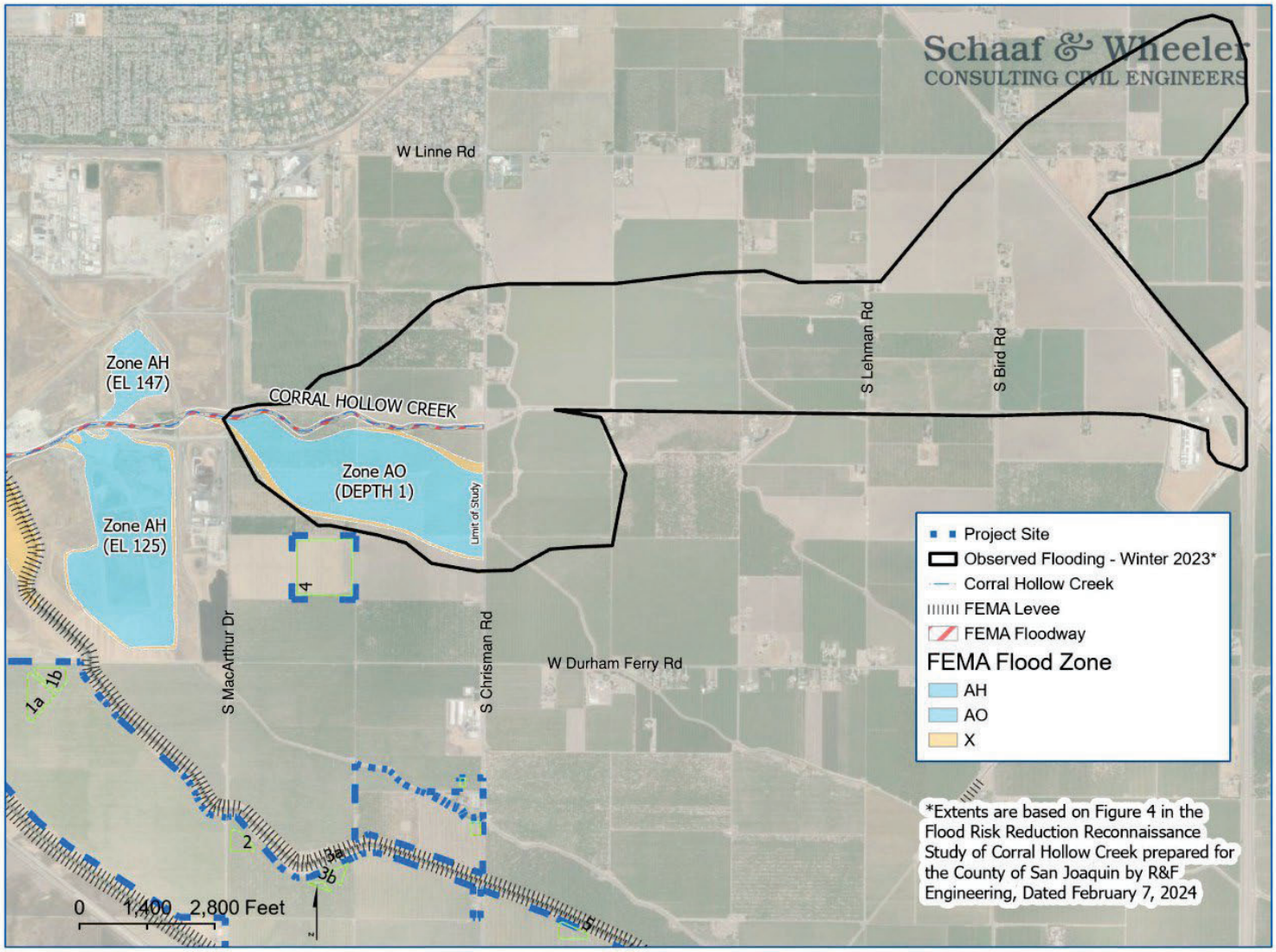


Figure 4-1: Proposed Basins Overlaid with FEMA Mapped Floodplain for Corral Hollow Creek

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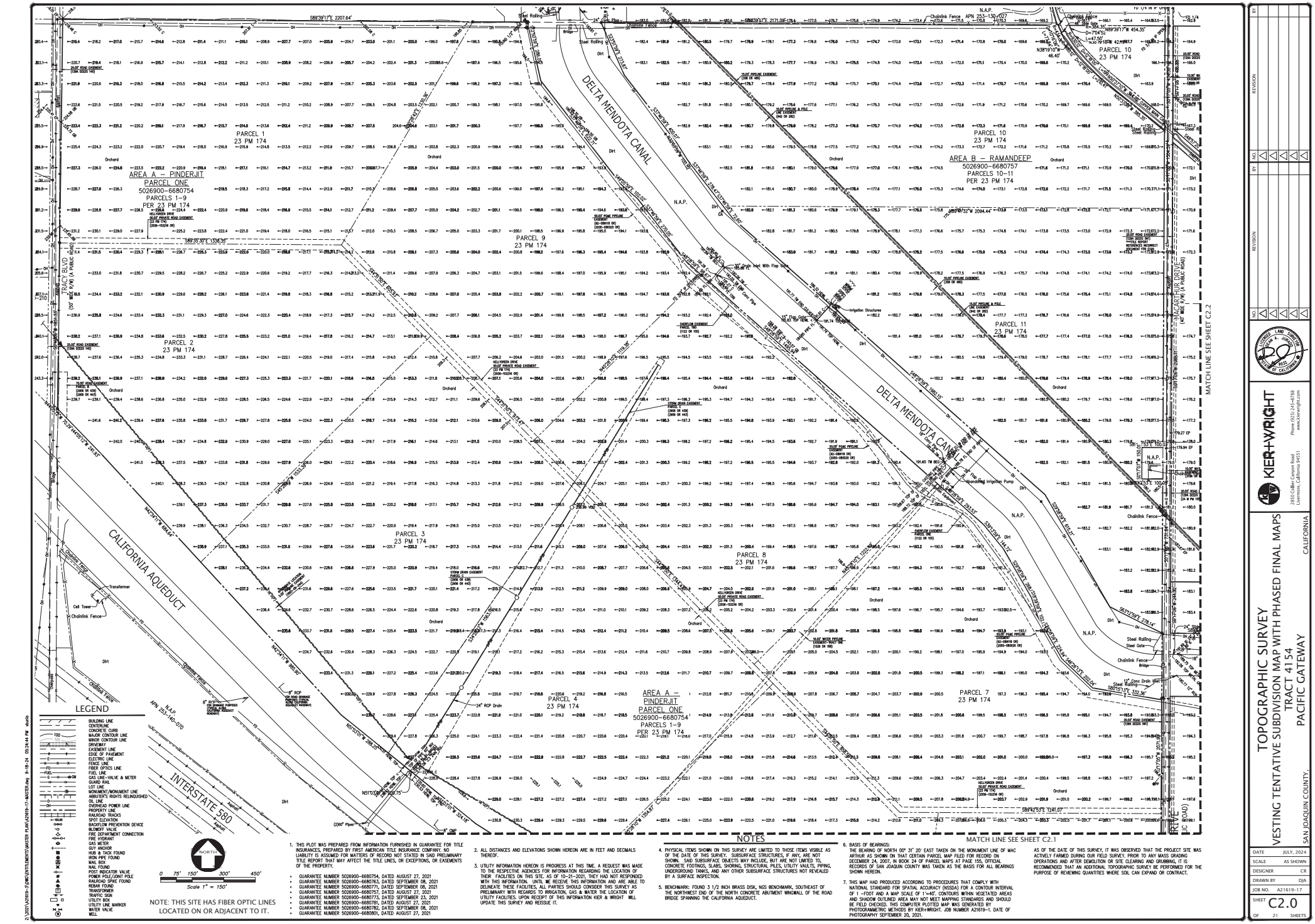
Appendix A Survey dated July 2024



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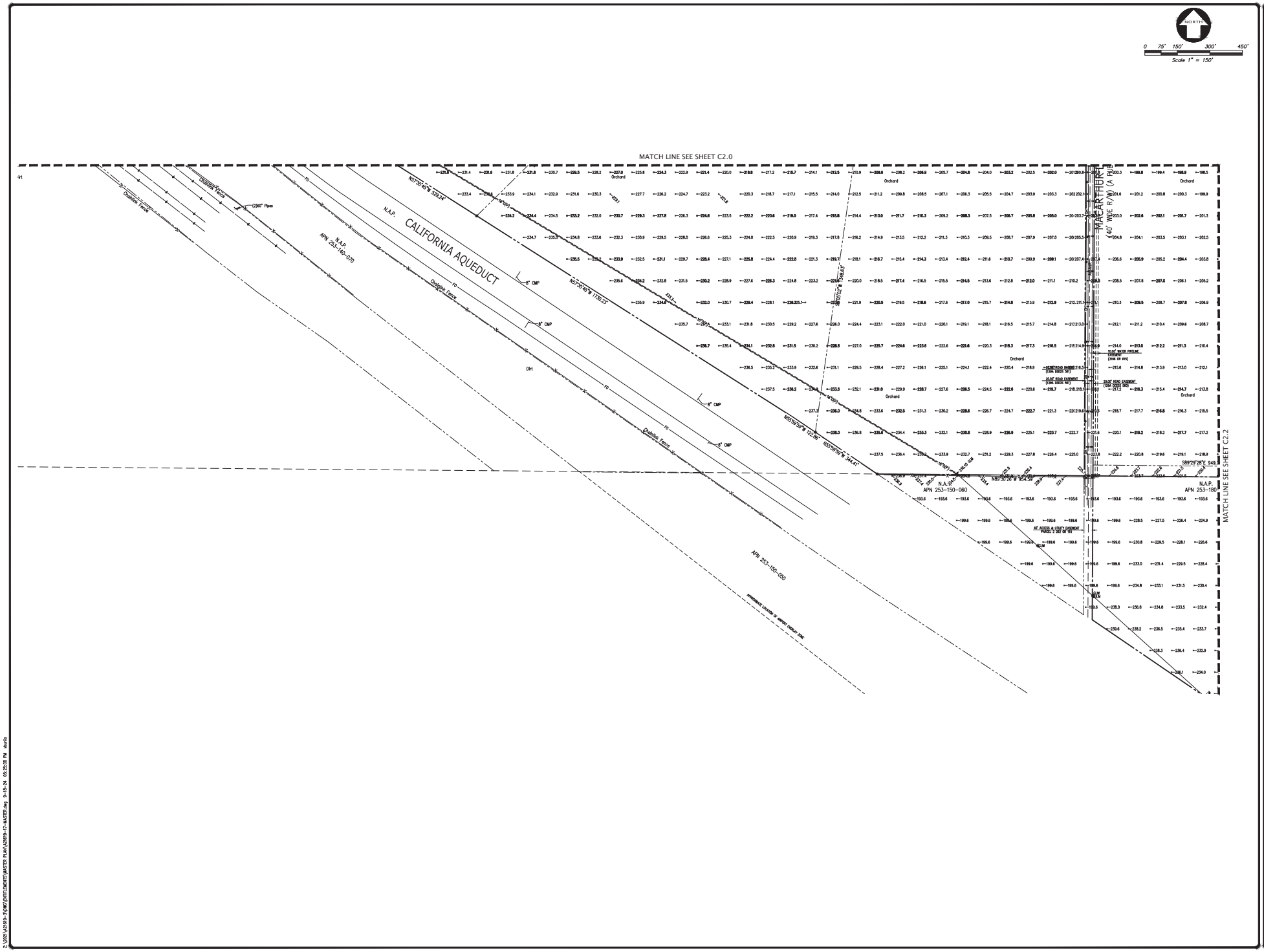
TOPOGRAPHIC SURVEY
VESTING TENTATIVE SUBDIVISION MAP WITH PHASED FINAL MAPS
TRACT 4154
PACIFIC GATEWAY
SAN JOAQUIN COUNTY, CALIFORNIA

DATE	JULY, 2024
SCALE	AS SHOWN
DESIGNER	CR
DRAWN BY	DJA
JOB NO.	A21619-17
SHEET	C2.0
OF	21 SHEETS

*Figure not OCR compatible



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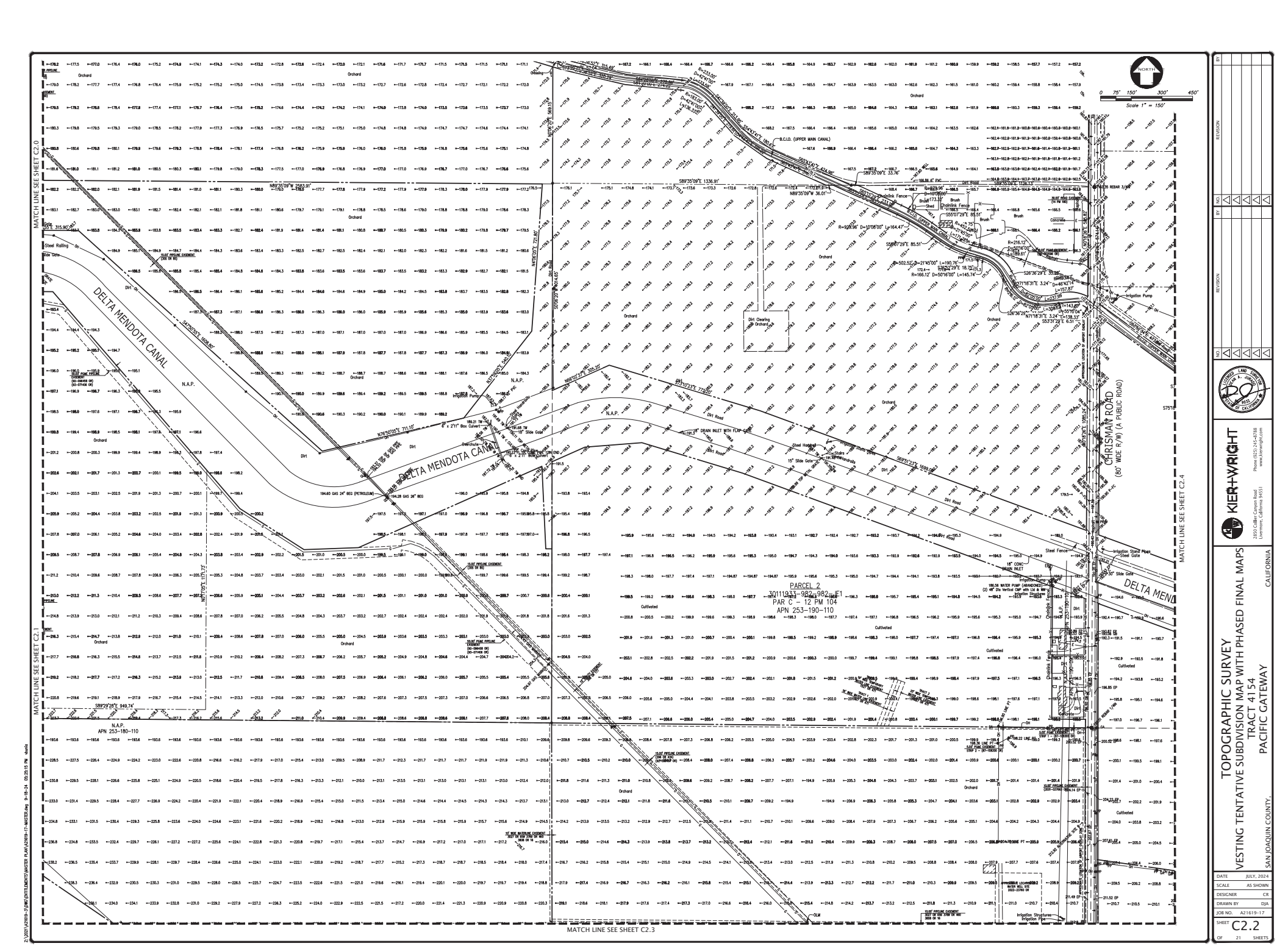
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DELTA MENDOTA CANAL
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(80' WIDE R/W) (A PUBLIC ROAD)
PARCEL 2
3011193-982-982-E1
PAR C – 12 PM 104
APN 253-190-110
APN 253-180-110
N.A.P.
Orchard
Dirt Road
Cultivated
Steel Rolling Gate
Side Gate
Irrigation Pump
Irrigation Stand Pipe
Steel Gate
Irrigation Structures
Irrigation Pipe
Chainlink Fence
Steel Fence
Concrete
Brush
Shed
Dirt Clearing
Overchute
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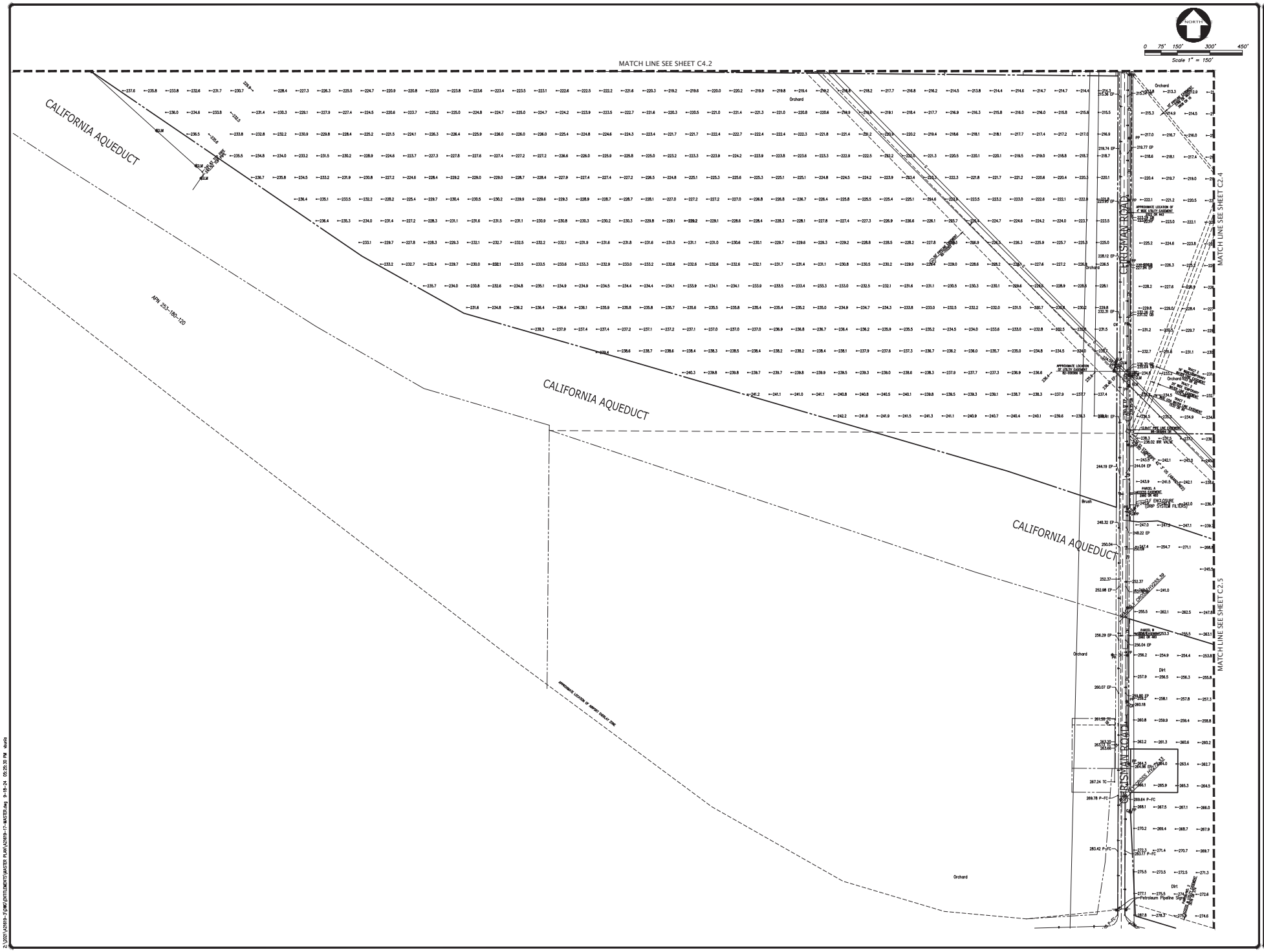
Irrigation Flow Meter
Irrigation Control Valve



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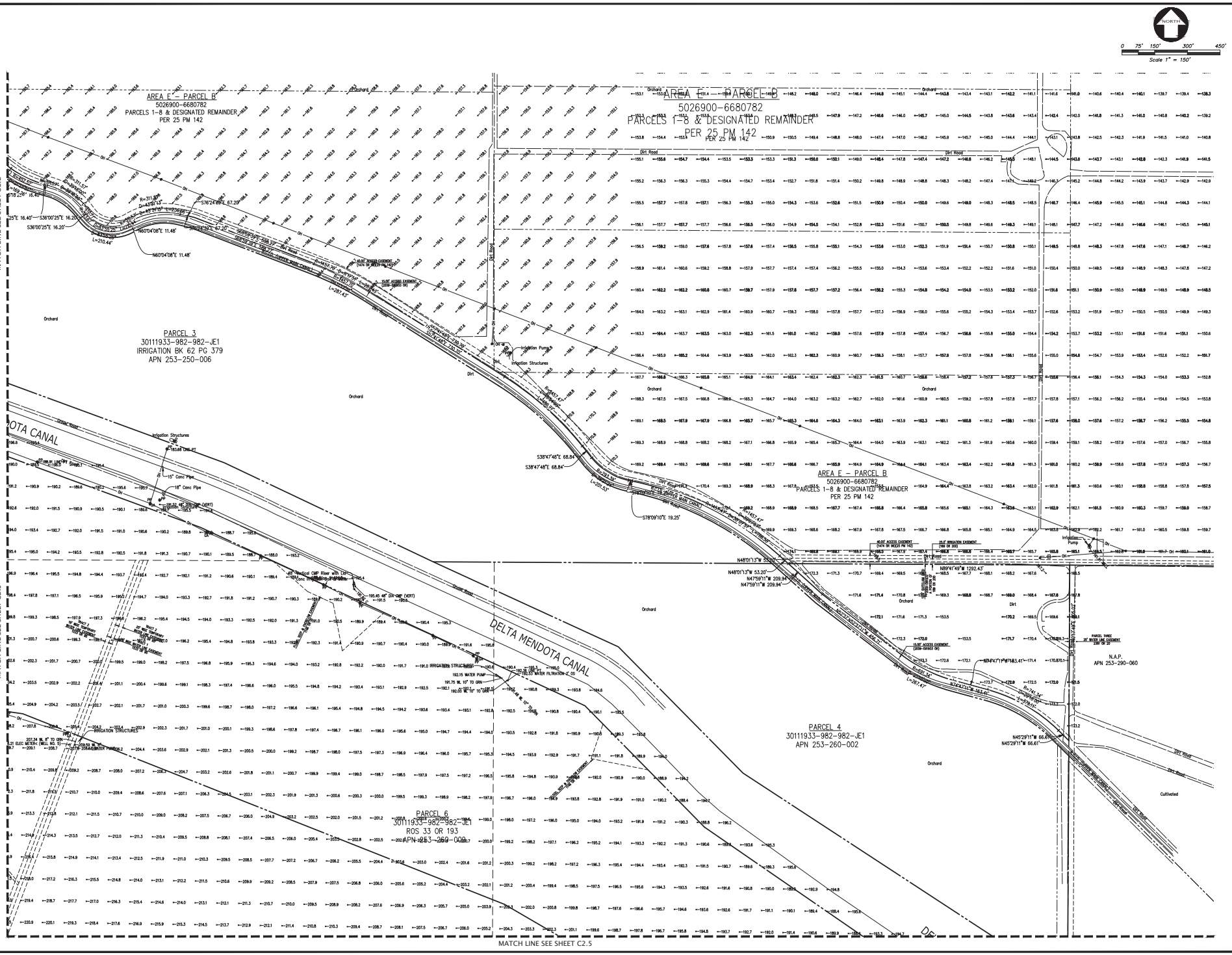

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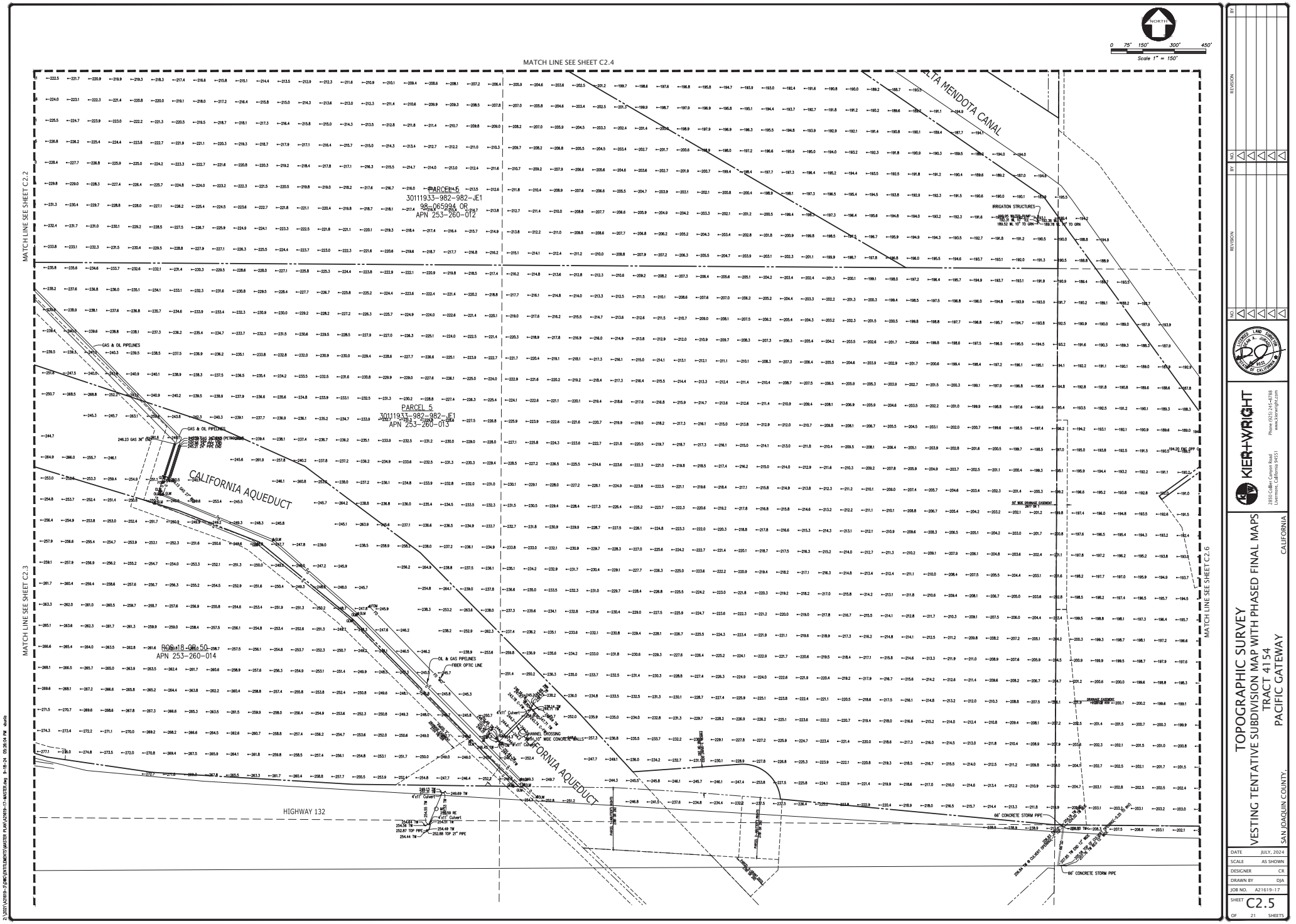
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MATCH LINE SEE SHEET C2.2
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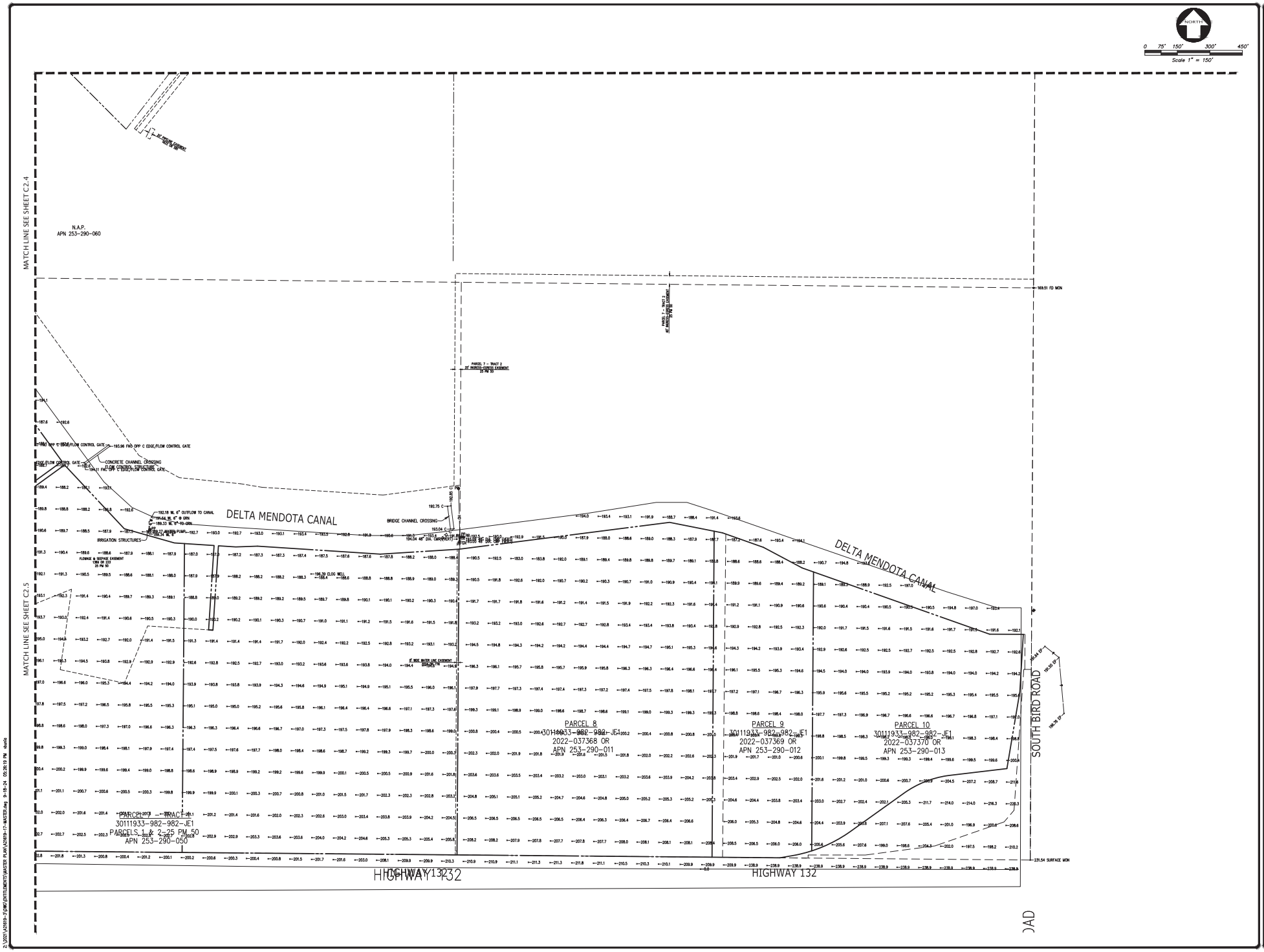
Scale 1" = 150'
DELTA MENDOTA CANAL
CALIFORNIA AQUEDUCT
CALIFORNIA AQUEDUCT
HIGHWAY 132
PARCEL 4
30111933-982-982-JE1
98-065994 OR
APN 253-260-012
PARCEL 5
30111933-982-982-JE1
APN 253-260-013
ROS 18 - OR 50
APN 253-260-014
GAS & OIL PIPELINES
OIL & GAS PIPELINES
FIBER OPTIC LINE
IRRIGATION STRUCTURES
66" CONCRETE STORM PIPE
66" CONCRETE STORM PIPE
50' WIDE DRAINAGE EASEMENT
DRAINAGE EASEMENT
CHANNEL CROSSING
4'x11' Culvert
4'x11' Culvert
4'x11' Culvert



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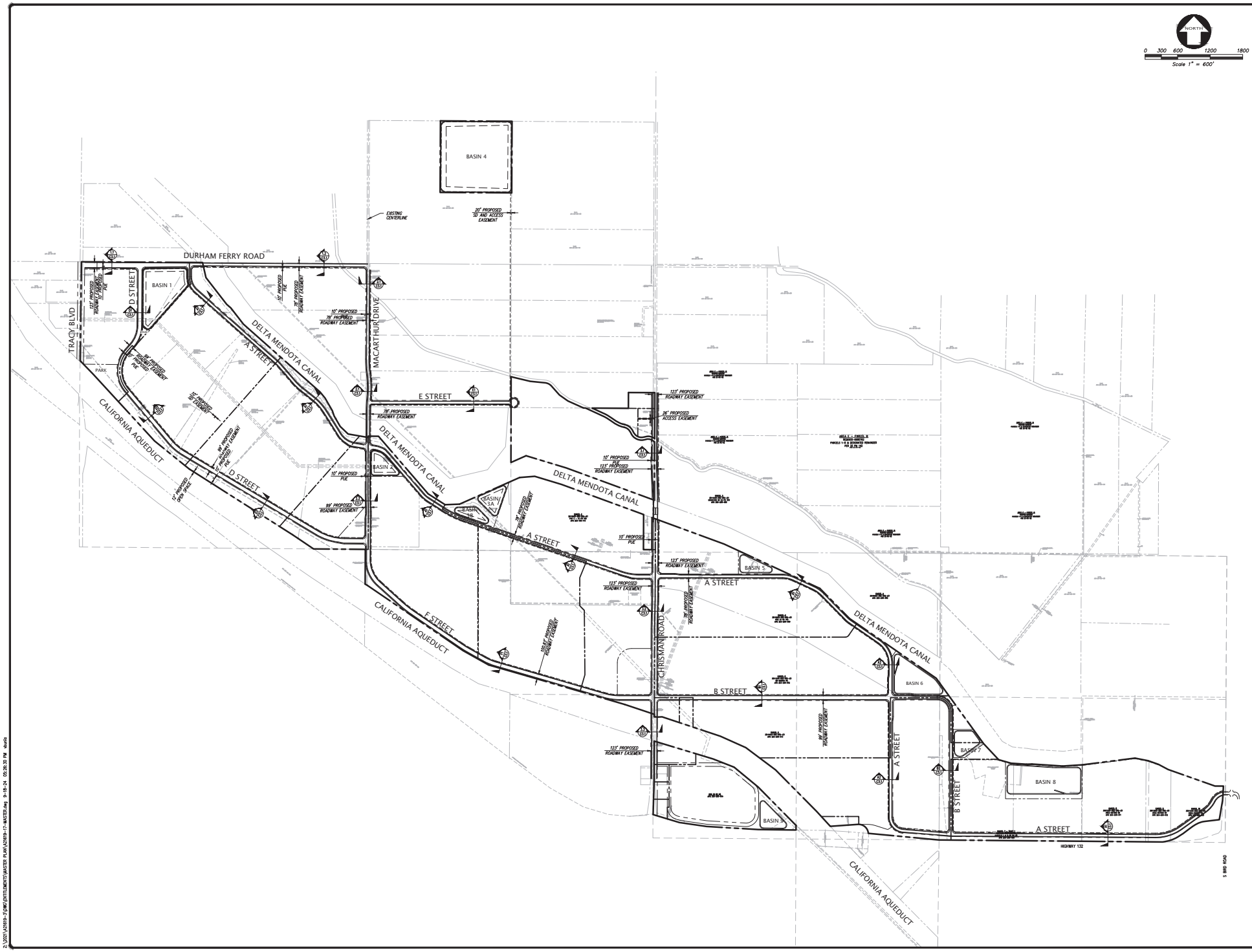

OVERALL ROADWAY PLAN
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PACIFIC GATEWAY
SAN JOAQUIN COUNTY, CALIFORNIA

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OF	21 SHEETS

*Figure not OCR compatible

Appendix B California Aqueduct As-Builts

Appendix B is available at: [LINK]

Appendix C Caltrans As-Builts

Appendix C is available at: [LINK]

Appendix D Geotechnical Reports



PACIFIC GATEWAY
TRACY, CALIFORNIA

GEOTECHNICAL FEASIBILITY REPORT

SUBMITTED TO
Mr. Steve Arthur
Pacific Gateway CA, LLC
c/o Ridgeline Property Group
915 Highland Pointe Dr., Suite 250
Roseville, CA 95678

PREPARED BY
ENGEO Incorporated

November 30, 2021
Revised January 11, 2023

PROJECT NO.
19633.000.001

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ENGEO
Expect Excellence

Project No.
19633.000.001

November 30, 2021
Revised January 11, 2023

Mr. Steve Arthur
Pacific Gateway CA, LLC
c/o Ridgeline Property Group
915 Highland Pointe Dr., Suite 250
Roseville, CA 95678

Subject: Pacific Gateway
Tracy, California

GEOTECHNICAL FEASIBILITY REPORT

Dear Mr. Arthur:

We prepared this geotechnical feasibility report for the proposed development located in Tracy, California, as outlined in our agreement with you, dated October 26, 2021. We performed this feasibility study to identify basic geotechnical considerations for the development and potential geologic hazards within the project site.

The proposed development is feasible from a geotechnical engineering viewpoint, provided that subsurface explorations are performed at a future date to confirm the preliminary conclusions presented herein. Based on our feasibility study, the primary geotechnical considerations for the planned development include the potential for existing fill and expansive soil.

If you have any questions or comments regarding this report, please call and we will be glad to discuss them with you.

Sincerely,

ENGEO Incorporated

Victoria Drake, PE

Steve Harris, GE

REGISTERED PROFESSIONAL ENGINEER
STEVE HARRIS
No. 2804
GEOTECHNICAL
STATE OF CALIFORNIA

vd/sh/sd/zc/ar

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APPENDIX A – Exploration Logs

APPENDIX B – Laboratory Test Data

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE

We prepared this geotechnical feasibility report for the Pacific Gateway project in Tracy, California. We prepared this report as outlined in our agreement dated October 26, 2021. Pacific Gateway CA, LLC authorized us to conduct the following scope of services.

- Review of available historical aerials and geologic maps
- Limited field exploration
- Limited soil sampling and laboratory testing
- Preliminary analysis and conclusions
- Report preparation

This report provides an assessment of geotechnical feasibility and does not provide design recommendations or design parameters; these items can be provided at a future date following supplemental subsurface exploration, sampling, lab testing, and engineering analysis once the project moves to the design phase.

We prepared this report for the exclusive use of our client and their consultants for evaluation of feasibility of this project. In the event that any changes are made in the character, design, or layout of the development, we must be contacted to review the conclusions and recommendations contained in this report to evaluate whether modifications are recommended. This document may not be reproduced in whole or in part by any means whatsoever, nor may it be quoted or excerpted without our express written consent.

1.2 PROJECT LOCATION AND DESCRIPTION

The proposed 1,625-acre logistics hub is located north of I-580, east of South Tracy Boulevard, and west of South Bird Road in Tracy, California, as shown in Figure 1. Based on our review of the provided information, we understand that Areas A, B, E, and F will be developed for industrial parks with concrete tilt-up warehouse structures, paved roadways and parking areas, and associated improvements. The preliminary site layout for Area E indicates a regional basin will be constructed in the northeast portion of the site, as shown in Figure 2B. Area D will be developed into the UofSA university campus, consisting of approximately 1.4 million square feet of university buildings and associated infrastructure. Based on our discussions with the project team, we understand the university buildings will be either glass over steel frame construction or concrete tilt-up construction.

Review of publicly available historical aerial photographs indicates that the property was utilized for agriculture, consisting of a mix of row crops, orchards, and dry land farming, since at least 1949. At the time of our site reconnaissance, the majority of the property consisted of active orchards. In addition, we observed existing structures on Areas B, E, and F. For additional information regarding site features observed during our site reconnaissance, please refer to Section 2.4.

2.0 FINDINGS

2.1 GEOLOGY AND SEISMICITY

2.1.1 Geology

The subject project in located within the margins of Great Valley and Coast Range Geomorphic Provinces of California. This valley is an elongate, asymmetric trough filled with a thick sequence of sediments beginning in the Jurassic period (180 million years ago) and continues currently. The sediments within the valley vary in thickness and are estimated to be up 10 km deep. These sediments are mostly derived from the erosion of the Sierra Nevada Mountain Range to the east, with lesser amounts of material from the Coast Range Mountains to the west.

As shown in Figure 3, Wagner (1991) mapped the project location as Holocene to Pleistocene aged alluvial fan deposits (Qf) consisting of unconsolidated gravel, sand, silt and clay in addition to Miocene to Pliocene fanglomerate deposits (Mf) consisting of conglomerates, siltstone, and sandstone primarily derived from the Coast Range to the southwest.

2.1.2 Seismicity

The site is located in an area of moderate seismicity. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone and no known surface expressions of active faults[1] are believed to exist within the site. According to the 2008 National Seismic Hazard Maps Spatial Query, the two nearest earthquake faults zoned as active by the State of California Geological Survey are the Great Valley fault, located approximately 1 mile south, and the Greenville fault, located approximately 11.7 miles west. Other active faults in the region are summarized in the table below. Figure 4 shows the approximate locations of these faults and significant historic earthquakes recorded within the region.

TABLE 2.1.2-1: Active Faults Capable of Producing Significant Ground Shaking at the Site

FAULT NAME	DISTANCE FROM SITE (miles)	DIRECTION FROM SITE	MAXIMUM MOMENT MAGNITUDE
Great Valley	1	South	6.9
Greenville Connected	12	West	7.0
Mount Diablo Thrust	24	West	6.7
Calaveras	26	West	7.0
Hayward-Rodgers Creek	29	West	7.3
Green Valley Connected	36	West	6.8

Portions of the Great Valley fault are considered seismically active blind thrust faults; however, since the Great Valley fault segments are not known to extend to the ground surface, the State of California has not defined Earthquake Fault Zones around postulated traces. The Great Valley fault is considered capable of causing significant ground shaking at the site, but the recurrence interval is believed longer than for more distant, strike-slip faults. Recent studies suggest that this boundary fault may have been the cause of the Vacaville-Winters earthquake sequence of April 1892 (Eaton, 1986; Wong and Biggar, 1989; Moores and others, 1991). Other large (>M_W7) earthquakes have historically occurred in the Bay Area to the west and along the margins of the Central Valley and many earthquakes of low magnitude occur every year.

[1] An active fault is defined by the State Mining and Geology Board as one that has had surface displacement within Holocene time (about the last 11,000 years) (California Geological Survey, 2007).

2.2 FIELD EXPLORATION

We performed our preliminary field exploration between November 11 and November 16, 2021. Our field exploration included drilling six borings and excavating 15 test pits at various locations across the proposed development. The locations of our explorations are approximate and were estimated by utilizing smart phones equipped with GPS; they should be considered accurate only to the degree implied by the method used.

2.2.1 Borings

Our field exploration included drilling six borings at various locations within Area E, as shown on Figure 2B. Two additional borings were drilled and converted for percolation testing, as described in Section 2.7.

An ENGEO representative observed the drilling and logged the subsurface conditions at each location. We retained a truck-mounted drill rig and crew to advance the borings using 4-inch-diameter solid-flight auger methods. The borings were advanced to a maximum depth of approximately 20½ feet below existing grade.

Soil samples were collected at frequent intervals using either a 3-inch outside-diameter (O.D.) California-type split-spoon sampler fitted with 6-inch-long brass liners, or a 2-inch O.D. Standard Penetration Test (SPT) split-spoon sampler. The samplers were advanced with a 140-pound hammer with a 30-inch drop, employing a rope-and-cathead hammer system. The penetration of the sampler was field recorded as the number of blows needed to drive the sampler 18 inches in 6-inch increments. The boring logs show the number of blows required for the last 1 foot of penetration, or the number of blows per depth of penetration for samples that met driving refusal. The blow counts depicted on the boring logs have not been converted using any correction factors.

We used the field logs to develop the report logs in Appendix A. The logs depict subsurface conditions at the exploration locations for the date of exploration; however, subsurface conditions may vary with time.

2.2.2 Test Pits

We also excavated 15 test pits across the proposed development, as shown on Figure 2A. Two of the test pits were converted for double ring infiltration testing, as described in Section 2.8.

An ENGEO representative observed the test pit excavations and logged the subsurface conditions at each location. We retained a rubber tired backhoe to excavate the test pits using a 2- to 3-foot-wide bucket and logged the type, location, and uniformity of the underlying soil. The test pits were excavated to a maximum depth of approximately 8 feet below existing grade. We obtained bulk soil samples from the test pits using hand sampling techniques.

We used the field logs to develop the report logs in Appendix A. The logs depict subsurface conditions at the exploration locations for the date of exploration; however, subsurface conditions may vary with time.

Following field logging and sample collection, the test pit excavations were loosely backfilled with the excavated material. During site grading, the loosely backfilled soil within our exploratory test pits should be removed and recompacted in accordance with Section 4.0. The test pits were lined with yellow caution tape to help identify the depth of the fill placed. The actual depth of removal of these materials should be determined by ENGEO in the field at the time of grading.

2.3 LABORATORY TESTING

We performed plasticity index testing on two soil samples collected from test pits in Area E. The purpose of this limited laboratory testing was to provide preliminary information on the expansion potential of the surficial soil at the site. Laboratory test results are provided in Appendix B.

2.4 SURFACE CONDITIONS

During our site reconnaissance, we observed the following site features.

- The majority of the site consists of active orchards.
- Pipeline markers for existing, underground oil and gas lines were observed across Areas A, B, and F, trending northwest to southeast.
- Existing structures were observed on the east portion of Area B, the south portion of Area E, and the southeast portion of Area F.

Please refer to Figures 2A and 2B, for more information on site features.

2.5 SUBSURFACE CONDITIONS

Based on our preliminary field exploration, the site consists of a surficial layer of lean to fat clay underlain by lean clay with sand to sandy lean clay. Our explorations within Area E encountered interbedded layers of sand and clay at depths ranging from 10 to 20 feet below the ground surface. Based on our limited laboratory testing, the surficial soil samples we analyzed consisted of moderate to highly expansive clay with plasticity index (PI) values ranging from 19 to 30.

We encountered undocumented fill in seven of our 14 test pit excavations. The undocumented fill was encountered in excavations within existing access roads. The undocumented fill was approximately ½ to 2 feet thick at the time of our field exploration and consisted of lean to fat clay with varying amounts of sand.

Consult the Site Plans and exploration logs for specific subsurface conditions at each location. We include our exploration logs in Appendix A. The logs contain the soil type, color, consistency, and visual classification in general accordance with the Unified Soil Classification System. The logs graphically depict the subsurface conditions encountered at the time of exploration.

2.6 GROUNDWATER CONDITIONS

We did not observe static or perched groundwater in any of our subsurface explorations. Our review of publically available data for groundwater wells in the immediate vicinity of the site indicates that groundwater is greater than 50 feet below the existing grade. Fluctuations in the level of groundwater may occur due to variations in rainfall, irrigation practice, and other factors not evident at the time measurements were made.

2.7 PERCOLATION TESTING

During our field exploration, we drilled two borings within the Area E Regional Basin. Borings 1-B05 and 1-B06 were drilled to depths of approximately 20½ and 15 feet below the ground surface, respectively. The purpose of these borings was to log the subsurface conditions below the proposed bottom of basin. Based on the subsurface conditions encountered in these borings, we selected percolation test elevations to target the layers with the highest infiltration potential.

Our percolation test holes were installed immediately adjacent to Borings 1-B05 and 1-B06 to depths of approximately 7½ feet and 12 feet, respectively. Preparation of the percolation test holes began by placing approximately 2 inches of fine gravel in the bottom of the holes. A 2-inch-diameter perforated PVC pipe was then placed in the test holes and surrounded by gravel. The holes were pre-soaked overnight prior to testing, with measurement of the percolation rate occurring the following day.

To perform the percolation tests, we measured the time until a relatively stable percolation rate was achieved. Municipal drinking water was used for the percolation testing. It is our opinion that the percolation rate of drinking water should be similar to stormwater. The results of the percolation tests are discussed below.

2.7.1 Percolation Testing Results

ENGEO performed the percolation testing on November 16, 2021. The following infiltration rates are based on a falling head percolation test where measurements are recorded for the time it took the water level to drop from a depth of approximately 12 inches from the bottom of the hole to a depth of approximately 6 inches from the bottom of the hole. Infiltration in the lateral and vertical direction is inherent in the rates provided below.

Based on our measured field test results, we converted the uncorrected field percolation rates to infiltration rates using Porchet's Method (Inverse Borehole Method), as summarized in the table below.

TABLE 2.7.1-1: Stabilized Percolation Rates and Converted Infiltration Rate

PERCOLATION TEST LOCATION	TEST DEPTH (feet)	HOLE DIAMETER (inches)	RAW FIELD PERCOLATION RATE (inches/hour)	CONVERTED PORCHET DESIGN INFILTRATION RATE (inches/hour)	SOIL TYPE
1-B05	7½	4	9.7	0.9	Sandy Clay (30-40% sand)
1-B06	11¾	4	1.8	0.1	Sandy Clay (20-30% sand)

It should be noted that the radius used in our calculations equates to the radius of the borehole (approximately 4 inches).

2.8 DOUBLE RING INFILTRATION TESTING

We performed two double-ring infiltration tests at the locations shown on the Site Plan, Figure 2B. The purpose of these tests was to provide preliminary information pertinent to the design of the Area E Regional Basin.

Test pits 1-TP14 and 1-TP15 were excavated to depths ranging from approximately 7 to 8 feet. Double-ring infiltrometer tests were performed at the bottom of the two test pits, within representative soil strata located at the proposed bottom of basin elevation. The two double-ring infiltration tests were performed in general conformance with ASTM D3385-18, Standard Test Method for Infiltration Rate of Soils in Field Using Double-Ring Infiltrometer, and the Multi-Agency Post-Construction Stormwater Standards Manual.

The infiltration test maintains a constant head within the rings. A graduated cylinder was used to maintain the water level at the selected head elevation in the inner ring throughout the test. The infiltration tests were run until the infiltration rate stabilized and then the test process was repeated to obtain a series of results.

2.8.1 Infiltration test results

The infiltration rate for the double-ring infiltrometer was calculated using the following equation from ASTM D3385:

$$VIR = \Delta VIR / (AIR * \Delta t)$$

Where:

VIR = inner ring incremental infiltration velocity, cm/hr
ΔVIR = volume of liquid used during time interval to maintain constant head in the inner ring, cm^3
AIR = interior area of inner ring, cm^2
Δt = time interval, h

Based on the encountered soil types, the soil would be anticipated to have an infiltration rate that is typical for Type A soil as presented in Table 3-1 of the Multi-Agency Post Construction Stormwater Standards Manual. Our double ring infiltration test results are summarized in the table below along with estimations of soil type and fines content.

TABLE 2.8.1-1: Double-Ring Infiltrometer Test Results

TEST LOCATION	TEST DEPTH (feet)	SOIL TYPE	INFILTRATION RATE (inches/hour)
1-TP14	7	Sandy Silt (20-30% sand)	0.1
1-TP15	8	Sandy Silt (30-40% sand)	0.9

3.0 DISCUSSION AND CONCLUSIONS

Based on our review of existing information and limited field exploration, the primary geotechnical concerns that could affect development of the site are potential existing fill and expansive soil. We summarize our conclusions below.

3.1 EXISTING FILL

As noted in Section 2.5, we encountered undocumented fill in seven of our 14 test pit locations. The undocumented fill we encountered was limited to excavations within existing access roads. The undocumented fill ranged from ½ to 2 feet in thickness. We expect that a surficial layer of undocumented fill exists along the majority of the access roads throughout the site. We also expect that there is some amount of existing fill adjacent to the existing structures noted in Section 2.4. Based on our limited field exploration and records review, we expect that the undocumented is limited to these areas.

Without documentation regarding the manner of placement, type of material used, and degree of compaction, existing fill encountered at the site should be considered non-engineered. Non-engineered fill can undergo excessive settlement, especially under new fill or building loads. The approximate extent of undocumented fill at the site should be further investigated during a design-level geotechnical exploration. Refer to Section 4.1 for preliminary recommendations regarding existing fill.

3.2 EXPANSIVE SOIL

As discussed in Section 2.4, our limited soil sampling and laboratory testing indicated the near-surface site soil exhibits moderate to high expansion potential.

Expansive soil can change in volume with changes in moisture. It can shrink or swell and cause heaving and cracking of slabs-on-grade, pavements, and structures founded on shallow foundations. Building damage due to volume changes associated with expansive soil can be reduced by: (1) using a rigid mat foundation that is designed to resist the settlement and heave of expansive soil, (2) deepening the foundations to below the zone of moisture fluctuation, i.e. by using deep footings or drilled piers, and/or (3) using footings at normal shallow depths but bottomed on a layer of select fill having a low expansion potential.

To reduce the potential for damage to the planned buildings, we recommend that the upper 18 inches of the building pad, extending at least 5 feet laterally beyond the building pad, be underlain by fill with low expansion potential (PI<12). This may be achieved by either importing material with low expansion potential or chemically stabilizing the native material on site.

Preliminary grading recommendations for compaction of expansive soil at the site is included in Section 4.0. Preliminary foundation design recommendations are provided in Section 5.0.

3.3 SEISMIC HAZARDS

Potential seismic hazards resulting from a nearby moderate to major earthquake can generally be classified as primary and secondary. The primary effect is ground rupture, also called surface faulting. The common secondary seismic hazards include ground shaking and liquefaction. The following sections present a discussion of these hazards as they apply to the site. Based on topographic and lithologic data, the risk of regional subsidence or uplift, lateral spreading, landslides, tsunamis, or seiches is considered low to negligible at the site.

3.3.1 Ground Rupture

Since there are no known active faults crossing the property and the site is not located within an Earthquake Fault Special Study Zone, it is our opinion that ground rupture is unlikely at the subject property.

3.3.2 Ground Shaking

An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the site, similar to that which has occurred in the past. To mitigate the shaking effects, structures should be designed using sound engineering judgment and the latest California Building Code (CBC) requirements, as a minimum. Structures should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. Conformance to the current building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake; however, it is reasonable to expect that a well-designed and well-constructed structure will not collapse or cause loss of life in a major earthquake (SEAOC, 1996).

3.3.3 Liquefaction

Soil liquefaction results from loss of strength during cyclic loading, such as imposed by earthquakes. Soil most susceptible to liquefaction is clean, loose, saturated, uniformly graded, fine-grained sand. The sand encountered in our borings was generally medium dense and often contained a significant amount of fine-grained material. In addition, groundwater was not encountered to the terminal depth of our borings. For these reasons and based upon engineering judgment, it is our opinion on a preliminary basis that the potential for liquefaction at the site is low during seismic shaking. This should be studied further with additional explorations and analysis during a design-level study.

3.4 2019 CBC SEISMIC DESIGN PARAMETERS

The 2019 CBC utilizes design criteria set forth in the 2016 ASCE 7 Standard. Based on the subsurface conditions encountered, we characterized the site as Site Class D in accordance with the 2019 CBC. We provide the 2019 CBC seismic design parameters in Table 3.4-1 below, which include design spectral response acceleration parameters based on the mapped Risk Targeted Maximum Considered Earthquake (MCER) spectral response acceleration parameters.

TABLE 3.4-1: 2019 CBC Seismic Design Parameters, Latitude: 37.66022, **Longitude:** -121.39753

PARAMETER	VALUE
Site Class	D
Mapped MCE_R Spectral Response Acceleration at Short Periods, S_S (g)	1.24
Mapped MCE_R Spectral Response Acceleration at 1-second Period, S_1 (g)	0.43
Site Coefficient, F_A	1.00
Site Coefficient, F_V	Null See Section 11.4.8
MCE_R Spectral Response Acceleration at Short Periods, S_{MS} (g)	1.25
MCE_R Spectral Response Acceleration at 1-second Period, S_{M1} (g)	Null See Section 11.4.8
Design Spectral Response Acceleration at Short Periods, S_{DS} (g)	0.83
Design Spectral Response Acceleration at 1-second Period, S_{D1} (g)	Null See Section 11.4.8
Mapped MCE Geometric Mean (MCE_G) Peak Ground Acceleration, PGA (g)	0.52
Site Coefficient, F_{PGA}	1.10
MCE_G Peak Ground Acceleration adjusted for Site Class effects, PGA_M (g)	0.57
Long period transition-period, T_L	8 sec

We recommend that we collaborate with the structural engineer of record to further evaluate the effects of taking the exceptions on the structural design and identify the need for performing a site-specific seismic hazard analysis. We can provide a scope for site-specific seismic hazard analysis and ground motion study under separate cover, if needed.

4.0 PRELIMINARY EARTHWORK RECOMMENDATIONS

As used in this report, relative compaction refers to the in-place dry unit weight of soil expressed as a percentage of the maximum dry unit weight of the same soil, as determined by the ASTM D1557 laboratory compaction test procedure, latest edition. Compacted soil is not acceptable if it is unstable; it should exhibit only minimal flexing or pumping, as observed by an ENGEO representative.

The term “moisture condition” refers to adjusting the moisture content of the soil by either drying if too wet or adding water if too dry. We define “structural areas” as any area sensitive to settlement of compacted soil. These areas include, but are not limited to building pads, sidewalks, pavement areas, and retaining walls.

The following recommendations should be considered preliminary and should be verified in a design-level report.

4.1 SITE PREPARATION

Site development will commence with the general clearing of the site and the excavation and removal of buried structures. Areas to be developed should be cleared of all surface and subsurface deleterious materials, including existing structures and associated foundation systems, buried utilities and irrigation lines, septic systems, debris, and designated fencing, trees, shrubs, and associated roots. All debris should be removed from any location to be graded and from areas to receive fill or structures. The depth of removal of such materials should be determined by our representative in the field at the time of grading.

All undocumented fills encountered during grading, including fill placed during our exploratory test pits, should be removed to competent native soil, as determined in the field by ENGEO. We expect that in the locations where there are existing structures, we will need to overexcavate 2 feet of material and rip and additional 12 inches to confirm that all pipes, foundations, and debris are removed. The subexcavation area should extend approximately 10 feet beyond the footprints of the existing structures. Additional subexcavation may be required based on our field observations. Provided the excavated soil is free from debris, it can be placed back as engineered fill.

Existing vegetation should be removed from areas to receive fill or improvements. Tree roots should be removed down to a depth of approximately 2 feet below existing grade. Once the orchards are removed, we will need to overexcavate approximately 12 inches of material and rip and additional 12 inches to mitigate the areas disturbed by removing the orchards.

All excavations from demolition and clearing below design grades should be cleaned to a firm undisturbed native soil surface determined by our representative. This surface should then be scarified, moisture conditioned, and backfilled with compacted engineered fill, in accordance with Section 4.4.

4.2 OVER-OPTIMUM SOIL MOISTURE CONDITIONS

The contractor should anticipate encountering excessively over-optimum (wet) soil moisture conditions during winter or spring grading, or during or following periods of rain. Wet soil can make proper compaction difficult or impossible. Wet soil conditions can be mitigated by:

1. Frequent spreading and mixing during warm dry weather,
2. Mixing with drier materials,
3. Mixing with a lime and/or cement product, or
4. Stabilizing with aggregate or geotextile stabilization fabric, or both.

Options 3 and 4 should be evaluated by ENGEO prior to implementation.

4.3 ACCEPTABLE FILL

On-site soil may be suitable as fill material provided it is processed to remove concentrations of organic material, debris, and particles greater than 8 inches in maximum dimension.

Imported fill materials should meet the above requirements and have a plasticity index equal to or less than the on-site material. If nonexpansive material is imported for the building pads, it should have a plasticity index of less than 12. Allow ENGEO to sample and test proposed imported fill materials at least 5 days prior to delivery to the site.

4.4 FILL COMPACTION

4.4.1 Grading in Structural Areas

Perform subgrade compaction prior to fill placement, following cutting operations, and in areas left at grade as follows.

1. Scarify to a depth of at least 12 inches.
2. Moisture condition soil to at least 3 percentage points over the optimum moisture content for expansive soil (PI ≥ 12) and to at least 1 percentage point over the optimum moisture content for soil with low expansion potential (PI < 12).
3. Compact the soil to between 90 percent relative compaction. Prior to aggregate base placement, compact the upper 6 inches of finish pavement subgrade to at least 92 percent relative compaction for expansive soil or at least 95 percent relative compaction for soil with low expansion potential.

After the subgrade has been compacted, place and compact acceptable fill as follows.

1. Spread fill in loose lifts that do not exceed 12 inches.
2. Moisture condition soil to at least 3 percentage points over the optimum moisture content for expansive soil (PI ≥ 12) and to at least 1 percentage point over the optimum moisture content for soil with low expansion potential (PI < 12).
3. Compact fill to between 90 percent relative compaction. Prior to aggregate base placement, compact the upper 6 inches of finish pavement subgrade to at least 92 percent relative compaction for expansive soil or at least 95 percent relative compaction for soil with low expansion potential.

Compact the pavement Caltrans Class 2 aggregate base section to at least 95 percent relative compaction (ASTM D1557). Moisture condition aggregate base to or slightly above the optimum moisture content prior to compaction.

Where lime or cement treatment of the soil is used to mitigate expansive soil conditions, we recommend the type of chemical admixture (lime, quicklime, or cement) and percentage of chemical additive be based on testing of actual foundation soil after mass grading is substantially completed. Based on our experience, on a preliminary basis we estimate that chemical treatment with approximately 4 percent lime (by dry unit weight) may be appropriate to reduce the plasticity of the on-site soil. The soil should be moisture conditioned to at least 3 percentage points above the optimum moisture content before mixing. The mixing should be performed in accordance with the current version of Caltrans Standard Specifications, with the following exceptions.

1. Following mixing, the treated soil should be allowed to fully hydrate prior to compaction.
2. Following hydration, the treated soil should be compacted according to ASTM D1557 to at least 95 percent relative compaction at, or slightly above, the optimum moisture content.

We recommend that the chemical treatment be performed by a specialty contractor experienced in this type of work.

4.4.2 Underground Utility Backfill

4.4.2.1 General

The contractor is responsible for conducting trenching and shoring in accordance with Cal/OSHA requirements. Project consultants involved in utility design should specify pipe-bedding materials.

4.4.2.2 Structural Areas

Place and compact trench backfill as follows.

1. Trench backfill should have a maximum particle size of 6 inches.
2. Moisture condition trench backfill to a minimum of 3 percent above the optimum moisture content. Moisture condition backfill outside the trench.
3. Place fill in loose lifts not exceeding 12 inches.
4. Compact fill to 90 percent minimum relative compaction.

Where utility trenches cross underneath buildings, we recommend that a plug be placed within the trench backfill to help prevent the normally granular bedding materials from acting as a conduit for water to enter beneath the building. The plug should be constructed using a sand cement slurry (minimum 28-day compressive strength of 500 psi) or relatively impermeable native soil for pipe bedding and backfill. We recommend that the plug extend for a distance of at least 3 feet in each direction from the point where the utility enters the building perimeter.

Jetting of backfill is not an acceptable means of compaction.

4.5 SITE DRAINAGE

The project civil engineer is responsible for designing surface drainage improvements. With regard to geotechnical engineering issues, we recommend that finish grades be sloped away from buildings and pavements to the maximum extent practical to reduce the potentially damaging effects of expansive soil. As a minimum, we recommend the following.

1. Discharge roof downspouts into closed conduits and direct away from foundations and pavements to appropriate drainage devices.
2. Do not allow water to pond near foundations, pavements, or exterior flatwork.

5.0 PRELIMINARY FOUNDATION RECOMMENDATIONS

It is anticipated that the proposed development will consist of concrete tilt-up warehouse structures and university buildings consisting of either glass over steel frame construction or concrete tilt-up construction. Based on our limited field exploration, laboratory testing, and engineering analysis, we recommend that the proposed buildings be supported on continuous or isolated spread footing foundation systems with slab-on-grade floors bearing in compacted subgrade with low expansion potential.

We developed preliminary structural improvement recommendations using data obtained from our limited field exploration and laboratory test results. The following recommendations should be considered preliminary and should be verified in a design-level report.

5.1 BUILDING PAD SUBGRADE PREPARATION

We recommend the upper 18 inches of the building pad, and to at least 5 feet laterally beyond, should consist of imported low-expansive fill with a Plasticity Index less than 12. Alternatively, the upper 18 inches of the finished building pad, and to at least 5 feet laterally beyond, can be chemically treated to reduce the plasticity of site soil.

If chemical treatment is selected as an alternative to importing low-expansive fill for building pad construction, the type of chemical admixture (lime, quicklime, or cement) and percentage of chemical additive should be based on testing of actual foundation soil after mass grading is substantially completed. Based on our experience, on a preliminary basis, we estimate that chemical treatment with approximately 4 percent lime (by dry unit weight) may be appropriate to reduce the plasticity of on-site soil. Chemical treatment should be performed by a specialty contractor experienced in this type of work. In addition, excavations performed in chemically treated soil, such as for utility trenches, should be stockpiled and protected for reuse in the upper backfill area to match the treated section.

5.2 FOOTING DIMENSIONS AND ALLOWABLE BEARING CAPACITY

Preliminary minimum footing dimensions are presented in Table 5.2-1 below.

TABLE 5.2-1: Preliminary Minimum Footing Dimensions

FOOTING TYPE	MINIMUM DEPTH (inches)	MINIMUM WIDTH (inches)
Continuous	24	12
Isolated	24	24

Minimum footing depths shown above are taken from the lowest adjacent pad grade.

On a preliminary basis, conventional footing foundations can be designed for a maximum allowable bearing pressure of 2,000 pounds per square foot (psf) for dead-plus-live loads. Increase this bearing capacity by one-third for the short-term effects of wind or seismic loading.

The maximum allowable bearing pressure is a net value; the weight of the footing may be neglected for design purposes. All footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1:1 (horizontal:vertical) plane projected upward from the bottom edge of the trench to the footing.

For low expansive import material, a subgrade modulus of 150 pci should be used. For chemically treated native material, a subgrade modulus of 250 pci should be used.

5.3 INTERIOR SLAB-ON-GRADE

We anticipate that the operation of the warehouse facilities will include forklift and rack loads on the interior concrete slab. While no loading information was provide for our review, we developed our preliminary recommendations assuming a lightly loaded industrial concrete floor. This would include only small racks and forklifts.

As previously discussed, due to the expansive nature of the onsite material, the interior slabs should be underlain by 18 inches of low expansive imported material or chemically treated native material. Interior concrete floors that will support forklift or rack loads should be underlain by 6 inches of granular base having an R-value of at least 50 and a Plasticity Index less than 12. The base should be compacted to at least 95 percent relative compaction (ASTM D1557) to provide firm, uniform support for the slab-on-grade. These 6 inches of base may be considered part of the low expansive fill recommended in Section 5.1 of this report.

Prior to construction of the slab, the surface should be proof-rolled with heavy equipment to check that the base material is uniformly compacted and does not deflect under equipment loads. Prior to placing the base material, the building subgrade should be prepared in accordance with Section 4.0.

The slab thickness and reinforcement should be designed by the structural engineer based on the intended use and loading of the slab.

Post-construction cracking of concrete slabs-on-grade is inherent in any project, especially where soil expansion potential is high. Adequate slab reinforcement should be provided to satisfy the anticipated use and loading requirements.

When buildings are constructed with concrete slab-on-grade, water vapor from beneath the slab will migrate through the slab and into the building. This water vapor can be reduced but not stopped. Vapor transmission can negatively affect floor coverings and lead to increased moisture within a building. When water vapor migrating through the slab would be undesirable, we recommend the following to reduce, but not stop, water vapor transmission upward through the slab-on-grade.

1. Install a vapor retarder membrane directly beneath the slab. Seal the vapor retarder at all seams and pipe penetrations. Vapor retarders shall conform to Class A vapor retarder in accordance with ASTM E 1745, latest edition, “Standard Specification for Plastic Water Vapor Retarders used in Contact with Soil or Granular Fill under Concrete Slabs.”
2. Provide inspection and testing during concrete placement to check that the proper concrete and water cement ratio are used.

6.0 PRELIMINARY PAVEMENT DESIGN

6.1 FLEXIBLE PAVEMENTS

Based on our limited field exploration and laboratory testing, we determined an R-Value of 5 to be appropriate for untreated native soil. As an alternative, we also provide preliminary design recommendations for lime-treated native soil. Lime treatment increases the subgrade R-value and allows for a decrease in the pavement structural section. Based on experience, we recommend an R-value of 40 to represent lime-treated subgrade soil.

Using estimated traffic indexes for various pavement loading requirements, we developed the following recommended pavement sections using Topic 633 of the Caltrans Highway Design Manual (including the asphalt factor of safety). The recommendations in Table 6.1-1 should be considered preliminary and should be verified in a design-level report.

TABLE 6.1-1: Preliminary Asphalt Concrete Pavement Section Recommendations

TRAFFIC INDEX	SECTION		
	ASPHALT CONCRETE (inches)	CLASS 2 AB (inches), NO LIME TREATMENT OF SUBGRADE	CLASS 2 AB (inches), WITH 12 INCHES OF LIME-TREATED SUBGRADE
5	3	10	4
6	3½	13	5½
7	4	15½	7
8	5	17½	8
9	5½	20½	9½
10	6½	23	10½
11	7	25	12½
12	8	25	13½

The civil engineer should determine the appropriate traffic indexes based on the estimated traffic loads and frequencies.

6.2 RIGID PAVEMENTS

We developed the preliminary rigid pavement sections in accordance with the methods contained in the Guide for the Design and Construction of Concrete Parking Lots, based on ACI 330R-08. Table 6.2-1 presents recommended PCCP and aggregate base (AB) thicknesses for various allowable Average Daily Truck Traffic (ADTT) indices that correspond to R-values of 5 for untreated subgrade and the use of concrete with a Modulus of Rupture equal to 500 psi, which corresponds to a compressive strength of approximately 4,000 psi. As an alternative, you may lime treat the pavement subgrade in order to reduce the overall pavement section. Table 6.2-2 presents recommended PCCP thicknesses for various allowable ADTT indices that correspond to 12 inches of lime treated subgrade and a Modulus of Rupture equal to 500 psi.

TABLE 6.2-1: Preliminary Concrete Pavement Section Recommendations, Class 2 AB

ADTT	AXLE CATEGORY	SECTION	
		PCCP (inches) NO LIME TREATMENT OF SUBGRADE	CLASS 2 AB (inches)
100	C	7.0	6
300	C	7.5	6
700	D	8.5	6

TABLE 6.2-2: Preliminary Concrete Pavement Section Recommendations, Lime Treated Subgrade

ADTT	AXLE CATEGORY	SECTION	
		PCCP (inches)	LIME TREATED SUBGRADE (inches)
100	C	6.5	12
300	C	6.5	12
700	D	7.0	12

6.3 SUBGRADE AND AGGREGATE BASE COMPACTION

Compact finish subgrade and aggregate base in accordance with Section 4.4. Aggregate Base should meet the requirements for ¾-inch maximum Class 2 AB in accordance with Section 26 1.02B of the latest Caltrans Standard Specifications.

7.0 DESIGN-LEVEL GEOTECHNICAL REPORT

This report presents preliminary geotechnical findings, conclusions and recommendations intended for preliminary planning purposes only. A design-level geotechnical exploration and assessment should be performed when development plans are available. The design-level geotechnical report should further discuss topics presented in this report and address the following items.

- Field exploration and laboratory testing to support design-level recommendations based on the actual development layout.
- Design-level analyses related to geologic and geotechnical hazards.
- Design-level earthwork, improvements, and construction recommendations.

8.0 LIMITATIONS AND UNIFORMITY OF CONDITIONS

This report presents a discussion of geotechnical feasibility for the project discussed in Section 1.2 for the Pacific Gateway project. If changes occur in the nature or design of the project, we should be allowed to review this report and provide additional recommendations, if any. It is the responsibility of the owner to transmit the information and recommendations of this report to the appropriate organizations or people involved in design of the project, including but not limited to developers, owners, buyers, architects, engineers, and designers. The conclusions and recommendations contained in this report are solely professional opinions and are valid for a period of no more than 2 years from the date of report issuance.

We strived to perform our professional services in accordance with generally accepted principles and practices currently employed in the area; no warranty is express or implied. There are risks of earth movement and property damages inherent in building on or with earth materials. We are unable to eliminate all risks; therefore, we are unable to guarantee or warrant the results of our services.

This report is based upon field and other conditions discovered at the time of report preparation. We developed this desktop report with limited site-specific data. We recommend that the owner perform a design-level geotechnical report prior to construction.

Our services did not include a geotechnical exploration, excavation sloping or shoring, soil volume change factors, flood potential, or a geohazard exploration. In addition, our scope did not include work to determine the existence of possible hazardous materials.

This document must not be subject to unauthorized reuse, that is, reusing without written authorization of ENGEO. Such authorization is essential because it requires ENGEO to evaluate the document's applicability given new circumstances, not the least of which is passage of time.

Actual field or other conditions will necessitate clarifications, adjustments, modifications or other changes to ENGEO's documents. Therefore, ENGEO must be engaged to prepare the necessary clarifications, adjustments, modifications or other changes before construction activities commence or further activity proceeds. If ENGEO's scope of services does not include on-site construction observation, or if other persons or entities are retained to provide such services, ENGEO cannot be held responsible for any or all claims arising from or resulting from the performance of such services by other persons or entities, and from any or all claims arising from or resulting from clarifications, adjustments, modifications, discrepancies or other changes necessary to reflect changed field or other conditions.

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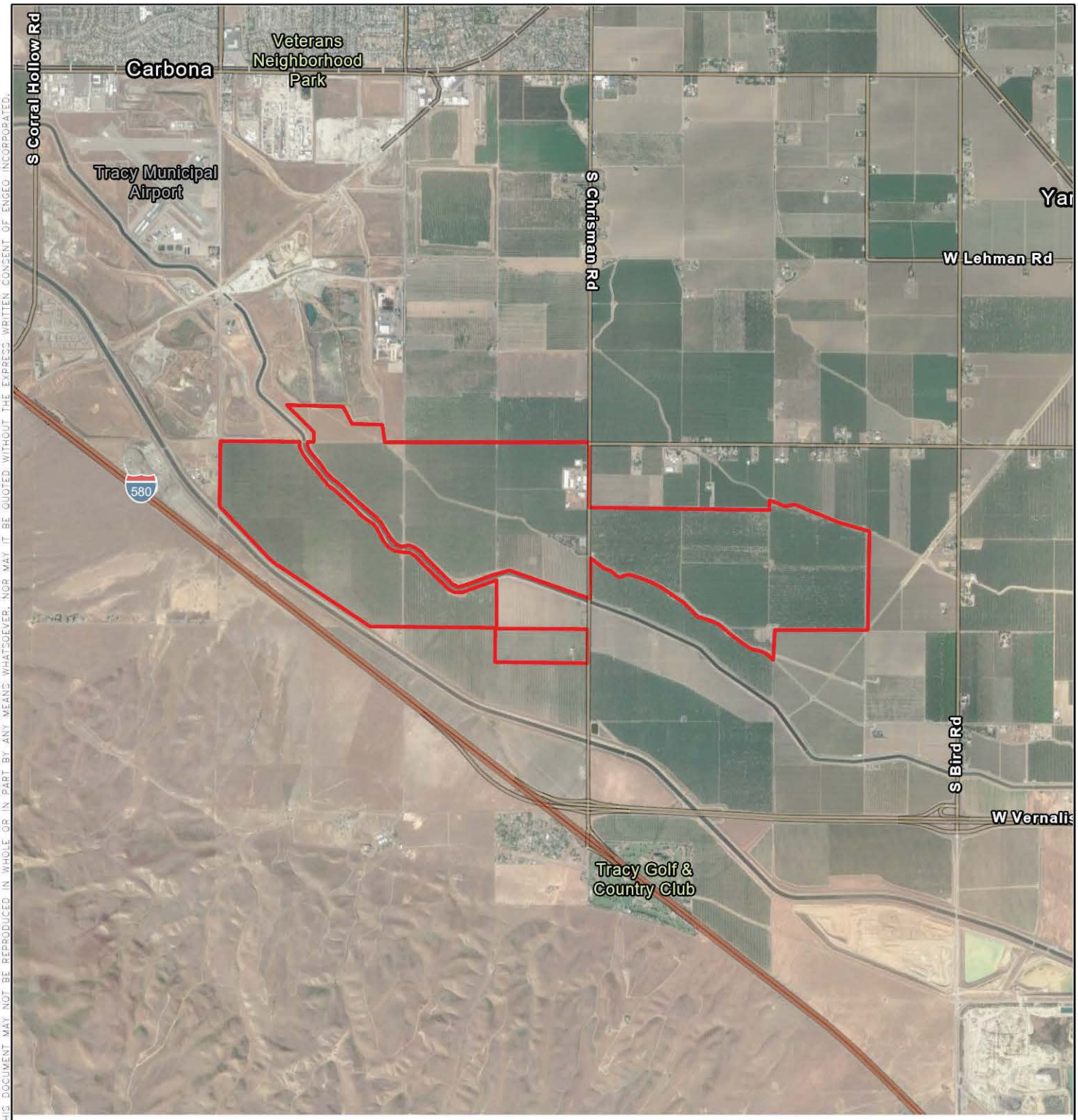
FIGURES

FIGURE 1: Vicinity Map
FIGURE 2A: Site Map – Overall
FIGURE 2B: Site Plan – Area E
FIGURE 3: Regional Geologic Map
FIGURE 4: Regional Faulting and Seismicity Map



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0 2,000 4,000

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

PROJECT SITE

BASEMAP SOURCE: GOOGLE MAPPING SERVICE 2021

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ENGEO Expect Excellence

VICINITY MAP

PACIFIC GATEWAY

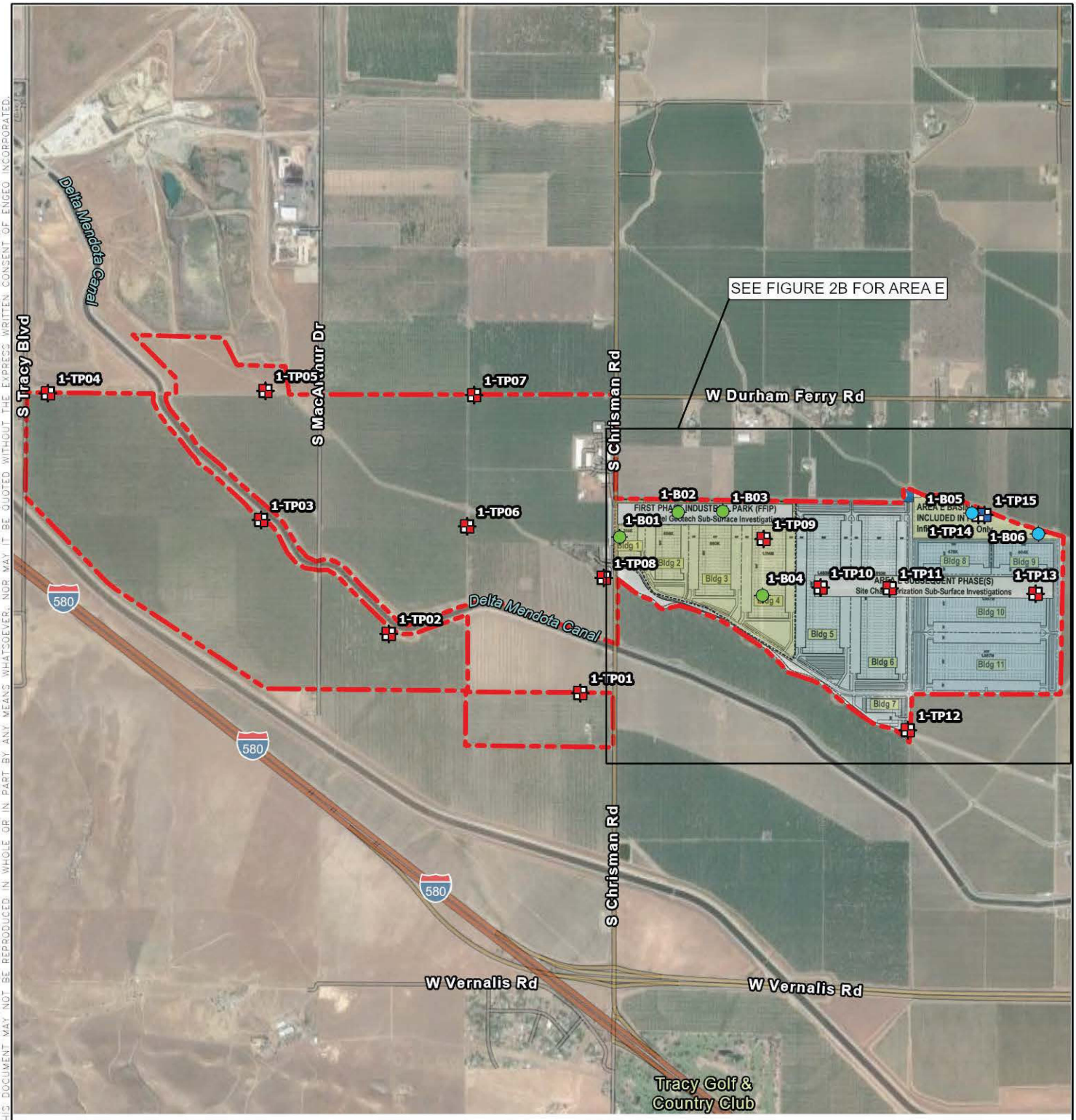
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 1

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000001\GEOTECH\GEX\GOLDEN STATE LOGISTICS HUB.APRX
LAYOUT: VICINITY USER: MTORRES

ORIGINAL FIGURE PRINTED IN COLOR



N

0 1,250 2,500

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE
- TEST PIT (ENGEO, 2021)
- TEST PIT/DOUBLE RING INFILTROMETER (ENGEO, 2021)
- BORING (ENGEO, 2021)
- BORING/PERCOLATION TEST (ENGEO, 2021)

BASEMAP SOURCE: GOOGLE MAPPING SERVICE 2021

ENGEO Expect Excellence

SITE PLAN - OVERALL

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 2A

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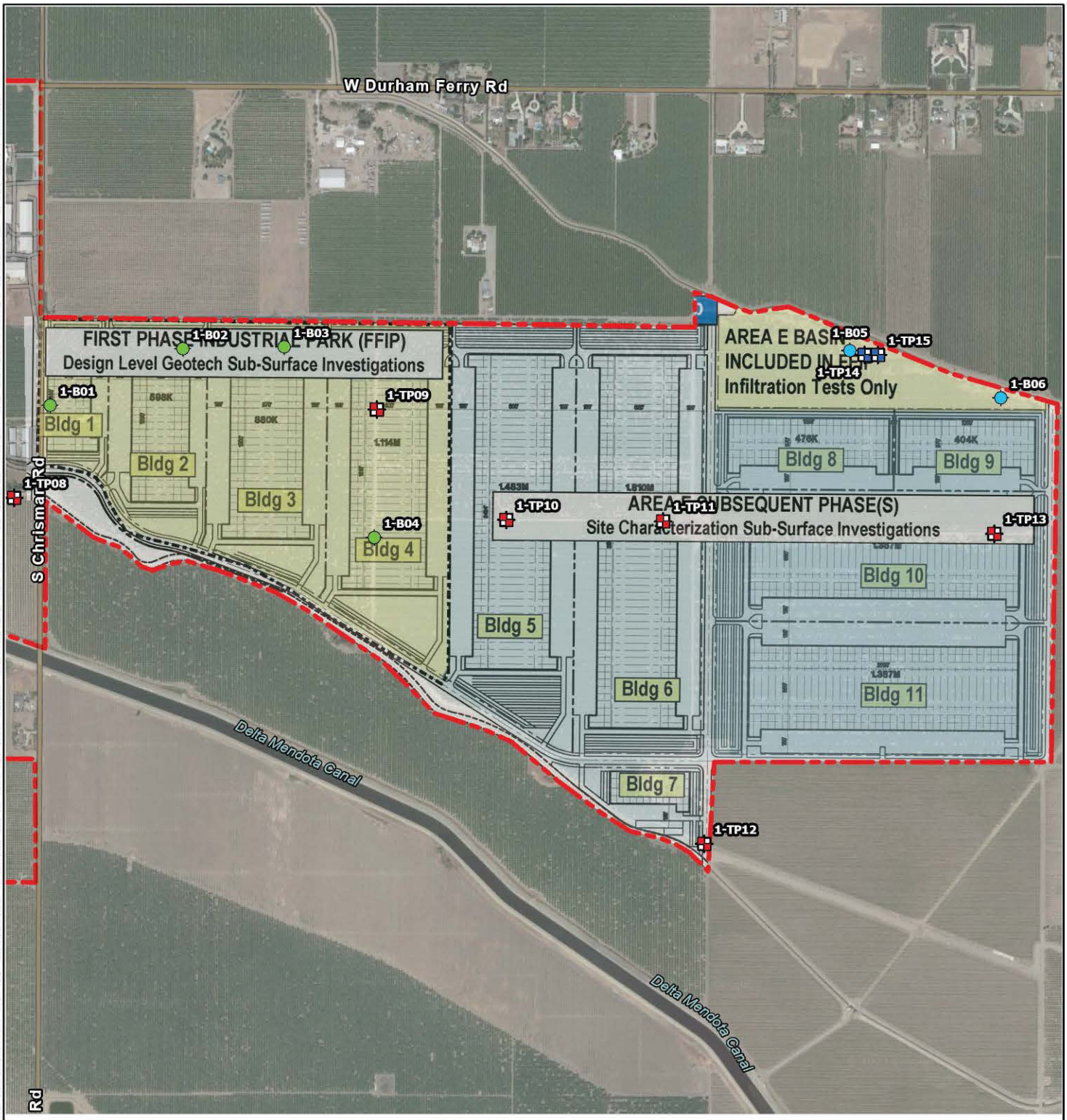
PATH: G:\DRAFTING\PROJECTS_19000 TO 19999\19633\19633000001\GEOTECH\GEX\GOLDEN STATE LOGISTICS HUB.APRX
LAYOUT: SITE PLAN USER: MTORREO

ORIGINAL FIGURE PRINTED IN COLOR



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE
- TEST PIT (ENGEO, 2021)
- TEST PIT/DOUBLE RING INFILTROMETER (ENGEO, 2021)
- BORING (ENGEO, 2021)
- BORING/PERCOLATION TEST (ENGEO, 2021)

BASEMAP SOURCE: GOOGLE MAPPING SERVICE 2021

ENGEO Expect Excellence

SITE PLAN - AREA E

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 2B

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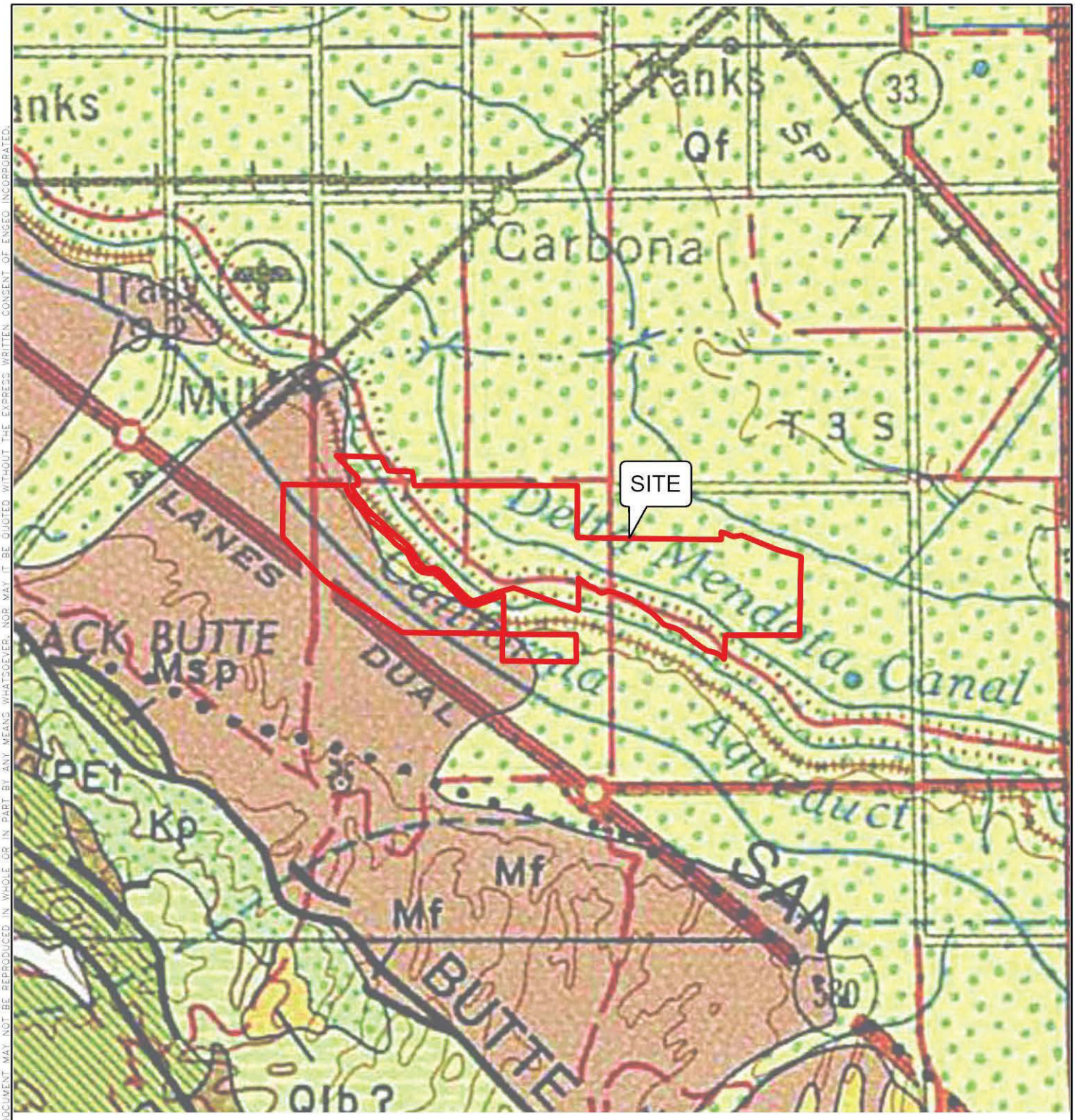
USER: MTORRES

ORIGINAL FIGURE PRINTED IN COLOR



N

0 2,500 5,000

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

Qf	ALLUVIAL FAN DEPOSITS
Qlb	LOS BANOS ALLUVIUM
Msp	SAN PABLO GROUP
Mf	FANGLOMERATE
kp	PANOCHE FORMATION

BASEMAP SOURCE: WAGNER 1991

ENGEO Expect Excellence

REGIONAL GEOLOGIC MAP

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. : 19633.000.001

SCALE: AS SHOWN

DRAWN BY: QRL CHECKED BY: SDH

FIGURE NO. 3

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PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000001\GEOTECH\GEX\GOLDEN STATE LOGISTICS HUB.APRX
LAYOUT: GEOLOGIC USER: MTORRES

ORIGINAL FIGURE PRINTED IN COLOR

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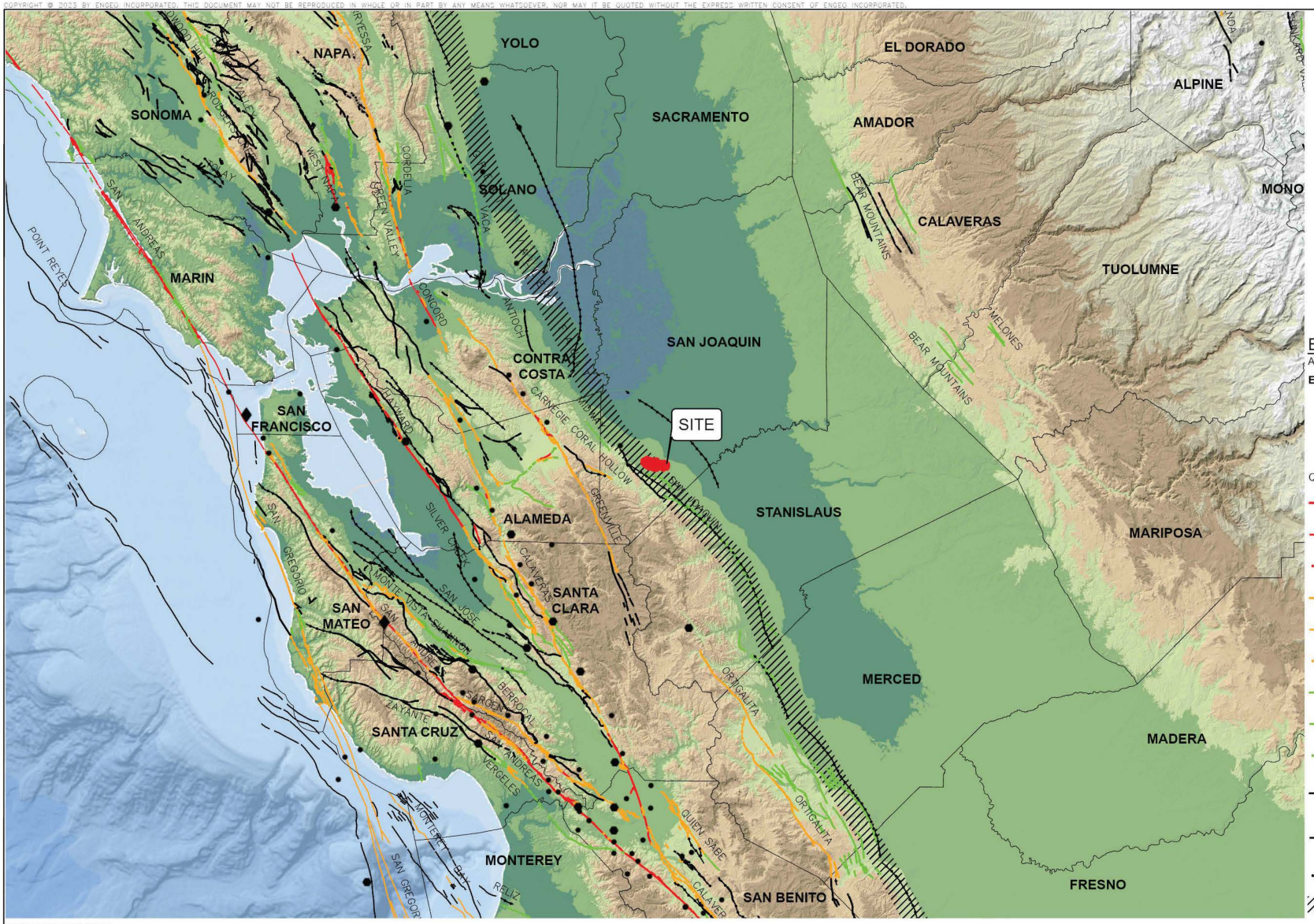

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

EARTHQUAKE

- MAGNITUDE 7+
- MAGNITUDE 6-7
- MAGNITUDE 5-6

QUATERNARY FAULTS 2020

- HISTORICAL (<150 YEARS), WELL CONSTRAINED LOCATION
- HISTORICAL (<150 YEARS), MODERATELY CONSTRAINED LOCATION
- HISTORICAL (<150 YEARS), INFERRED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), WELL CONSTRAINED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), MODERATELY CONSTRAINED LOCATION
- LATEST QUATERNARY (<15,000 YEARS), INFERRED LOCATION
- LATE QUATERNARY (<130,000 YEARS), WELL CONSTRAINED LOCATION
- LATE QUATERNARY (<130,000 YEARS), MODERATELY CONSTRAINED LOCATION
- LATE QUATERNARY (<130,000 YEARS), INFERRED LOCATION
- UNDIFFERENTIATED QUATERNARY(<1.6 MILLION YEARS), WELL CONSTRAINED LOCATION
- UNDIFFERENTIATED QUATERNARY(<1.6 MILLION YEARS), MODERATELY CONSTRAINED LOCATION
- UNDIFFERENTIATED QUATERNARY(<1.6 MILLION YEARS), INFERRED LOCATION
- GREAT VALLEY FAULT ZONE

BASE MAP SOURCE
ESRI, GEBCO, DELORME, NATURALVUE
COLOR HILLSHADE IMAGE BASED ON THE NATIONAL ELEVATION DATA SET (NED) AT 30 METER RESOLUTION
U.S.G.S. QUATERNARY FAULT DATABASE, 2020
U.S.G.S. HISTORIC EARTHQUAKE DATABASE (1800-PRESENT)
U.S.G.S OPEN-FILE REPORT 96-705

ENGEO Expect Excellence

REGIONAL FAULTING AND SEISMICITY
PACIFIC GATEWAY
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: JV	CHECKED BY: SDH

FIGURE NO. 4

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000001\GEOTECH\GEX\GOLDEN STATE LOGISTICS HUB.APRX
LAYOUT: FAULT&SEISMICITY USER: MTORRES

ORIGINAL FIGURE PRINTED IN COLOR



APPENDIX A

KEY TO BORING LOGS
BORING LOGS
TEST PIT LOGS

KEY TO BORING LOGS

MAJOR TYPES			DESCRIPTION
COARSE-GRAINED SOILS MORE THAN HALF OF MAT'L LARGER THAN #200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	CLEAN GRAVELS WITH LESS THAN 5% FINES	GW - Well graded gravels or gravel-sand mixtures GP - Poorly graded gravels or gravel-sand mixtures
		GRAVELS WITH OVER 12 % FINES	GM - Silty gravels, gravel-sand and silt mixtures GC - Clayey gravels, gravel-sand and clay mixtures
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 5% FINES	SW - Well graded sands, or gravelly sand mixtures SP - Poorly graded sands or gravelly sand mixtures
		SANDS WITH OVER 12 % FINES	SM - Silty sand, sand-silt mixtures SC - Clayey sand, sand-clay mixtures
FINE-GRAINED SOILS MORE THAN HALF OF MAT'L SMALLER THAN #200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50 % OR LESS		ML - Inorganic silt with low to medium plasticity CL - Inorganic clay with low to medium plasticity OL - Low plasticity organic silts and clays
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50 %		MH - Elastic silt with high plasticity CH - Fat clay with high plasticity OH - Highly plastic organic silts and clays
	HIGHLY ORGANIC SOILS		PT - Peat and other highly organic soils

For fine-grained soils with 15 to 29% retained on the #200 sieve, the words "with sand" or "with gravel" (whichever is predominant) are added to the group name.

For fine-grained soil with >30% retained on the #200 sieve, the words "sandy" or "gravelly" (whichever is predominant) are added to the group name.

GRAIN SIZES

U.S. STANDARD SERIES SIEVE SIZE					CLEAR SQUARE SIEVE OPENINGS			
200	40	10	4	3/4 "	3"	12"		
SILTS AND CLAYS	SAND			GRAVEL			COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE			

RELATIVE DENSITY

SANDS AND GRAVELS	BLOWS/FOOT (S.P.T.)
VERY LOOSE	0-4
LOOSE	4-10
MEDIUM DENSE	10-30
DENSE	30-50
VERY DENSE	OVER 50

CONSISTENCY

SILTS AND CLAYS	STRENGTH*
VERY SOFT	0-1/4
SOFT	1/4-1/2
MEDIUM STIFF	1/2-1
STIFF	1-2
VERY STIFF	2-4
HARD	OVER 4

SAMPLER SYMBOLS

- Modified California (3" O.D.) sampler
- California (2.5" O.D.) sampler
- S.P.T. - Split spoon sampler
- Shelby Tube
- Dames and Moore Piston
- Continuous Core
- Bag Samples
- Grab Samples
- NR No Recovery

MOISTURE CONDITION

DRY	Dusty, dry to touch
MOIST	Damp but no visible water
WET	Visible freewater

LINE TYPES

- ———— Solid - Layer Break
- – – – – – Dashed - Gradational or approximate layer break

GROUNDWATER SYMBOLS

- Groundwater level during drilling
- Stabilized groundwater level

(S.P.T.) Number of blows of 140 lb. hammer falling 30" to drive a 2-inch O.D. (1-3/8 inch I.D.) sampler

* Unconfined compressive strength in tons/sq. ft., asterisk on log means determined by pocket penetrometer

ENGEO
Expect Excellence

ENGEO
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LOG OF BORING 1-B01

LATITUDE: 37.66022 LONGITUDE: -121.397533

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 159 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), brown, hard, moist, medium plasticity, 10% fine- to coarse-grained sand, <5% fine to coarse gravel												
			Grades to yellowish brown, stiff			38								>4.5*	PP
														>4.5*	PP
						7									
	155														
5			Grades to 15% fine- to coarse-grained sand												
						9									
			Grades to <5% fine- to coarse-grained sand												
	150														
10			Grades to 10% fine- to coarse grained sand, very stiff			37								>4.5*	PP
	145														
15						22									
			CLAYEY SAND (SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 20% fines												
	140					54									
20			Bottom of boring at approximately 20 feet below ground surface. Groundwater not encountered during drilling.												

LOG OF BORING 1-B02

Expect Excellence

LATITUDE: 37.662131 LONGITUDE: -121.39397

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 16½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 150 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark brown, medium stiff, moist, medium plasticity, <5% fine to coarse gravel												
						18								3.25*	PP
			SANDY LEAN CLAY (CL), yellowish brown, medium stiff, moist, low plasticity, 40% fine- to coarse-grained sand, <5% fine gravel											3.0*	PP
						7									
5	145		LEAN CLAY (CL), yellowish brown, very stiff, moist, medium plasticity, 5% fine- to coarse-grained sand												
						37									
10	140														
			CLAYEY SAND (SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 25% fines, <5% fine gravel			20									
			Grades to 40% fines, 10% fine- to coarse-grained gravel												
15	135					40									
			LEAN CLAY WITH SAND (CL), yellowish brown, very stiff, moist, medium plasticity, 15% fine- to coarse-grained sand												
			Bottom of boring at approximately 16 1/2 feet below ground surface. Groundwater not encountered during drilling.												

LOG OF BORING 1-B03

ENGEO Expect Excellence

LATITUDE: 37.662157 LONGITUDE: -121.391202

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 17½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 145 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark brown, moist, medium plasticity, 5% fine- to coarse-grained sand, <5% fine to coarse gravel												
			LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, medium plasticity, 15% fine- to coarse-grained sand, <5% coarse gravel			30								>4.5*	PP
5	140		Grades to very stiff			25									
			Grades to hard, 5% fine- to coarse-grained sand			68								>4.5*	PP
			Grades to 15% fine- to coarse-grained sand												
10	135		POORLY GRADED SAND WITH CLAY (SP-SC), yellowish brown, medium dense to dense, moist, fine- to coarse-grained sand, 10% fines, 10% fine to coarse gravel			30									
			CLAYEY SAND (SC), yellowish brown, medium dense to dense, moist, fine- to coarse-grained sand, 40% fines												
15	130		POORLY GRADED SAND WITH CLAY AND GRAVEL (SP-SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 25% fine to coarse gravel, 5-10% fines			43								>4.5*	PP
			LEAN CLAY (CL), yellowish brown, hard, moist, medium plasticity, <5% fine- to coarse-grained sand												
			Bottom of boring at approximately 17 1/2 feet below ground surface. Groundwater not encountered during drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 1-BS.GPJ ENGEO INC.GDT 1/10/23

LOG OF BORING 1-B04

ENGEO Expect Excellence

LATITUDE: 37.657422 LONGITUDE: -121.388672

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 19 ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 156 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
	155		SANDY LEAN CLAY (CL), dark brown, hard, moist, medium plasticity, 30% fine- to coarse-grained sand			24								>4.5*	PP
														>4.5*	PP
			LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, medium plasticity, 15% fine- to coarse-grained sand			24									
5															
	150		LEAN CLAY (CL), yellowish brown, very stiff, moist, medium plasticity, <5% fine- to coarse-grained sand			16									
10															
	145		Grades to hard, medium to high plasticity, 5% fine- to coarse-grained sand			70								>4.5*	PP
			SANDY LEAN CLAY (CL), yellowish brown, hard, moist, medium plasticity, 40% fine- to coarse-grained sand												
15						38									
	140		LEAN CLAY (CL), yellowish brown, hard, moist, medium to high plasticity, <5% fine- to coarse-grained sand			68								>4.5*	PP
			Bottom of boring at approximately 19 feet below ground surface. Groundwater not encountered during drilling.												

LOG OF BORING 1-B05

ENGEO Expect Excellence

LATITUDE: 37.661565 LONGITUDE: -121.375773

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 20½ ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 127 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
	125		LEAN CLAY (CL), dark brown, stiff, moist, medium plasticity, 5% fine- to coarse-grained sand												
			LEAN CLAY WITH SAND (CL), yellowish brown, stiff, moist, medium plasticity, 15% fine- to coarse-grained sand			13									
5			SANDY LEAN CLAY (CL), yellowish brown, very stiff, moist, low plasticity, 30-40% fine- to coarse-grained sand												
	120					25									
			LEAN CLAY WITH SAND (CL), dark yellowish brown, very stiff, moist, medium plasticity, 15% fine- to coarse-grained sand												
10						22									
	115		LEAN CLAY (CL), dark yellowish brown, very stiff, moist, medium plasticity, <5% fine- to coarse-grained sand												
						26									
15															
						27									
			CLAYEY SAND (SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 35% fines												
	110		LEAN CLAY (CL), yellowish brown, very stiff, moist, medium plasticity, 5% fine- to coarse-grained sand												
						25									
						18									
20			SANDY LEAN CLAY (CL), yellowish brown, stiff, moist, low plasticity, 35% fine- to coarse-grained sand												
			Bottom of boring at approximately 20 1/2 feet below ground surface. Groundwater not encountered during drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 1-BS.GPJ ENGEO INC.GDT 1/10/23

ENGEO
Expect Excellence

LOG OF BORING 1-B06

LATITUDE: 37.660573 LONGITUDE: -121.371652

Geotechnical Feasibilty
Pacific Gateway
Tracy, California
19633.000.001

DATE DRILLED: 11/15/2021
HOLE DEPTH: Approx. 15 ft.
HOLE DIAMETER: 4.0 in.
SURF ELEV (WGS84): Approx. 129 ft.

LOGGED / REVIEWED BY: C. Johnson / SH
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark brown, moist, medium plasticity, <5% fine- to coarse-grained sand												
	125		SANDY LEAN CLAY (CL), yellowish brown, medium stiff, moist, low plasticity, 30% fine- to coarse-grained sand												
5						7									
	120		Grades to 35% medium- to coarse-grained sand			10									
10			Grades to 20-30% fine- to coarse-grained sand			14									
			POORLY GRADED SAND WITH CLAY (SP-SC), yellowish brown, medium dense, moist, fine- to coarse-grained sand, 10% fines												
	115		SANDY LEAN CLAY (CL), yellowish brown, stiff, moist, low plasticity, 30-40% fine- to coarse-grained sand, contains silt fines			15									
15			Bottom of boring at approximately 15 feet below ground surface. Groundwater not encountered during drilling.												

ENGEO Expect Excellence	TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001	Logged By: Jason Sedore Logged Date: November 11, 2021

Test Pit Number	Depth (feet)	Description
1-TP01	0 – 3	FAT CLAY (CH), dark grayish brown, hard (Pocket Penetrometer >4.5 tsf at 2 feet), moist, high plasticity, <15% fine- to medium-grained sand, contains gravel Bottom of test pit at approximately 3 feet below ground surface. No groundwater encountered during excavation.
1-TP02	0 – 1½ 1 ½ - 3	LEAN CLAY WITH SAND (CL), dark grayish brown mottled with brown, very stiff (Pocket Penetrometer = 3.5 tsf at 1 foot), moist, medium to high plasticity, 15-25% fine- to medium-grained sand, contains silt fines and gravel FAT CLAY (CH) very dark grayish brown, hard (Pocket Penetrometer >4.5 tsf at 2 feet), moist, high plasticity, <15% fine-grained sand Bottom of test pit at approximately 3 feet below ground surface. No groundwater encountered during excavation.
1-TP03	0 – 2 2 – 3	FAT CLAY (CH), very dark brown mottled with yellowish brown, hard (Pocket Penetrometer = 4.0 tsf at 1 foot), moist, high plasticity, <15% fine-grained sand [Undocumented Fill] FAT CLAY (CH), very dark brown, hard, moist, high plasticity, <15% fine-grained sand [Native] Bottom of test pit at approximately 3 feet below ground surface. No groundwater encountered during excavation.
1-TP04	0 – 6	SANDY LEAN CLAY (CL), grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine-grained sand, contains fine gravel Grades to brown, low to medium plasticity, contains silt fines at 3½ feet Grades to yellowish brown to brown, contains carbonates at 4½ feet Bottom of test pit at approximately 6 feet below ground surface. No groundwater encountered during excavation.

ENGEO Expect Excellence		TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001		Logged By: Jason Sedore Logged Date: November 11, 2021
Test Pit Number	Depth (feet)	Description
1-TP05	0 – 3	SANDY LEAN CLAY (CL), dark grayish brown, medium to high plasticity, 30-40% fine-grained sand, <10% fine to coarse gravel, contains cobbles
	3 – 5½	SILTY GRAVEL WITH SAND (GM), brown, dense to very dense, moist, fine to coarse, subangular to to subrounded gravel, 25-35% fine- to coarse-grained sand, 15-20% fines, contains cobbles Bottom of test pit at approximately 5½ feet below ground surface. No groundwater encountered during excavation.
1-TP06	0 – 4	FAT CLAY (CH), very dark grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine-grained sand Grades to brown, contains carbonates at 3 feet
	4 – 5	LEAN CLAY (CL), brown, very stiff to hard, moist, medium plasticity, <15% fine-grained sand, contains silt fines and carbonates
	5 – 5½	SANDY LEAN CLAY (CL), brown to yellowish brown, moist, medium plasticity, 30-40% fine-grained sand, contains silt fines Bottom of test pit at approximately 5½ feet below ground surface. No groundwater encountered during excavation.
1-TP07	0 – ⅔	SANDY LEAN CLAY (CL), dark brown with strong brown, hard, moist, medium plasticity, 30-40% fine- to coarse-grained sand, contains debris [Undocumented Fill]
	⅔ – 2½	FAT CLAY (CH), brown mottled with grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine-grained sand [NATIVE]
	2½ – 4	LEAN CLAY WITH SAND (CL), brown, very stiff (Pocket Penetrometer = 3.5 to 4.0 tsf), moist, medium plasticity, 15-25% fine-grained sand, contains silt fines
	4 – 6½	SANDY LEAN CLAY (CL), brown, very stiff (Pocket Penetrometer = 3.75 to 4.0 tsf), moist, medium plasticity, 30-40% fine-grained sand, contains silt fines Bottom of test pit at approximately 6½ feet below ground surface. No groundwater encountered during excavation.

ENGEO Expect Excellence	TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001	Logged By: Jason Sedore Logged Date: November 11, 2021

Test Pit Number	Depth (feet)	Description
1-TP08	0 – 1	FAT CLAY WITH SAND (CH), very dark grayish brown, very stiff (Pocket Penetrometer = 3.5 to 4.0 tsf), moist, high plasticity, <15% fine-grained sand, <15% fine gravel [Undocumented Fill]
	1 – 4	FAT CLAY (CH), very dark brown to very dark grayish brown, very stiff (Pocket Penetrometer = 3.0 tsf), moist, high plasticity, <15% fine-grained sand [Native] Grades to hard at 3½ feet (Pocket Penetrometer >4.5 tsf)
	4 – 5	LEAN CLAY WITH SAND (CL), brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium to high plasticity, 15-25% fine-grained sand
	5 – 6½	SANDY LEAN CLAY (CL), brown to yellowish brown, moist, medium plasticity, 30-40% fine-grained sand, contains silt fines and carbonates Bottom of test pit at approximately 6½ feet below ground surface. No groundwater encountered during excavation.
1-TP09	0 – ½	SANDY LEAN CLAY (CL), dark grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine- to coarse-grained sand, contains gravel [Undocumented Fill]
	½ - 4½	SANDY LEAN CLAY (CL), dark grayish brown, hard (Pocket Penetrometer 4.0 to 4.5 tsf), moist, medium plasticity, 30-40% fine-grained sand, contains silt fines Graded to brown, very stiff (Pocket Penetrometer = 3.0 tsf), contains carbonates at 4 feet Bottom of test pit at approximately 4½ feet below ground surface. No groundwater encountered during excavation.

ENGEO Expect Excellence	TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001	Logged By: Jason Sedore Logged Date: November 11, 2021

Test Pit Number	Depth (feet)	Description
1-TP10	0 – ¾	FAT CLAY WITH SAND (CH), dark brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, 10-20% fine- to medium-grained sand, <10% fine gravel
	¾ – 3½	FAT CLAY (CH), dark brown mottled with brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine-grained sand, contains carbonates
	3½ – 4	SANDY LEAN CLAY (CL), brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine-grained sand
	4 – 5	SILTY SAND (SM), brown, moist, fine-grained sand, 25-35% fines
		Bottom of test pit at approximately 5 feet below ground surface. No groundwater encountered during excavation.
1-TP11	0 – 1	FAT CLAY WITH SAND (CH), dark grayish brown, very stiff to hard (Pocket Penetrometer = 4.0 to 4.5 tsf), moist, high plasticity, <15% fine- to coarse-grained sand, 5-10% fine gravel [UNDOCUMENTED FILL]
	1 – 2	FAT CLAY (CH), dark grayish brown, very stiff to hard (Pocket Penetrometer = 4.0 tsf), moist, high plasticity, <15% fine- to coarse-grained sand [NATIVE]
	2 – 3½	LEAN CLAY WITH SAND (CL), brown mottled with dark brown, very stiff to hard (Pocket Penetrometer = 3.5 to 4.5 tsf), moist, 15-25% fine-grained sand, contains silt fines
	3½ – 5	SANDY LEAN CLAY (CL), yellowish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine-grained sand, contains silt fines and carbonates
		Bottom of test pit at approximately 5 feet below ground surface. No groundwater encountered during excavation.

ENGEO Expect Excellence	TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001	Logged By: Jason Sedore Logged Date: November 11, 2021

Test Pit Number	Depth (feet)	Description
1-TP12	0 – 2	SANDY LEAN CLAY (CL), brown to grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine- to coarse-grained sand, <10% gravel [UNDOCUMENTED FILL]
	2 – 4½	SANDY LEAN CLAY (CL), brown to grayish brown, hard (Pocket Penetrometer >4.5 tsf), moist, medium plasticity, 30-40% fine- to medium-grained sand, trace gravel [NATIVE] Grades to brown with silt fines at 3¾ feet Bottom of test pit at approximately 4½ feet below ground surface. No groundwater encountered during excavation.
1-TP13	0 – 1	FAT CLAY (CH), very dark brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine- to coarse-grained sand, trace gravel [UNDOCUMENTED FILL]
	1 – 2	FAT CLAY (CH), very dark brown, hard (Pocket Penetrometer >4.5 tsf), moist, high plasticity, <15% fine- to coarse-grained sand, trace gravel [NATIVE]
	2 – 5	LEAN CLAY (CL), yellowish brown, very stiff to hard (Pocket Penetrometer = 3.0 to 4.0 tsf), moist, medium plasticity, contains carbonates Grades to brown at 4 feet Bottom of test pit at approximately 5 feet below ground surface. No groundwater encountered during excavation.
1-TP14	0 – 5	LEAN CLAY (CL), dark brown, moist, medium plasticity, <5% fine- to coarse-grained sand Grades to dark yellowish brown at 2½ feet
	5 – 7	SANDY SILT (ML), yellowish brown, moist, low plasticity, 20-30% fine- to coarse-grained sand Bottom of test pit at approximately 7 feet below ground surface. No groundwater encountered during excavation.

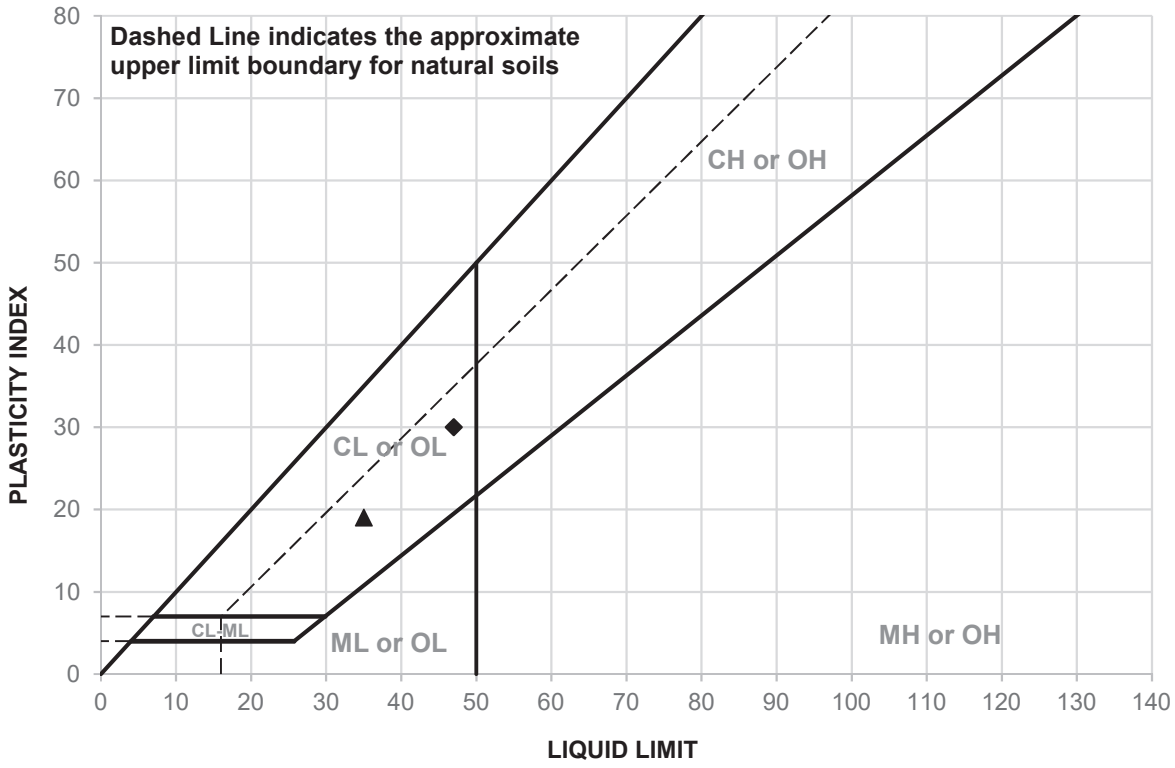
ENGEO Expect Excellence		TEST PIT LOG
Pacific Gateway Tracy, California 19633.000.001		Logged By: Jason Sedore Logged Date: November 11, 2021
Test Pit Number	Depth (feet)	Description
1-TP15	0 – 5½	LEAN CLAY (CL), dark brown, moist, medium plasticity, <5% fine- to coarse-grained sand Grades to dark yellowish brown, 10% fine- to coarse-grained sand at 3½ feet
	5½ – 8	SANDY SILT (ML), yellowish brown, moist, low plasticity, 30-40% fine- to coarse grained sand Bottom of test pit at approximately 8 feet below ground surface. No groundwater encountered during excavation.



APPENDIX B

LABORATORY TEST DATA

LIQUID AND PLASTIC LIMITS TEST REPORT
ASTM D4318



SAMPLE ID	DEPTH (ft)	MATERIAL DESCRIPTION	LL	PL	PI
1-TP09 @ 1'	1 foot	See exploration logs	35	16	19
1-TP13 @ 1'	1 foot	See exploration logs	47	17	30

SAMPLE ID	TEST METHOD	REMARKS
1-TP09 @ 1'	PI: ASTM D4318, Wet Method	
1-TP13 @ 1'	PI: ASTM D4318, Wet Method	

ENGEO
Expect Excellence

CLIENT: Ridgeline Property Group
PROJECT NAME: Pacific Gateway
PROJECT NO: 19633.000.001 PH001
PROJECT LOCATION: Tracy, CA
REPORT DATE: 11/18/2021
TESTED BY: D. Bryant
REVIEWED BY: K. Lecce



ENGEO

Expect Excellence

Project No.
19633.000.002

December 20, 2022
Revised January 9, 2023

Mr. Steve Arthur
Pacific Gateway CA, LLC
c/o Ridgeline Property Group
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Subject: Pacific Gateway
Tracy, California

DOUBLE RING INFILTRATION TESTING RESULTS

Dear Mr. Arthur:

As requested, we performed double-ring infiltration testing at the subject property in Tracy, California. The purpose of our services was to provide information pertinent to the design of the proposed project basins. A discussion of our field services and the results of our infiltration testing are provided below.

INFILTRATION FIELD TESTING

At each of the five proposed basin locations, we retained the services of a subcontractor to drill one boring to a depth of 20 feet. We reviewed subsurface conditions at each location and selected the most appropriate elevations for infiltration testing. We performed our double-ring tests at the approximate depth below the existing surface, as shown on Table 1 below. An ENGEO representative conducted two infiltration tests at various elevations within each of the five basin locations. The double-ring infiltration tests were performed in general conformance with ASTM D3385-18 and the Multi-Agency Post-Construction Stormwater Standards Manual. The approximate locations of our geotechnical borings and infiltration tests are provided in the attached figures.

The infiltration test maintains a constant head within the rings. Specialized Mariotte Tubes were used to maintain the water levels at the selected head elevation in both the inner ring and the annular space throughout the test. A constant head was achieved in DR-7 and DR-8 by manually adding a selected amount of water over a measured time interval due to the rapid infiltration rates of the targeted soil layers. Each infiltration test was run until the infiltration rate stabilized.

INFILTRATION TEST RESULTS

The infiltration rate for the double-ring infiltrometer was calculated using the following equation from ASTM D3385.

$$VIR = \Delta VIR / (AIR * \Delta t)$$

Where:

VIR = inner ring incremental infiltration velocity, cm/hr
ΔVIR = volume of liquid used during time interval to maintain constant head in the inner ring, cm^3
AIR = interior area of inner ring, cm^2
Δt = time interval, h

Based on the encountered soil types, the site soil would be anticipated to have infiltration rates varying from Type A to Type D soil, as presented in Table 3-1 of the Multi-Agency Post Construction Stormwater Standards Manual. Our double-ring infiltration test results are summarized in Table 1 below, along with a description of the soil type at each test location.

TABLE 1: Double-Ring Infiltrometer Test Results

TEST LOCATION	BASIN IDENTIFICATION	DEPTH (Below the existing ground surface, ft)	SOIL TYPE	INFILTRATION RATE (inches/hour)
DR-1	Basin 1	7	Sandy silt	1.8
DR-2	Basin 1	12	Silty sand	1.0
DR-3	Basin 2	5	Lean clay	0.3
DR-4	Basin 2	11½	Sandy lean clay	1.2
DR-5	Basin 3	3	Lean clay	0.3
DR-6	Basin 3	9½	Sandy lean clay	0.9
DR-7	Basin 4	9	Poorly graded gravel with silt and sand	15.0
DR-8	Basin 4	12	Poorly graded gravel with clay and sand	15.0
DR-9	Basin 5	4	Lean clay with sand	0.5
DR-10	Basin 5	9	Sandy silt	0.8

We strived to perform our professional services in accordance with generally accepted principles and practices currently employed in the area, there is no warranty, express or implied. If you have any questions regarding the contents of this letter, please do not hesitate to contact us.

Sincerely,

ENGEO Incorporated

Chase Dunn

Steve Harris, GE



cd/zc/sdh/ca

Attachments: Figure 1 – Vicinity Map
Figure 2 – Site Plan - Proposed Basin 1
Figure 3 – Site Plan - Proposed Basin 2
Figure 4 – Site Plan - Proposed Basin 3
Figure 5 – Site Plan - Proposed Basin 4
Figure 6 – Site Plan - Proposed Basin 5
Boring Logs 1 through 5



EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

PROJECT SITE

N

0 1,500 3,000

FEET

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2022

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VICINITY MAP

PACIFIC GATEWAY

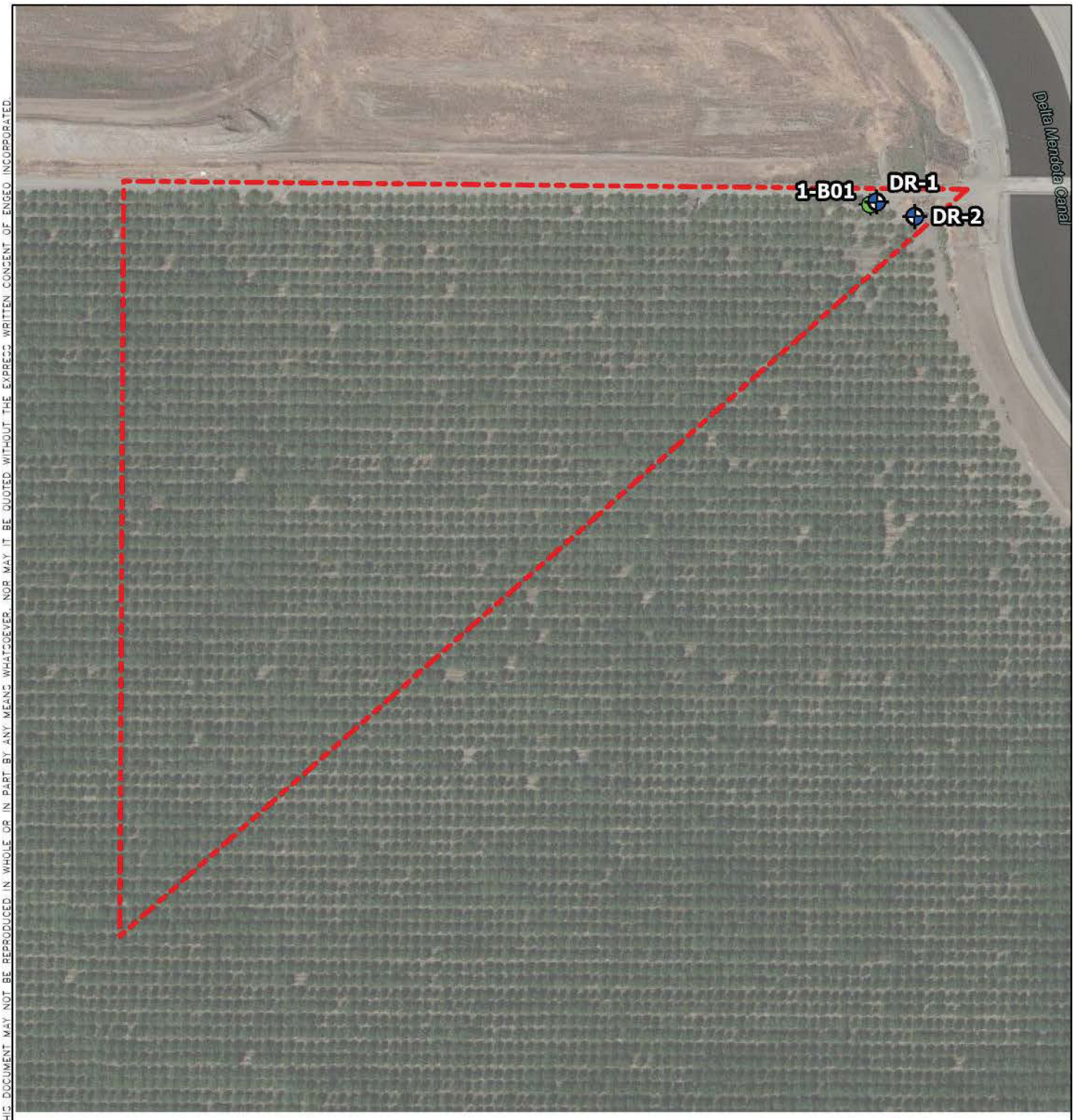
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.002
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 1

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\PACIFIC GATEWAY.APRX
LAYOUT: VICINITY USER: QLIANG

ORIGINAL FIGURE PRINTED IN COLOR



N

0 100 200

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE PROPOSED BASIN 1
- BORING (ENGEO, 2022)
- DOUBLE-RING TEST LOCATION (ENGEO, 2022)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2021

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SITE PLAN - PROPOSED BASIN 1

PACIFIC GATEWAY

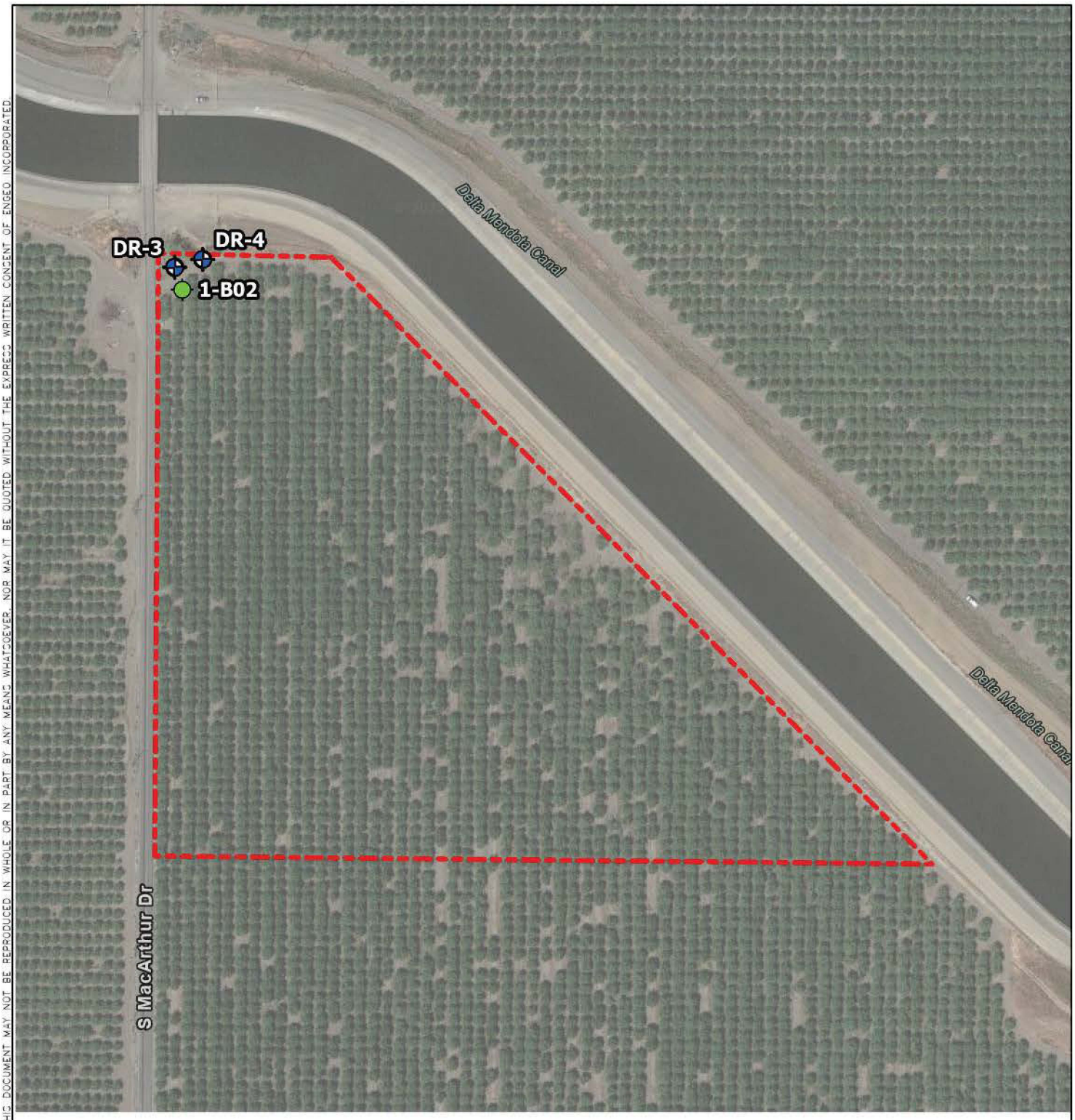
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.002
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 2

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\PACIFIC GATEWAY.APRX
LAYOUT: SITE PLAN USER: QLIANG

ORIGINAL FIGURE PRINTED IN COLOR



N

0 100 200

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE PROPOSED BASIN 2
- BORING (ENGEO, 2022)
- DOUBLE-RING TEST LOCATION (ENGEO, 2022)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2021

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SITE PLAN - PROPOSED BASIN 2

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.002
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 3

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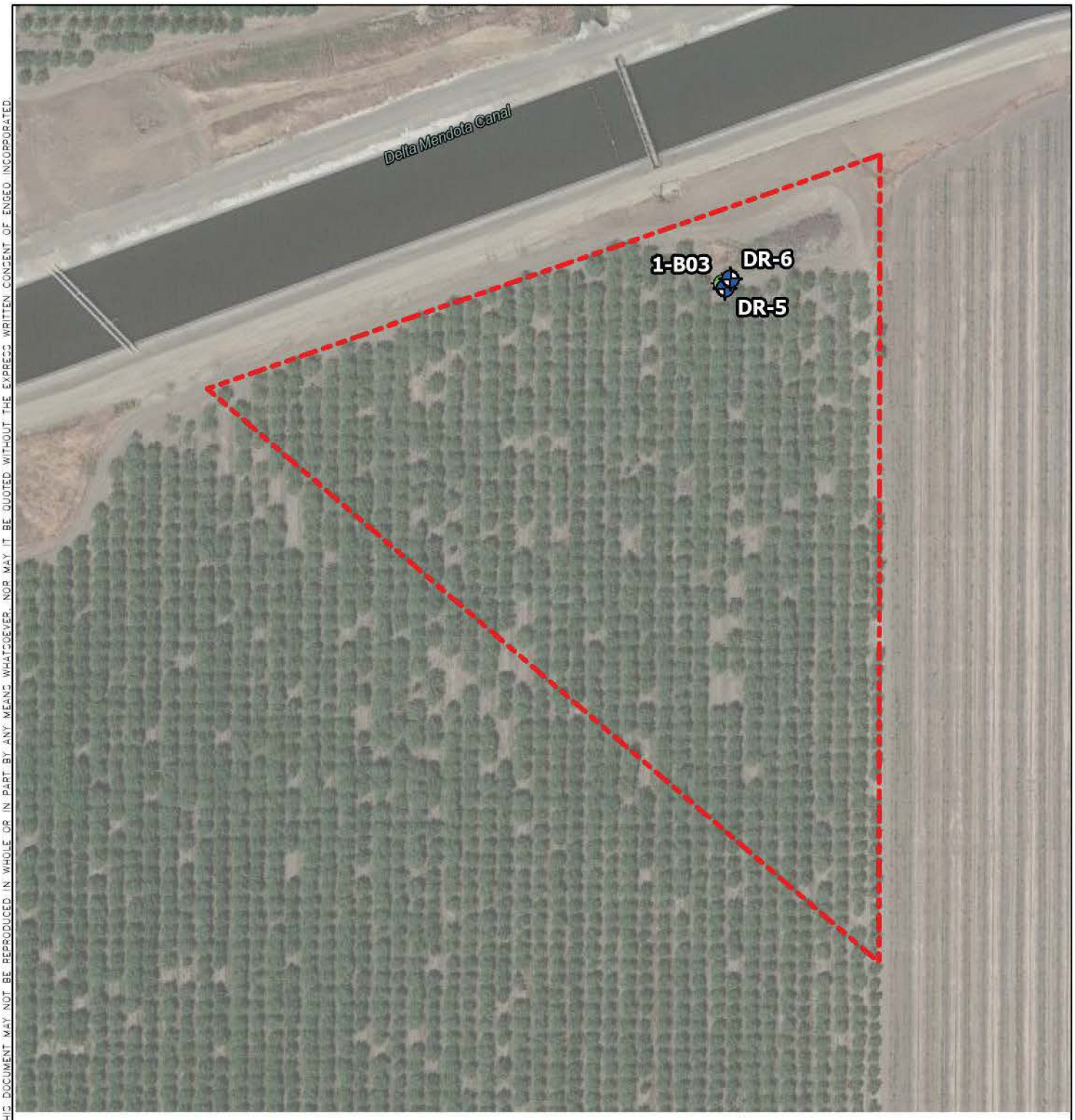
PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\PACIFIC GATEWAY.APRX
LAYOUT: SITE PLAN USER: QLIANG

ORIGINAL FIGURE PRINTED IN COLOR



N

0 75 150

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE PROPOSED BASIN 3
- BORING (ENGEO, 2022)
- DOUBLE-RING TEST LOCATION (ENGEO, 2022)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2021

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SITE PLAN - PROPOSED BASIN 3

PACIFIC GATEWAY

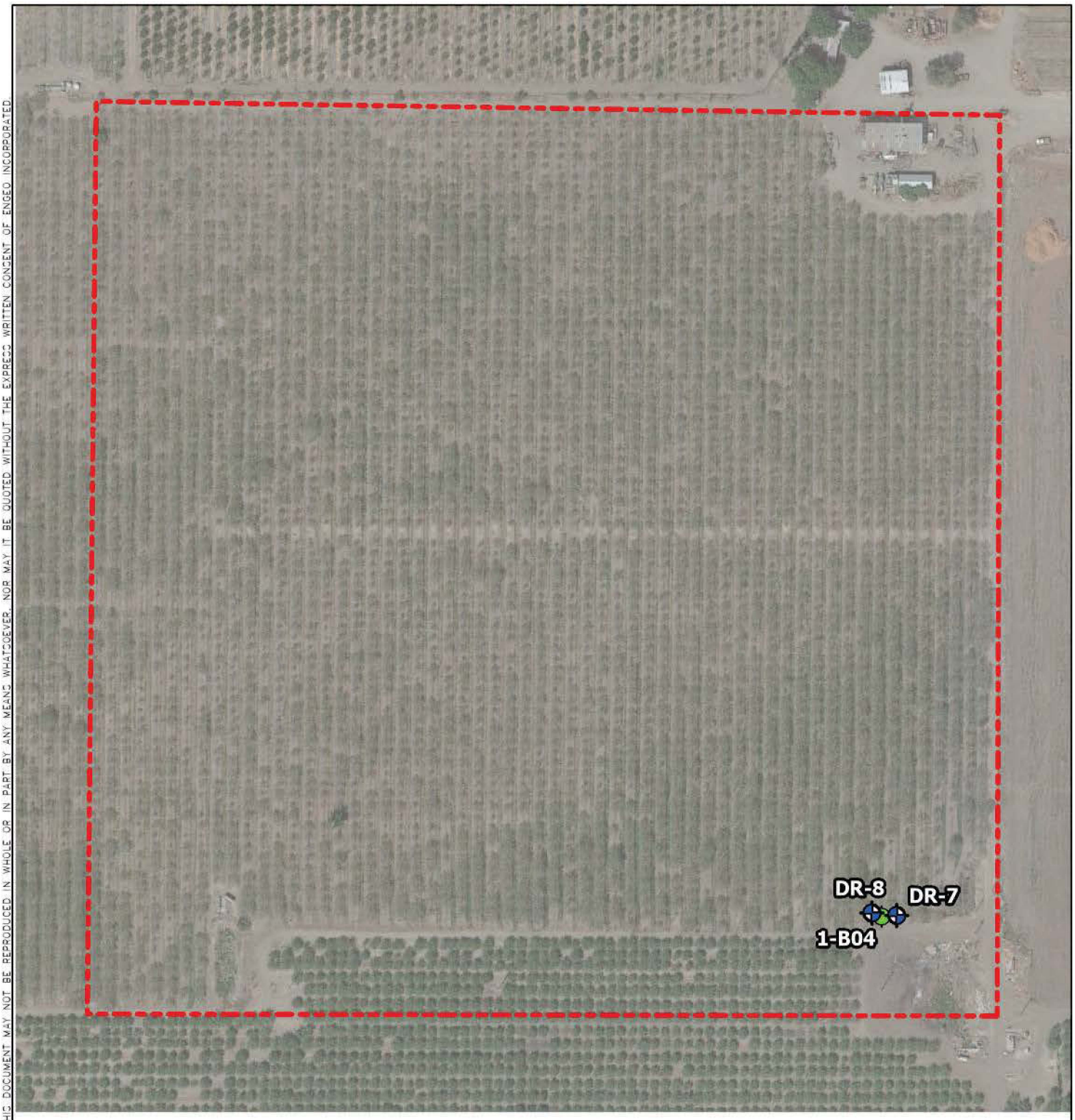
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.002
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 4

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\PACIFIC GATEWAY.APRX
LAYOUT: SITE PLAN USER: QLIANG

ORIGINAL FIGURE PRINTED IN COLOR



N

0 100 200

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE PROPOSED BASIN 4
- BORING (ENGEO, 2022)
- DOUBLE-RING TEST LOCATION (ENGEO, 2022)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2021

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SITE PLAN - PROPOSED BASIN 4

PACIFIC GATEWAY

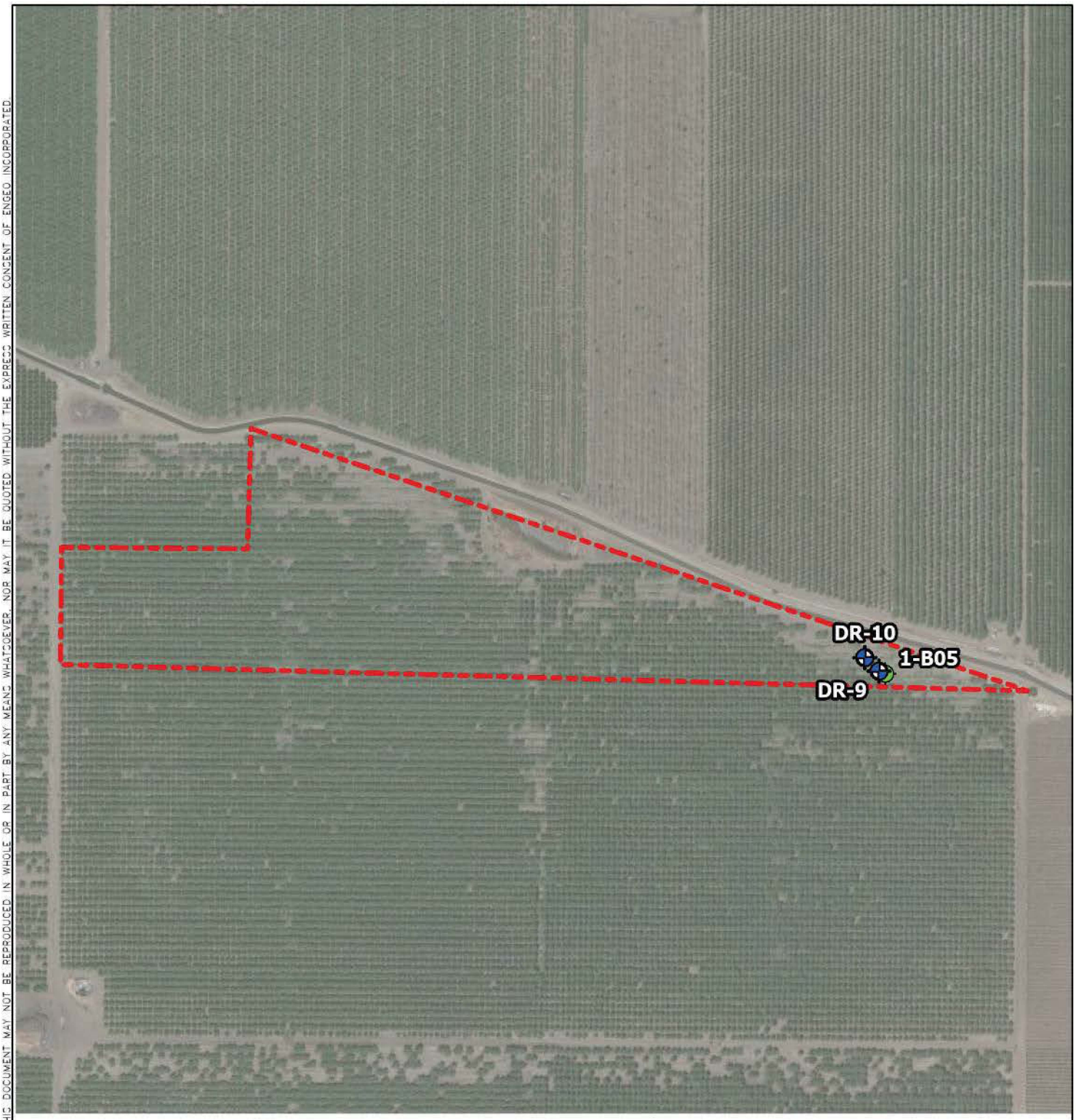
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.002
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 5

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\PACIFIC GATEWAY.APRX
LAYOUT: SITE PLAN USER: QLIANG

ORIGINAL FIGURE PRINTED IN COLOR



N

0 200 400

FEET

EXPLANATION

ALL LOCATIONS ARE APPROXIMATE

- PROJECT SITE PROPOSED BASIN 5
- BORING (ENGEO, 2022)
- DOUBLE-RING TEST LOCATION (ENGEO, 2022)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2021

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SITE PLAN - PROPOSED BASIN 5

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.002
SCALE:	AS SHOWN
DRAWN BY: QRL	CHECKED BY: SDH

FIGURE NO. 6

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\PACIFIC GATEWAY.APRX
LAYOUT: SITE PLAN USER: QLIANG

ORIGINAL FIGURE PRINTED IN COLOR

KEY TO BORING LOGS

MAJOR TYPES			DESCRIPTION
COARSE-GRAINED SOILS MORE THAN HALF OF MAT'L LARGER THAN #200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE SIZE	CLEAN GRAVELS WITH LESS THAN 5% FINES	GW - Well graded gravels or gravel-sand mixtures GP - Poorly graded gravels or gravel-sand mixtures
		GRAVELS WITH OVER 12 % FINES	GM - Silty gravels, gravel-sand and silt mixtures GC - Clayey gravels, gravel-sand and clay mixtures
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LESS THAN 5% FINES	SW - Well graded sands, or gravelly sand mixtures SP - Poorly graded sands or gravelly sand mixtures
		SANDS WITH OVER 12 % FINES	SM - Silty sand, sand-silt mixtures SC - Clayey sand, sand-clay mixtures
FINE-GRAINED SOILS MORE THAN HALF OF MAT'L SMALLER THAN #200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50 % OR LESS		ML - Inorganic silt with low to medium plasticity CL - Inorganic clay with low to medium plasticity OL - Low plasticity organic silts and clays
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50 %		MH - Elastic silt with high plasticity CH - Fat clay with high plasticity OH - Highly plastic organic silts and clays
	HIGHLY ORGANIC SOILS		PT - Peat and other highly organic soils

For fine-grained soils with 15 to 29% retained on the #200 sieve, the words "with sand" or "with gravel" (whichever is predominant) are added to the group name.

For fine-grained soil with >30% retained on the #200 sieve, the words "sandy" or "gravelly" (whichever is predominant) are added to the group name.

GRAIN SIZES

U.S. STANDARD SERIES SIEVE SIZE					CLEAR SQUARE SIEVE OPENINGS			
200	40	10	4	3/4 "	3"	12"		
SILTS AND CLAYS	SAND			GRAVEL			COBBLES	BOULDERS
	FINE	MEDIUM	COARSE	FINE	COARSE			

RELATIVE DENSITY

SANDS AND GRAVELS	BLOWS/FOOT (S.P.T.)
VERY LOOSE	0-4
LOOSE	4-10
MEDIUM DENSE	10-30
DENSE	30-50
VERY DENSE	OVER 50

CONSISTENCY

SILTS AND CLAYS	STRENGTH*
VERY SOFT	0-1/4
SOFT	1/4-1/2
MEDIUM STIFF	1/2-1
STIFF	1-2
VERY STIFF	2-4
HARD	OVER 4

SAMPLER SYMBOLS

- Modified California (3" O.D.) sampler
- California (2.5" O.D.) sampler
- S.P.T. - Split spoon sampler
- Shelby Tube
- Dames and Moore Piston
- Continuous Core
- Bag Samples
- Grab Samples
- NR No Recovery

MOISTURE CONDITION

DRY	Dusty, dry to touch
MOIST	Damp but no visible water
WET	Visible freewater

LINE TYPES

- ———— Solid - Layer Break
- – – – – – Dashed - Gradational or approximate layer break

GROUNDWATER SYMBOLS

- Groundwater level during drilling
- Stabilized groundwater level

(S.P.T.) Number of blows of 140 lb. hammer falling 30" to drive a 2-inch O.D. (1-3/8 inch I.D.) sampler

* Unconfined compressive strength in tons/sq. ft., asterisk on log means determined by pocket penetrometer

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LOG OF BORING 1-B01

LATITUDE: 37.666966 LONGITUDE: -121.426855

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 12/2/2022
HOLE DEPTH: Approx. 21½ ft.
HOLE DIAMETER: 4.5 in.
SURF ELEV (WGS84): Approx. 195 ft.

LOGGED / REVIEWED BY: CM. Dunn / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			SILTY SAND (SM), brown, medium dense, moist, fine-grained sand, 30-40% fines			28									
			SANDY LEAN CLAY (CL), brown, stiff, moist, medium plasticity, 30-40% fine-grained sand			12									
5	190		CLAYEY SAND (SC), brown, loose, moist, fine-grained sand, 25-35% fines			19									
			SANDY SILT (ML), brown, medium stiff, moist, non-plastic, 35-45% fine-grained sand			10									
10	185		SILTY SAND (SM), brown, medium dense, moist, fine-grained sand, 30-40% fines			16									
15	180		POORLY GRADED SAND WITH SILT AND GRAVEL (SP-SM), brown, medium dense, moist, fine- to coarse-grained sand, 5-12% fines, 30-40% fine to coarse gravel			23									
20	175		SILTY SAND WITH GRAVEL (SM), brown, medium dense, moist, fine- to coarse-grained sand, 12-20% fines, 20-30% fine to coarse gravel			17									
			Bottom of boring at approximately 21 1/2 feet below existing grade. Groundwater not encountered during drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 1-B01_1-B05.GPJ ENGEO INC.GDT 12/20/22

ENGEO
Expect Excellence

LOG OF BORING 1-B02

LATITUDE: 37.658188 LONGITUDE: -121.41592

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 12/2/2022
HOLE DEPTH: Approx. 21½ ft.
HOLE DIAMETER: 4.5 in.
SURF ELEV (WGS84): Approx. 188 ft.

LOGGED / REVIEWED BY: CM. Dunn / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark brown, very stiff to hard, moist, medium plasticity, <15% fine-grained sand, contains carbonates			40								>4.5*	PP
	185					22									
5						73								>4.5*	PP
	180					26								4.0*	PP
			LEAN CLAY WITH SAND (CL), brown, hard, moist, medium plasticity, 15-25% fine-grained sand												
10						68								>4.5*	PP
			SANDY LEAN CLAY (CL), brown, hard, moist, low plasticity, 35-45% fine-grained sand												
	175		SILTY SAND (SM), brown, dense, moist, fine- to medium-grained sand, 25-35% fines												
15						30									
	170		SILTY SAND WITH GRAVEL (SM), brown, very dense, moist, fine- to coarse-grained sand, 15-25% fines, 20-30% fine to coarse gravel												
20						55									
			Bottom of boring at approximately 21 1/2 feet below existing grade. Groundwater not encountered during drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 1-B01_1-B05.GPJ ENGEO INC.GDT 12/20/22

ENGEO
Expect Excellence

LOG OF BORING 1-B03

LATITUDE: 37.655847 LONGITUDE: -121.407512

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 12/2/2022
HOLE DEPTH: Approx. 21½ ft.
HOLE DIAMETER: 4.5 in.
SURF ELEV (WGS84): Approx. 192 ft.

LOGGED / REVIEWED BY: CM. Dunn / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark grayish brown, hard, moist, medium to high plasticity, <15% fine-grained sand, contains manganese nodules			22								>4.5*	PP
	190					13								4.25*	PP
5						26								>4.5*	PP
	185		LEAN CLAY WITH SAND (CL), brown, very stiff, moist, medium plasticity, 20-29% fine-grained sand			18								4.0*	PP
			SANDY LEAN CLAY (CL), brown, hard, moist, medium plasticity, 30-40% fine-grained sand												
10						30								>4.5*	PP
	180		grades to increasing sands content, contains gravel												
15			LEAN CLAY WITH SAND (CL), brown, stiff, moist, medium plasticity, 15-25% fine-grained sand			15									
	175														
20			grades to hard			33									
			Bottom of boring at approximately 21 1/2 feet below existing grade. Groundwater not encountered during drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 1-B01_1-B05.GPJ ENGEO INC.GDT 12/20/22

ENGEO
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LOG OF BORING 1-B04

LATITUDE: 37.671124 LONGITUDE: -121.407554

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 12/2/2022
HOLE DEPTH: Approx. 21½ ft.
HOLE DIAMETER: 4.5 in.
SURF ELEV (WGS84): Approx. 148 ft.

LOGGED / REVIEWED BY: CM. Dunn / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY (CL), dark grayish brown, very stiff, moist, medium to high plasticity, <15% fine-grained sand			29							1750*	3.5*	PP+TV
	145		LEAN CLAY WITH SAND (CL), brown, medium stiff, moist, medium plasticity, 15-25% fine-grained sand			6									
5			grades to very stiff			19								2.75*	PP
			SANDY LEAN CLAY (CL), brown, hard, moist, low to medium plasticity, 35-45% fine-grained sand			16								>4.5*	PP
	140		POORLY GRADED GRAVEL WITH SILT AND SAND (GP-GM), yellowish brown, very dense, moist, fine to coarse gravel, 5-12% fines, 35-45% fine- to coarse-grained sand												
10						53									
	135		POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC), yellowish brown, dense, moist, fine to coarse gravel, 5-12% fines, 25-35% fine- to coarse-grained sand												
15						30									
	130		CLAYEY SAND (SC), brown, medium dense, moist, fine-grained sand, 40-49% fines												
20						19									
			Bottom of boring at approximately 21 1/2 feet below existing grade. Groundwater not encountered during drilling.												

ENGEO
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LOG OF BORING 1-B05

LATITUDE: 37.660539 LONGITUDE: -121.371812

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 12/2/2022
HOLE DEPTH: Approx. 21½ ft.
HOLE DIAMETER: 4.5 in.
SURF ELEV (WGS84): Approx. 129 ft.

LOGGED / REVIEWED BY: CM. Dunn / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY WITH SAND (CL), dark brown, hard, moist, medium to high plasticity, 15-25% fine-grained sand, contains carbonates			58								>4.5*	PP
			grades to brown, 20-29% fine-grained sand			18								>4.5*	PP
	125														
5						33								>4.5*	PP
			LEAN CLAY (CL), brown, hard, moist, medium to high plasticity, <15% fine-grained sand												
			LEAN CLAY WITH SAND (CL), brown, very stiff, moist, medium plasticity, 15-25% fine-grained sand			16								2.75*	PP
			SANDY SILT (ML), brown, stiff, moist, low plasticity to non-plastic, 30-40% fine-grained sand												
	120														
10			grades to medium stiff			9									
			SANDY ELASTIC SILT (MH), brown, stiff, moist, medium plasticity, 30-40% fine-grained sand												
	115														
15						11									
	110														
20						11									
			Bottom of boring at approximately 21 1/2 feet below existing grade. Groundwater not encountered during drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 1-B01_1-B05.GPJ ENGEO INC.GDT 12/20/22

September 4, 2024

Project No.
19633.000.002

Mr. Steve Arthur
Ridgeline Property Group
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

Subject: Pacific Gateway
Tracy, California

INFILTRATION RATE TEST RESULTS

Dear Mr. Arthur:

As requested, we performed percolation rate testing at the subject property in Tracy, California. The purpose of our services was to provide information pertinent to the design of the proposed project basins. Our scope of services included field exploration, percolation rate testing, converting percolation rates into infiltration rates, and reporting.

PERCOLATION TESTING

Test Preparation

At each of the six proposed basin locations shown in the attached figures, we retained the services of a subcontractor to drill one boring to a depth of 8 to 20 feet. We reviewed subsurface conditions at each location and selected the most appropriate elevations for percolation testing. We performed our percolation tests at the approximate depth below the existing surface, as shown in Table 1 below. An ENGEO representative conducted one to two percolation tests at various elevations within each of the six basin locations.

Ten percolation test holes were installed and presoaked on August 14 through August 16, 2024. The locations of our explorations are approximate and were estimated by utilizing smartphones with GPS; they should be considered accurate only to the degree implied by the method used. The logs of the soil encountered at the percolation test holes and the boring location are attached.

Nine percolation test holes, 2-P01 through 2-P09, were installed using a 4½-inch-diameter solid-flight auger to drill down to the desired test depth. One percolation test hole, 2-P10 was installed by using a 3½-inch-diameter hand-augur to drill down to the desired test depth. Preparation of the percolation test holes began by placing approximately 2 inches of approximately 1-inch-diameter drain rock in the bottom of each hole. A 3-inch-diameter perforated PVC pipe was then placed in the test holes and surrounded by drain rock extending up to the ground surface. The holes were presoaked prior to performing the percolation tests.

Percolation Testing

ENGEO performed percolation testing from August 19 through August 22, 2024. Municipal drinking water was used for the percolation testing. It is our opinion that the percolation rate of drinking water should be similar to stormwater. At the start of each test, the hole was refilled with water to approximately 12 inches above the drain rock placed at the bottom of the hole. The water level was then measured at appropriate intervals until the percolation rate stabilized. At the end

of each interval, additional water was added, as needed, to reset the water level to approximately 12 inches above the drain rock.

Percolation Testing Results

Based on our measured field test results, we converted the uncorrected field percolation rates to infiltration (vertical flow) rates using Porchet's Method (Inverse Borehole Method), as summarized in the table below. Infiltration in the lateral and vertical direction is inherent in the rates provided below.

TABLE 1: Infiltration Rates

TEST LOCATION	BASIN IDENTIFICATION	DEPTH (Below the existing ground surface, ft)	SOIL TYPE	ESTIMATED INFILTRATION RATE* (inches/hour)
2-P01	Basin 9	12½	Sandy Lean Clay	0.3
2-P02	Basin 8	8	Silty Gravel with Sand	7.2
2-P03	Basin 7	12	Silty Sand	4.0
2-P04	Basin 6	12½	Sandy Lean Clay	0.1
2-P05	Basin 6	11¼	Sandy Lean Clay	0.6
2-P06	Basin 5	12½	Silty Sand	0.3
2-P07	Basin 5	8½	Clayey Gravel with Sand	8.8
2-P08	Basin 7	7½	Silty Sand	1.5
2-P09	Basin 8	12	Silty Sand with Gravel	1.4
2-P10	Basin 10	8	Sandy Lean Clay	0.5

*Converted using Porchet's Method

The infiltration rates reported above are based on the conditions at the location, depth, and time of the test. Actual infiltration rates can be affected by changes in the subsurface conditions, test methodology, time of year, and the rate and depth at which water is applied. Appropriate engineering judgement should be applied to the use of these test data for stormwater infiltration.

No factors of safety have been applied to these rates. The design engineer should consider appropriate conversion factors or factors of safety for the design of the retention basins. Maintenance should be performed routinely to prevent fine accumulation and or growth of organics.

We strive to perform our professional services in accordance with generally accepted principles and practices currently employed in the area, there is no warranty, express or implied. If you have any questions regarding the contents of this letter, please do not hesitate to contact us.

Sincerely,

ENGEO Incorporated

Viridiana Navarro

vn/sdh/ca

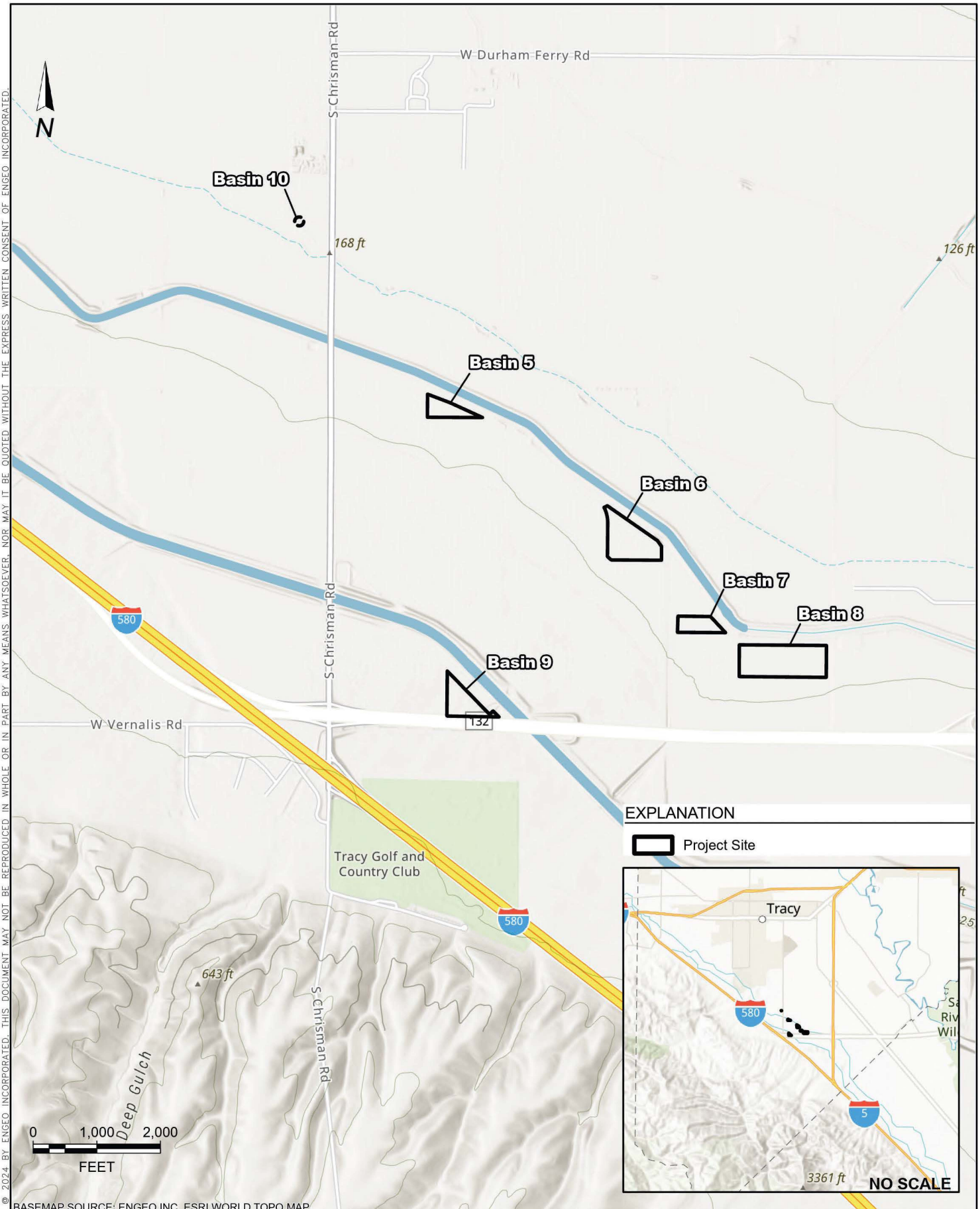
Attachments: Figures
Boring Logs

Steve Harris, GE



FIGURES

Figure 1 – Vicinity Map - Basins
Figure 2 – Site Plan - Proposed Basin 5
Figure 3 – Site Plan - Proposed Basin 6
Figure 4 – Site Plan - Proposed Basin 7
Figure 5 – Site Plan - Proposed Basin 8
Figure 6 – Site Plan - Proposed Basin 9
Figure 7 – Site Plan - Proposed Basin 10



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BASEMAP SOURCE: ENGEO INC, ESRI WORLD TOPO MAP

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VICINITY MAP - BASINS

PACIFIC GATEWAY

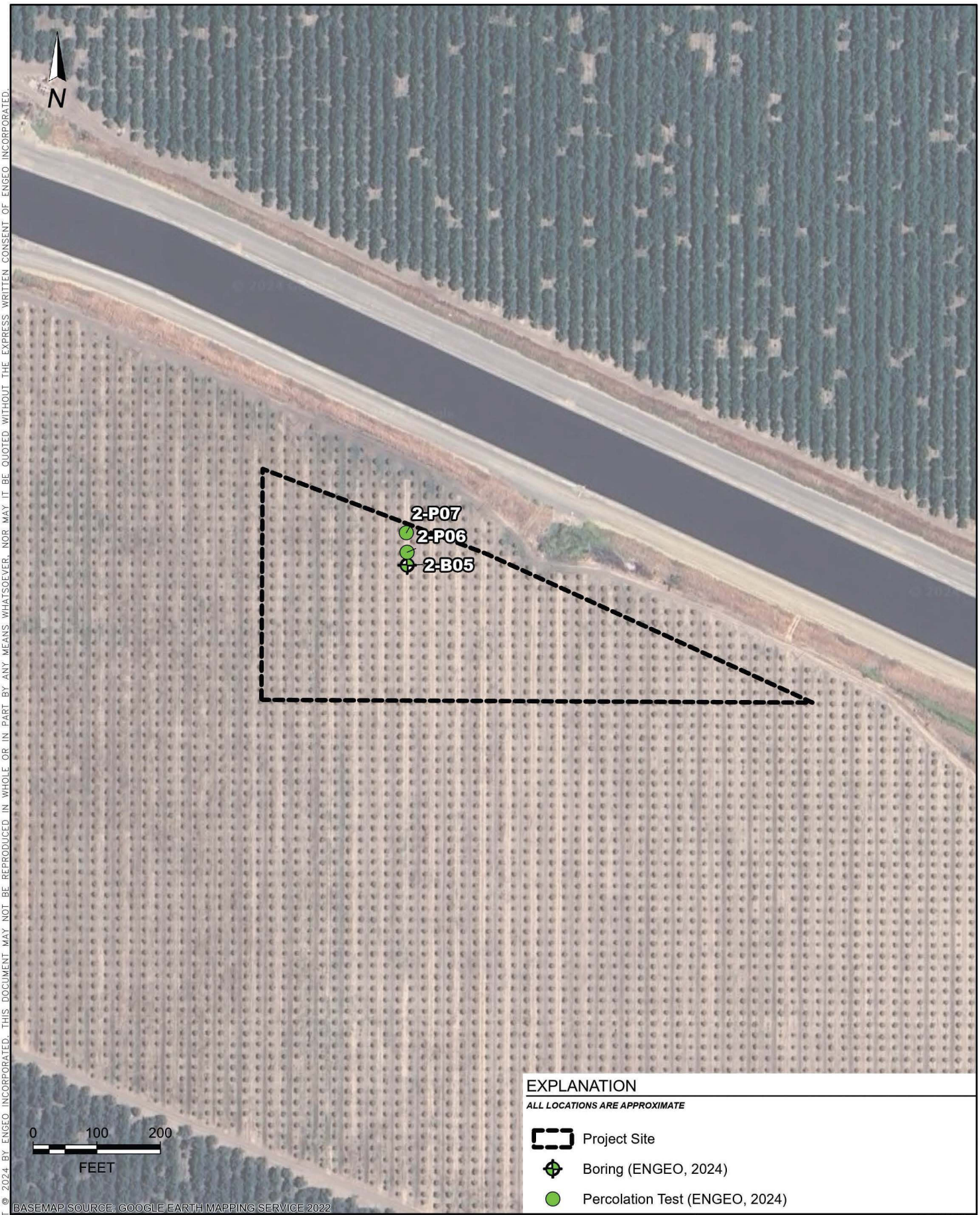
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: MMH	CHECKED BY: SDH

FIGURE NO. 1

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\BASINS\PACIFIC GATEWAY BASINS.APRX
LAYOUT: 01. VICINITY 8.5 X 11 PORTRAIT USER: MHAWKINS



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SITE PLAN - PROPOSED BASIN 5

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. : 19633.000.001		FIGURE NO. 2
SCALE: AS SHOWN		
DRAWN BY: MMH	CHECKED BY: SDH	

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\BASINS\PACIFIC GATEWAY BASINS.APRX
LAYOUT: 02. SITE PLAN 8.5 X 11 PORTRAIT USER: MHAWKINS



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SITE PLAN - PROPOSED BASIN 6

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: MMH	CHECKED BY: SDH

FIGURE NO. 3

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\BASINS\PACIFIC GATEWAY BASINS.APRX
LAYOUT: 03. SITE PLAN 8.5 X 11 PORTRAIT USER: MHAWKINS



BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2022

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SITE PLAN - PROPOSED BASIN 7

PACIFIC GATEWAY

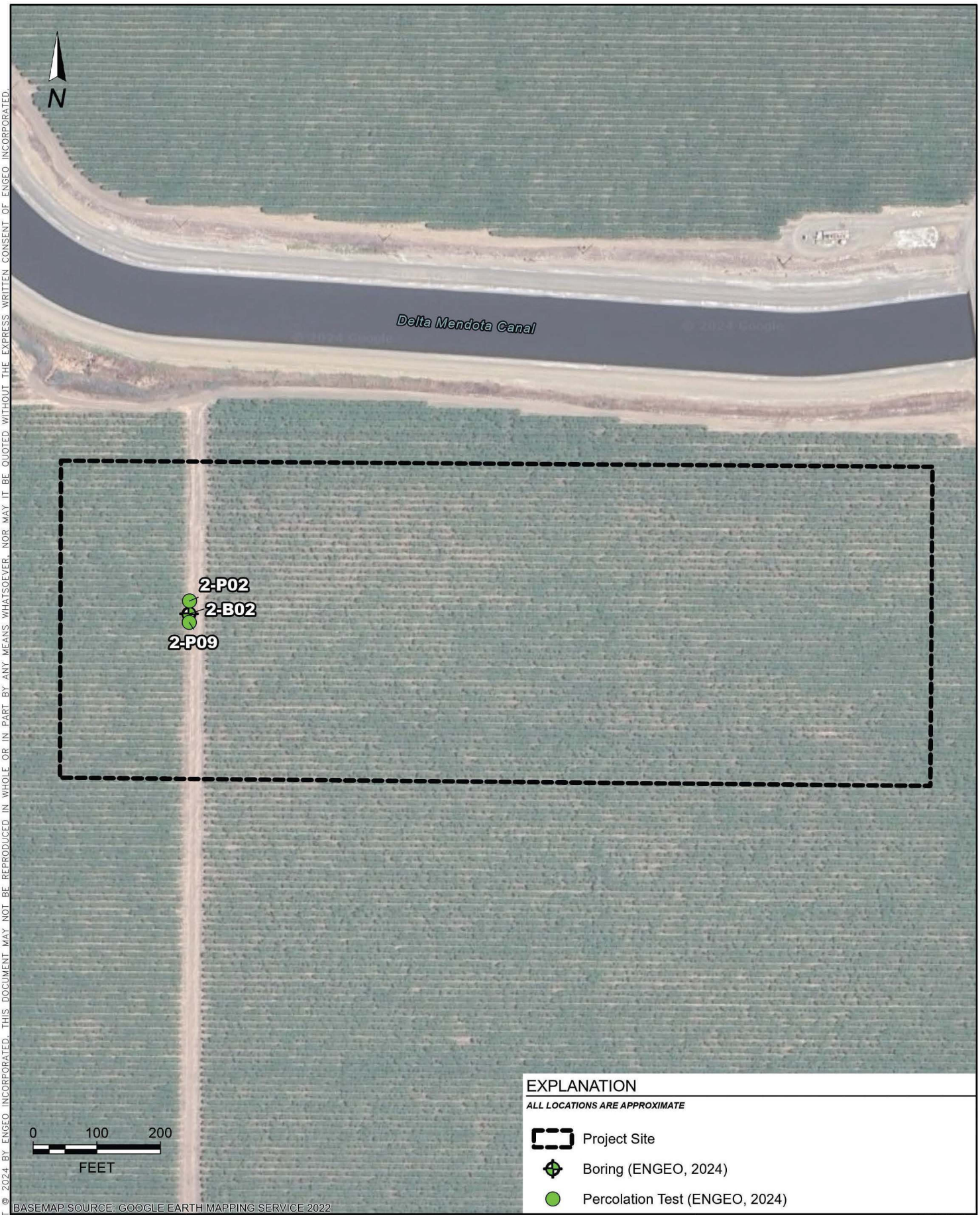
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: MMH	CHECKED BY: SDH

FIGURE NO. 4

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\BASINS\PACIFIC GATEWAY BASINS.APRX
LAYOUT: 04. SITE PLAN 8.5 X 11 PORTRAIT USER: MHAWKINS



BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2022

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ENGEO Expect Excellence

SITE PLAN - PROPOSED BASIN 8

PACIFIC GATEWAY

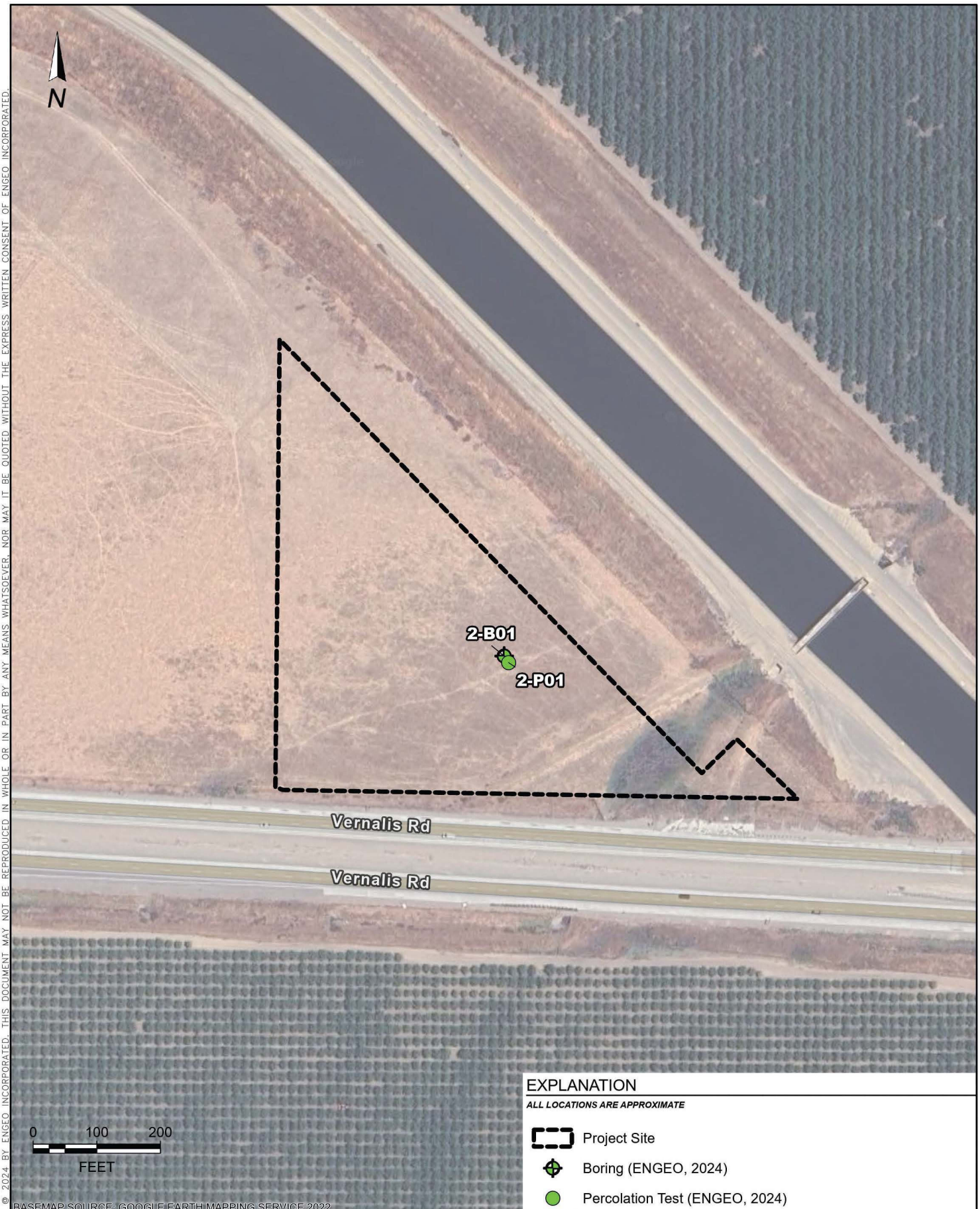
TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: MMH	CHECKED BY: SDH

FIGURE NO. 5

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\BASINS\PACIFIC GATEWAY BASINS.APRX
LAYOUT: 05. SITE PLAN 8.5 X 11 PORTRAIT USER: MHAWKINS



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SITE PLAN - PROPOSED BASIN 9

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: MMH	CHECKED BY: SDH

FIGURE NO. 6

ORIGINAL FIGURE PRINTED IN COLOR

PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\BASINS\PACIFIC GATEWAY BASINS.APRX
LAYOUT: 06. SITE PLAN 8.5 X 11 PORTRAIT1 USER: MHAWKINS



EXPLANATION

Percolation Test (ENGEO, 2024)

BASEMAP SOURCE: GOOGLE EARTH MAPPING SERVICE 2022

ENGEO
Expect Excellence

SITE PLAN - PROPOSED BASIN 10

PACIFIC GATEWAY

TRACY, CALIFORNIA

PROJECT NO. :	19633.000.001
SCALE:	AS SHOWN
DRAWN BY: MMH	CHECKED BY: SDH

FIGURE NO. 7

ORIGINAL FIGURE PRINTED IN COLOR

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PATH: G:\DRAFTING\PROJECTS_18000 TO 19999\19633\19633000002\BASINS\PACIFIC GATEWAY BASINS.APRX
LAYOUT: 07. SITE PLAN 8.5 X 11 PORTRAIT USER: MHAWKINS

BORING LOGS

19633.000.002
September 4, 2024

ENGEO
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LOG OF BORING 2-B01

LATITUDE: 37.639195 LONGITUDE: -121.390024

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/14/2024
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 251 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	250		LEAN CLAY WITH SAND (CL), dark brown, moist, low to medium plasticity, <15% fine- to medium-grained sand, <5% fine gravel, contains rootlets												
			LEAN CLAY WITH SAND (CL), brown, moist, medium to high plasticity, 15-25% fine- to medium-grained sand												
5	245		SANDY LEAN CLAY WITH GRAVEL (CL), yellowish brown, moist, medium plasticity, 15-20% fine-grained sand, 15-20% fine-gravel												
10	240		SANDY SILT (ML), yellowish brown, moist, low plasticity, 30-40% fine-grained sand												
			SANDY SILT (ML), yellowish brown, moist, low plasticity, 25-30% fine-grained sand, 5-10% fine- to coarse gravel												
15	235		Grades to contain 15-20% fine to coarse gravel												
20			Bottom of boring at approximately 20 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

LOG OF BORING 2-B02

ENGEO Expect Excellence

LATITUDE: 37.641144 LONGITUDE: -121.374717

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 192 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	190		SANDY LEAN CLAY (CL), yellowish brown, moist, medium plasticity, 30-40% fine-grained sand												
5	185		SANDY LEAN CLAY WITH GRAVEL (CL), yellowish brown, moist, medium plasticity, 30-35% fine-grained sand, 15% fine to coarse gravel												
			SILTY GRAVEL WITH SAND (GM), grayish brown, moist, medium plasticity, 15-20% fines, 15-20% fine to coarse-grained sand, fine- to coarse gravel												
10	180														
15	175		LEAN CLAY WITH SAND (CL), yellowish brown, hard, moist, medium plasticity, 15-25% fine- to medium-grained sand												
20			Bottom of boring at approximately 20 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

ENGEO
Expect Excellence

LOG OF BORING 2-B03

LATITUDE: 37.642684 LONGITUDE: -121.379187

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 196 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	195		LEAN CLAY WITH SAND (CL), dark brown, moist, medium plasticity, 15-25% fine- to coarse-grained sand, <5% fine gravel												
5	190		LEAN CLAY WITH SAND (CL), yellowish brown, moist, low to medium plasticity, 15-25% fine- to coarse-grained sand												
10	185		SANDY SILT (ML), light yellowish brown, moist, low plasticity, 30-40% fine- to coarse-grained sand												
15	180		SANDY LEAN CLAY WITH GRAVEL (CL), yellowish brown, moist, low to medium plasticity, 30-35% fine- to coarse-grained sand, 15% fine gravel												
			SANDY LEAN CLAY (CL), light yellowish brown, moist, low to medium plasticity, 30-40% fine- to coarse-grained sand												
20			Bottom of the boring at approximately 20 feet below ground surface. No groundwater encountered at the time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV_19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

LOG OF BORING 2-B04

ENGEO Expect Excellence

LATITUDE: 37.646107 LONGITUDE: -121.381358

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 197 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	195		FAT CLAY (CH), dark brown, moist, high plasticity, <15% fine- to coarse-grained sand, <5% fine gravel												
5	190		LEAN CLAY WITH SAND (CL), yellowish brown, moist, medium plasticity, 15-25% fine- to coarse-grained sand												
10	185		SANDY LEAN CLAY (CL), yellowish brown, moist, low plasticity, 30-40% fine- to coarse-grained sand												
15	180		SANDY LEAN CLAY (CL), yellowish brown, moist, low plasticity, 25-30% fine- to coarse-grained sand, 15-25% fine to coarse gravel												
20			LEAN CLAY (CL), light yellowish brown, moist, medium to high plasticity, <15% fine-grained sand, 5% fine to coarse gravel, contains silt fines												
			Bottom of the boring at approximately 20 feet below ground surface. No groundwater encountered at the time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

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LOG OF BORING 2-B05

LATITUDE: 37.652084 LONGITUDE: -121.391686

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 20 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 192 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	190		FAT CLAY WITH SAND (CH), dark brown, moist, high plasticity, 15-25% fine- to medium-grained sand												
			Grades to brown												
5	185		LEAN CLAY WITH SAND (CL), yellowish brown, moist, medium to high plasticity, 20-25% fine-grained sand												
			SANDY LEAN CLAY (CL), yellowish brown, moist, medium plasticity, 30-40% fine-grained sand												
10	180		SILTY SAND (SM), yellowish brown, moist, 30-40% fines, fine- to coarse-grained sand												
			SANDY LEAN CLAY (CL), yellowish brown, moist, medium plasticity, 30-40% fine-grained sand												
15	175		Grades to contain 5% coarse gravel												
			Grades to contain no gravel												
20			Bottom of boring at approximately 20 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

ENGEO
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LOG OF BORING 2-P01

LATITUDE: 37.639167 LONGITUDE: -121.39

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/14/2024
HOLE DEPTH: Approx. 12½ ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 251 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: 140 lb. Rope and Cathead

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	250		LEAN CLAY WITH SAND (CL), dark brown, moist, low to medium plasticity, <15% fine- to medium-grained sand, <5% fine-gravel, contains rootlets												
2.5			LEAN CLAY WITH GRAVEL (CL), dark brown, moist, medium plasticity, 15-20% fine to coarse gravel												
5.0	245														
7.5			SANDY LEAN CLAY (CL), yellowish brown, moist, medium plasticity, 30-40% fine- to medium-grained sand			30									
10.0	240														
12.5			Bottom of boring at approximately 12½ feet below ground surface. No groundwater encountered at the time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

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LOG OF BORING 2-P02

LATITUDE: 37.641201 LONGITUDE: -121.374715

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 8 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 192 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	190		SANDY LEAN CLAY (CL), yellowish brown, moist, medium plasticity, 30-40% fine- to coarse-grained sand												
2.5															
5.0			Grades to contain 5-10% fine to coarse gravel												
7.5	185		SILTY GRAVEL WITH SAND (GC), grayish brown, moist, medium plasticity, 15-25% fines, 15-25% fine- to coarse grained sand												
			Bottom of boring at approximately 8 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

LOG OF BORING 2-P03

ENGEO Expect Excellence

LATITUDE: 37.642645 LONGITUDE: -121.379188

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 12 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 196 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	195		LEAN CLAY WITH SAND (CL), dark brown, moist, medium plasticity, 15-25% fine- to coarse-grained sand, <5% fine gravel												
2.5															
			SANDY SILT (ML), yellowish brown, moist, low plasticity, rapid dilatancy, 30-40% fine- to coarse-grained sand												
5.0	190														
7.5															
10.0			SILTY SAND (SM), brown, moist, 20-25% fines, 5-10% fine gravel, fine- to coarse-grained sand												
	185														
			Bottom of boring at approximately 12 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

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LOG OF BORING 2-P04

LATITUDE: 37.645992 LONGITUDE: -121.381355

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 12½ ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 199 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	195		FAT CLAY WITH SAND (CH), dark brown, moist, high plasticity, <15% fine- to coarse-grained sand, <5% fine gravel												
5.0	190		LEAN CLAY WITH SAND (CL), yellowish brown, moist, medium plasticity, 15-25% fine- to medium-grained sand												
10.0			SANDY LEAN CLAY (CL), yellowish brown, moist, low plasticity, 30-40% fine- to coarse-grained sand												
12.5			Bottom of boring at approximately 12½ feet below ground surface. No groundwater encountered at time of drilling												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

LOG OF BORING 2-P05

ENGEO Expect Excellence

LATITUDE: 37.64585 LONGITUDE: -121.381352

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 11¼ ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 198 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			FAT CLAY WITH SAND (CH), dark brown, moist, high plasticity, <15% fine- to coarse-grained sand, <5% fine gravel												
			Grades to brown												
2.5	195														
			LEAN CLAY WITH SAND (CL), yellowish brown, moist, medium plasticity, 15-25% fine- to coarse-grained sand												
5.0															
7.5	190		SANDY LEAN CLAY (CL), yellowish brown, moist, low plasticity, 30-40% fine- to coarse-grained sand												
10.0															
			Bottom of boring at approximately 11 1/4 feet below ground surface. No groundwater encountered at time of drilling.												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

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LOG OF BORING 2-P06

LATITUDE: 37.65214 LONGITUDE: -121.391688

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 12½ ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 194 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	190		FAT CLAY WITH SAND (CH), dark brown, moist, high plasticity, 15-25% fine- to medium-grained sand												
5.0	185		LEAN CLAY WITH SAND (CL), yellowish brown, moist, medium to high plasticity, 20-25% fine-grained sand												
10.0			SANDY SILT (ML), yellowish brown, moist, low plasticity, 30-40% fine-grained sand												
			SILTY SAND (SM), yellowish brown, moist, 20-30% fines, fine- to coarse-grained sand												
12.5			Bottom of boring at approximately 12½ feet below ground surface. No groundwater encountered at time of drilling												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

ENGEO
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LOG OF BORING 2-P07

LATITUDE: 37.652224 LONGITUDE: -121.391693

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 8½ ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 193 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			FAT CLAY WITH SAND (CH), dark brown, moist, high plasticity, 15-25% fine- to medium-grained sand												
2.5	190		Grades to brown												
5.0															
7.5	185		CLAYEY GRAVEL WITH SAND (GC), yellowish brown, moist, medium plasticity, 20-30% fines, 25-35% fine- to coarse-grained sand												
			Bottom of boring at approximately 8½ feet below ground surface. No groundwater encountered at time of drilling												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

ENGEO
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LOG OF BORING 2-P08

LATITUDE: 37.642616 LONGITUDE: -121.37919

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 7½ ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 196 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	195		LEAN CLAY WITH SAND (CL), dark brown, moist, medium plasticity, 15-25% fine- to coarse-grained sand, <5% fine gravel												
2.5			SANDY SILT (ML), yellowish brown, moist, low plasticity, rapid dilatancy, 30-40% fine- to coarse-grained sand												
5.0	190		CLAYEY GRAVEL WITH SAND (GC), brown, moist, medium plasticity, 25-35% fines, 15-25% fine- to coarse-grained sand												
			SILTY SAND (SM), brown, moist, 20-25% fines, 5-10% fine gravel												
7.5			Bottom of boring at approximately 7½ feet below ground surface. No groundwater encountered at time of drilling												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

ENGEO
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LOG OF BORING 2-P09

LATITUDE: 37.641108 LONGITUDE: -121.374715

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/15/2024
HOLE DEPTH: Approx. 12 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 192 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
0	192		SANDY LEAN CLAY (CL), brown, moist, medium plasticity, 30-40% fine- to coarse-grained sand												
2.5	190														
5.0															
7.5	185		SANDY SILT (ML), yellowish brown, moist, low plasticity, 30-40% fine-grained sand, <5% fine gravel												
10.0			SILTY SAND WITH GRAVEL (SM), yellowish brown, moist, 20-30% fines, 15-25% fine gravel, fine- to coarse-grained sand												
	180		Bottom of boring at approximately 12 feet below ground surface. No groundwater encountered at time of drilling												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

ENGEO
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LOG OF BORING 2-P10

LATITUDE: 37.660528 LONGITUDE: -121.399333

Geotechnical Exploration
Pacific Gateway
Tracy, California
19633.000.002

DATE DRILLED: 8/16/2024
HOLE DEPTH: Approx. 8 ft.
HOLE DIAMETER: 4½ in.
SURF ELEV (WGS84): Approx. 159 ft.

LOGGED / REVIEWED BY: V. Navarro / ZAC
DRILLING CONTRACTOR: West Coast Exploration
DRILLING METHOD: Solid Flight Auger
HAMMER TYPE: N/A

Depth in Feet	Elevation in Feet	Sample Type	DESCRIPTION	Log Symbol	Water Level	Blow Count/Foot	Atterberg Limits: Liquid Limit	Atterberg Limits: Plastic Limit	Atterberg Limits: Plasticity Index	Fines Content (% passing #200 sieve)	Moisture Content (% dry weight)	Dry Unit Weight (pcf)	Shear Strength (psf) *field approximation	Unconfined Strength (tsf) *field approximation	Strength Test Type
			LEAN CLAY WITH SAND (CL), dark brown, moist, medium plasticity, 15-25% fine- to medium-grained sand												
			Grades to brown												
2.5	155		SANDY LEAN CLAY (CL), brown, moist, medium plasticity, 30-40% fine- to medium-grained sand												
5.0			LEAN CLAY WITH SAND (CL), brown, moist, medium plasticity, 15-25% fine- to medium-grained sand												
7.5			SANDY LEAN CLAY (CL), yellowish brown, moist, medium plasticity, 30-40% fine- to medium-grained sand												
			Bottom of boring at approximately 8 feet below ground surface. No groundwater encountered at time of drilling												

LOG - GEOTECHNICAL_SU+QU W/ ELEV 19633000002_INFILTRATION TESTING_2-B01 THROUGH 2-B06, 2-P01 THROUGH 2-P10.GPJ ENGEO INC.GDT 9/4/24

Appendix E HEC-HMS Model

Appendix F HEC-RAS Model

Appendix M

Environmental Noise Assessment

Pacific Gateway Specific Plan EIR

San Joaquin County, California

July 31, 2025

Project #230309

Prepared for:

Raney Planning and Management
1501 Sports Drive
Sacramento, CA 95834

Prepared by:

Saxelby Acoustics LLC





Luke Saxelby, INCE Bd. Cert.
Principal Consultant
Board Certified, Institute of Noise Control Engineering (INCE)

(916) 760-8821
www.SaxNoise.com | Luke@SaxNoise.com
915 Highland Pointe Drive, Suite 250
Roseville, CA 95678

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INTRODUCTION

The Pacific Gateway Specific Plan EIR Project will establish the land uses, zoning, development standards, and development regulations for approximately 1,576.7 acres of land in southwest San Joaquin County north of the junction of Interstate I-580 and State Route 132. The project will consist of several designations for limited industrial, general commercial, public, and business park use types. The primary noise-generating components of the project will include industrial warehouse and distribution facility uses. Secondary noise sources include a wastewater treatment plant. Sensitive receptors in the project vicinity include single family homes northeast of the project site.

Figure 1 shows the project site plan. **Figure 2** shows an aerial photo of the project site.

ENVIRONMENTAL SETTING

BACKGROUND INFORMATION ON NOISE

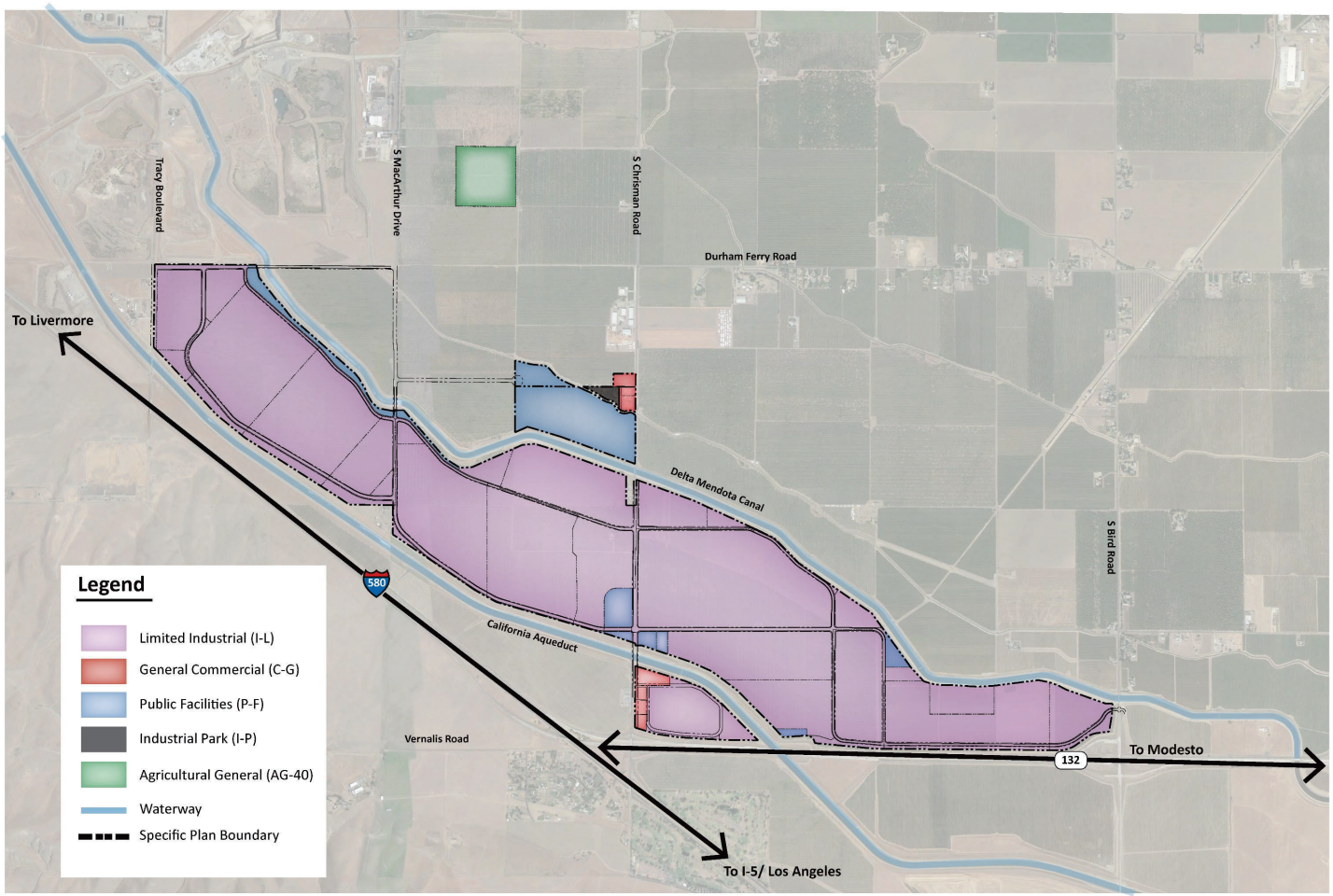
Fundamentals of Acoustics

Acoustics is the science of sound. Sound may be thought of as mechanical energy of a vibrating object transmitted by pressure waves through a medium to human (or animal) ears. If the pressure variations occur frequently enough (at least 20 times per second), then they can be heard and are called sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second or Hertz (Hz).

Noise is a subjective reaction to different types of sounds. Noise is typically defined as (airborne) sound that is loud, unpleasant, unexpected or undesired, and may therefore be classified as a more specific group of sounds. Perceptions of sound and noise are highly subjective from person to person.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals), as a point of reference, defined as 0 dB. Other sound pressures are then compared to this reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB, and changes in levels (dB) correspond closely to human perception of relative loudness.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable, and can be approximated by A-weighted sound levels. There is a strong correlation between A-weighted sound levels (expressed as dBA) and the way the human ear perceives sound. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment.



DBA # 2406

DB+A

PACIFIC GATEWAY

PROPOSED ZONING PLAN

0 500' 1000' 2000'

SCALE 1"= 1000'

SEPTEMBER 17, 2024

NORTH

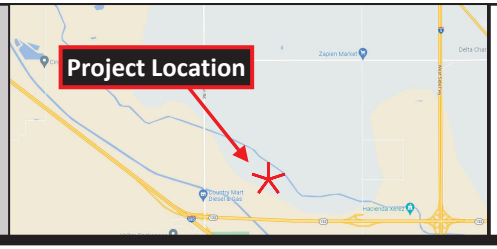
SHEET 1 of 1

Pacific Gateway Specific Plan EIR

San Joaquin County, California

Figure 1

Project Site Plan



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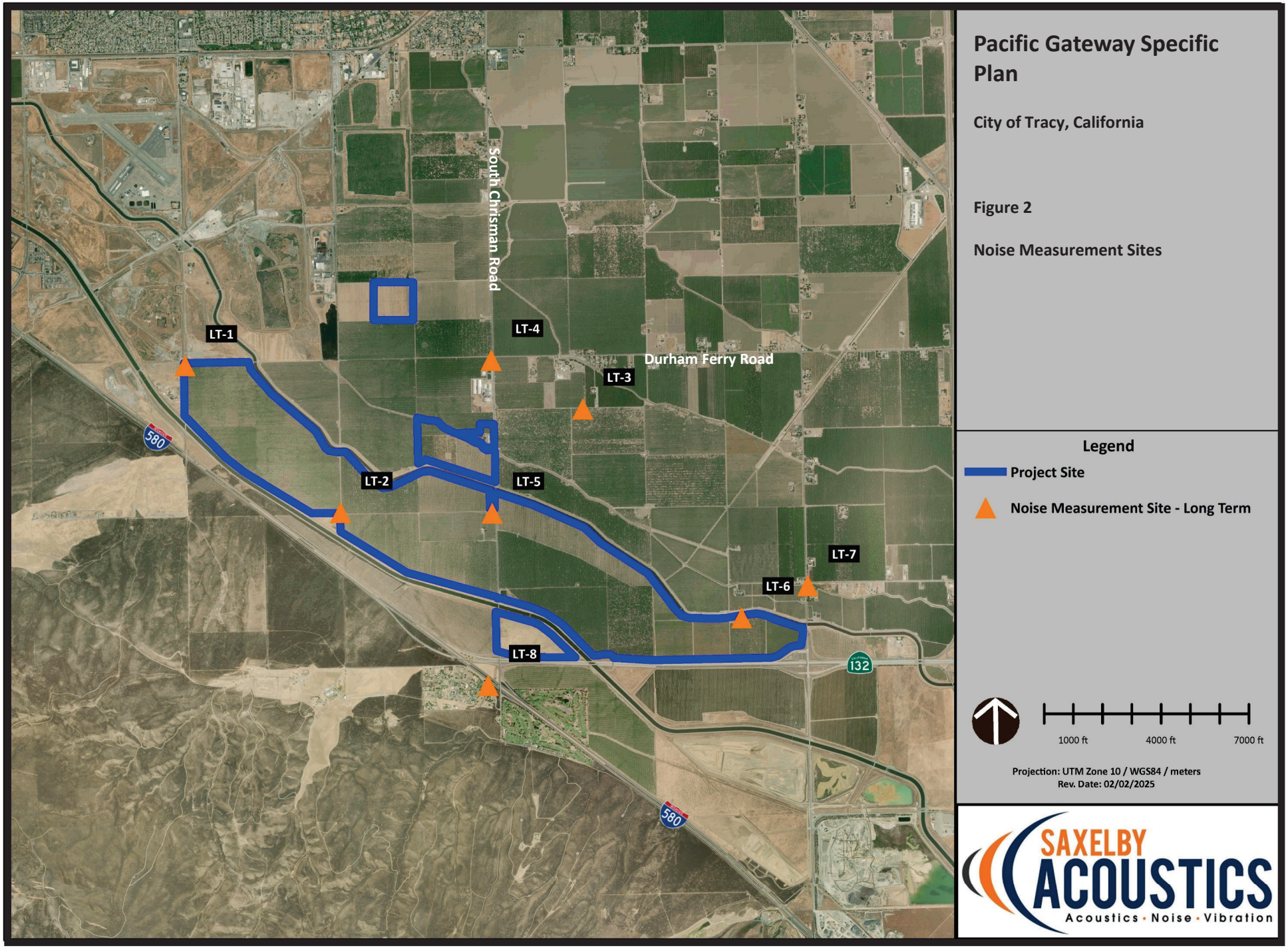

Pacific Gateway Specific Plan

City of Tracy, California

Figure 2

Noise Measurement Sites

Legend

- Project Site
- Noise Measurement Site - Long Term

1000 ft 4000 ft 7000 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 02/02/2025

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*Figure not OCR compatible

The decibel scale is logarithmic, not linear. In other words, two sound levels 10-dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted, an increase of 10-dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound, and twice as loud as a 60-dBA sound.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given environment. A common statistical tool is the average, or equivalent, sound level (L_{eq}), which corresponds to a steady-state A-weighted sound level containing the same total energy as a time varying signal over a given time period (usually one hour). The L_{eq} is the foundation of the composite noise descriptor, L_{dn}, and shows very good correlation with community response to noise.

The day/night average level (DNL or L_{dn}) is based upon the average noise level over a 24-hour day, with a +10-decibel weighing applied to noise occurring during nighttime (10:00 p.m. to 7:00 a.m.) hours. The nighttime penalty is based upon the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because L_{dn} represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Table 1 lists several examples of the noise levels associated with common situations. **Appendix A** provides a summary of acoustical terms used in this report.

TABLE 1: TYPICAL NOISE LEVELS

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	--110--	Rock Band
Jet Fly-over at 300 m (1,000 ft.)	--100--	
Gas Lawn Mower at 1 m (3 ft.)	--90--	
Diesel Truck at 15 m (50 ft.), at 80 km/hr. (50 mph)	--80--	Food Blender at 1 m (3 ft.) Garbage Disposal at 1 m (3 ft.)
Noisy Urban Area, Daytime Gas Lawn Mower, 30 m (100 ft.)	--70--	Vacuum Cleaner at 3 m (10 ft.)
Commercial Area Heavy Traffic at 90 m (300 ft.)	--60--	Normal Speech at 1 m (3 ft.)
Quiet Urban Daytime	--50--	Large Business Office Dishwasher in Next Room
Quiet Urban Nighttime	--40--	Theater, Large Conference Room (Background)
Quiet Suburban Nighttime	--30--	Library
Quiet Rural Nighttime	--20--	Bedroom at Night, Concert Hall (Background)
	--10--	Broadcast/Recording Studio
Lowest Threshold of Human Hearing	--0--	Lowest Threshold of Human Hearing

Source: Caltrans, Technical Noise Supplement, Traffic Noise Analysis Protocol. September, 2013.

Effects of Noise on People

The effects of noise on people can be placed in three categories:

- Subjective effects of annoyance, nuisance, and dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as hearing loss or sudden startling

Environmental noise typically produces effects in the first two categories. Workers in industrial plants can experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise or the corresponding reactions of annoyance and dissatisfaction. A wide variation in individual thresholds of annoyance exists and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted: the so-called ambient noise level. In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by those hearing it.

With regards to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1-dBA cannot be perceived;
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference;
- A change in level of at least 5-dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness and can cause an adverse response.

Stationary point sources of noise – including stationary mobile sources such as idling vehicles – attenuate (lessen) at a rate of approximately 6-dB per doubling of distance from the source, depending on environmental conditions (i.e. atmospheric conditions and either vegetative or manufactured noise barriers, etc.). Widely distributed noises, such as a large industrial facility spread over many acres or a street with moving vehicles, would typically attenuate at a lower rate.

EXISTING NOISE AND VIBRATION ENVIRONMENTS

EXISTING NOISE RECEPTORS

Some land uses are considered more sensitive to noise than others. Land uses often associated with sensitive receptors generally include residences, schools, libraries, hospitals, and passive recreational areas. Sensitive noise receptors may also include threatened or endangered noise-sensitive biological species, although many jurisdictions have not adopted noise standards for wildlife areas. Noise sensitive land uses are typically given special attention in order to achieve protection from excessive noise.

Sensitivity is a function of noise exposure (in terms of both exposure duration and insulation from noise) and the types of activities involved. In the vicinity of the project site, sensitive land uses include existing single-family residential uses around the project site, as well as the Jefferson Middle School adjacent to Chrisman Road at W. Linne Road. Several of the sensitive residential uses are located adjacent to the project site with approximately ten additional residential uses located within approximately 1,000 feet of the project boundaries. A greater number of sensitive receptors are located at varying distances from the project-area roadways, including Chrisman Road, where off-site improvements are required or where project traffic may travel to and from the site.

EXISTING GENERAL AMBIENT NOISE LEVELS

The existing noise environment in the project area is primarily defined by traffic on the local roadway network. To quantify the existing ambient noise environment in the project vicinity, Saxelby Acoustics conducted continuous (24-hr.) noise level measurements at four locations on the project site. Noise measurement locations are shown on **Figure 2**. A summary of the noise level measurement survey results is provided in **Table 2**. **Appendix B** contains the complete results of the noise monitoring.

The sound level meters were programmed to record the maximum, median, and average noise levels at each site during the survey. The maximum value, denoted L_{max}, represents the highest noise level measured. The average value, denoted L_{eq}, represents the energy average of all the noise received by the sound level meter microphone during the monitoring period. The median value, denoted L_{50}, represents the sound level exceeded 50 percent of the time during the monitoring period.

Larson Davis Laboratories (LDL) model 820 precision integrating sound level meters were used for the ambient noise level measurement survey. The meters were calibrated before and after use with a CAL200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all pertinent specifications of the American National Standards Institute for Type 1 sound level meters (ANSI S1.4).

TABLE 2: SUMMARY OF EXISTING BACKGROUND NOISE MEASUREMENT DATA

Location	Date	L_{dn}	Daytime L_{eq}	Daytime L_{50}	Daytime L_{max}	Nighttime L_{eq}	Nighttime L_{50}	Nighttime L_{max}
LT-1: 30 feet to CL of S Tracy Blvd.	6/14/23	63	59	45	82	57	47	79
LT-2: 35 feet to CL of S MacArthur Dr.	6/14/23	58	49	46	66	53	51	62
LT-3: 1,800 feet to CL of Durham Ferry Rd.	6/14/23	48	43	38	59	42	41	53
LT-4: 80 feet to CL of S Chrisman Rd.	6/14/23	70	66	54	83	64	47	82
LT-5: 150 feet to CL of S. Chrisman Road	1/11/25	64	61	53	78	57	47	76
LT-6: 1,600 feet north of SR 132 CL, west of S. Bird	1/11/25	66	66	61	77	56	52	71
LT-7: 50 feet to CL of S. Bird at W. Kenner Road	1/11/25	59	56	49	78	52	42	70
LT-8: 200 feet to CL of I-580	1/11/25	72	69	66	86	66	62	80

- *All values shown in dBA*
- *Daytime hours: 7:00 a.m. to 10:00 p.m.*
- *Nighttime Hours: 10:00 p.m. to 7:00 a.m.*
- *Source: Saxelby Acoustics, 2023-2025.*

FUTURE TRAFFIC NOISE ENVIRONMENT AT OFF-SITE RECEPTORS

OFF-SITE TRAFFIC NOISE IMPACT ASSESSMENT METHODOLOGY

To assess noise impacts due to project-related traffic increases on the local roadway network, traffic noise levels are predicted at sensitive receptors for existing and future, project and no-project conditions.

Existing and Cumulative noise levels due to traffic are calculated using the Federal Highway Administration Highway Traffic Noise Prediction Models (FHWA RD-77-108). The model is based upon the Calveno reference noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict traffic noise levels in terms of L_{dn}, it is necessary to adjust the input volume to account for the day/night distribution of traffic.

Project trip generation volumes were provided by the project traffic engineer (Fehr & Peers 2024), truck usage and vehicle speeds on the local area roadways were estimated from field observations. The predicted increases in traffic noise levels on the local roadway network for Existing and Cumulative conditions which would result from the project are provided in terms of L_{dn}.

Traffic noise levels are predicted at the sensitive receptors located at the closest typical setback distance along each project-area roadway segment. In some locations sensitive receptors may not receive full shielding from noise barriers or may be located at distances which vary from the assumed calculation distance.

Tables 3-5 summarize the modeled traffic noise levels at the nearest sensitive receptors along each roadway segment in the Project area. **Appendix C** provides the complete inputs and results of the FHWA traffic modeling.

TABLE 3: EXISTING AND EXISTING PLUS PHASE 1 TRAFFIC NOISE LEVELS

Roadway	Segment	Existing, dBA Ldn	Existing + Phase 1, dBA Ldn	Change
S Chrisman Rd	11th St to W Schulte Rd	71.5	72.7	1.2
S Chrisman Rd	W Schulte Rd to Valpico Rd	62.2	64.0	1.8
S Chrisman Rd	Valpico Rd to W Linne Rd	67.5	69.4	1.9
W Linne Rd	S Tracy Blvd to S MacArthur Rd	72.6	73.0	0.4
S Tracy Blvd	W Linne Rd to I-580	72.7	72.7	0.0
W Linne Rd	S MacArthur Rd to S Chrisman Rd	68.7	68.9	0.2
S MacArthur Rd	W Linne Rd to Project	59.4	59.4	0.0
Chrisman Rd	W Linne Rd to Durham Ferry Rd	67.8	70.1	2.3
S Chrisman Rd	Durham Ferry Rd to SR-132	58.3	60.6	2.3
Durham Ferry Rd	S Chrisman Rd to S Bird Rd	59.3	59.4	0.1
S. Bird	Durham Ferry Rd to SR-132	55.7	55.7	0.0
S Bird Rd	S Lehman Rd to Durham Ferry Rd	56.9	56.5	-0.4
Durham Ferry Rd	S Bird Rd to I-5	65.2	66.4	1.2
W Lehman Rd	S Bird Rd to Ahern Rd	51.6	50.9	-0.7

Based upon the **Table 3** data, the proposed project Phase 1 is predicted to result in a maximum traffic noise level increase of 2.3 dBA.

TABLE 4: EXISTING AND EXISTING PLUS PROJECT TRAFFIC NOISE LEVELS

Roadway	Segment	Existing, dBA Ldn	Existing + Project, dBA Ldn	Change
S Chrisman Rd	11th St to W Schulte Rd	71.5	76.0	4.5
S Chrisman Rd	W Schulte Rd to Valpico Rd	62.2	67.6	5.4
S Chrisman Rd	Valpico Rd to W Linne Rd	67.5	73.6	6.1
W Linne Rd	S Tracy Blvd to S MacArthur Rd	72.6	74.4	1.8
S Tracy Blvd	W Linne Rd to I-580	72.7	72.7	0.0
W Linne Rd	S MacArthur Rd to S Chrisman Rd	68.7	71.4	2.7
S MacArthur Rd	W Linne Rd to Project	59.4	62.2	2.8
Chrisman Rd	W Linne Rd to Durham Ferry Rd	67.8	74.4	6.6
S Chrisman Rd	Durham Ferry Rd to SR-132	58.3	65.2	6.9
Durham Ferry Rd	S Chrisman Rd to S Bird Rd	59.3	64.7	5.4
S. Bird	Durham Ferry Rd to SR-132	55.7	56.6	0.9
S Bird Rd	S Lehman Rd to Durham Ferry Rd	56.9	62.2	5.3
Durham Ferry Rd	S Bird Rd to I-5	65.2	70.1	4.9
W Lehman Rd	S Bird Rd to Ahern Rd	51.6	58.7	7.1

Based upon the **Table 4** data, the proposed project is predicted to result in a maximum traffic noise level increase of 7.1 dBA under existing plus full project buildout.

TABLE 5: CUMULATIVE AND CUMULATIVE PLUS PROJECT TRAFFIC NOISE LEVELS

Roadway	Segment	Cumulative, dBA Ldn	Cumulative + Project, dBA Ldn	Change
S Chrisman Rd	11th St to W Schulte Rd	73.2	77.1	3.9
S Chrisman Rd	W Schulte Rd to Valpico Rd	65.0	69.0	4.0
S Chrisman Rd	Valpico Rd to W Linne Rd	70.7	75.2	4.5
W Linne Rd	S Tracy Blvd to S MacArthur Rd	76.9	77.8	0.9
S Tracy Blvd	W Linne Rd to I-580	73.0	72.7	-0.3
W Linne Rd	S MacArthur Rd to S Chrisman Rd	71.7	73.0	1.3
S MacArthur Rd	W Linne Rd to Project	59.4	62.2	2.8
Chrisman Rd	W Linne Rd to Durham Ferry Rd	69.4	75.1	5.7
S Chrisman Rd	Durham Ferry Rd to SR-132	60.5	65.9	5.4
Durham Ferry Rd	S Chrisman Rd to S Bird Rd	61.2	65.1	3.9
S. Bird	Durham Ferry Rd to SR-132	53.7	54.8	1.1
S Bird Rd	S Lehman Rd to Durham Ferry Rd	61.4	64.2	2.8
Durham Ferry Rd	S Bird Rd to I-5	69.4	71.9	2.5
W Lehman Rd	S Bird Rd to Ahern Rd	52.2	58.6	6.4

Based upon the **Table 5** data, the proposed project is predicted to result in a maximum traffic noise level increase of 6.4 dBA under cumulative plus full project buildout.

EVALUATION OF PROJECT OPERATIONAL NOISE ON EXISTING SENSITIVE RECEPTORS

LIMITED INDUSTRIAL LAND USE

Project site traffic circulation, loading docks, the wastewater treatment plant (WWTP), and the proposed university are considered to be the primary noise sources for this project. The following is a list of assumptions used for the noise modeling. The data used is based upon a combination of manufacturer's provided data and Saxelby Acoustics data from similar operations.

Loading Docks, Truck Circulation, and Truck Parking:

> To determine typical loading dock noise levels associated with the proposed loading docks, truck circulation, and parking areas noise level measurement data from a similar warehousing facility was used. Activities during the peak hour of loading dock activities included truck arrival/departures, truck idling, truck backing (including backup alarms), air brake release, and operation of truck-mounted refrigeration units. The results of the loading dock noise measurements indicate that a busy hour generated an average noise level of 61 dBA L_{eq} and 81 dBA L_{max} at the boundary of the truck maneuvering lanes.

Auto Parking Lots: Saxelby Acoustics estimated noise generated by employee parking lots at similar warehouse facilities. It was determined that the parking lots produced up to 52 L_{eq} at the edge of each lot during a peak hour. A similar level of activity was assumed for the VFW use.

WWTP: Saxelby Acoustics assumed the wastewater treatment plant could consist of two packaged MBR plants operating continuously during the daytime and nighttime, as measured by Saxelby Acoustics at a similar facility. It was assumed that the equipment would be housed within sound attenuation enclosures. The average noise level for this unit was assumed to be 58 dBA at 25 feet in any direction from the plant. Additionally, Saxelby Acoustics assumed a backup generator could be utilized in the operation of the project. It was assumed that the generator could produce noise levels of up to 75 dBA L_{eq} at 23 feet per manufacturer's data.

Proposed University: Saxelby Acoustics assumed that the proposed university could generate up to 938 peak hour automobile trips in the peak hour with 1% of these trips consisting of heavy trucks. Parking lot movements are predicted to generate a sound exposure level (SEL) of 71 dBA SEL at 50 feet for cars and 85 dBA SEL at 50 feet for trucks. It was also assumed that the university amenities could include two large sport fields such as soccer or cricket (58 dBA L_{eq} at 200 feet from center of field), one basketball court 55 dBA at 50 feet from center of court), and two pickleball or tennis courts (61 dBA L_{eq} at 25 feet from edge of court). It was assumed that all amenities would be active at this level continuously.

Saxelby Acoustics used the SoundPLAN noise prediction model. Inputs to the model included sound power levels for the proposed amenities, existing and proposed buildings, terrain type, and locations of sensitive receptors. These predictions are made in accordance with International Organization for Standardization (ISO) standard 9613-2:1996 (Acoustics – Attenuation of sound during propagation outdoors). ISO 9613 is the most commonly used method for calculating exterior noise propagation. **Figure 3** shows the noise level contours resulting from operation of the project Phase 1. **Figure 4** shows the full project buildout under a theorized buildout scenario for a site configuration similar to Phase 1 for each of the industrial parcels.

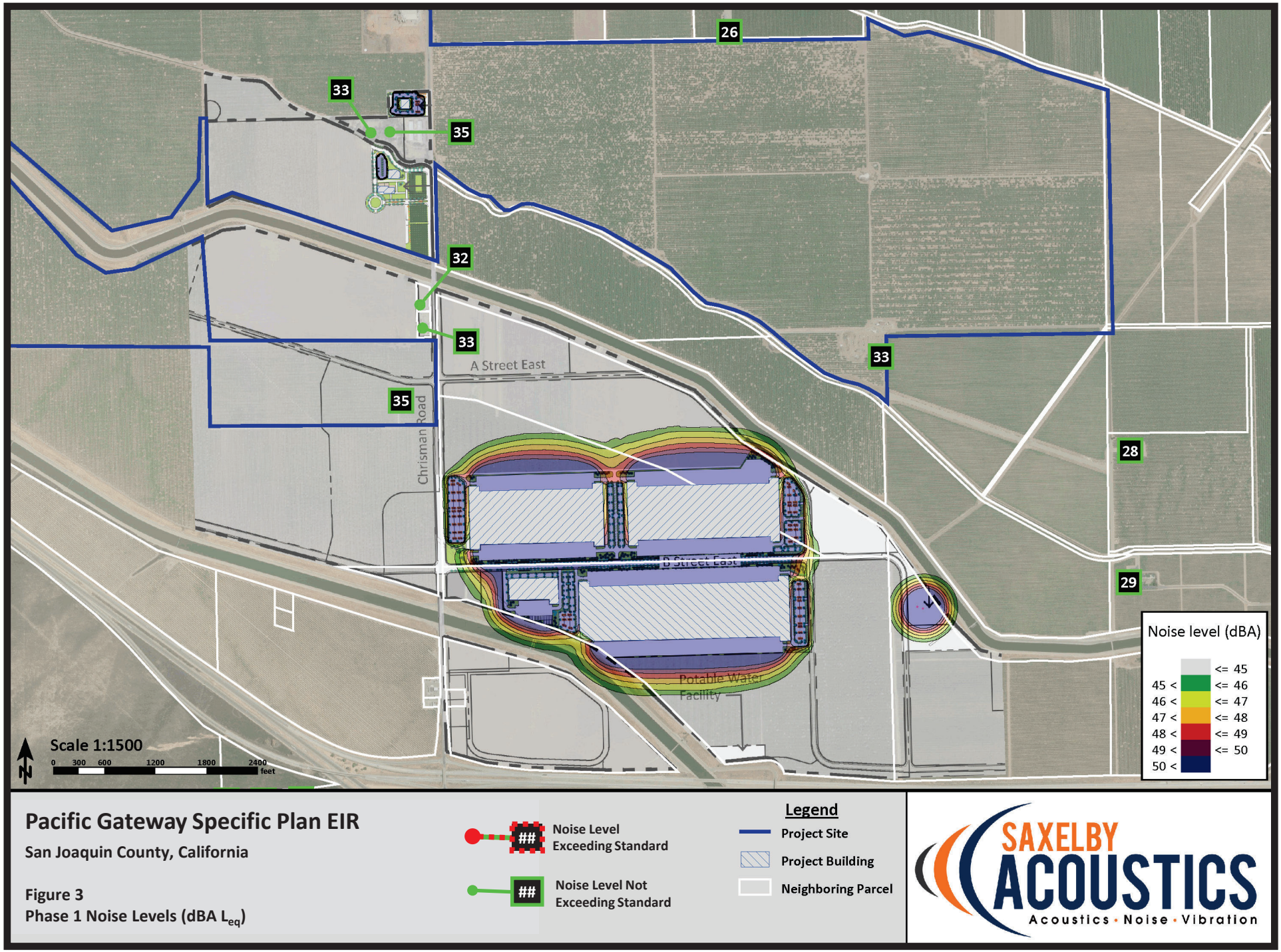


*Figure not OCR compatible

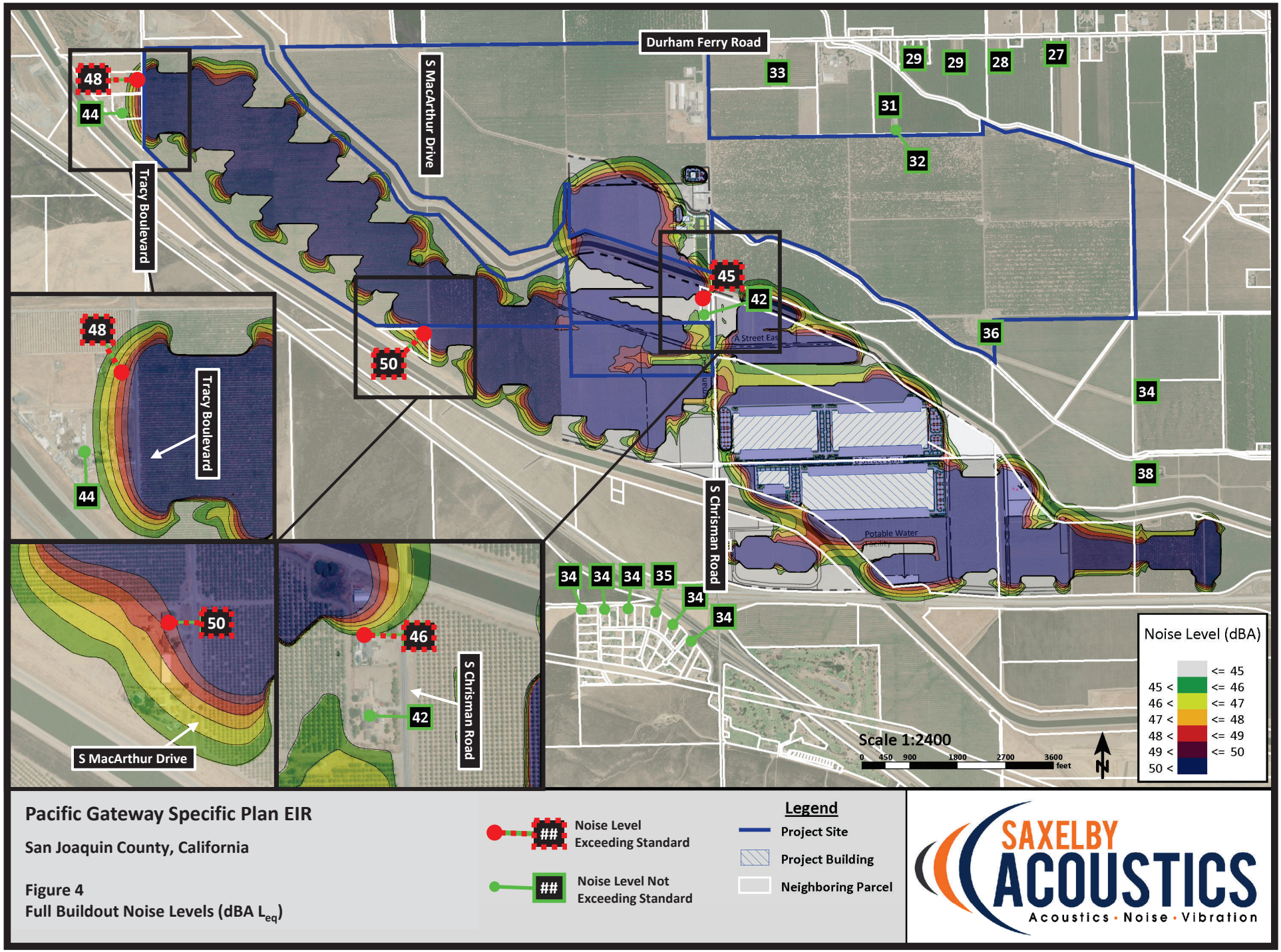
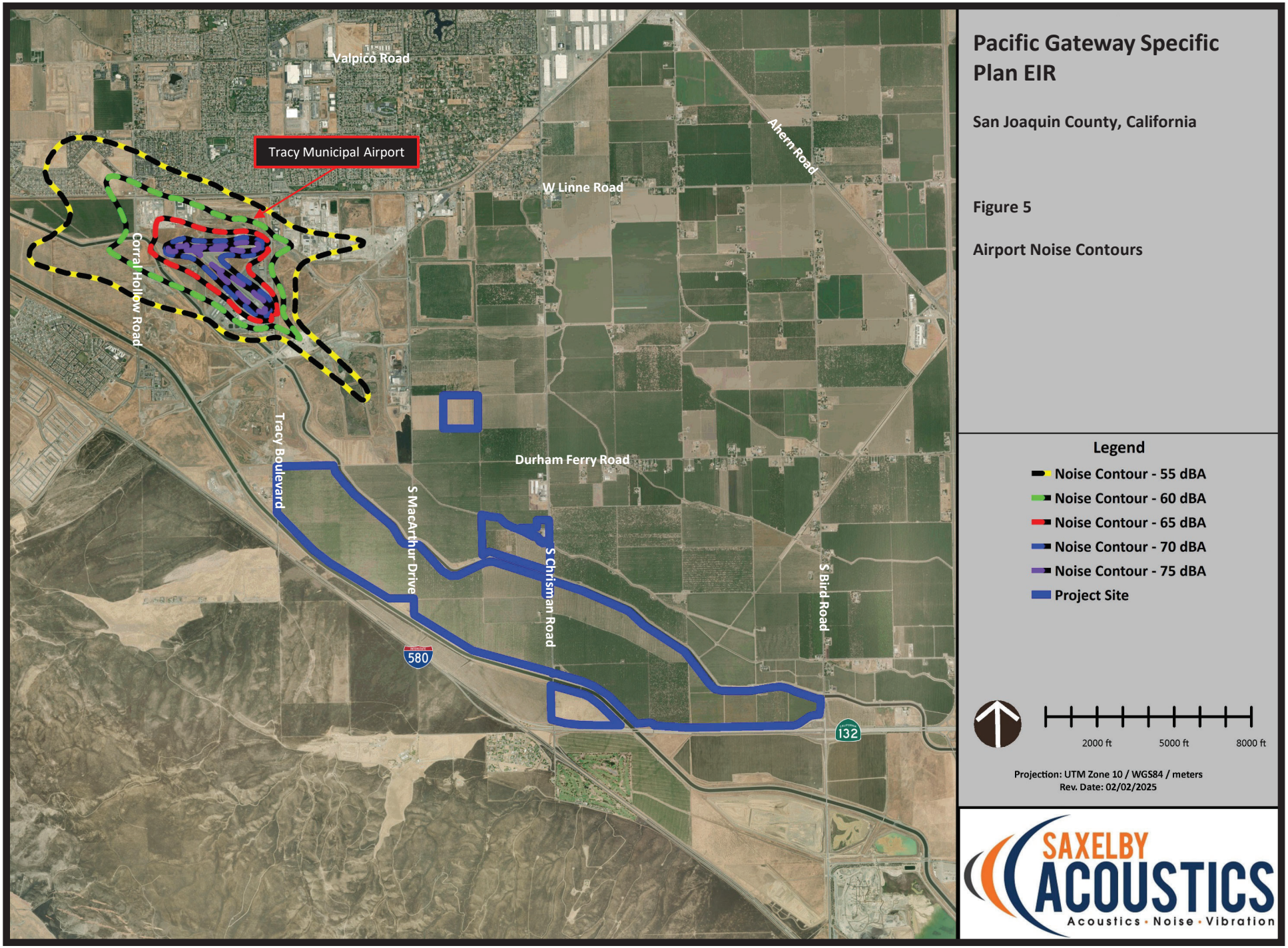


*Figure not OCR compatible

TRACY MUNICIPAL AIRPORT

The Tracy Municipal Airport is located within the boundaries of the City of Tracy and approximately 1.1 miles north of the northwestern project site. **Figure 5** shows the CNEL contours for the Airport as published in the City of Tracy 2011 General Plan in relation to the project site.



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CONSTRUCTION NOISE ENVIRONMENT

During the construction of the proposed project, noise from construction activities would temporarily add to the noise environment in the project vicinity. As shown in **Table 6**, activities involved in construction would generate maximum noise levels ranging from 76 to 90 dB at a distance of 50 feet.

TABLE 6: CONSTRUCTION EQUIPMENT NOISE

Type of Equipment	Maximum Level, dBA at 50 feet
Auger Drill Rig	84
Backhoe	78
Compactor	83
Compressor (air)	78
Concrete Saw	90
Concrete Mixer Truck	79
Dozer	82
Dump Truck	76
Excavator	81
Generator	81
Jackhammer	89
Pneumatic Tools	85

Source: Roadway Construction Noise Model User's Guide. Federal Highway Administration. FHWA-HEP-05-054. January 2006.

CONSTRUCTION VIBRATION ENVIRONMENT

The primary vibration-generating activities associated with the proposed project would occur during construction when activities such as grading, utilities placement, and parking lot construction occur. **Table 7** shows the typical vibration levels produced by construction equipment.

TABLE 7: VIBRATION LEVELS FOR VARIOUS CONSTRUCTION EQUIPMENT

Type of Equipment	Peak Particle Velocity at 25 feet (inches/second)	Peak Particle Velocity at 50 feet (inches/second)	Peak Particle Velocity at 100 feet (inches/second)
Large Bulldozer	0.089	0.031	0.011
Loaded Trucks	0.076	0.027	0.010
Small Bulldozer	0.003	0.001	0.000
Auger/drill Rigs	0.089	0.031	0.011
Jackhammer	0.035	0.012	0.004
Vibratory Hammer	0.070	0.025	0.009
Vibratory Compactor/roller	0.210 (Less than 0.20 at 26 feet)	0.074	0.026

Source: Transit Noise and Vibration Impact Assessment Guidelines. Federal Transit Administration. May 2006.

REGULATORY CONTEXT

FEDERAL

There are no federal regulations related to noise that apply to the Proposed Project.

STATE

California Environmental Quality Act

The California Environmental Quality Act (CEQA) Guidelines, Appendix G, indicate that a significant noise impact may occur if a project exposes persons to noise or vibration levels in excess of local general plans or noise ordinance standards, or cause a substantial permanent or temporary increase in ambient noise levels. CEQA standards are discussed more below under the Thresholds of Significance section.

LOCAL

San Joaquin County General Plan

Table 8 summarizes the noise level standards for noise-sensitive uses (e.g., residential development, lodging, hospitals, nursing homes, schools, day care centers) at outdoor activity areas affected by non-transportation noise sources in the County. **Table 9** presents the noise and land use compatibility standards for various land uses. In addition to these standards, the policies in this section address ways to reduce or eliminate existing and future conflicts between land uses and noise.

TABLE 8: NON-TRANSPORTATION NOISE LEVEL PERFORMANCE STANDARDS FOR NOISE-SENSITIVE USES AT OUTDOOR ACTIVITY AREAS[1,2]

Noise Level Descriptor	Daytime[3] (7:00 am – 10:00 pm)	Nighttime[3] (10:00 pm – 7:00 am)
Hourly L_{eq}, dB	50	45
Maximum Level, dB	70	65

Notes: These standards apply to new or existing residential areas affected by new or existing non-transportation sources.

[1] Where the location of outdoor activity areas is unknown or is not applicable, the noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures.

[2] Refer to Mountain House Master Plan, Table 11.2, Exterior Noise Standards for Noise-Sensitive Uses Affected by Non-Transportation Noise Sources, Page 11.12, for Mountain House Noise Standards.

[3] Each of the noise level standards specified shall be reduced by 5 dB for impulsive noise, single tone noise, or noise consisting primarily of speech or music.

Source: San Joaquin County General Plan Table PHS-1

TABLE 9: MAXIMUM ALLOWABLE NOISE EXPOSURE FROM TRANSPORTATION NOISE SOURCES[1]

Noise Sensitive Land Use Types	Outdoor Activity Areas[2] (dB L_{dn})	Interior Spaces (dB L_{dn})
Residential	65	45
Administrative Office	-	45
Child Care Services - Child Care Centers	-	45
Community Assembly	65	45
Cultural &amp: Library Services	-	45
Educational Services: General	-	45
Funeral &amp: Interment Services – Undertaking	65	45
Lodging Services	65	45
Medical Services	65	45
Professional Services	-	45
Public Services (excluding hospitals)	-	45
Public Services (hospitals only)	65	45
Recreation – Indoor Spectator	-	45
Religious Assembly	65	45

Notes: These standards apply to new or existing residential areas affected by new or existing non-transportation sources.

[1] Refer to Mountain House Master Plan, Chapter 11, Noise, for Mountain House Noise Standards.

[2] Where the location of outdoor activity areas is unknown or is not applicable, the noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures.

Source: San Joaquin County General Plan Table PHS-2

San Joaquin County Development Title

The County of San Joaquin Development Title provides regulations for vibration and sound. The applicable standards are reproduced below:

9-404.020 - EXEMPTIONS

This Chapter does not apply to:

(a) **Emergencies.** The emission of sound for the purpose of alerting persons to the existence of an emergency, or the emission of sound in the performance of emergency work. This includes warning devices necessary for the protection of the public safety, such as police, fire, and ambulance sirens.

(b) **Parks and Schools**. Activities conducted in public parks, playgrounds, and public or private school grounds, including, but not limited to, school athletic and school entertainment events;

(c) **Construction.** Noise associated with construction, provided such activities do not take place before 6:00 a.m. or after 9:00 p.m. on any day;

(d) **Residential Property Maintenance.** Noise sources associated with maintenance of residential property located in Residential zones, provided such activities shall take place between 8:00 a.m. and 9:00 p.m. on any day.

(e) **Residential Air Conditioning.** Noise associated with residential air conditioning equipment, provided such equipment is in good repair;

(f) **Agricultural Operations.** Noise associated with any agricultural operation, including the processing or transportation of crops when such activities are conducted in Agricultural zones;

(g) **Community Assembly, Religious Institutions, and Other Similar Organizations.** Unamplified bells, chimes, or other similar devices used for community assembly or by religious institutions and other houses of religious worship.

(h) **Solid Waste Collection.** Collection of solid waste, vegetative waste, and recyclable materials by the County or under contract with the County.

(i) **Public Works Construction Projects, Maintenance, and Repair.** Street, utility, and similar construction projects, or the maintenance or repair thereof, undertaken by, under contract to, or at the direction of the County, the State of California, or a public utility. These activities include street sweeping, debris and litter removal, removal of downed wires, restoring electrical service, repairing traffic signals, unplugging sewers, vacuuming catch basins, repairing of damaged poles, removal of abandoned vehicles, and repairing of water hydrants, watermains, gas lines, oil lines, sewers, storm drains, roads, and sidewalks.

(j) **Utility Facilities.** Facilities for utilities including, without limitation, electric power transformers and related equipment, sewer lift stations, wastewater processing, wells, and pumping stations.

(Ord. No. 4632, § 12, 9-26-2023)

9-404.040 - *NOISE* LIMITS

All uses and property must meet the following standards for *noise* from transportation sources and stationary sources.

(a) **Transportation *Noise* Sources.**

(1) Excluding projects on infill lots, proposed *noise* sensitive land uses that will be impacted by *noise* from existing or planned transportation facilities shall be required to mitigate the *noise* levels from these *noise* sources so that the resulting *noise* levels within the site do not exceed the standards specified in Table 9-404.040, Part I (**Table 10**) for the specified *noise* sensitive land uses.

(2) Proposed projects on infill lots that will be impacted by *noise* from existing or planned transportation facilities shall be required to mitigate the *noise* levels from these *noise*

sources so that the resulting *noise* levels do not exceed the standards specified in Table 9-404.040, Part I (**Table 10**) for interior spaces only for the specified *noise* sensitive land uses.

(3) Private development projects that include the development of new transportation facilities or the expansion of existing transportation facilities shall be required to mitigate the *noise* levels from these facilities so that the resulting *noise* levels on *noise* sensitive land uses within and adjacent to said development projects do not exceed the standards specified in Table 9-404.040, Part I (**Table 10**) for the specified *noise* sensitive land uses.

(b) **Stationary *Noise* Sources.**

(1) Excluding proposed *noise* sensitive land uses on infill lots, proposed *noise* sensitive land uses that will be impacted by stationary *noise* sources shall be required to mitigate the *noise* levels from these sources so that the resulting *noise* levels on the proposed *noise* sensitive land uses do not exceed the standards specified in Table 9-404.040, Part II (**Table 11**) for the specified *noise* sensitive land uses.

(2) Proposed projects that will create new stationary *noise* sources or expand existing stationary *noise* sources shall be required to mitigate the *noise* levels from these sources, so as not to exceed the *noise* level standards specified in Table 9-404.040, Part II (**Table 11**) for the specified *noise* sensitive land uses.

9-404.060 - ADDITIONAL REGULATIONS FOR SPECIFIC ACTIVITIES

(a) **Construction.** General construction *noise* shall be limited to weekdays from 6:00 a.m. to 9:00 p.m. Pre-construction activities, including loading and unloading, deliveries, truck idling, backup beeps, and radios, also are limited to these construction *noise* hours.

(1) No *noise*-producing construction activities shall be permitted outside of these hours or on Sundays and federal holidays unless a temporary waiver is granted by the Building Official.

(2) More restrictive construction *noise* hours may be established as a Condition of Approval of an Administrative Use Permit or a Conditional Use Permit when appropriate given the surrounding neighborhood, the type of *noise*, or other unique factors.

(3) Any waiver granted shall take the potential *noise* impacts upon the surrounding neighborhood and the larger community into consideration.

(4) Except in emergencies, no construction shall be permitted outside of these hours, including maintenance work on public rights-of-way, that creates construction *noise*..

(b) **Deliveries.** Deliveries to or pickups from any commercial use sharing a lot line with any conforming residential use may occur between 7:00 a.m. and 10:00 p.m. daily. No deliveries to or pickups from any such use shall occur outside of these hours unless specifically authorized by a Conditional Use Permit.

(c) Normal Maintenance. Maintenance of real property operations may exceed the *noise* standards between 6:00 a.m. and 9:00 p.m.

TABLE 10: MAXIMUM ALLOWABLE NOISE EXPOSURE – TRANSPORTATION NOISE SOURCES

Noise Sensitive Land Use (Use Types)	Outdoor Activity Areas[1] dB Ldn	Interior Spaces dB Ldn
Residential: all Housing Types and Residential Use Types	65	45
College and Trade School	65	45
Commercial Use Types not separately listed	-	45
Community Assembly/Religious Assembly	65	45
Cultural Institutions	65	45
Hospitals and Clinics	65	45
Offices	-	45
Parks and Recreation Facilities	65	45
Schools	65	45

1 Where the location of outdoor activity areas is unknown or is not applicable, the noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures.

2 Each of the noise level standards specified shall be reduced by 5 dB for impulsive noise, single tone noise, or noise consisting primarily of speech or music.

3. If the noise source operates for less than 30 minutes per hour, then the maximum sound level standard shall apply.

Source: Table 9-404.040 (Part I).

TABLE 11: MAXIMUM ALLOWABLE NOISE EXPOSURE – STATIONARY NOISE SOURCES

	Outdoor Activity Areas[1] Daytime[2] (7 a.m. to 10 p.m.)	Outdoor Activity Areas[1] Nighttime[2] (10 p.m. to 7 a.m.)
Hourly Equivalent Sound Level (Leq), dB	55	45
Maximum Sound Level (Lmax), dB	75	65

1 Where the location of outdoor activity areas is unknown or is not applicable, the noise standard shall be applied at the property line of the receiving land use. When determining the effectiveness of noise mitigation measures, the standards shall be applied on the receiving side of noise barriers or other property line noise mitigation measures.

2 Each of the noise level standards specified shall be reduced by 5 dB for impulsive noise, single tone noise, or noise consisting primarily of speech or music.

3. If the noise source operates for less than 30 minutes per hour, then the maximum sound level standard shall apply.

Source: Table 9-404.040 (Part II).

City of Tracy General Plan

Policies

P8. Measures to attenuate exterior and/or interior noise levels to acceptable levels shall be incorporated into all development projects. Acceptable, conditionally acceptable and unacceptable noise levels are presented in **Table 12** (Figure 9-3).

TABLE 12: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENT (FIGURE 9-3)

Land Use Category	Exterior Noise Exposure (L_{dn})					
	55	60	65	70	75	80
Single-Family Residential						
Multi-Family Residential, Hotels, and Motels		(a)				
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches						
Office Buildings, Business Commercial, and Professional						
Auditoriums, Concert Halls, Amphitheaters						

(a) Residential development sites exposed to noise levels exceeding 60 L_{dn} shall be analyzed following protocols in Appendix Chapter 12, Section 1208A, Sound Transmission Control, California Building Code

	NORMALLY ACCEPTABLE Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	CONDITIONALLY ACCEPTABLE Specified land use may be permitted only after detailed analysis of the noise reduction requirements and the needed noise insulation features included in the design.
	UNACCEPTABLE New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Summary of Noise Level Standards

San Joaquin County

The stationary source noise level standards apply to the warehousing and wastewater treatment plant uses proposed by the project. **Table 8** shows the San Joaquin County General Plan noise level standards applicable to stationary noise sources. The General Plan mandates a noise level standard of 50 dBA L_{eq} during daytime (7:00 a.m. to 10:00 p.m.) hours and 45 dBA L_{eq} during nighttime (10:00 p.m. to 7:00 a.m.) hours at the outdoor activity areas of residential uses. The maximum noise level standards for San Joaquin County are 70 dBA L_{max} and 65 dBA L_{max} during daytime and nighttime hours, respectively. It should be noted that the County Development Title allows for daytime noise of up to 55 dBA L_{eq} and 75 dBA L_{max}, 5 dB higher than that allowed under the General Plan standards. For this analysis, the lower standards of the General Plan will be utilized.

For transportation noise, the County applies a 65 dBA L_{dn} exterior noise standard (**Table 10**) to outdoor activity areas of residential uses.

City of Tracy General Plan

The relevant standards of the City of Tracy are shown below for receptors within the City which may be affected by the proposed proejct.

Objective N-1.1 Policies

P8. Measures to attenuate exterior and/or interior noise levels to acceptable levels shall be incorporated into all development projects. Acceptable, conditionally acceptable and unacceptable noise levels are presented in **Table 13** (Figure 9-3).

TABLE 13: LAND USE COMPATIBILITY FOR COMMUNITY NOISE ENVIRONMENT (FIGURE 9-3)

Land Use Category	Exterior Noise Exposure (L_{dn})					
	55	60	65	70	75	80
Single-Family Residential						
Multi-Family Residential, Hotels, and Motels		(a)				
Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds						
Schools, Libraries, Museums, Hospitals, Personal Care, Meeting Halls, Churches						
Office Buildings, Business Commercial, and Professional						
Auditoriums, Concert Halls, Amphitheaters						

(a) Residential development sites exposed to noise levels exceeding 60 L_{dn} shall be analyzed following protocols in Appendix Chapter 12, Section 1208A, Sound Transmission Control, California Building Code

	NORMALLY ACCEPTABLE Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.
	CONDITIONALLY ACCEPTABLE Specified land use may be permitted only after detailed analysis of the noise reduction requirements and the needed noise insulation features included in the design.
	UNACCEPTABLE New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Objective N-1.2 Policies

P2. Mitigation measures shall be required for new development projects that exceed the following criteria:

- Cause the L_{dn} at noise-sensitive uses to increase by 3 dB or more and exceed the "normally acceptable" level.
- Cause the L_{dn} at noise-sensitive uses to increase 5 dB or more and remain "normally acceptable."
- Cause new noise levels to exceed the City of Tracy Noise Ordinance limits.

P4. All construction in the vicinity of noise sensitive land uses, such as residences, hospitals, or convalescent homes, shall be limited to daylight hours or 7:00 a.m. to 7:00 p.m. In addition, the

following construction noise control measures shall be included as requirements at construction sites to minimize construction noise impacts:

- Equip all internal combustion engine-driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Locate stationary noise-generating equipment as far as possible from sensitive receptors when sensitive receptors adjoin or are near a construction area.
- Utilize "quiet" air compressors and other stationary noise sources where technology exists.

CRITERIA FOR ACCEPTABLE VIBRATION

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, whereas vibration usually consists of the excitation of a structure or surface. As with noise, vibration consists of an amplitude and frequency. A person's perception to the vibration will depend on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating.

Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration measures in terms of peak particle velocities in inches per second. Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. **Table 14**, which was developed by Caltrans, shows the vibration levels which would normally be required to result in damage to structures. The vibration levels are presented in terms of peak particle velocity in inches per second.

Table 14 indicates that the threshold for architectural damage to structures is 0.20 in/sec p.p.v. A threshold of 0.20 in/sec p.p.v. is considered to be a reasonable threshold for short-term construction projects.

TABLE 14: EFFECTS OF VIBRATION ON PEOPLE AND BUILDINGS

Peak Particle Velocity		Human Reaction	Effect on Buildings
mm/second	in/second		
0.15-0.30	0.006-0.019	Threshold of perception; possibility of intrusion	Vibrations unlikely to cause damage of any type
2.0	0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
2.5	0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of "architectural" damage to normal buildings
5.0	0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations)	Threshold at which there is a risk of "architectural" damage to normal dwelling - houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage
10-15	0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Transportation Related Earthborne Vibrations. Caltrans. TAV-02-01-R9601. February 20, 2002.

IMPACTS AND MITIGATION MEASURES

THRESHOLDS OF SIGNIFICANCE

Appendix G of the CEQA Guidelines states that a project would normally be considered to result in significant noise impacts if noise levels conflict with adopted environmental standards or plans or if noise generated by the project would substantially increase existing noise levels at sensitive receivers on a permanent or temporary basis. Significance criteria for noise impacts are drawn from CEQA Guidelines Appendix G (Items XI [a-c]).

Would the project:

a. Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Generate excessive groundborne vibration or groundborne noise levels?

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

Temporary Construction Noise Impacts

With temporary noise impacts (construction), identification of "substantial increases" depends upon the duration of the impact, the temporal daily nature of the impact, and the absolute change in decibel levels. Per the San Joaquin County Development Title, construction activities operating between 6:00 a.m. to 9:00 p.m. on any day, is exempt from the outlined noise requirements.

The City of Tracy and San Joaquin County have not adopted any formal standard for evaluating temporary construction noise which occurs within allowable hours. For short-term noise associated with Project construction, Saxelby Acoustics recommends use of the Caltrans increase criteria of 12 dBA (Caltrans Traffic Noise Protocol, 2020), applied to existing residential receptors in the project vicinity. This level of increase is approximately equivalent to a doubling of sound energy and has been the standard of significance for Caltrans projects at the state level for many years. Application of this standard to construction activities is considered reasonable considering the temporary nature of construction activities.

Noise Level Increase Criteria for Long-Term Project-Related Noise Level Increases

The California Environmental Quality Act (CEQA) guidelines define a significant impact of a project if it "increases substantially the ambient noise levels for adjoining areas." Generally, a project may have a significant effect on the environment if it will substantially increase the ambient noise levels for adjoining areas or expose people to severe noise levels. In practice, more specific professional standards have been developed. These standards state that a noise impact may be considered significant if it would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in traffic noise from the project is a factor in determining significance. Research into the human perception of changes in sound level indicates the following:

- A 3-dB change is barely perceptible,
- A 5-dB change is clearly perceptible, and
- A 10-dB change is perceived as being twice or half as loud.

A limitation of using a single noise level increase value to evaluate noise impacts is that it fails to account for pre-project noise conditions. **Table 15** is based upon recommendations made by the Federal Interagency Committee on Noise (FICON) to provide guidance in the assessment of changes in ambient noise levels resulting from aircraft operations. The recommendations are based upon studies that relate aircraft noise levels to the percentage of persons highly annoyed by the noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, it has been accepted that they are applicable to all sources of noise described in terms of cumulative noise exposure metrics such as the L_{dn}.

TABLE 15: SIGNIFICANCE OF CHANGES IN NOISE EXPOSURE

Ambient Noise Level Without Project, L_{dn}	Increase Required for Significant Impact
<60 dB	+5.0 dB or more
60-65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON).

Based on the **Table 15** data, an increase in the traffic noise level of 5 dB or more would be significant where the pre-project noise levels are less than 60 dB L_{dn}, or 3 dB or more where existing noise levels are between 60

to 65 dB L_{dn}. Extending this concept to higher noise levels, an increase in the traffic noise level of 1.5 dB or more may be significant where the pre-project traffic noise level exceeds 65 dB L_{dn}. The rationale for the **Table 15** criteria is that, as ambient noise levels increase, a smaller increase in noise resulting from a project is sufficient to cause annoyance.

It should also be noted that the City of Tracy establishes a similar test of significance. As shown above, Objective N-1.2 Policy P2 establishes 3 dB, or more, as the test of significance where noise levels would exceed the City's "normally acceptable" (60 dBA L_{dn}) exterior noise standard at residential uses. A 5 dBA, or more, limit is set where increased noise levels would remain less than the "normally acceptable" limit. In essence, this is equivalent to the FICON standards shown in **Table 15** with the exception that FICON includes a test of 1.5 dBA, or more, where exterior noise levels exceed 65 dBA L_{dn}. This is stricter than the 3 dBA test of significance for Tracy for cases where exterior noise would exceed 60 dBA L_{dn}. For simplicity, the stricter **Table 15** standards will be applied at all receptor locations in the City of Tracy or San Joaquin County.

PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES

Impact 1: ***Would the project generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

Traffic Noise Increases at Off-Site Receptors

Based upon the **Table 15** FICON criteria, where existing traffic noise levels are greater than 65 dBA L_{dn}, at the outdoor activity areas of noise-sensitive uses, a +1.5 dBA L_{dn} increase in roadway noise levels will be considered significant. Where traffic noise levels are between 60 dBA L_{dn} and 65 dBA L_{dn}, a +3.0 dB L_{dn} increase in roadway noise levels will be considered significant. Where traffic noise levels are less than 60 dBA L_{dn}, a +5.0 dB L_{dn} increase in roadway noise levels will be considered significant. Additionally, an impact would occur where the proposed project would cause noise levels to exceed the San Joaquin County 65 dBA L_{dn} exterior noise standard, or the City of Tracy 60 dBA L_{dn} exterior noise standard (for receptors within the City).

Tables 16-18 list each roadway segment and whether project-related traffic noise increases constitute a significant impact as defined by the FICON criteria, or exceedance of the local noise standard.

TABLE 16: EXISTING AND EXISTING PLUS PHASE 1 TRAFFIC NOISE LEVELS

Segment #	Roadway	Segment Description	Existing	Existing + Phase 1	Change	Local Noise Standard, Ldn	Criteria	Impact?
1	S Chrisman Rd	11th St to W Schulte Rd	71.5	72.7	1.2	65 dBA	+1.5 dBA	No
2	S Chrisman Rd	W Schulte Rd to Valpico Rd	62.2	64.0	1.8	65 dBA	+3.0 dBA or >65 dBA	No
3	S Chrisman Rd	Valpico Rd to W Linne Rd	67.5	69.4	1.9	60 dBA	+1.5 dBA	**Yes**
4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	72.6	73.0	0.4	65 dBA	+1.5 dBA	No
5	S Tracy Blvd	W Linne Rd to I-580	72.7	72.7	0.0	65 dBA	+1.5 dBA	No
6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	68.7	68.9	0.2	65 dBA	+1.5 dBA	No
7	S MacArthur Rd	W Linne Rd to Project	59.4	59.4	0.0	65 dBA	+5.0 dBA or >65 dBA	No
8	Chrisman Rd	W Linne Rd to Durham Ferry Rd	67.8	70.1	2.3	65 dBA	+1.5 dBA	**Yes**
9	S Chrisman Rd	Durham Ferry Rd to SR-132	58.3	60.6	2.3	65 dBA	+5.0 dBA or >65 dBA	No
10	Durham Ferry Rd	S Chrisman Rd to S Bird Rd	59.3	59.4	0.1	65 dBA	+5.0 dBA or >65 dBA	No
11	S. Bird	Durham Ferry Rd to SR-132	55.7	55.7	0.0	65 dBA	+5.0 dBA or >65 dBA	No
12	S Bird Rd	S Lehman Rd to Durham Ferry Rd	56.9	56.5	-0.4	65 dBA	+5.0 dBA or >65 dBA	No
13	Durham Ferry Rd	S Bird Rd to I-5	65.2	66.4	1.2	65 dBA	+1.5 dBA	No
14	W Lehman Rd	S Bird Rd to Ahern Rd	51.6	50.9	-0.7	65 dBA	+5.0 dBA or >65 dBA	No

Based upon the **Table 16** data, the proposed project Phase 1 is predicted to result in significant increases on two roadway segments, both on Chrisman Road. It should be noted that this table is for screening purposes and does not account for varying setbacks along each roadway segment. A more in-depth house-by-house analysis is discussed later in this report.

TABLE 17: EXISTING AND EXISTING PLUS PROJECT TRAFFIC NOISE LEVELS

Segment #	Roadway	Segment	Existing	Existing + Project	Change	Local Noise Standard, Ldn	Criteria	Impact?
1	S Chrisman Rd	11th St to W Schulte Rd	71.5	76.0	4.5	65 dBA	+1.5 dBA	**Yes**
2	S Chrisman Rd	W Schulte Rd to Valpico Rd	62.2	67.6	5.4	65 dBA	+3.0 dBA or >65 dBA	**Yes**
3	S Chrisman Rd	Valpico Rd to W Linne Rd	67.5	73.6	6.1	60 dBA	+1.5 dBA	**Yes**
4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	72.6	74.4	1.8	65 dBA	+1.5 dBA	**Yes**
5	S Tracy Blvd	W Linne Rd to I-580	72.7	72.7	0.0	65 dBA	+1.5 dBA	No
6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	68.7	71.4	2.7	65 dBA	+1.5 dBA	**Yes**
7	S MacArthur Rd	W Linne Rd to Project	59.4	62.2	2.8	65 dBA	+5.0 dBA or >65 dBA	No
8	Chrisman Rd	W Linne Rd to Durham Ferry Rd	67.8	74.4	6.6	65 dBA	+1.5 dBA	**Yes**
9	S Chrisman Rd	Durham Ferry Rd to SR-132	58.3	65.2	6.9	65 dBA	+5.0 dBA or >65 dBA	**Yes**
10	Durham Ferry Rd	S Chrisman Rd to S Bird Rd	59.3	64.7	5.4	65 dBA	+5.0 dBA or >65 dBA	**Yes**
11	S. Bird	Durham Ferry Rd to SR-132	55.7	56.6	0.9	65 dBA	+5.0 dBA or >65 dBA	No
12	S Bird Rd	S Lehman Rd to Durham Ferry Rd	56.9	62.2	5.3	65 dBA	+5.0 dBA or >65 dBA	**Yes**
13	Durham Ferry Rd	S Bird Rd to I-5	65.2	70.1	4.9	65 dBA	+1.5 dBA	**Yes**
14	W Lehman Rd	S Bird Rd to Ahern Rd	51.6	58.7	7.1	65 dBA	+5.0 dBA or >65 dBA	**Yes**

Based upon the **Table 17** data, the proposed project is predicted to result in significant increases on all but three roadway segments analyzed in this report. It should be noted that this table is for screening purposes and does not account for varying setbacks along each roadway segment. A more in-depth house-by-house analysis is discussed later in this report.

TABLE 18: CUMULATIVE AND CUMULATIVE PLUS PROJECT TRAFFIC NOISE LEVELS

Segment #	Roadway	Segment	Cumulative	Cumulative + Project	Change	Local Noise Standard, Ldn	Criteria	Impact?
1	S Chrisman Rd	11th St to W Schulte Rd	73.2	77.1	3.9	65 dBA	+1.5 dBA	**Yes**
2	S Chrisman Rd	W Schulte Rd to Valpico Rd	65.0	69.0	4.0	65 dBA	+1.5 dBA	**Yes**
3	S Chrisman Rd	Valpico Rd to W Linne Rd	70.7	75.2	4.5	60 dBA	+1.5 dBA	**Yes**
4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	76.9	77.8	0.9	65 dBA	+1.5 dBA	No
5	S Tracy Blvd	W Linne Rd to I-580	73.0	72.7	-0.3	65 dBA	+1.5 dBA	No
6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	71.7	73.0	1.3	65 dBA	+1.5 dBA	No
7	S MacArthur Rd	W Linne Rd to Project	59.4	62.2	2.8	65 dBA	+5.0 dBA or >65 dBA	No
8	Chrisman Rd	W Linne Rd to Durham Ferry Rd	69.4	75.1	5.7	65 dBA	+1.5 dBA	**Yes**
9	S Chrisman Rd	Durham Ferry Rd to SR-132	60.5	65.9	5.4	65 dBA	+3.0 dBA or >65 dBA	**Yes**
10	Durham Ferry Rd	S Chrisman Rd to S Bird Rd	61.2	65.1	3.9	65 dBA	+3.0 dBA or >65 dBA	**Yes**
11	Corral hollow Rd	W Linne Rd to I-580	53.7	54.8	1.1	65 dBA	+5.0 dBA or >65 dBA	No
12	S Bird Rd	S Lehman Rd to Durham Ferry Rd	61.4	64.2	2.8	65 dBA	+3.0 dBA or >65 dBA	No
13	Durham Ferry Rd	S Bird Rd to I-5	69.4	71.9	2.5	65 dBA	+1.5 dBA	**Yes**
14	W Lehman Rd	S Bird Rd to Ahern Rd	52.2	58.6	6.4	65 dBA	+5.0 dBA or >65 dBA	**Yes**

Based upon the **Table 18** data, the proposed project is predicted to result in significant increases on a total of eight roadway segments analyzed in this report, under cumulative conditions. It should be noted that this table is for screening purposes and does not account for varying setbacks along each roadway segment. A more in-depth house-by-house analysis is discussed later in this report.

In order to reduce the impact of the traffic noise increases outlined in **Tables 16-18** the use of sound walls or quiet pavement overlay would be required. Construction of new sound walls could be a potential mitigation measure. However, the majority of the impacted residential uses along the roadway segments listed above are accessed directly via driveways off the main roadway or already have installed sound walls. As such, a sound wall would require many driveway openings, resulting in partial noise barriers. These openings in the sound wall would substantially reduce the noise barrier performance. Additionally, construction of noise barriers at off-site locations would result in encroachment into private property. Such encroachment would require private property owners to allow permission to enter their property. Therefore, noise barriers are not considered to be a practical option.

Quiet pavement overlays are typically assumed to provide a 3 to 5 dBA reduction. Assuming a minimum reduction of 4 dBA, quiet pavement placed along sensitive receptors on the roadway segments predicted to see a significant increase in traffic noise levels could reduce noise level increases to a less than significant level. Due to the large number of potentially impacted receptors, Saxelby Acoustics analyzed traffic noise increases at each sensitive receptor, or groups of receptors, located along each of the roadway segments where a potentially significant impact was identified. The complete results of this analysis are provided in **Appendix D.** The following is a list of terms used in this detailed analysis:

Receiver ID:

The receiver ID represents the specific point where traffic noise levels have been analyzed. Impacted receiver points are shown on **Figures 6-8**. Some receiver points may represent more than one noise sensitive receptor where the receptors have similar noise exposure. Grouping of sensitive receptors where more than one receptor have a similar noise exposure is a common method for conducting traffic noise impact studies to minimize the number of analysis points. Please note that some receptor locations have been moved due to changes in the proposed project and may appear out of order in the tables below and some receptor numbers are not used.

Segment #:

The segment number represents the individual roadway segment along which the analyzed receptor is located. The study included a review of fourteen different roadway segments which are numbered 1-14 in **Appendix C** and in **Tables 19-21.**

Address:

This address corresponds to the location of the Receiver ID where the traffic analysis point is located.

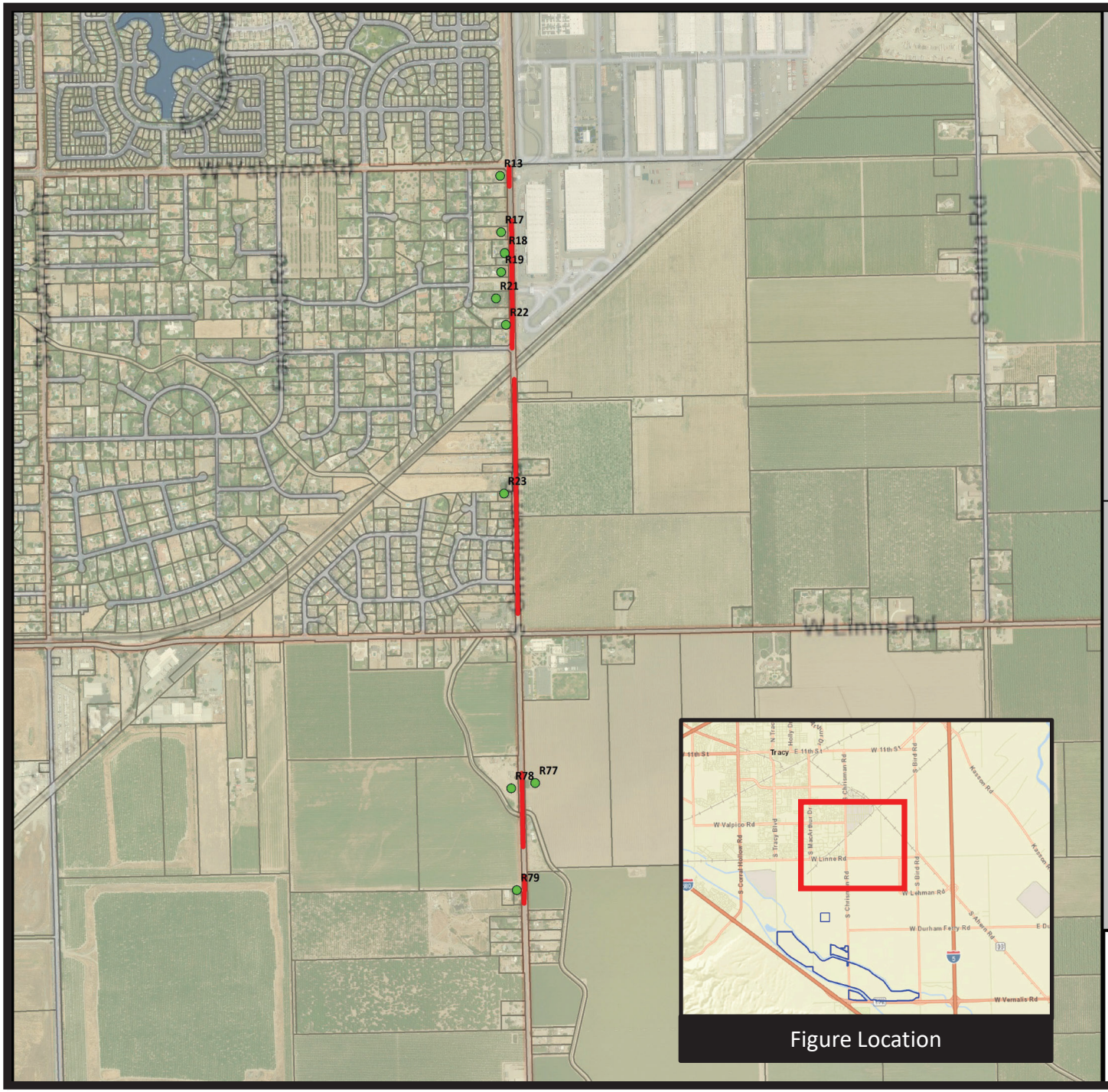
# of Sensitive Receptors Represented:

This indicates the number of unique sensitive receptors represented by the Receiver ID number.

Summary of Traffic Noise Impacts

Existing Plus Phase 1

Based upon the detailed traffic noise analysis shown in **Appendix D** it was found that under the Existing plus Phase 1 project, a total of 27 sensitive receptors were identified as impacted due to either the increase in traffic noise or the project causing noise levels to exceed the applicable San Joaquin County or City of Tracy exterior noise standards. With the use of quiet pavement, it was determined that all of these impacts could be reduced to less than significant. The total amount of quiet pavement overlay is estimated to be approximately 1 mile in total. **Figure 6** shows the locations where quiet pavement would be required under Phase 1 of the proposed project. **Table 19** shows the predicted noise levels at each receiver location under the Existing plus Phase 1 project traffic conditions.



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 6 – Existing Plus Phase 1 Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Figure Location

Legend

- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

*Figure not OCR compatible

TABLE 19: EXISTING PLUS PHASE 1 TRAFFIC NOISE IMPACT ASSESSMENT

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Phase 1, dBA L_{dn}						Existing Plus Phase 1 – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Phase 1	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R1	1	24169 S Chrisman Rd, Tracy, CA 95304	1	71.5	72.7	1.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R2	1	24301 S Chrisman Rd Unit B, Tracy, CA 95304	1	62.9	64.1	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R3	1	24353 S Chrisman Rd, Tracy, CA 95304	1	60.6	61.8	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R4	1	24591 S Chrisman Rd, Tracy, CA 95304	1	60.6	61.8	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R5	1	24711 S Chrisman Rd, Tracy, CA 95304	1	60.1	61.3	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R6	1	25023 S Chrisman Rd, Tracy, CA 95304	1	62.2	63.4	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R7	1	25079 S Chrisman Rd, Tracy, CA 95304	1	61.0	62.2	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R8	1	25111 S Chrisman Rd, Tracy, CA 95304	1	60.4	61.6	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R9	1	25288 S Chrisman Rd, Tracy, CA 95304	1	59.1	60.3	1.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R10	2	25673 S Chrisman Rd, Tracy, CA 95304	1	62.2	64.0	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R11	2	25909 S Chrisman Rd, Tracy, CA 95304	1	55.7	57.5	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R12	2	1728 Toulouse Ct, Tracy, CA 95304	29	62.2	64.0	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R13	3	27000 Hillview St, Tracy, CA 95304	1	67.5	69.4	1.9	**1.5**	No	**Yes**	-2.1	65.4	1.5	No	No
R14	3	27070 Hillview St, Tracy, CA 95304	1	60.0	61.9	1.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R15	3	27120 Hillview St, Tracy, CA 95304	1	61.2	63.1	1.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R16	3	27150 Hillview St, Tracy, CA 95304	1	61.2	63.1	1.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R17	3	27200 Hillview St, Tracy, CA 95304	1	66.5	68.4	1.9	**1.5**	No	**Yes**	-2.1	64.4	1.5	No	No
R18	3	27251 S Chrisman Rd, Tracy, CA 95304	1	69.1	71.0	1.9	**1.5**	No	**Yes**	-2.1	67.0	1.5	No	No
R19	3	27320 Hillview St, Tracy, CA 95304	1	65.9	67.8	1.9	**1.5**	No	**Yes**	-2.1	63.8	1.5	No	No

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Phase 1, dBA L_{dn}						Existing Plus Phase 1 – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Phase 1	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R20	3	22360 Walnut Ct, Tracy, CA 95304	1	60.8	62.7	1.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R21	3	27398 Walnut Ct, Tracy, CA 95304	1	63.2	65.1	1.9	3.0	**Yes**	**Yes**	-2.1	61.1	3.0	No	No
R22	3	27503 S Chrisman Rd, Tracy, CA 95304	2	69.1	71.0	1.9	**1.5**	No	**Yes**	-2.1	67.0	1.5	No	No
R23	3	27527 S Chrisman Rd, Tracy, CA 95304	15	66.8	68.7	1.9	**1.5**	No	**Yes**	-2.1	64.7	1.5	No	No
R26	4	10450 W Linne Rd, Tracy, CA 95377	1	72.6	73.0	0.4	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R27	4	10322 W Linne Rd, Tracy, CA 95377	2	59.1	59.5	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R28	4	4717 Bonsai Ave, Tracy, CA 95377	6	53.6	54.0	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R29	4	4739 Windchime Way, Tracy, CA 95377	4	60.1	60.5	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R30	4	4723 Cherub Way, Tracy, CA 95377	5	53.4	53.8	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R31	4	187 Glenhaven Dr, Tracy, CA 95377	11	52.3	52.7	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R32	4	4740 Glenbrook Dr, Tracy, CA 95377	15	53.7	54.1	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R33	4	9362 Lorraine Rd, Tracy, CA 95377	1	61.6	62.0	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R34	4	9310 Lorraine Rd, Tracy, CA 95377	1	62.5	62.9	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R35	4	9262 Lorraine Rd, Tracy, CA 95377	1	60.3	60.7	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R36	4	28455 S MacArthur Dr, Tracy, CA 95377	1	64.1	64.5	0.4	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R37	5	28700 S Tracy Blvd, Tracy, CA 95377	1	72.7	72.7	0.0	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R25	5	28584 S Tracy Blvd, Tracy, CA 95377	1	55.9	56.3	0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R38	5	28770 S Tracy Blvd, Tracy, CA 95377	1	62.9	62.9	0.0	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R39	5	6683 S Tracy Blvd, Tracy, CA 95377	1	65.5	65.5	0.0	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R40	5	30558 S Tracy Blvd, Tracy, CA 95377	1	57.5	57.5	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R41	5	30773 S Tracy Blvd, Tracy, CA 95377	1	60.5	60.5	0.0	3.0	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Phase 1, dBA L_{dn}						Existing Plus Phase 1 – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Phase 1	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R42	6	8393 W Linne Rd, Tracy, CA 95304	1	68.7	68.9	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R43	6	8806 Waterwell Way, Tracy, CA 95304	1	60.4	60.6	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R44	6	8762 Waterwell Way, Tracy, CA 95304	1	60.2	60.4	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R45	6	8738 Waterwell Way, Tracy, CA 95304	1	60.2	60.4	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R46	6	8706 Waterwell Way, Tracy, CA 95304	1	59.9	60.1	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R47	6	8672 Waterwell Way, Tracy, CA 95304	1	60.0	60.2	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R48	6	8650 Waterwell Way, Tracy, CA 95304	2	60.5	60.7	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R49	6	8556 Waterwell Way, Tracy, CA 95304	1	59.2	59.4	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R50	6	8538 Waterwell Way, Tracy, CA 95304	1	58.5	58.7	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R51	6	8512 Waterwell Way, Tracy, CA 95304	1	57.0	57.2	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R52	6	28552 S MacArthur Dr, Tracy, CA 95377	1	57.5	57.7	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R53	6	28475 Depot Master Dr, Tracy, CA 95304	1	68.3	68.5	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R54	6	28480 Depot Master Dr, Tracy, CA 95304	1	68.7	68.9	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R55	6	8120 Depot Master Ct, Tracy, CA 95304	1	68.7	68.9	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R56	6	28460 Jack Godwin Ct, Tracy, CA 95304	1	70.3	70.5	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R57	6	28443 Jack Godwin Ct, Tracy, CA 95304	1	69.2	69.4	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R58	6	28450 Jack Godwin Ct, Tracy, CA 95304	1	69.2	69.4	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R59	6	7897 W Linne Rd, Tracy, CA 95304	1	64.0	64.2	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R60	6	7860 Zilli Dr, Tracy, CA 95304	1	70.3	70.5	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R61	6	7831 W Linne Rd, Tracy, CA 95304	1	64.2	64.4	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Phase 1, dBA L_{dn}						Existing Plus Phase 1 – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Phase 1	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R62	6	7831 W Linne Rd, Tracy, CA 95304	1	70.9	71.1	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R63	6	7783 W Linne Rd, Tracy, CA 95304	1	63.7	63.9	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R64	6	7717 W Linne Rd, Tracy, CA 95304	1	62.4	62.6	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R65	6	7705 W Linne Rd, Tracy, CA 95304	1	68.3	68.5	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R66	6	7681 W Linne Rd, Tracy, CA 95304	1	65.2	65.4	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R67	6	7594 W Linne Rd, Tracy, CA 95304	1	71.7	71.9	0.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R68	6	7700 W Linne Rd, Tracy, CA 95304	1	63.1	63.3	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R69	6	7714 W Linne Rd, Tracy, CA 95304	1	59.1	59.3	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R70	6	7790 W Linne Rd, Tracy, CA 95304	1	58.9	59.1	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R71	6	7834 W Linne Rd, Tracy, CA 95304	1	59.4	59.6	0.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R72	6	7902 W Linne Rd, Tracy, CA 95304	1	62.7	62.9	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R73	6	7936 W Linne Rd, Tracy, CA 95304	1	62.2	62.4	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R74	6	8000 W Linne Rd, Tracy, CA 95304	1	60.3	60.5	0.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R75	7	28544 S MacArthur Dr, Tracy, CA 95377	1	59.4	59.4	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R76	7	30144 S MacArthur Dr, Tracy, CA 95377	1	58.3	58.3	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R77	8	7170 W Linne Rd, Tracy, CA 95304	2	67.8	70.1	2.3	**1.5**	No	**Yes**	-1.7	66.1	1.5	No	No
R78	8	28981 S Chrisman Rd, Tracy, CA 95304	1	67.5	69.8	2.3	**1.5**	No	**Yes**	-1.7	65.8	1.5	No	No
R79	8	29325 S Chrisman Rd, Tracy, CA 95304	1	69.3	71.6	2.3	**1.5**	No	**Yes**	-1.7	67.6	1.5	No	No
R80	8	29423 S Chrisman Rd, Tracy, CA 95304	1	57.2	59.5	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R81	8	29400 S Chrisman Rd, Tracy, CA 95304	1	58.0	60.3	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R82	8	29430 S Chrisman Rd, Tracy, CA 95304	1	59.9	62.2	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Phase 1, dBA L_{dn}						Existing Plus Phase 1 – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Phase 1	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R83	8	29430 S Chrisman Rd, Tracy, CA 95304	1	57.0	59.3	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R84	8	29466 S Chrisman Rd, Tracy, CA 95304	1	59.7	62.0	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R85	8	29466 S Chrisman Rd, Tracy, CA 95304	1	57.5	59.8	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R86	8	29500 S Chrisman Rd, Tracy, CA 95304	1	59.9	62.2	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R87	8	29534 S Chrisman Rd, Tracy, CA 95304	1	59.9	62.2	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R88	8	29561 S Chrisman Rd, Tracy, CA 95304	1	60.6	62.9	2.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R89	8	29879 S Chrisman Rd, Tracy, CA 95304	1	58.6	60.9	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R90	8	29929 S Chrisman Rd, Tracy, CA 95304	1	59.7	62.0	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R91	8	29750 S Chrisman Rd, Tracy, CA 95304	1	61.6	63.9	2.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R92	8	29800 S Chrisman Rd, Tracy, CA 95304	1	57.5	59.8	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R93	8	29850 S Chrisman Rd, Tracy, CA 95304	1	55.8	58.1	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R94	8	30000 S Chrisman Rd, Tracy, CA 95304	1	53.0	55.3	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R94b	8	7500 W Linne Rd, Tracy, CA 95304 (Jefferson School)	1	61.3	63.6	2.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R95	9	32851 S Chrisman Rd, Tracy, CA 95304	1	58.3	60.6	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R96	9	32951 S Chrisman Rd, Tracy, CA 95304	1	58.3	60.6	2.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R97	10	6601 Durham Ferry Rd, Tracy, CA 95304	1	59.3	59.4	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R98	10	6685 Durham Ferry Rd, Tracy, CA 95304	1	51.2	51.3	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R99	10	7060 Durham Ferry Rd, Tracy, CA 95304	1	43.8	43.9	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R100	10	6610 Durham Ferry Rd, Tracy, CA 95304	1	51.2	51.3	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R101	10	6554 Durham Ferry Rd, Tracy, CA 95304	1	49.5	49.6	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R102	10	6512 Durham Ferry Rd, Tracy, CA 95304	1	47.7	47.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Phase 1, dBA L_{dn}						Existing Plus Phase 1 – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Phase 1	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R103	10	6500 Durham Ferry Rd, Tracy, CA 95304	1	48.0	48.1	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R104	10	6410 Durham Ferry Rd, Tracy, CA 95304	1	46.9	47.0	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R105	10	6368 Durham Ferry Rd, Tracy, CA 95304	1	46.7	46.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R106	10	6312 Durham Ferry Rd, Tracy, CA 95304	1	47.1	47.2	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R107	10	6120 Durham Ferry Rd, Tracy, CA 95304	1	44.7	44.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R108	10	5922 Durham Ferry Rd, Tracy, CA 95304	1	50.2	50.3	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R109	10	5850 Durham Ferry Rd, Tracy, CA 95304	1	51.4	51.5	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R110	10	5850 Durham Ferry Rd, Tracy, CA 95304	1	52.8	52.9	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R111	10	5801 Durham Ferry Rd, Tracy, CA 95304	1	50.8	50.9	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R112	10	5700 Durham Ferry Rd, Tracy, CA 95304	1	48.9	49.0	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R113	10	5366 Durham Ferry Rd, Tracy, CA 95304	1	44.3	44.4	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R114	10	5404 Durham Ferry Rd, Tracy, CA 95304	1	48.7	48.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R115	10	5613 Durham Ferry Rd, Tracy, CA 95304	1	45.2	45.3	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R116	10	5392 Durham Ferry Rd, Tracy, CA 95304	1	48.6	48.7	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R117	10	5336 Durham Ferry Rd, Tracy, CA 95304	1	47.5	47.6	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R118	10	30751 S Bird Rd, Tracy, CA 95304	1	51.7	51.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R119	10	4952 Durham Ferry Rd, Tracy, CA 95304	1	46.4	46.5	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R120	10	4911 Durham Ferry Rd, Tracy, CA 95304	1	50.1	50.2	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R121	10	4952 Durham Ferry Rd, Tracy, CA 95304	1	43.1	43.2	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R122	10	4876 Durham Ferry Rd, Tracy, CA 95304	1	48.3	48.4	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R123	10	4873 Durham Ferry Rd, Tracy, CA 95304	1	52.6	52.7	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R124	10	4820 Durham Ferry Rd, Tracy, CA 95304	1	48.7	48.8	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Phase 1, dBA L_{dn}						Existing Plus Phase 1 – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Phase 1	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R125	10	4699 Durham Ferry Rd, Tracy, CA 95304	1	50.1	50.2	0.1	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R127	12	31154 S Bird Rd, Tracy, CA 95304	2	56.9	56.5	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R128	12	31069 S Bird Rd, Tracy, CA 95304	1	53.3	52.9	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R129	12	30920 S Bird Rd, Tracy, CA 95304	1	51.3	50.9	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R130	12	30908 S Bird Rd, Tracy, CA 95304	1	53.5	53.1	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R131	12	30830 S Bird Rd, Tracy, CA 95304	1	52.4	52.0	-0.4	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R132a	13	4447 Durham Ferry Rd, Tracy, CA 95304	1	65.2	66.4	1.2	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R132b	13	4303 Durham Ferry Rd, Tracy, CA 95304	1	60.7	61.9	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R133	13	4001 Durham Ferry Rd, Tracy, CA 95304	1	61.7	62.9	1.2	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R134	13	3652 Durham Ferry Rd, Tracy, CA 95304	1	49.1	50.3	1.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R135	13	3652 Durham Ferry Rd, Tracy, CA 95304	1	53.4	54.6	1.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R136	13	3081 Durham Ferry Rd, Tracy, CA 95304	1	54.7	55.9	1.2	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R137	14	4494 W Lehman Rd, Tracy, CA 95304	1	51.6	50.9	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R138	14	3994 W Lehman Rd, Tracy, CA 95304	1	39.7	39.0	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R139	14	3656 W Lehman Rd, Tracy, CA 95304	1	40.2	39.5	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R140	14	3545 W Lehman Rd, Tracy, CA 95304	1	43.6	42.9	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R141	14	3350 W Lehman Rd, Tracy, CA 95304	1	46.8	46.1	-0.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
								Total Impacted Receiver Points, without Mitigation:	10	Total Impacted Receiver Points, with Mitigation				0
								Total Impacted Receptors, without Mitigation:	27	Total Impacted Receptors, with Mitigation				0

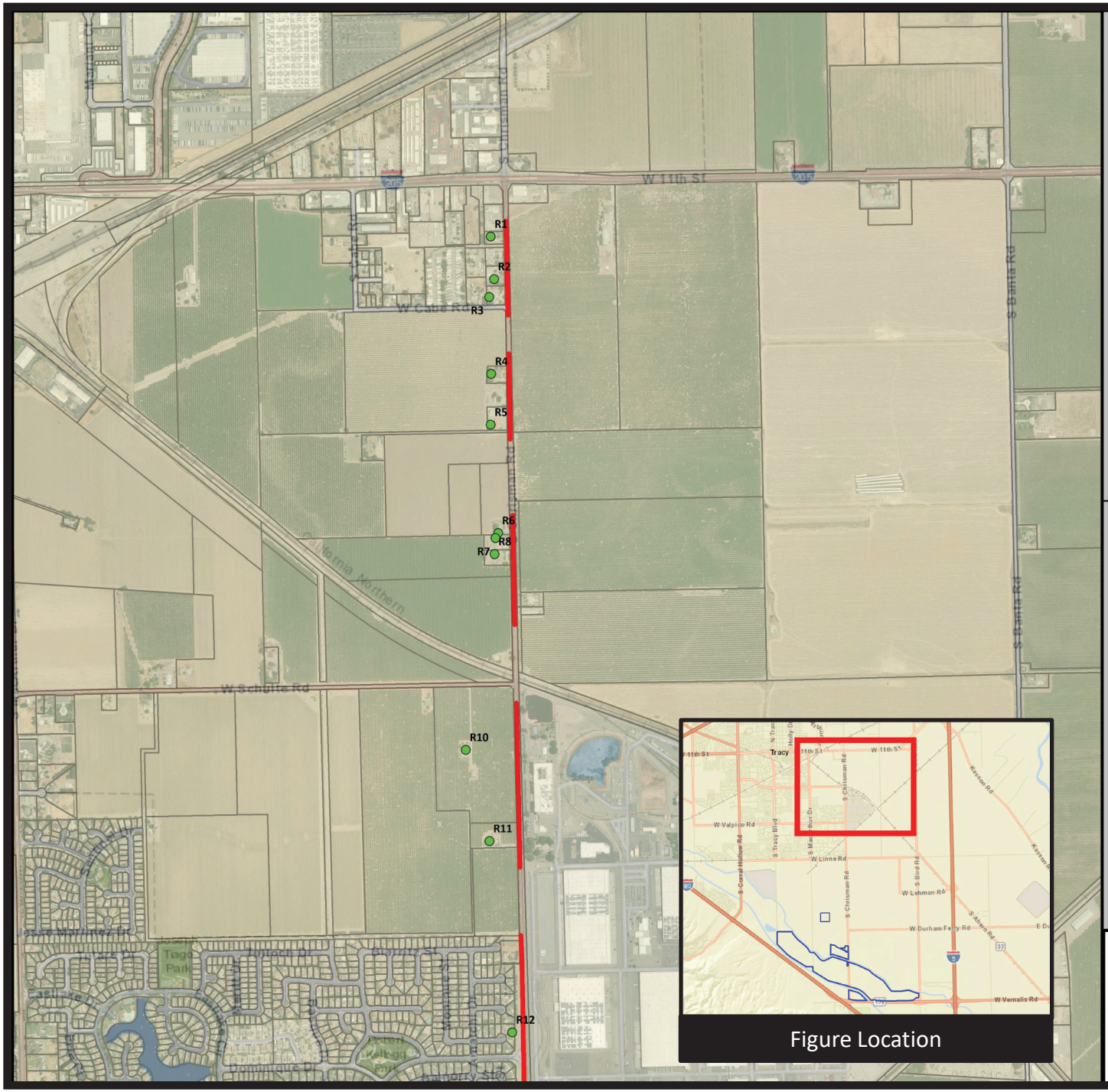
[1] Please note that some receptor locations have been moved due to changes in the proposed project and may appear out of order and some receptor numbers are not used.
Note: **Bold** indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Existing Plus Full Project Buildout

Based upon the detailed traffic noise analysis shown in **Appendix D** it was found that under the Existing plus full project buildout, a total of 150 sensitive receptors were identified as impacted due to either the increase in traffic noise or the project causing noise levels to exceed the applicable San Joaquin County or City of Tracy exterior noise standards. With the use of quiet pavement, it was determined that all but 27 of these impacts could be reduced to less than significant. The total amount of quiet pavement is estimated to be approximately 6.9 miles in total.

For example, approximately 29 receptors along Durham Ferry Road are predicted to experience an increase in traffic noise levels of approximately 5.4 dBA under existing plus full project buildout. With the use of quiet pavement this increase is predicted to be reduced to 1.4 dBA and would be less than significant.

However, 27 sensitive receptors along S. Chrisman Road would have significant unavoidable impacts due to increased traffic noise. The 27 sensitive receptors are predicted to have mitigated exterior noise levels ranging between 65.3 to 71.9 dBA L_{dn}. **Figure 7** shows the locations where quiet pavement would be required under existing plus full project buildout, as well as which receptors would remain significant after mitigation. **Table 20** shows the predicted noise levels at each receiver location under the Existing plus project traffic conditions.



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 7A – Existing Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

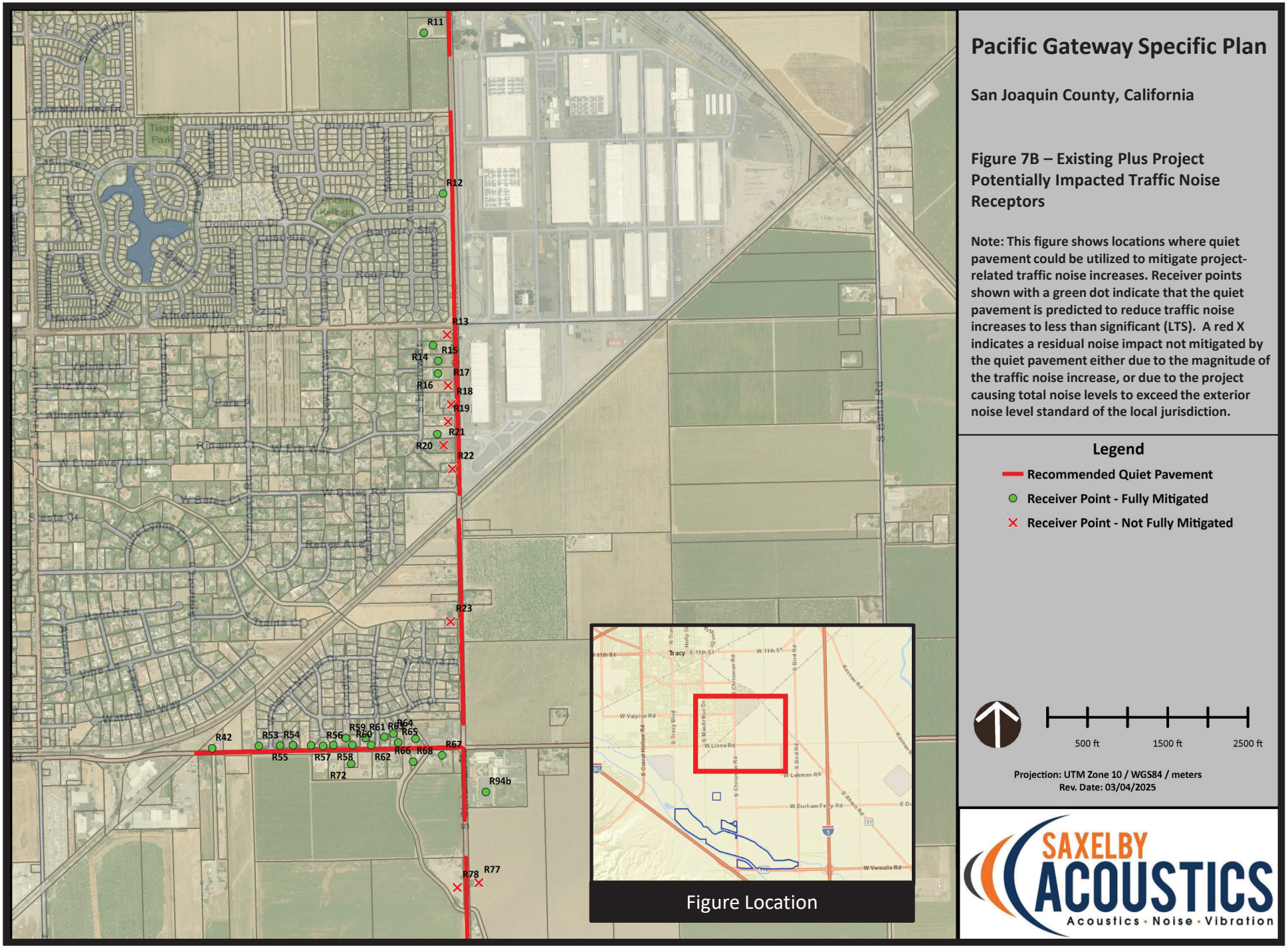
- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

*Figure not OCR compatible



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 7B – Existing Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated
- Receiver Point - Not Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

SAXELBY ACOUSTICS
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*Figure not OCR compatible

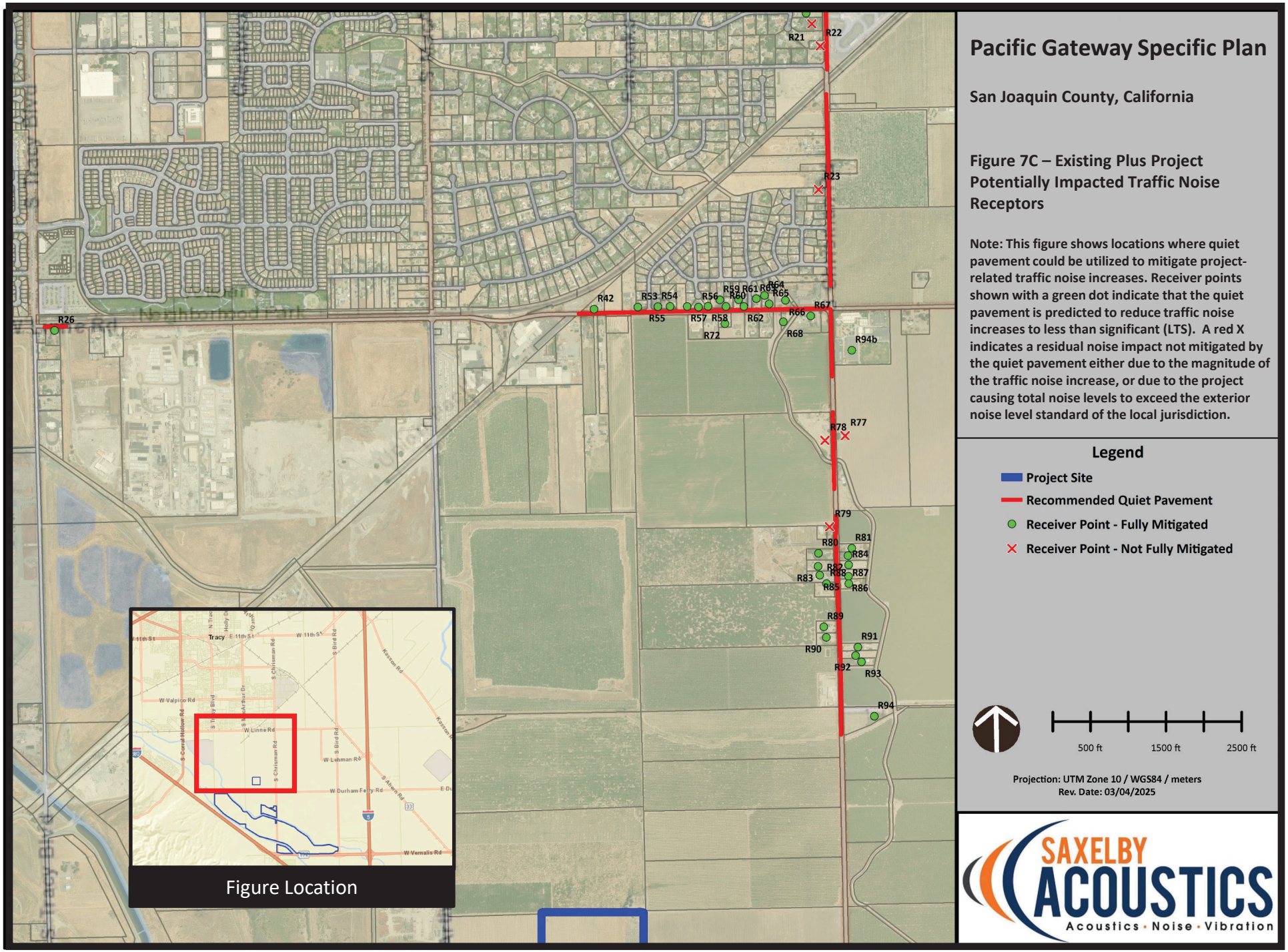
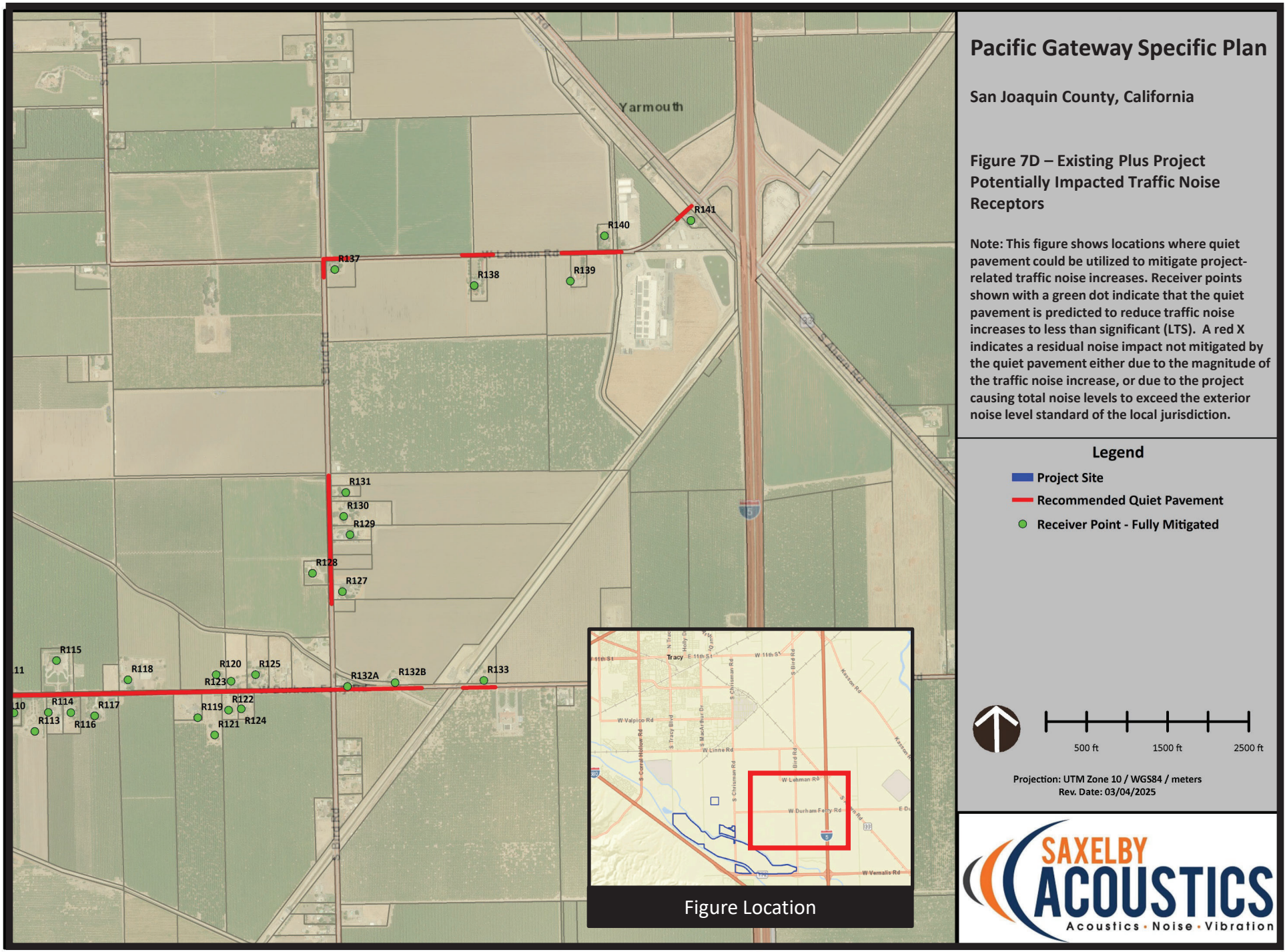


*Figure not OCR compatible



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 7D – Existing Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

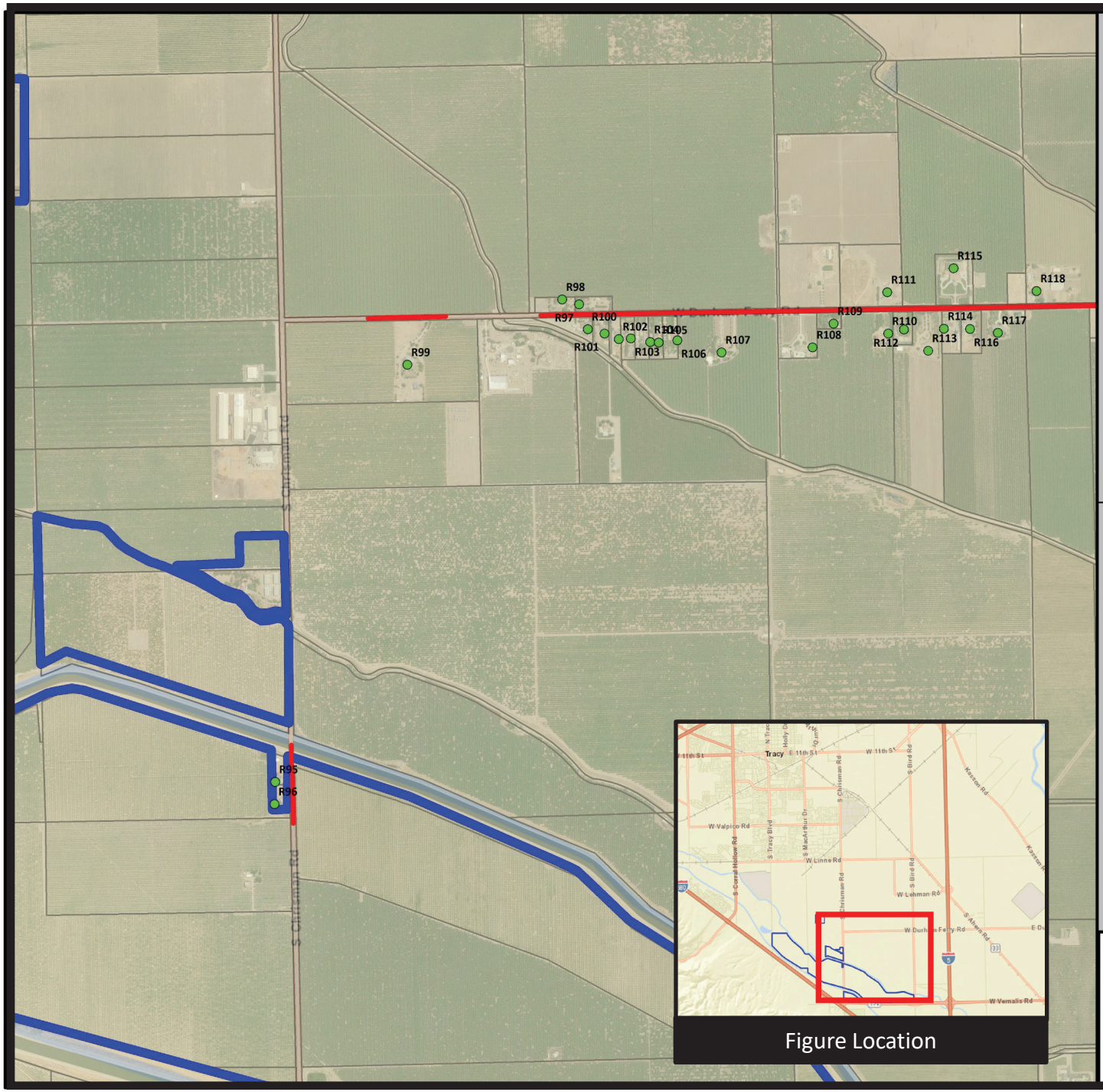
- Project Site
- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

SAXELBY ACOUSTICS
Acoustics · Noise · Vibration

*Figure not OCR compatible



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 7E – Existing Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

- Project Site
- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

SAXELBY ACOUSTICS
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*Figure not OCR compatible

TABLE 20: EXISTING PLUS PROJECT TRAFFIC NOISE IMPACT ASSESSMENT

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Project, dBA L_{dn}						Existing Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R1	1	24169 S Chrisman Rd, Tracy, CA 95304	1	71.5	76.0	4.5	**1.5**	No	**Yes**	0.5	72.0	1.5	No	No
R2	1	24301 S Chrisman Rd Unit B, Tracy, CA 95304	1	62.9	67.4	4.5	**3.0**	**Yes**	**Yes**	0.5	63.4	3.0	No	No
R3	1	24353 S Chrisman Rd, Tracy, CA 95304	1	60.6	65.1	4.5	**3.0**	**Yes**	**Yes**	0.5	61.1	3.0	No	No
R4	1	24591 S Chrisman Rd, Tracy, CA 95304	1	60.6	65.1	4.5	**3.0**	**Yes**	**Yes**	0.5	61.1	3.0	No	No
R5	1	24711 S Chrisman Rd, Tracy, CA 95304	1	60.1	64.6	4.5	**3.0**	No	**Yes**	0.5	60.6	3.0	No	No
R6	1	25023 S Chrisman Rd, Tracy, CA 95304	1	62.2	66.7	4.5	**3.0**	**Yes**	**Yes**	0.5	62.7	3.0	No	No
R7	1	25079 S Chrisman Rd, Tracy, CA 95304	1	61.0	65.5	4.5	**3.0**	**Yes**	**Yes**	0.5	61.5	3.0	No	No
R8	1	25111 S Chrisman Rd, Tracy, CA 95304	1	60.4	64.9	4.5	**3.0**	No	**Yes**	0.5	60.9	3.0	No	No
R9	1	25288 S Chrisman Rd, Tracy, CA 95304	1	59.1	63.6	4.5	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R10	2	25673 S Chrisman Rd, Tracy, CA 95304	1	62.2	67.6	5.4	**3.0**	**Yes**	**Yes**	1.4	63.6	3.0	No	No
R11	2	25909 S Chrisman Rd, Tracy, CA 95304	1	55.7	61.1	5.4	**5.0**	No	**Yes**	1.4	57.1	5.0	No	No
R12	2	1728 Toulouse Ct, Tracy, CA 95304	29	62.2	67.6	5.4	**3.0**	No	**Yes**	1.4	63.6	3.0	No	No
R13	3	27000 Hillview St, Tracy, CA 95304	1	67.5	73.6	6.1	**1.5**	No	**Yes**	2.1	69.6	**1.5**	No	**Yes**
R14	3	27070 Hillview St, Tracy, CA 95304	1	60.0	66.1	6.1	**5.0**	**Yes**	**Yes**	2.1	62.1	5.0	No	No
R15	3	27120 Hillview St, Tracy, CA 95304	1	61.2	67.3	6.1	**3.0**	**Yes**	**Yes**	2.1	63.3	3.0	No	No
R16	3	27150 Hillview St, Tracy, CA 95304	1	61.2	67.3	6.1	**3.0**	**Yes**	**Yes**	2.1	63.3	3.0	No	No
R17	3	27200 Hillview St, Tracy, CA 95304	1	66.5	72.6	6.1	**1.5**	No	**Yes**	2.1	68.6	**1.5**	No	**Yes**
R18	3	27251 S Chrisman Rd, Tracy, CA 95304	1	69.1	75.2	6.1	**1.5**	No	**Yes**	2.1	71.2	**1.5**	No	**Yes**
R19	3	27320 Hillview St, Tracy, CA 95304	1	65.9	72.0	6.1	**1.5**	No	**Yes**	2.1	68.0	**1.5**	No	**Yes**
R20	3	22360 Walnut Ct, Tracy, CA 95304	1	60.8	66.9	6.1	**3.0**	**Yes**	**Yes**	2.1	62.9	3.0	No	No

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Project, dBA L_{dn}						Existing Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R21	3	27398 Walnut Ct, Tracy, CA 95304	1	63.2	69.3	6.1	**3.0**	**Yes**	**Yes**	2.1	65.3	3.0	**Yes**	**Yes**
R22	3	27503 S Chrisman Rd, Tracy, CA 95304	2	69.1	75.2	6.1	**1.5**	No	**Yes**	2.1	71.2	**1.5**	No	**Yes**
R23	3	27527 S Chrisman Rd, Tracy, CA 95304	15	66.8	72.9	6.1	**1.5**	No	**Yes**	2.1	68.9	**1.5**	No	**Yes**
R26	4	10450 W Linne Rd, Tracy, CA 95377	1	72.6	74.4	1.8	**1.5**	No	**Yes**	-2.2	70.4	1.5	No	No
R27	4	10322 W Linne Rd, Tracy, CA 95377	2	59.1	60.9	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R28	4	4717 Bonsai Ave, Tracy, CA 95377	6	53.6	55.4	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R29	4	4739 Windchime Way, Tracy, CA 95377	4	60.1	61.9	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R30	4	4723 Cherub Way, Tracy, CA 95377	5	53.4	55.2	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R31	4	187 Glenhaven Dr, Tracy, CA 95377	11	52.3	54.1	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R32	4	4740 Glenbrook Dr, Tracy, CA 95377	15	53.7	55.5	1.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R33	4	9362 Lorraine Rd, Tracy, CA 95377	1	61.6	63.4	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R34	4	9310 Lorraine Rd, Tracy, CA 95377	1	62.5	64.3	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R35	4	9262 Lorraine Rd, Tracy, CA 95377	1	60.3	62.1	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R36	4	28455 S MacArthur Dr, Tracy, CA 95377	1	64.1	65.9	1.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R37	5	28700 S Tracy Blvd, Tracy, CA 95377	1	72.7	72.7	0.0	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R25	5	28584 S Tracy Blvd, Tracy, CA 95377	1	55.9	56.0	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R38	5	28770 S Tracy Blvd, Tracy, CA 95377	1	62.9	62.9	0.0	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R39	5	6683 S Tracy Blvd, Tracy, CA 95377	1	65.5	65.5	0.0	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R40	5	30558 S Tracy Blvd, Tracy, CA 95377	1	57.5	57.5	0.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R41	5	30773 S Tracy Blvd, Tracy, CA 95377	1	60.5	60.5	0.0	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R42	6	8393 W Linne Rd, Tracy, CA 95304	1	68.7	71.4	2.7	**1.5**	No	**Yes**	-1.3	67.4	1.5	No	No

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Project, dBA L_{dn}						Existing Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R43	6	8806 Waterwell Way, Tracy, CA 95304	1	60.4	63.1	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R44	6	8762 Waterwell Way, Tracy, CA 95304	1	60.2	62.9	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R45	6	8738 Waterwell Way, Tracy, CA 95304	1	60.2	62.9	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R46	6	8706 Waterwell Way, Tracy, CA 95304	1	59.9	62.6	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R47	6	8672 Waterwell Way, Tracy, CA 95304	1	60.0	62.7	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R48	6	8650 Waterwell Way, Tracy, CA 95304	2	60.5	63.2	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R49	6	8556 Waterwell Way, Tracy, CA 95304	1	59.2	61.9	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R50	6	8538 Waterwell Way, Tracy, CA 95304	1	58.5	61.2	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R51	6	8512 Waterwell Way, Tracy, CA 95304	1	57.0	59.7	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R52	6	28552 S MacArthur Dr, Tracy, CA 95377	1	57.5	60.2	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R53	6	28475 Depot Master Dr, Tracy, CA 95304	1	68.3	71.0	2.7	**1.5**	No	**Yes**	-1.3	67.0	1.5	No	No
R54	6	28480 Depot Master Dr, Tracy, CA 95304	1	68.7	71.4	2.7	**1.5**	No	**Yes**	-1.3	67.4	1.5	No	No
R55	6	8120 Depot Master Ct, Tracy, CA 95304	1	68.7	71.4	2.7	**1.5**	No	**Yes**	-1.3	67.4	1.5	No	No
R56	6	28460 Jack Godwin Ct, Tracy, CA 95304	1	70.3	73.0	2.7	**1.5**	No	**Yes**	-1.3	69.0	1.5	No	No
R57	6	28443 Jack Godwin Ct, Tracy, CA 95304	1	69.2	71.9	2.7	**1.5**	No	**Yes**	-1.3	67.9	1.5	No	No
R58	6	28450 Jack Godwin Ct, Tracy, CA 95304	1	69.2	71.9	2.7	**1.5**	No	**Yes**	-1.3	67.9	1.5	No	No
R59	6	7897 W Linne Rd, Tracy, CA 95304	1	64.0	66.7	2.7	3.0	**Yes**	**Yes**	-1.3	62.7	3.0	No	No
R60	6	7860 Zilli Dr, Tracy, CA 95304	1	70.3	73.0	2.7	**1.5**	No	**Yes**	-1.3	69.0	1.5	No	No
R61	6	7831 W Linne Rd, Tracy, CA 95304	1	64.2	66.9	2.7	3.0	**Yes**	**Yes**	-1.3	62.9	3.0	No	No
R62	6	7831 W Linne Rd, Tracy, CA 95304	1	70.9	73.6	2.7	**1.5**	No	**Yes**	-1.3	69.6	1.5	No	No
R63	6	7783 W Linne Rd, Tracy, CA 95304	1	63.7	66.4	2.7	3.0	**Yes**	**Yes**	-1.3	62.4	3.0	No	No

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Project, dBA L_{dn}						Existing Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R64	6	7717 W Linne Rd, Tracy, CA 95304	1	62.4	65.1	2.7	3.0	**Yes**	**Yes**	-1.3	61.1	3.0	No	No
R65	6	7705 W Linne Rd, Tracy, CA 95304	1	68.3	71.0	2.7	**1.5**	No	**Yes**	-1.3	67.0	1.5	No	No
R66	6	7681 W Linne Rd, Tracy, CA 95304	1	65.2	67.9	2.7	**1.5**	No	**Yes**	-1.3	63.9	1.5	No	No
R67	6	7594 W Linne Rd, Tracy, CA 95304	1	71.7	74.4	2.7	**1.5**	No	**Yes**	-1.3	70.4	1.5	No	No
R68	6	7700 W Linne Rd, Tracy, CA 95304	1	63.1	65.8	2.7	3.0	**Yes**	**Yes**	-1.3	61.8	3.0	No	No
R69	6	7714 W Linne Rd, Tracy, CA 95304	1	59.1	61.8	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R70	6	7790 W Linne Rd, Tracy, CA 95304	1	58.9	61.6	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R71	6	7834 W Linne Rd, Tracy, CA 95304	1	59.4	62.1	2.7	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R72	6	7902 W Linne Rd, Tracy, CA 95304	1	62.7	65.4	2.7	3.0	**Yes**	**Yes**	-1.3	61.4	3.0	No	No
R73	6	7936 W Linne Rd, Tracy, CA 95304	1	62.2	64.9	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R74	6	8000 W Linne Rd, Tracy, CA 95304	1	60.3	63.0	2.7	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R75	7	28544 S MacArthur Dr, Tracy, CA 95377	1	59.4	62.2	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R76	7	30144 S MacArthur Dr, Tracy, CA 95377	1	58.3	61.1	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R77	8	7170 W Linne Rd, Tracy, CA 95304	2	67.8	74.4	6.6	**1.5**	No	**Yes**	2.6	70.4	**1.5**	No	**Yes**
R78	8	28981 S Chrisman Rd, Tracy, CA 95304	1	67.5	74.1	6.6	**1.5**	No	**Yes**	2.6	70.1	**1.5**	No	**Yes**
R79	8	29325 S Chrisman Rd, Tracy, CA 95304	1	69.3	75.9	6.6	**1.5**	No	**Yes**	2.6	71.9	**1.5**	No	**Yes**
R80	8	29423 S Chrisman Rd, Tracy, CA 95304	1	57.2	63.8	6.6	**5.0**	No	**Yes**	2.6	59.8	5.0	No	No
R81	8	29400 S Chrisman Rd, Tracy, CA 95304	1	58.0	64.6	6.6	**5.0**	No	**Yes**	2.6	60.6	5.0	No	No
R82	8	29430 S Chrisman Rd, Tracy, CA 95304	1	59.9	66.5	6.6	**5.0**	**Yes**	**Yes**	2.6	62.5	5.0	No	No
R83	8	29430 S Chrisman Rd, Tracy, CA 95304	1	57.0	63.6	6.6	**5.0**	No	**Yes**	2.6	59.6	5.0	No	No
R84	8	29466 S Chrisman Rd, Tracy, CA 95304	1	59.7	66.3	6.6	**5.0**	**Yes**	**Yes**	2.6	62.3	5.0	No	No

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Project, dBA L_{dn}						Existing Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R85	8	29466 S Chrisman Rd, Tracy, CA 95304	1	57.5	64.1	6.6	**5.0**	No	**Yes**	2.6	60.1	5.0	No	No
R86	8	29500 S Chrisman Rd, Tracy, CA 95304	1	59.9	66.5	6.6	**5.0**	**Yes**	**Yes**	2.6	62.5	5.0	No	No
R87	8	29534 S Chrisman Rd, Tracy, CA 95304	1	59.9	66.5	6.6	**5.0**	**Yes**	**Yes**	2.6	62.5	5.0	No	No
R88	8	29561 S Chrisman Rd, Tracy, CA 95304	1	60.6	67.2	6.6	**3.0**	**Yes**	**Yes**	2.6	63.2	3.0	No	No
R89	8	29879 S Chrisman Rd, Tracy, CA 95304	1	58.6	65.2	6.6	**5.0**	**Yes**	**Yes**	2.6	61.2	5.0	No	No
R90	8	29929 S Chrisman Rd, Tracy, CA 95304	1	59.7	66.3	6.6	**5.0**	**Yes**	**Yes**	2.6	62.3	5.0	No	No
R91	8	29750 S Chrisman Rd, Tracy, CA 95304	1	61.6	68.2	6.6	**3.0**	**Yes**	**Yes**	2.6	64.2	3.0	No	No
R92	8	29800 S Chrisman Rd, Tracy, CA 95304	1	57.5	64.1	6.6	**5.0**	No	**Yes**	2.6	60.1	5.0	No	No
R93	8	29850 S Chrisman Rd, Tracy, CA 95304	1	55.8	62.4	6.6	**5.0**	No	**Yes**	2.6	58.4	5.0	No	No
R94	8	30000 S Chrisman Rd, Tracy, CA 95304	1	53.0	59.6	6.6	**5.0**	No	**Yes**	2.6	55.6	5.0	No	No
R94b	8	7500 W Linne Rd, Tracy, CA 95304 (Jefferson School)	1	61.3	67.9	6.6	**3.0**	**Yes**	**Yes**	2.6	63.9	3.0	No	No
R95	9	32851 S Chrisman Rd, Tracy, CA 95304	1	58.3	65.2	6.9	**5.0**	**Yes**	**Yes**	2.9	61.2	5.0	No	No
R96	9	32951 S Chrisman Rd, Tracy, CA 95304	1	58.3	65.2	6.9	**5.0**	**Yes**	**Yes**	2.9	61.2	5.0	No	No
R97	10	6601 Durham Ferry Rd, Tracy, CA 95304	1	59.3	64.7	5.4	**5.0**	No	**Yes**	1.4	60.7	5.0	No	No
R98	10	6685 Durham Ferry Rd, Tracy, CA 95304	1	51.2	56.6	5.4	**5.0**	No	**Yes**	1.4	52.6	5.0	No	No
R99	10	7060 Durham Ferry Rd, Tracy, CA 95304	1	43.8	49.2	5.4	**5.0**	No	**Yes**	1.4	45.2	5.0	No	No
R100	10	6610 Durham Ferry Rd, Tracy, CA 95304	1	51.2	56.6	5.4	**5.0**	No	**Yes**	1.4	52.6	5.0	No	No
R101	10	6554 Durham Ferry Rd, Tracy, CA 95304	1	49.5	54.9	5.4	**5.0**	No	**Yes**	1.4	50.9	5.0	No	No
R102	10	6512 Durham Ferry Rd, Tracy, CA 95304	1	47.7	53.1	5.4	**5.0**	No	**Yes**	1.4	49.1	5.0	No	No
R103	10	6500 Durham Ferry Rd, Tracy, CA 95304	1	48.0	53.4	5.4	**5.0**	No	**Yes**	1.4	49.4	5.0	No	No
R104	10	6410 Durham Ferry Rd, Tracy, CA 95304	1	46.9	52.3	5.4	**5.0**	No	**Yes**	1.4	48.3	5.0	No	No

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Project, dBA L_{dn}						Existing Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R105	10	6368 Durham Ferry Rd, Tracy, CA 95304	1	46.7	52.1	5.4	**5.0**	No	**Yes**	1.4	48.1	5.0	No	No
R106	10	6312 Durham Ferry Rd, Tracy, CA 95304	1	47.1	52.5	5.4	**5.0**	No	**Yes**	1.4	48.5	5.0	No	No
R107	10	6120 Durham Ferry Rd, Tracy, CA 95304	1	44.7	50.1	5.4	**5.0**	No	**Yes**	1.4	46.1	5.0	No	No
R108	10	5922 Durham Ferry Rd, Tracy, CA 95304	1	50.2	55.6	5.4	**5.0**	No	**Yes**	1.4	51.6	5.0	No	No
R109	10	5850 Durham Ferry Rd, Tracy, CA 95304	1	51.4	56.8	5.4	**5.0**	No	**Yes**	1.4	52.8	5.0	No	No
R110	10	5850 Durham Ferry Rd, Tracy, CA 95304	1	52.8	58.2	5.4	**5.0**	No	**Yes**	1.4	54.2	5.0	No	No
R111	10	5801 Durham Ferry Rd, Tracy, CA 95304	1	50.8	56.2	5.4	**5.0**	No	**Yes**	1.4	52.2	5.0	No	No
R112	10	5700 Durham Ferry Rd, Tracy, CA 95304	1	48.9	54.3	5.4	**5.0**	No	**Yes**	1.4	50.3	5.0	No	No
R113	10	5366 Durham Ferry Rd, Tracy, CA 95304	1	44.3	49.7	5.4	**5.0**	No	**Yes**	1.4	45.7	5.0	No	No
R114	10	5404 Durham Ferry Rd, Tracy, CA 95304	1	48.7	54.1	5.4	**5.0**	No	**Yes**	1.4	50.1	5.0	No	No
R115	10	5613 Durham Ferry Rd, Tracy, CA 95304	1	45.2	50.6	5.4	**5.0**	No	**Yes**	1.4	46.6	5.0	No	No
R116	10	5392 Durham Ferry Rd, Tracy, CA 95304	1	48.6	54.0	5.4	**5.0**	No	**Yes**	1.4	50.0	5.0	No	No
R117	10	5336 Durham Ferry Rd, Tracy, CA 95304	1	47.5	52.9	5.4	**5.0**	No	**Yes**	1.4	48.9	5.0	No	No
R118	10	30751 S Bird Rd, Tracy, CA 95304	1	51.7	57.1	5.4	**5.0**	No	**Yes**	1.4	53.1	5.0	No	No
R119	10	4952 Durham Ferry Rd, Tracy, CA 95304	1	46.4	51.8	5.4	**5.0**	No	**Yes**	1.4	47.8	5.0	No	No
R120	10	4911 Durham Ferry Rd, Tracy, CA 95304	1	50.1	55.5	5.4	**5.0**	No	**Yes**	1.4	51.5	5.0	No	No
R121	10	4952 Durham Ferry Rd, Tracy, CA 95304	1	43.1	48.5	5.4	**5.0**	No	**Yes**	1.4	44.5	5.0	No	No
R122	10	4876 Durham Ferry Rd, Tracy, CA 95304	1	48.3	53.7	5.4	**5.0**	No	**Yes**	1.4	49.7	5.0	No	No
R123	10	4873 Durham Ferry Rd, Tracy, CA 95304	1	52.6	58.0	5.4	**5.0**	No	**Yes**	1.4	54.0	5.0	No	No
R124	10	4820 Durham Ferry Rd, Tracy, CA 95304	1	48.7	54.1	5.4	**5.0**	No	**Yes**	1.4	50.1	5.0	No	No
R125	10	4699 Durham Ferry Rd, Tracy, CA 95304	1	50.1	55.5	5.4	**5.0**	No	**Yes**	1.4	51.5	5.0	No	No

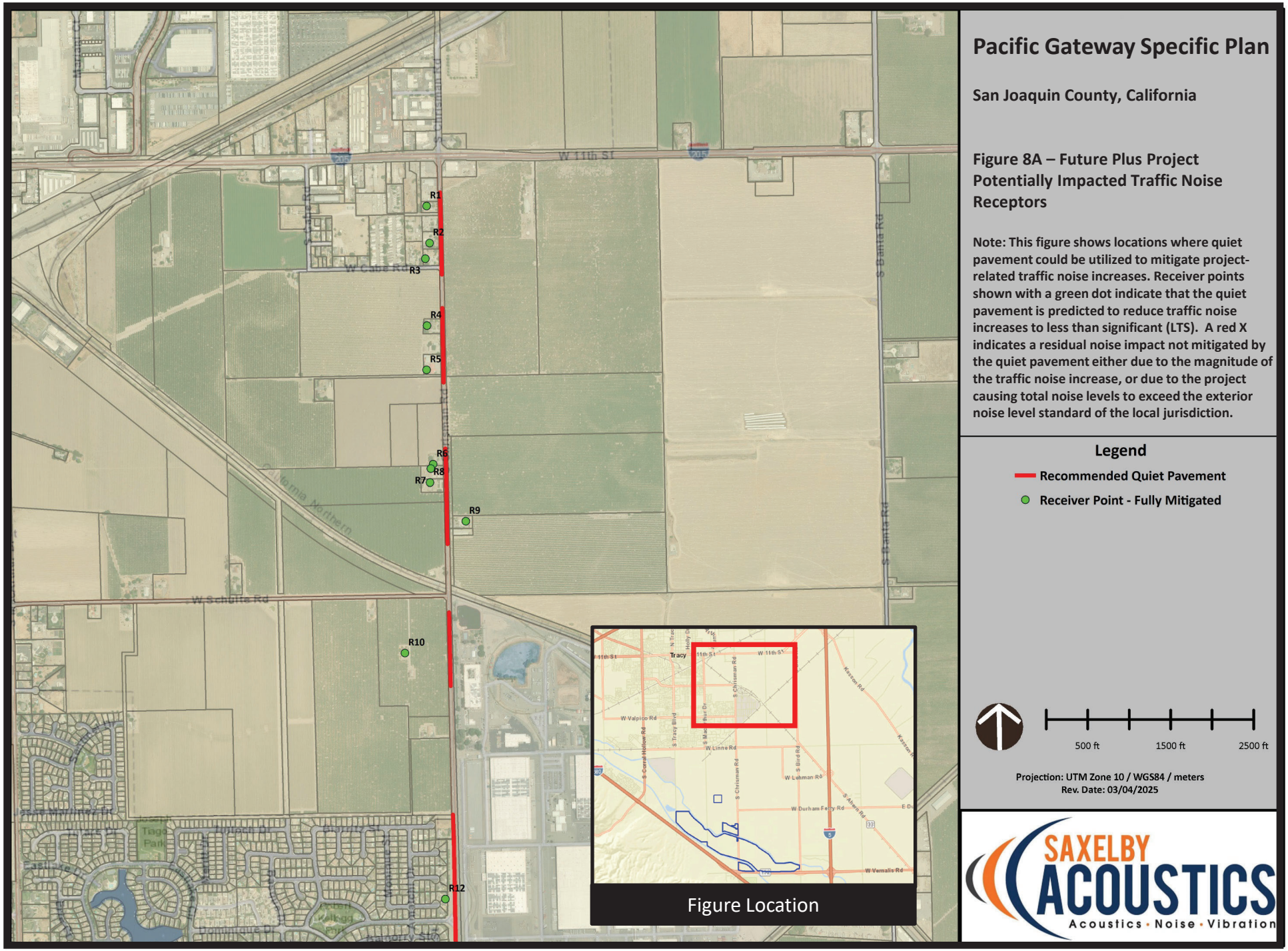
Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Existing Plus Project, dBA L_{dn}						Existing Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Existing	Existing Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R127	12	31154 S Bird Rd, Tracy, CA 95304	2	56.9	62.2	5.3	**5.0**	No	**Yes**	1.3	58.2	5.0	No	No
R128	12	31069 S Bird Rd, Tracy, CA 95304	1	53.3	58.6	5.3	**5.0**	No	**Yes**	1.3	54.6	5.0	No	No
R129	12	30920 S Bird Rd, Tracy, CA 95304	1	51.3	56.6	5.3	**5.0**	No	**Yes**	1.3	52.6	5.0	No	No
R130	12	30908 S Bird Rd, Tracy, CA 95304	1	53.5	58.8	5.3	**5.0**	No	**Yes**	1.3	54.8	5.0	No	No
R131	12	30830 S Bird Rd, Tracy, CA 95304	1	52.4	57.7	5.3	**5.0**	No	**Yes**	1.3	53.7	5.0	No	No
R132a	13	4447 Durham Ferry Rd, Tracy, CA 95304	1	65.2	70.1	4.9	**1.5**	No	**Yes**	0.9	66.1	1.5	No	No
R132b	13	4303 Durham Ferry Rd, Tracy, CA 95304	1	60.7	65.6	4.9	**3.0**	**Yes**	**Yes**	0.9	61.6	3.0	No	No
R133	13	4001 Durham Ferry Rd, Tracy, CA 95304	1	61.7	66.6	4.9	**3.0**	**Yes**	**Yes**	0.9	62.6	3.0	No	No
R134	13	3652 Durham Ferry Rd, Tracy, CA 95304	1	49.1	54.0	4.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R135	13	3652 Durham Ferry Rd, Tracy, CA 95304	1	53.4	58.3	4.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R136	13	3081 Durham Ferry Rd, Tracy, CA 95304	1	54.7	59.6	4.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R137	14	4494 W Lehman Rd, Tracy, CA 95304	1	51.6	58.7	7.1	**5.0**	No	**Yes**	3.1	54.7	5.0	No	No
R138	14	3994 W Lehman Rd, Tracy, CA 95304	1	39.7	46.8	7.1	**5.0**	No	**Yes**	3.1	42.8	5.0	No	No
R139	14	3656 W Lehman Rd, Tracy, CA 95304	1	40.2	47.3	7.1	**5.0**	No	**Yes**	3.1	43.3	5.0	No	No
R140	14	3545 W Lehman Rd, Tracy, CA 95304	1	43.6	50.7	7.1	**5.0**	No	**Yes**	3.1	46.7	5.0	No	No
R141	14	3350 W Lehman Rd, Tracy, CA 95304	1	46.8	53.9	7.1	**5.0**	No	**Yes**	3.1	49.9	5.0	No	No
Total Impacted Receiver Points, without Mitigation:									104	Total Impacted Receiver Points, with Mitigation				10
Total Impacted Receptors, without Mitigation:									150	Total Impacted Receptors, with Mitigation				27

[1] Please note that some receptor locations have been moved due to changes in the proposed project and may appear out of order and some receptor numbers are not used.
Note: **Bold** indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Cumulative Plus Full Project Buildout

Based upon the detailed traffic noise analysis shown in **Appendix D** it was found that under the Cumulative plus full project buildout, a total of 97 sensitive receptors were identified as impacted due to either the increase in traffic noise or the project causing noise levels to exceed the applicable San Joaquin County or City of Tracy exterior noise standards. With the use of quiet pavement, it was determined that 93 of these impacts could be reduced to less than significant. The total amount of quiet pavement is estimated to be approximately 4.2 miles in total. For example, approximately 40 receptors along S. Chrisman Road are predicted to experience an increase in traffic noise levels of approximately 3.9 to 5.7 dBA under cumulative plus full project buildout conditions. With the use of quiet pavement this increase is predicted to be reduced to less than 1.7 dBA and would be less than significant.

However, four sensitive receptors would experience significant unavoidable impacts due to increased traffic noise. These receptors would see increases in noise of 1.7 dBA after installation of quiet pavement and would experience exterior noise levels of 70.8 to 72.6 dBA Ldn. **Figure 8** shows the locations where quiet pavement would be required under cumulative plus full project buildout, as well as which receptors would remain significant after mitigation. **Table 21** shows the predicted noise levels at each receiver location under the Cumulative plus project traffic conditions.



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 8A – Future Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

SAXELBY ACOUSTICS
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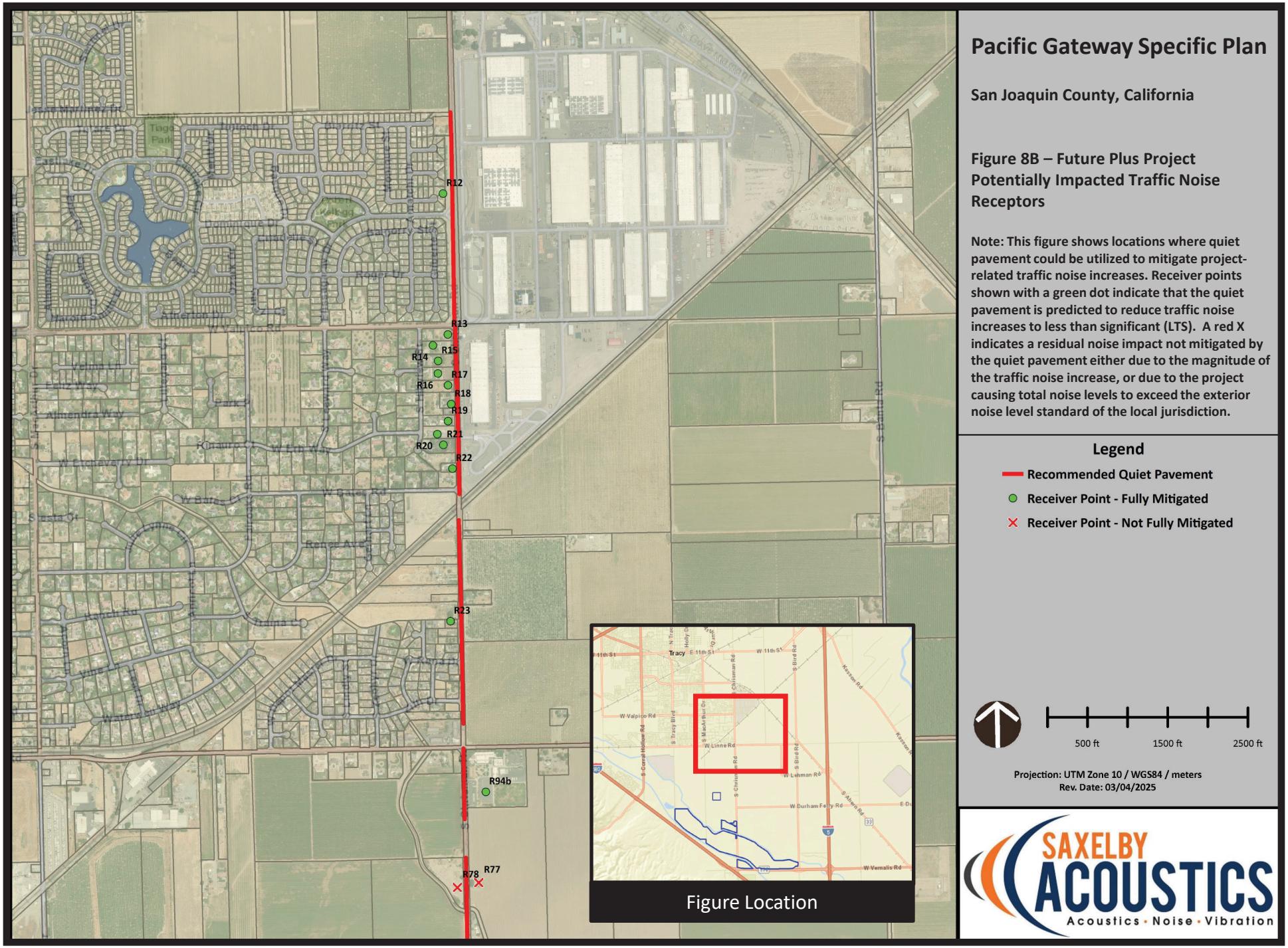
*Figure not OCR compatible



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 8B – Future Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated
- Receiver Point - Not Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

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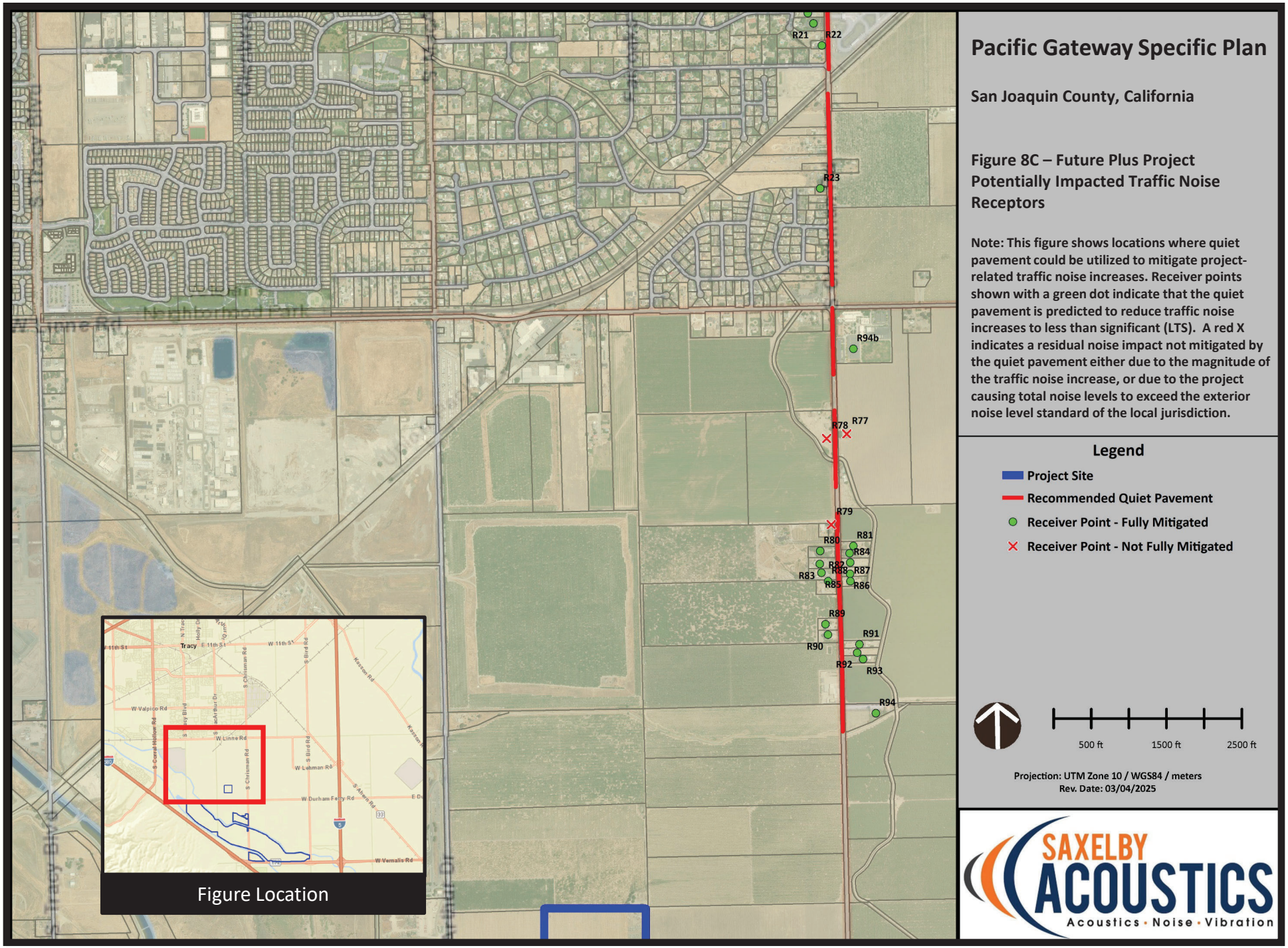
*Figure not OCR compatible



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 8C – Future Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

- Project Site
- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated
- Receiver Point - Not Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

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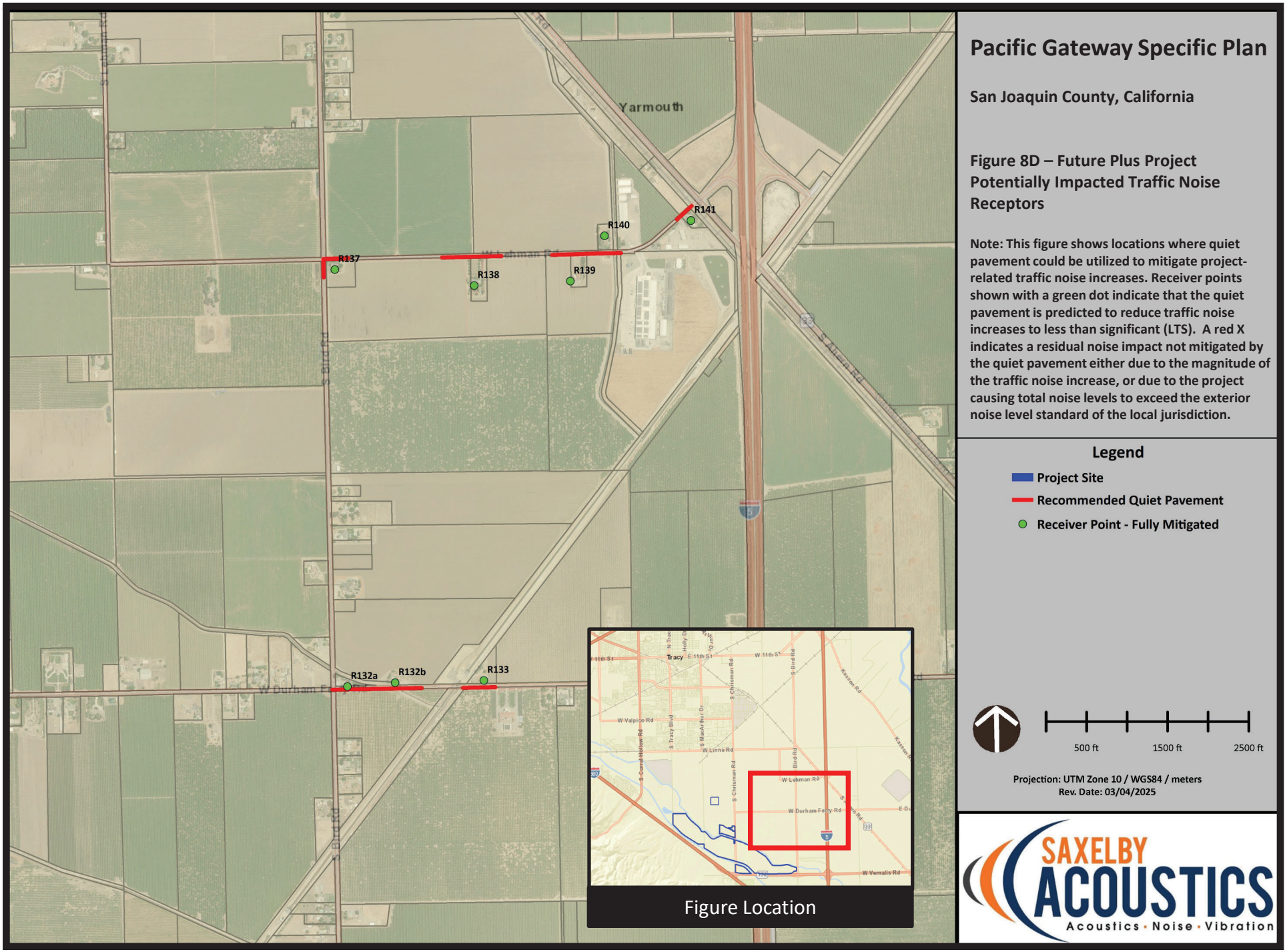
*Figure not OCR compatible



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 8D – Future Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

- Project Site
- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

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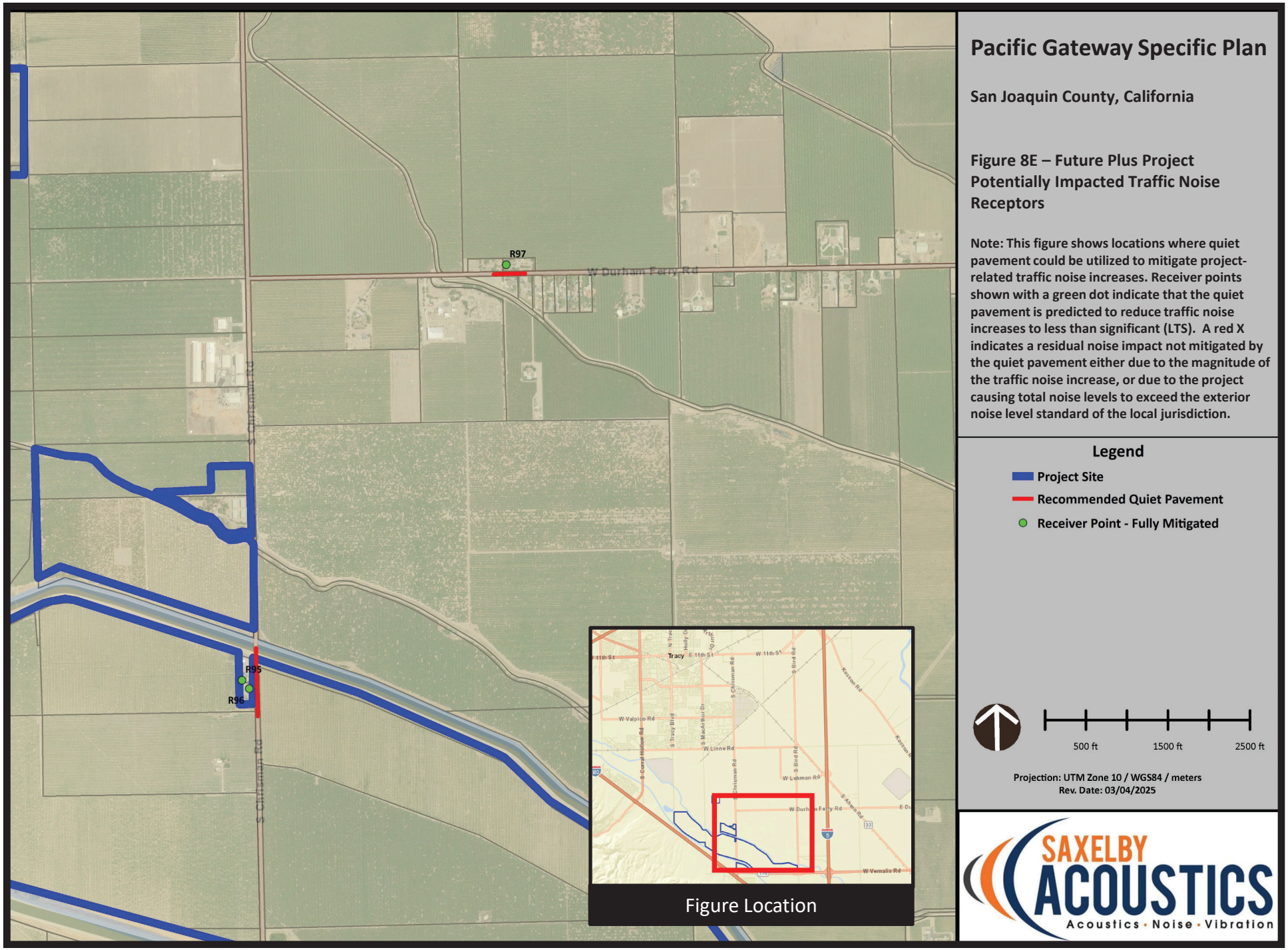
*Figure not OCR compatible



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 8E – Future Plus Project Potentially Impacted Traffic Noise Receptors

Note: This figure shows locations where quiet pavement could be utilized to mitigate project-related traffic noise increases. Receiver points shown with a green dot indicate that the quiet pavement is predicted to reduce traffic noise increases to less than significant (LTS). A red X indicates a residual noise impact not mitigated by the quiet pavement either due to the magnitude of the traffic noise increase, or due to the project causing total noise levels to exceed the exterior noise level standard of the local jurisdiction.

Legend

- Project Site
- Recommended Quiet Pavement
- Receiver Point - Fully Mitigated

500 ft 1500 ft 2500 ft

Projection: UTM Zone 10 / WGS84 / meters
Rev. Date: 03/04/2025

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*Figure not OCR compatible

TABLE 21: CUMULATIVE PLUS PROJECT TRAFFIC NOISE IMPACT ASSESSMENT

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Project, dBA L_{dn}						Cumulative Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Cumulative	Cumulative Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R1	1	24169 S Chrisman Rd, Tracy, CA 95304	1	73.2	77.1	3.9	**1.5**	No	**Yes**	-0.1	73.1	1.5	No	No
R2	1	24301 S Chrisman Rd Unit B, Tracy, CA 95304	1	64.6	68.5	3.9	**3.0**	**Yes**	**Yes**	-0.1	64.5	3.0	No	No
R3	1	24353 S Chrisman Rd, Tracy, CA 95304	1	62.3	66.2	3.9	**3.0**	**Yes**	**Yes**	-0.1	62.2	3.0	No	No
R4	1	24591 S Chrisman Rd, Tracy, CA 95304	1	62.3	66.2	3.9	**3.0**	**Yes**	**Yes**	-0.1	62.2	3.0	No	No
R5	1	24711 S Chrisman Rd, Tracy, CA 95304	1	61.8	65.7	3.9	**3.0**	**Yes**	**Yes**	-0.1	61.7	3.0	No	No
R6	1	25023 S Chrisman Rd, Tracy, CA 95304	1	63.9	67.8	3.9	**3.0**	**Yes**	**Yes**	-0.1	63.8	3.0	No	No
R7	1	25079 S Chrisman Rd, Tracy, CA 95304	1	62.7	66.6	3.9	**3.0**	**Yes**	**Yes**	-0.1	62.6	3.0	No	No
R8	1	25111 S Chrisman Rd, Tracy, CA 95304	1	62.1	66.0	3.9	**3.0**	**Yes**	**Yes**	-0.1	62.0	3.0	No	No
R9	1	25288 S Chrisman Rd, Tracy, CA 95304	1	60.8	64.7	3.9	**3.0**	No	**Yes**	-0.1	60.7	3.0	No	No
R10	2	25673 S Chrisman Rd, Tracy, CA 95304	1	65.0	69.0	4.0	**3.0**	No	**Yes**	0.0	65.0	3.0	No	No
R11	2	25909 S Chrisman Rd, Tracy, CA 95304	1	58.5	62.5	4.0	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R12	2	1728 Toulouse Ct, Tracy, CA 95304	29	65.0	69.0	4.0	**3.0**	No	**Yes**	0.0	65.0	3.0	No	No
R13	3	27000 Hillview St, Tracy, CA 95304	1	70.7	75.2	4.5	**1.5**	No	**Yes**	0.5	71.2	1.5	No	No
R14	3	27070 Hillview St, Tracy, CA 95304	1	63.2	67.7	4.5	**3.0**	**Yes**	**Yes**	0.5	63.7	3.0	No	No
R15	3	27120 Hillview St, Tracy, CA 95304	1	64.4	68.9	4.5	**3.0**	**Yes**	**Yes**	0.5	64.9	3.0	No	No
R16	3	27150 Hillview St, Tracy, CA 95304	1	64.4	68.9	4.5	**3.0**	**Yes**	**Yes**	0.5	64.9	3.0	No	No
R17	3	27200 Hillview St, Tracy, CA 95304	1	69.7	74.2	4.5	**1.5**	No	**Yes**	0.5	70.2	1.5	No	No
R18	3	27251 S Chrisman Rd, Tracy, CA 95304	1	72.3	76.8	4.5	**1.5**	No	**Yes**	0.5	72.8	1.5	No	No

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Project, dBA L_{dn}						Cumulative Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Cumulative	Cumulative Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R19	3	27320 Hillview St, Tracy, CA 95304	1	69.1	73.6	4.5	**1.5**	No	**Yes**	0.5	69.6	1.5	No	No
R20	3	22360 Walnut Ct, Tracy, CA 95304	1	64.0	68.5	4.5	**3.0**	**Yes**	**Yes**	0.5	64.5	3.0	No	No
R21	3	27398 Walnut Ct, Tracy, CA 95304	1	66.4	70.9	4.5	**1.5**	No	**Yes**	0.5	66.9	1.5	No	No
R22	3	27503 S Chrisman Rd, Tracy, CA 95304	2	72.3	76.8	4.5	**1.5**	No	**Yes**	0.5	72.8	1.5	No	No
R23	3	27527 S Chrisman Rd, Tracy, CA 95304	15	70.0	74.5	4.5	**1.5**	No	**Yes**	0.5	70.5	1.5	No	No
R26	4	10450 W Linne Rd, Tracy, CA 95377	1	76.9	77.8	0.9	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R27	4	10322 W Linne Rd, Tracy, CA 95377	2	63.4	64.3	0.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R28	4	4717 Bonsai Ave, Tracy, CA 95377	6	57.9	58.8	0.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R29	4	4739 Windchime Way, Tracy, CA 95377	4	64.4	65.3	0.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R30	4	4723 Cherub Way, Tracy, CA 95377	5	57.7	58.6	0.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R31	4	187 Glenhaven Dr, Tracy, CA 95377	11	56.6	57.5	0.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R32	4	4740 Glenbrook Dr, Tracy, CA 95377	15	58.0	58.9	0.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R33	4	9362 Lorraine Rd, Tracy, CA 95377	1	65.9	66.8	0.9	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R34	4	9310 Lorraine Rd, Tracy, CA 95377	1	66.8	67.7	0.9	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R35	4	9262 Lorraine Rd, Tracy, CA 95377	1	64.6	65.5	0.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R36	4	28455 S MacArthur Dr, Tracy, CA 95377	1	68.4	69.3	0.9	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R37	5	28700 S Tracy Blvd, Tracy, CA 95377	1	73.0	72.7	-0.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R25	5	28584 S Tracy Blvd, Tracy, CA 95377	1	60.2	61.1	0.9	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R38	5	28770 S Tracy Blvd, Tracy, CA 95377	1	63.2	62.9	-0.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R39	5	6683 S Tracy Blvd, Tracy, CA 95377	1	65.8	65.5	-0.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Project, dBA L_{dn}						Cumulative Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Cumulative	Cumulative Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R40	5	30558 S Tracy Blvd, Tracy, CA 95377	1	57.8	57.5	-0.3	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R41	5	30773 S Tracy Blvd, Tracy, CA 95377	1	60.8	60.5	-0.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R42	6	8393 W Linne Rd, Tracy, CA 95304	1	71.7	73.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R43	6	8806 Waterwell Way, Tracy, CA 95304	1	63.4	64.7	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R44	6	8762 Waterwell Way, Tracy, CA 95304	1	63.2	64.5	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R45	6	8738 Waterwell Way, Tracy, CA 95304	1	63.2	64.5	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R46	6	8706 Waterwell Way, Tracy, CA 95304	1	62.9	64.2	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R47	6	8672 Waterwell Way, Tracy, CA 95304	1	63.0	64.3	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R48	6	8650 Waterwell Way, Tracy, CA 95304	2	63.5	64.8	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R49	6	8556 Waterwell Way, Tracy, CA 95304	1	62.2	63.5	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R50	6	8538 Waterwell Way, Tracy, CA 95304	1	61.5	62.8	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R51	6	8512 Waterwell Way, Tracy, CA 95304	1	60.0	61.3	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R52	6	28552 S MacArthur Dr, Tracy, CA 95377	1	60.5	61.8	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R53	6	28475 Depot Master Dr, Tracy, CA 95304	1	71.3	72.6	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R54	6	28480 Depot Master Dr, Tracy, CA 95304	1	71.7	73.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R55	6	8120 Depot Master Ct, Tracy, CA 95304	1	71.7	73.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R56	6	28460 Jack Godwin Ct, Tracy, CA 95304	1	73.3	74.6	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R57	6	28443 Jack Godwin Ct, Tracy, CA 95304	1	72.2	73.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R58	6	28450 Jack Godwin Ct, Tracy, CA 95304	1	72.2	73.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R59	6	7897 W Linne Rd, Tracy, CA 95304	1	67.0	68.3	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Project, dBA L_{dn}						Cumulative Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Cumulative	Cumulative Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R60	6	7860 Zilli Dr, Tracy, CA 95304	1	73.3	74.6	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R61	6	7831 W Linne Rd, Tracy, CA 95304	1	67.2	68.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R62	6	7831 W Linne Rd, Tracy, CA 95304	1	73.9	75.2	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R63	6	7783 W Linne Rd, Tracy, CA 95304	1	66.7	68.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R64	6	7717 W Linne Rd, Tracy, CA 95304	1	65.4	66.7	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R65	6	7705 W Linne Rd, Tracy, CA 95304	1	71.3	72.6	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R66	6	7681 W Linne Rd, Tracy, CA 95304	1	68.2	69.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R67	6	7594 W Linne Rd, Tracy, CA 95304	1	74.7	76.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R68	6	7700 W Linne Rd, Tracy, CA 95304	1	66.1	67.4	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R69	6	7714 W Linne Rd, Tracy, CA 95304	1	62.1	63.4	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R70	6	7790 W Linne Rd, Tracy, CA 95304	1	61.9	63.2	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R71	6	7834 W Linne Rd, Tracy, CA 95304	1	62.4	63.7	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R72	6	7902 W Linne Rd, Tracy, CA 95304	1	65.7	67.0	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R73	6	7936 W Linne Rd, Tracy, CA 95304	1	65.2	66.5	1.3	1.5	No	No	N/A	N/A	N/A	N/A	N/A
R74	6	8000 W Linne Rd, Tracy, CA 95304	1	63.3	64.6	1.3	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R75	7	28544 S MacArthur Dr, Tracy, CA 95377	1	59.4	62.2	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R76	7	30144 S MacArthur Dr, Tracy, CA 95377	1	58.3	61.1	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R77	8	7170 W Linne Rd, Tracy, CA 95304	2	69.4	75.1	5.7	**1.5**	No	**Yes**	1.7	71.1	**1.5**	No	**Yes**
R78	8	28981 S Chrisman Rd, Tracy, CA 95304	1	69.1	74.8	5.7	**1.5**	No	**Yes**	1.7	70.8	**1.5**	No	**Yes**
R79	8	29325 S Chrisman Rd, Tracy, CA 95304	1	70.9	76.6	5.7	**1.5**	No	**Yes**	1.7	72.6	**1.5**	No	**Yes**

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Project, dBA L_{dn}						Cumulative Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Cumulative	Cumulative Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R80	8	29423 S Chrisman Rd, Tracy, CA 95304	1	58.8	64.5	5.7	**5.0**	No	**Yes**	1.7	60.5	5.0	No	No
R81	8	29400 S Chrisman Rd, Tracy, CA 95304	1	59.6	65.3	5.7	**5.0**	**Yes**	**Yes**	1.7	61.3	5.0	No	No
R82	8	29430 S Chrisman Rd, Tracy, CA 95304	1	61.5	67.2	5.7	**3.0**	**Yes**	**Yes**	1.7	63.2	3.0	No	No
R83	8	29430 S Chrisman Rd, Tracy, CA 95304	1	58.6	64.3	5.7	**5.0**	No	**Yes**	1.7	60.3	5.0	No	No
R84	8	29466 S Chrisman Rd, Tracy, CA 95304	1	61.3	67.0	5.7	**3.0**	**Yes**	**Yes**	1.7	63.0	3.0	No	No
R85	8	29466 S Chrisman Rd, Tracy, CA 95304	1	59.1	64.8	5.7	**5.0**	No	**Yes**	1.7	60.8	5.0	No	No
R86	8	29500 S Chrisman Rd, Tracy, CA 95304	1	61.5	67.2	5.7	**3.0**	**Yes**	**Yes**	1.7	63.2	3.0	No	No
R87	8	29534 S Chrisman Rd, Tracy, CA 95304	1	61.5	67.2	5.7	**3.0**	**Yes**	**Yes**	1.7	63.2	3.0	No	No
R88	8	29561 S Chrisman Rd, Tracy, CA 95304	1	62.2	67.9	5.7	**3.0**	**Yes**	**Yes**	1.7	63.9	3.0	No	No
R89	8	29879 S Chrisman Rd, Tracy, CA 95304	1	60.2	65.9	5.7	**3.0**	**Yes**	**Yes**	1.7	61.9	3.0	No	No
R90	8	29929 S Chrisman Rd, Tracy, CA 95304	1	61.3	67.0	5.7	**3.0**	**Yes**	**Yes**	1.7	63.0	3.0	No	No
R91	8	29750 S Chrisman Rd, Tracy, CA 95304	1	63.2	68.9	5.7	**3.0**	**Yes**	**Yes**	1.7	64.9	3.0	No	No
R92	8	29800 S Chrisman Rd, Tracy, CA 95304	1	59.1	64.8	5.7	**5.0**	No	**Yes**	1.7	60.8	5.0	No	No
R93	8	29850 S Chrisman Rd, Tracy, CA 95304	1	57.4	63.1	5.7	**5.0**	No	**Yes**	1.7	59.1	5.0	No	No
R94	8	30000 S Chrisman Rd, Tracy, CA 95304	1	54.6	60.3	5.7	**5.0**	No	**Yes**	1.7	56.3	5.0	No	No
R94b	8	7500 W Linne Rd, Tracy, CA 95304 (Jefferson School)	1	62.9	68.6	5.7	**3.0**	Yes	**Yes**	1.7	64.6	3.0	No	No
R95	9	32851 S Chrisman Rd, Tracy, CA 95304	1	60.5	65.9	5.4	**3.0**	**Yes**	**Yes**	1.4	61.9	3.0	No	No
R96	9	32951 S Chrisman Rd, Tracy, CA 95304	1	60.5	65.9	5.4	**3.0**	**Yes**	**Yes**	1.4	61.9	3.0	No	No
R97	10	6601 Durham Ferry Rd, Tracy, CA 95304	1	61.2	65.1	3.9	**3.0**	**Yes**	**Yes**	-0.1	61.1	3.0	No	No
R98	10	6685 Durham Ferry Rd, Tracy, CA 95304	1	53.1	57.0	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Project, dBA L_{dn}						Cumulative Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Cumulative	Cumulative Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R99	10	7060 Durham Ferry Rd, Tracy, CA 95304	1	45.7	49.6	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R100	10	6610 Durham Ferry Rd, Tracy, CA 95304	1	53.1	57.0	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R101	10	6554 Durham Ferry Rd, Tracy, CA 95304	1	51.4	55.3	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R102	10	6512 Durham Ferry Rd, Tracy, CA 95304	1	49.6	53.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R103	10	6500 Durham Ferry Rd, Tracy, CA 95304	1	49.9	53.8	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R104	10	6410 Durham Ferry Rd, Tracy, CA 95304	1	48.8	52.7	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R105	10	6368 Durham Ferry Rd, Tracy, CA 95304	1	48.6	52.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R106	10	6312 Durham Ferry Rd, Tracy, CA 95304	1	49.0	52.9	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R107	10	6120 Durham Ferry Rd, Tracy, CA 95304	1	46.6	50.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R108	10	5922 Durham Ferry Rd, Tracy, CA 95304	1	52.1	56.0	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R109	10	5850 Durham Ferry Rd, Tracy, CA 95304	1	53.3	57.2	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R110	10	5850 Durham Ferry Rd, Tracy, CA 95304	1	54.7	58.6	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R111	10	5801 Durham Ferry Rd, Tracy, CA 95304	1	52.7	56.6	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R112	10	5700 Durham Ferry Rd, Tracy, CA 95304	1	50.8	54.7	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R113	10	5366 Durham Ferry Rd, Tracy, CA 95304	1	46.2	50.1	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R114	10	5404 Durham Ferry Rd, Tracy, CA 95304	1	50.6	54.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R115	10	5613 Durham Ferry Rd, Tracy, CA 95304	1	47.1	51.0	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R116	10	5392 Durham Ferry Rd, Tracy, CA 95304	1	50.5	54.4	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R117	10	5336 Durham Ferry Rd, Tracy, CA 95304	1	49.4	53.3	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R118	10	30751 S Bird Rd, Tracy, CA 95304	1	53.6	57.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R119	10	4952 Durham Ferry Rd, Tracy, CA 95304	1	48.3	52.2	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Project, dBA L_{dn}						Cumulative Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Cumulative	Cumulative Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R120	10	4911 Durham Ferry Rd, Tracy, CA 95304	1	52.0	55.9	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R121	10	4952 Durham Ferry Rd, Tracy, CA 95304	1	45.0	48.9	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R122	10	4876 Durham Ferry Rd, Tracy, CA 95304	1	50.2	54.1	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R123	10	4873 Durham Ferry Rd, Tracy, CA 95304	1	54.5	58.4	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R124	10	4820 Durham Ferry Rd, Tracy, CA 95304	1	50.6	54.5	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R125	10	4699 Durham Ferry Rd, Tracy, CA 95304	1	52.0	55.9	3.9	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R127	12	31154 S Bird Rd, Tracy, CA 95304	2	61.4	64.2	2.8	3.0	No	No	N/A	N/A	N/A	N/A	N/A
R128	12	31069 S Bird Rd, Tracy, CA 95304	1	57.8	60.6	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R129	12	30920 S Bird Rd, Tracy, CA 95304	1	55.8	58.6	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R130	12	30908 S Bird Rd, Tracy, CA 95304	1	58.0	60.8	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R131	12	30830 S Bird Rd, Tracy, CA 95304	1	56.9	59.7	2.8	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R132a	13	4447 Durham Ferry Rd, Tracy, CA 95304	1	69.4	71.9	2.5	**1.5**	No	**Yes**	-1.5	67.9	1.5	No	No
R132b	13	4303 Durham Ferry Rd, Tracy, CA 95304	1	64.9	67.4	2.5	3.0	**Yes**	**Yes**	-1.5	63.4	3.0	No	No
R133	13	4001 Durham Ferry Rd, Tracy, CA 95304	1	65.9	68.4	2.5	**1.5**	No	**Yes**	-1.5	64.4	1.5	No	No
R134	13	3652 Durham Ferry Rd, Tracy, CA 95304	1	53.3	55.8	2.5	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R135	13	3652 Durham Ferry Rd, Tracy, CA 95304	1	57.6	60.1	2.5	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R136	13	3081 Durham Ferry Rd, Tracy, CA 95304	1	58.9	61.4	2.5	5.0	No	No	N/A	N/A	N/A	N/A	N/A
R137	14	4494 W Lehman Rd, Tracy, CA 95304	1	52.2	58.6	6.4	**5.0**	No	**Yes**	2.4	54.6	5.0	No	No
R138	14	3994 W Lehman Rd, Tracy, CA 95304	1	40.3	46.7	6.4	**5.0**	No	**Yes**	2.4	42.7	5.0	No	No
R139	14	3656 W Lehman Rd, Tracy, CA 95304	1	40.8	47.2	6.4	**5.0**	No	**Yes**	2.4	43.2	5.0	No	No

Receiver ID[1]	Segment #	Address	# of Sensitive Receptors Represented	Cumulative Plus Project, dBA L_{dn}						Cumulative Plus Project – with Quiet Pavement at Impacted Receptors, dBA L_{dn}				
				Cumulative	Cumulative Plus Project	Change	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?	Change, w/Quiet Pavement	Level w/Quiet Pavement	Increase Criteria	Exceed City or County Exterior Noise Standard Due to Project?	Impact?
R140	14	3545 W Lehman Rd, Tracy, CA 95304	1	44.2	50.6	6.4	**5.0**	No	**Yes**	2.4	46.6	5.0	No	No
R141	14	3350 W Lehman Rd, Tracy, CA 95304	1	47.4	53.8	6.4	**5.0**	No	**Yes**	2.4	49.8	5.0	No	No
Total Impacted Receiver Points, without Mitigation:									52	Total Impacted Receiver Points, with Mitigation				3
Total Impacted Receptors, without Mitigation:									97	Total Impacted Receptors, with Mitigation				4

[1] Please note that some receptor locations have been moved due to changes in the proposed project and may appear out of order and some receptor numbers are not used.
Note: **Bold** indicates where project-related traffic is predicted to exceed the increase criteria or cause traffic noise levels to exceed the local exterior noise standard.

Operational Noise at Existing Sensitive Receptors

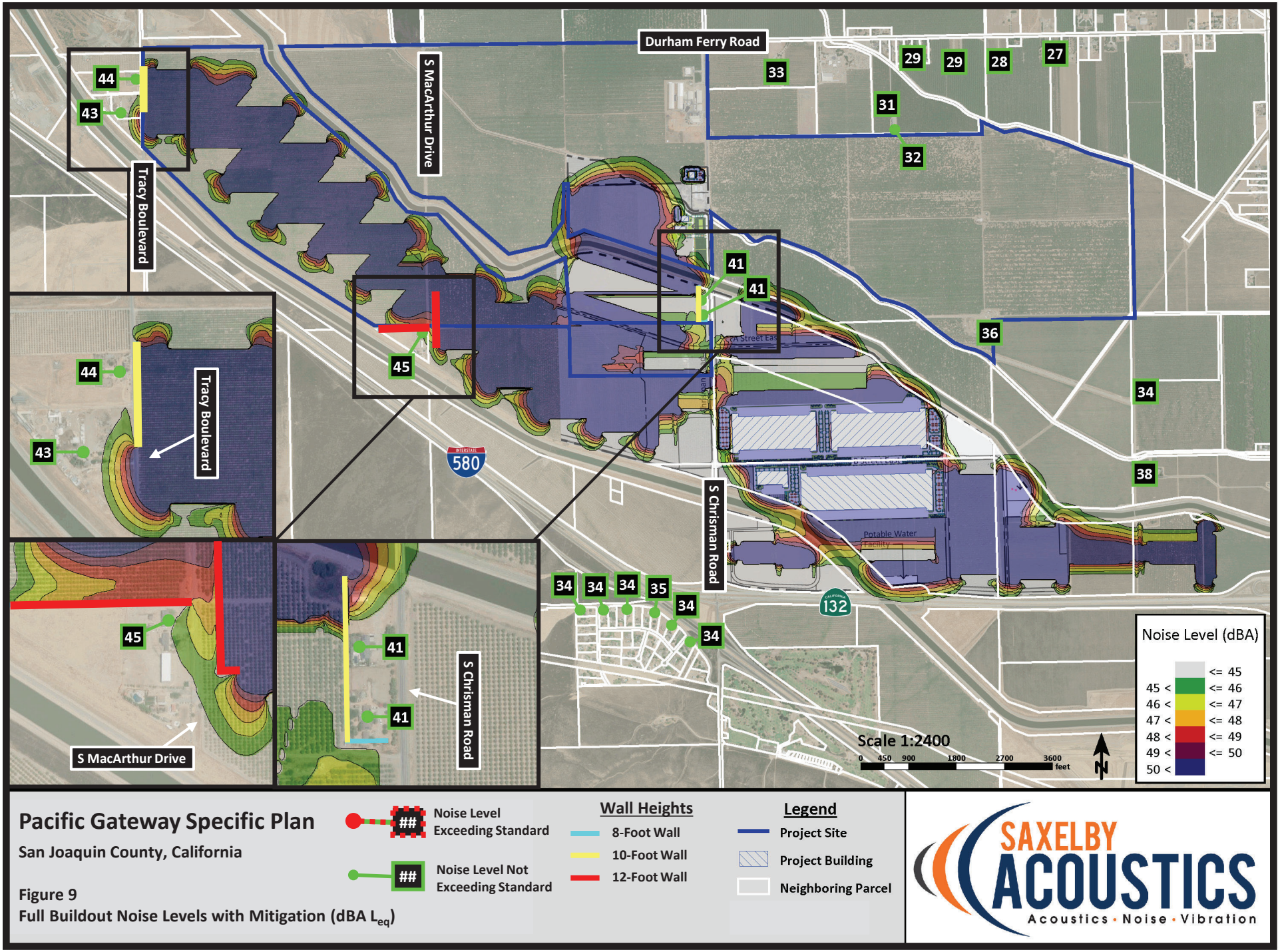
As shown on **Figure 3**, the Phase 1 project would not expose nearby residences to noise levels exceeding 35 dBA L_{eq} during either the peak daytime or nighttime hours. Therefore, no mitigation would be required to achieve compliance with the County's 50 dBA L_{eq} daytime or 45 dBA L_{eq} nighttime noise standards.

As shown on **Figure 4**, the full buildout of the project is predicted to expose nearby residences to noise levels up to 50 dBA, L_{eq} during daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) hours. The predicted project noise levels would exceed the San Joaquin County Development Title 45 dBA L_{eq} nighttime noise standard for non-transportation noise sources.. This would be a ***potentially significant*** impact and requires mitigation.

Saxelby Acoustics recommends the construction of 8-foot-tall to 12-foot-tall sound walls along portions of the project boundaries to shield the nearest single-family residences. **Figure 9** shows the location of the sound walls and resulting noise level contours. As shown on the figure, construction of the sound walls would reduce noise levels to the 45 dBA L_{eq} noise level standard, or less.

It should be noted that maximum noise levels generated by the loading docks and on-site vehicle circulation are predicted to be 20 dBA, or less, than the average (L_{eq}) values. This is based on similar facilities which consisted primarily of loading dock noise and truck circulation. The San Joaquin+ County maximum (L_{max}) nighttime noise level standard is 65 dBA L_{max}, which is 20 dBA higher than the L_{eq} standard. Therefore, where average noise levels are in compliance with the L_{eq} standards, maximum noise levels will also meet the County's standards. Based upon the highest average noise levels of 45 dBA, the maximum (L_{max}) noise levels will be 65 dBA and comply with the County maximum standards.

Therefore, implementation of Mitigation Measure 1(a) would reduce impacts due to operational noise to ***less-than-significant***.



Pacific Gateway Specific Plan

San Joaquin County, California

Figure 9

Full Buildout Noise Levels with Mitigation (dBA L_{eq})

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*Figure not OCR compatible

Construction Noise

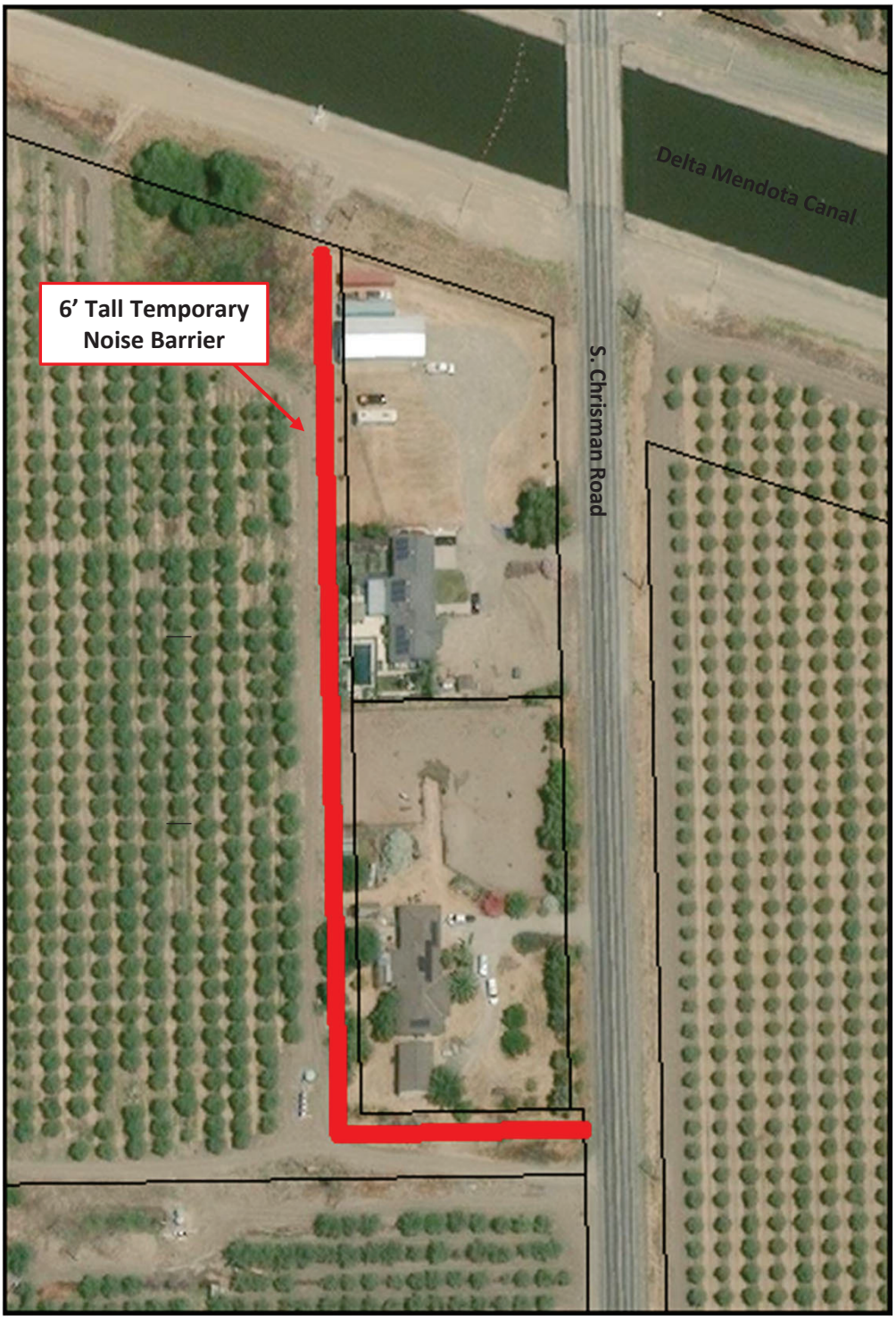
During the construction phases of the project, noise from construction activities would add to the noise environment in the immediate project vicinity. As indicated in **Table 6,** activities involved in construction would generate maximum noise levels ranging from 76 to 90 dBA L_{max} at a distance of 50 feet. Construction activities would also be temporary in nature and are anticipated to occur during normal daytime working hours. The San Joaquin County Development Title exempts construction noise from the noise ordinance provided that activities do not occur before 6:00 a.m. or after 9:00 p.m. The City of Tracy limits construction activity to 7:00 a.m. to 7:00 p.m.

Caltrans defines a significant increase due to noise as an increase of 12 dBA over existing ambient noise levels; Saxelby Acoustics used this criterion to evaluate increases due to construction noise associated with the project. As shown in **Table 6**, construction equipment is predicted to generate noise levels of up to 90 dBA L_{max} at 50 feet. Construction noise is evaluated as occurring at the edge of the site to represent the loudest expected noise levels generated during project construction. The closest residential uses share a property line with the project site and could experience periods of construction as close as 50 feet. Therefore, maximum noise levels of up to 90 dBA L_{max} could occur. While the majority of construction would occur at much larger distances, worst case noise levels of up to 90 dBA L_{max} could occur. The average daytime maximum noise level in the vicinity of the sensitive receptors was measured to be 77-78 dBA (LT-5 and LT-6). Therefore, project construction could cause an increase of up to 12-13 dBA L_{max} over existing noise levels.

In order to reduce daytime construction noise, it is recommended that a 6-foot-tall temporary noise barrier be installed to shield existing residential uses from project construction. The 6-foot-tall barrier would be expected to reduce construction noise levels by a minimum of 5 dBA **(Appendix E)**, to 85 dBA $L_{max,}$ for an increase of 7-8 dBA over ambient conditions. Therefore, the use of temporary noise barriers at construction areas located in close proximity from existing receptors would reduce on-site construction noise to less than significant. Saxelby Acoustics conservatively recommends use of construction noise barriers where construction occurs at distances of 100 feet, or less, from existing noise sensitive receptors, as shown on **Figure 10**.

Noise would also be generated during the construction phase by increased truck traffic on area roadways. A project-generated noise source would be truck traffic associated with transport of heavy materials and equipment to and from the construction site. This noise increase would be of short duration and would be similar to noise levels associated with existing trucking traffic.

The project would also require occasional early morning (pre 7:00 a.m.) concrete pours to avoid daytime heat. This could require up to 20 peak hour concrete mixer trucks to arrive to pour foundations and tilt up wall panels. As shown in **Table 6**, a concrete mixer truck is expected to generate a maximum noise levels of 79 dBA L_{max} at 50 feet. The closest residential uses share a property line with the project site and could experience periods of construction as close as 50 feet. This location would have placement of a 6-foot-tall temporary construction noise barrier which would be expected to reduce noise levels by 5 dBA. Therefore, maximum noise levels of up to 74 dBA L_{max} could occur during these early morning nighttime hours. The average nighttime maximum noise level in the vicinity of the sensitive receptors was measured to be 71-76 dBA (LT-5 and LT-6). Therefore, nighttime project construction could cause an increase of up to 3 dBA L_{max} over existing noise levels. This is within the allowable +12 dBA increase criteria.



Pacific Gateway EIR
San Joaquin County, California

Figure 10
Temporary Construction Noise Barrier

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The project also includes various off-site roadway improvements. Many of the roadway improvement areas are located along undeveloped lands, or sparsely populated areas, especially south of W. Linne Road along S. Chrisman Road. One of the potential off-site roadway improvements is the widening of Chrisman Road to 4-lanes from 11th Street to SR 132. This would likely include roadway construction activity within 50 feet of existing noise-sensitive receptors. At this distance, construction noise would be expected to range between 76 to 90 dBA L_{max}. Additional off-site improvements will likely be required along W. Linne Road between Tracy Boulevard and Chrisman Road. Receptors along this stretch of roadway are located within approximately 60 feet to approximately 400 feet. At 60 feet, construction noise would be expected to range between 74 to 88 dBA L_{max}. Based upon noise measurements collected at site LT-4, existing maximum noise levels ranged from 79-88 dBA L_{max} along Chrisman Road. Based upon the predicted off-site construction noise levels of up to 88-90 dBA L_{max}, project construction may not cause an increase of greater than 12 dBA over existing ambient noise levels. However, due to the programmatic nature of the off-site improvements, it cannot be definitely stated that temporary construction of off-site improvements would not exceed 12 dBA in all potential areas.

Although construction activities are temporary in nature and would occur during normal daytime working hours, construction-related noise could result in sleep interference at existing noise-sensitive land uses in the vicinity of the construction if construction activities were to occur outside the normal daytime hours or could exceed an ambient noise increase exceeding 12 dBA due to the close proximity of construction activities. Therefore, impacts resulting from noise levels temporarily exceeding the threshold of significance due to construction would be considered ***significant***. Mitigation measure 1(d) would reduce construction noise impacts but this would be a ***significant unavoidable*** impact.

Mitigation Measures

1(a) To reduce traffic noise increases under Existing Plus Phase 1 conditions, quiet pavement overlays should be installed on the roadway segments shown on **Figure 6**, prior to the operation of the Phase 1 portion of the project. Quiet pavement overlays shall follow industry best practices as outlined by Caltrans (Quiet Pavement, Acoustic Measurement and Performance, February 2018), or a similar industry publication.

1(b) To reduce traffic noise increases under Cumulative Plus Project conditions, quiet pavement should be installed on the roadway segments shown on **Figure 8**, prior to the operation of the full project buildout.

1(c) Under full project buildout, an 8-foot to 12-tall sound walls should be constructed along portions of the project boundary to shield the closest sensitive receptors. **Figure 9** shows the suggested locations of the sound walls. If desired, sound walls may also be placed off-site on adjacent property owner's property if preferred and agreed to by the property owner. This mitigation measure may be waived if a future noise study prepared by a qualified acoustical engineer shows it to be unnecessary based upon the proposed future site layout(s).

1(d) The County shall establish the following as conditions of approval for any permit that results in the use of construction equipment:

- Construction shall be limited to between 6:00 a.m. and 9:00 p.m. for projects within San Joaquin County and 7:00 a.m. to 7:00 p.m. for off-site improvements within the City of Tracy.

- All construction equipment powered by internal combustion engines shall be properly muffled and maintained.
- Quiet construction equipment, particularly air compressors, are to be selected whenever possible.
- All stationary noise-generating construction equipment such as generators or air compressors are to be located as far as is practical from existing residences. In addition, the project contractor shall place such stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site.
- Unnecessary idling of internal combustion engines is prohibited.
- The construction contractor shall, to the maximum extent practical, locate on-site equipment staging areas to maximize the distance between construction-related noise sources and noise-sensitive receptors nearest the project site during all project construction.

- On-site construction occurring within 100 feet, or less, from existing residential uses should be shielded by a 6-foot-tall temporary construction noise barrier as shown on **Figure 10**. The sound barrier should consist of ½" plywood or minimum STC 27 sound curtains. The barrier should be free from gaps, openings, or penetrations to ensure maximum performance.

Timing/Implementation: Implemented prior to approval of grading and/or building permits
Enforcement/Monitoring: County of San Joaquin Community Development Services Department

Implementation of mitigation measures 1(a) through 1(c) would help to reduce traffic-generated noise levels. However, with mitigation, this portion of the impact would not be fully mitigated, and this would be considered a ***significant unavoidable impact***.

Implementation of mitigation measures 1(d) would reduce site-generated noise levels to a ***less than significant*** level.

Implementation of mitigation measure 1(e) would reduce construction noise levels. However, with mitigation, this portion of the impact may not be fully mitigated, and this would be considered a ***significant unavoidable impact***.

Impact 2: Would the project generate excessive groundborne vibration or groundborne noise levels?

Construction vibration impacts include human annoyance and building structural damage. Human annoyance occurs when construction vibration rises significantly above the threshold of perception. Building damage can take the form of cosmetic or structural.

The **Table 7** data indicate that construction vibration levels anticipated for the project are less than the 0.2 in/sec threshold at distances of 26 feet. Sensitive receptors which could be impacted by construction related vibrations, especially vibratory compactors/rollers, are located further than 26 feet from typical on-site construction activities. At distances greater than 26 feet construction vibrations are not predicted to exceed acceptable levels. Additionally, construction activities would be temporary in nature and would likely occur during normal daytime working hours. However, off-site improvements could occur in close proximity to sensitive receptors. Because the exact location of construction is unknown at this time, this is considered a ***potentially significant*** impact.

Mitigation Measures

2 If use of vibratory compactors are required within 25 feet, or less, of a residential structure, pre-construction crack documentation and construction vibration monitoring shall be conducted to ensure that construction vibrations do not cause damage to any adjacent structures. Alternatively, use of hand compaction equipment could be employed to minimize ground vibrations.

Implementation of mitigation measures 2 would reduce groundborne vibration levels to a ***less than significant*** level.

Impact 3: ***For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

Based upon **Figure 5**, the proposed project is located outside the Tracy Municipal Airport 55 dBA CNEL contour. Land use may be carried out with essentially no interference from the noise exposure. This is a **less-than-significant** impact, and no mitigation is required.

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Appendix A: Acoustical Terminology

Acoustics	The science of sound.
Ambient Noise	The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.
ASTC	Apparent Sound Transmission Class. Similar to STC but includes sound from flanking paths and correct for room reverberation. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Attenuation	The reduction of an acoustic signal.
A-Weighting	A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.
Decibel or dB	Fundamental unit of sound, A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.
CNEL	Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by +5 dBA and nighttime hours weighted by +10 dBA.
DNL	See definition of Ldn.
IIC	Impact Insulation Class. An integer-number rating of how well a building floor attenuates impact sounds, such as footsteps. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Frequency	The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz (Hz).
Ldn	Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.
Leq	Equivalent or energy-averaged sound level.
Lmax	The highest root-mean-square (RMS) sound level measured over a given period of time.
L(n)	The sound level exceeded a described percentile over a measurement period. For instance, an hourly L50 is the sound level exceeded 50% of the time during the one-hour period.
Loudness	A subjective term for the sensation of the magnitude of sound.
NIC	Noise Isolation Class. A rating of the noise reduction between two spaces. Similar to STC but includes sound from flanking paths and no correction for room reverberation.
NNIC	Normalized Noise Isolation Class. Similar to NIC but includes a correction for room reverberation.
Noise	Unwanted sound.
NRC	Noise Reduction Coefficient. NRC is a single-number rating of the sound-absorption of a material equal to the arithmetic mean of the sound-absorption coefficients in the 250, 500, 1000, and 2,000 Hz octave frequency bands rounded to the nearest multiple of 0.05. It is a representation of the amount of sound energy absorbed upon striking a particular surface. An NRC of 0 indicates perfect reflection; an NRC of 1 indicates perfect absorption.
RT60	The time it takes reverberant sound to decay by 60 dB once the source has been removed.
Sabin	The unit of sound absorption. One square foot of material absorbing 100% of incident sound has an absorption of 1 Sabin.
SEL	Sound Exposure Level. SEL is a rating, in decibels, of a discrete event, such as an aircraft flyover or train pass by, that compresses the total sound energy into a one-second event.
SPC	Speech Privacy Class. SPC is a method of rating speech privacy in buildings. It is designed to measure the degree of speech privacy provided by a closed room, indicating the degree to which conversations occurring within are kept private from listeners outside the room.
STC	Sound Transmission Class. STC is an integer rating of how well a building partition attenuates airborne sound. It is widely used to rate interior partitions, ceilings/floors, doors, windows and exterior wall configurations. The STC rating is typically used to rate the sound transmission of a specific building element when tested in laboratory conditions where flanking paths around the assembly don't exist. A larger number means more attenuation. The scale, like the decibel scale for sound, is logarithmic.
Threshold of Hearing	The lowest sound that can be perceived by the human auditory system, generally considered to be 0 dB for persons with perfect hearing.
Threshold of Pain	Approximately 120 dB above the threshold of hearing.
Impulsive	Sound of short duration, usually less than one second, with an abrupt onset and rapid decay.
Simple Tone	Any sound which can be judged as audible as a single pitch or set of single pitches.

Appendix B: Continuous Ambient Noise Measurement Results

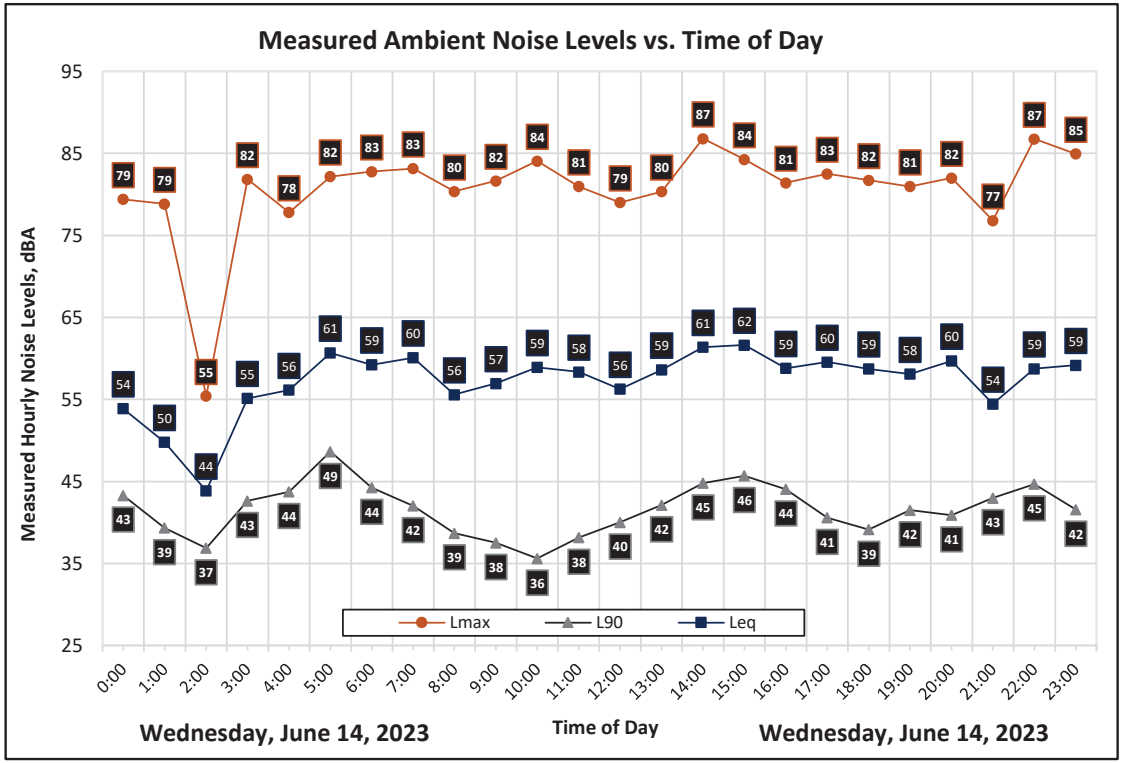


Appendix B1: Continuous Noise Monitoring Results

Site: LT-1
Project: Pacific Gateway Specific Plan EIR
Meter: LDL 820-3
Location: Western Project Boundary
Calibrator: CAL200
Coordinates: (37.6668507, -121.4342800)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Wednesday, June 14, 2023	0:00	54	79	46	43
Wednesday, June 14, 2023	1:00	50	79	44	39
Wednesday, June 14, 2023	2:00	44	55	41	37
Wednesday, June 14, 2023	3:00	55	82	47	43
Wednesday, June 14, 2023	4:00	56	78	48	44
Wednesday, June 14, 2023	5:00	61	82	52	49
Wednesday, June 14, 2023	6:00	59	83	46	44
Wednesday, June 14, 2023	7:00	60	83	46	42
Wednesday, June 14, 2023	8:00	56	80	47	39
Wednesday, June 14, 2023	9:00	57	82	41	38
Wednesday, June 14, 2023	10:00	59	84	39	36
Wednesday, June 14, 2023	11:00	58	81	44	38
Wednesday, June 14, 2023	12:00	56	79	44	40
Wednesday, June 14, 2023	13:00	59	80	46	42
Wednesday, June 14, 2023	14:00	61	87	49	45
Wednesday, June 14, 2023	15:00	62	84	50	46
Wednesday, June 14, 2023	16:00	59	81	49	44
Wednesday, June 14, 2023	17:00	60	83	45	41
Wednesday, June 14, 2023	18:00	59	82	43	39
Wednesday, June 14, 2023	19:00	58	81	45	42
Wednesday, June 14, 2023	20:00	60	82	45	41
Wednesday, June 14, 2023	21:00	54	77	46	43
Wednesday, June 14, 2023	22:00	59	87	49	45
Wednesday, June 14, 2023	23:00	59	85	45	42

Statistics	Leq	Lmax	L50	L90
Day Average	59	82	45	41
Night Average	57	79	47	43
Day Low	54	77	39	36
Day High	62	87	50	46
Night Low	44	55	41	37
Night High	61	87	52	49
Ldn	63	Day %		75
CNEL	64	Night %		25



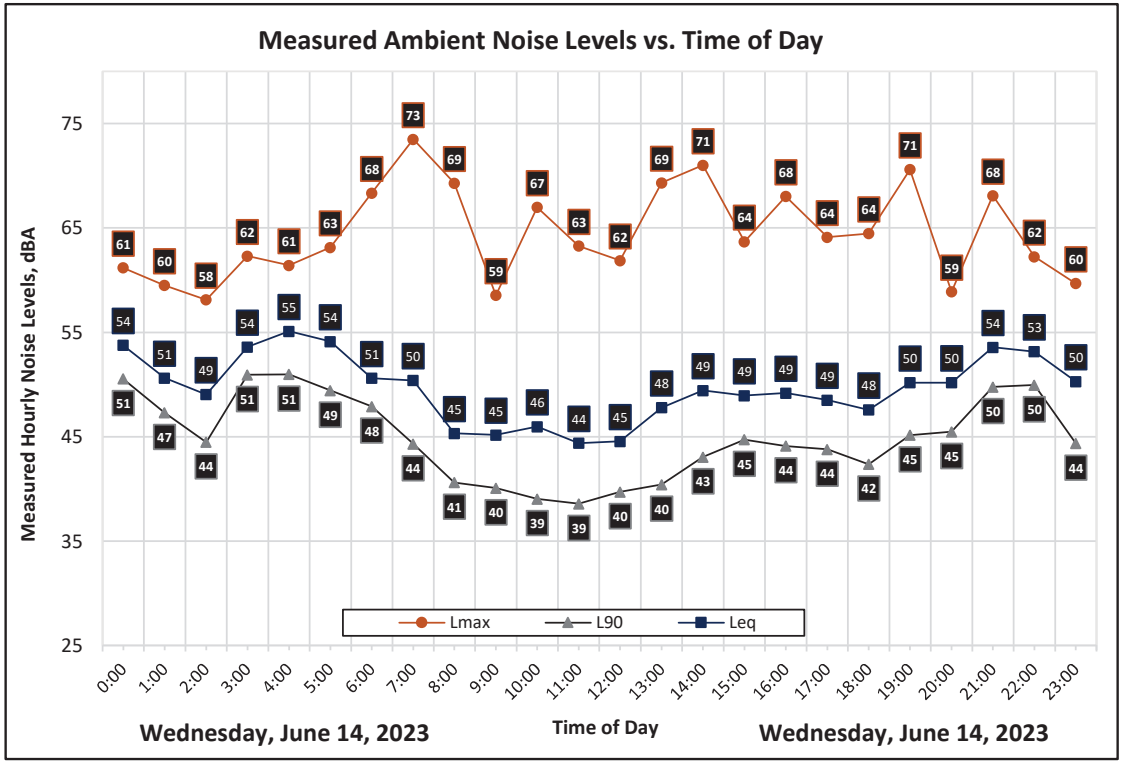


Appendix B2: Continuous Noise Monitoring Results

Site: LT-2
Project: Pacific Gateway Specific Plan EIR
Meter: LDL 820-5
Location: South Western Project Boundary
Calibrator: CAL200
Coordinates: (37.6527623, -121.4161704)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Wednesday, June 14, 2023	0:00	54	61	53	51
Wednesday, June 14, 2023	1:00	51	60	50	47
Wednesday, June 14, 2023	2:00	49	58	47	44
Wednesday, June 14, 2023	3:00	54	62	53	51
Wednesday, June 14, 2023	4:00	55	61	55	51
Wednesday, June 14, 2023	5:00	54	63	53	49
Wednesday, June 14, 2023	6:00	51	68	50	48
Wednesday, June 14, 2023	7:00	50	73	47	44
Wednesday, June 14, 2023	8:00	45	69	43	41
Wednesday, June 14, 2023	9:00	45	59	43	40
Wednesday, June 14, 2023	10:00	46	67	41	39
Wednesday, June 14, 2023	11:00	44	63	41	39
Wednesday, June 14, 2023	12:00	45	62	43	40
Wednesday, June 14, 2023	13:00	48	69	44	40
Wednesday, June 14, 2023	14:00	49	71	47	43
Wednesday, June 14, 2023	15:00	49	64	48	45
Wednesday, June 14, 2023	16:00	49	68	47	44
Wednesday, June 14, 2023	17:00	49	64	47	44
Wednesday, June 14, 2023	18:00	48	64	45	42
Wednesday, June 14, 2023	19:00	50	71	48	45
Wednesday, June 14, 2023	20:00	50	59	48	45
Wednesday, June 14, 2023	21:00	54	68	52	50
Wednesday, June 14, 2023	22:00	53	62	53	50
Wednesday, June 14, 2023	23:00	50	60	49	44

Statistics	Leq	Lmax	L50	L90
Day Average	49	66	46	43
Night Average	53	62	51	48
Day Low	44	59	41	39
Day High	54	73	52	50
Night Low	49	58	47	44
Night High	55	68	55	51
Ldn	58	Day %		44
CNEL	58	Night %		56



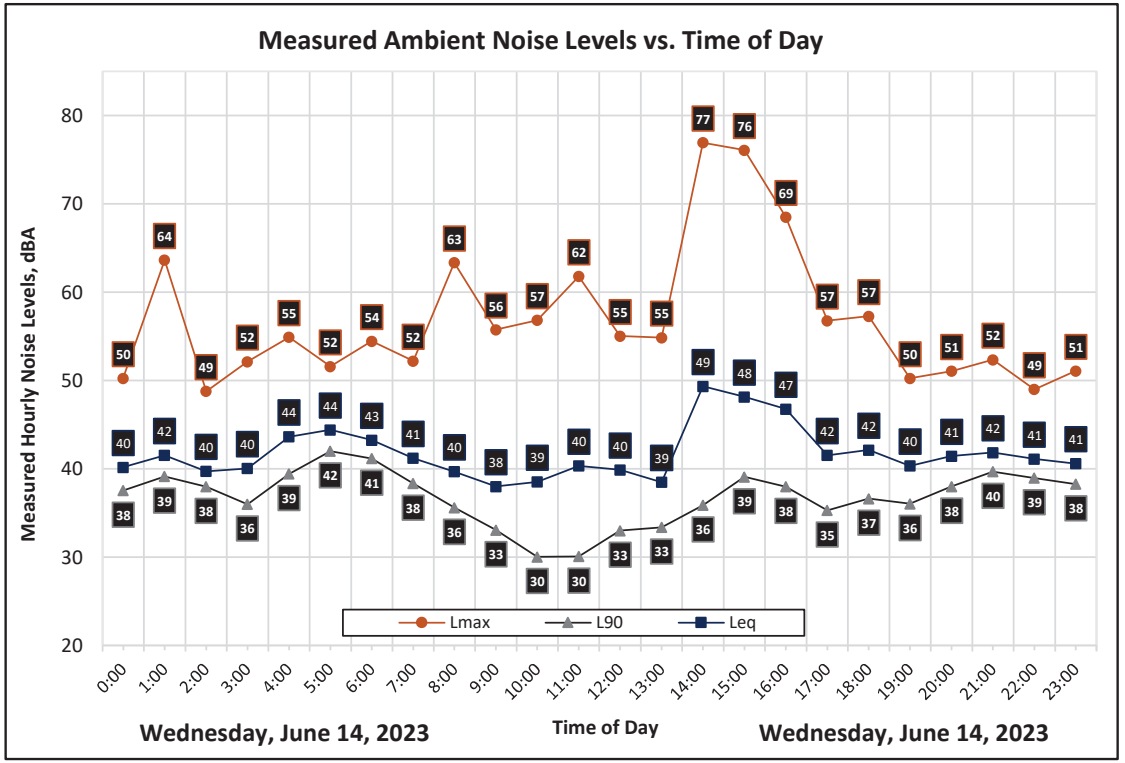


Appendix B3: Continuous Noise Monitoring Results

Site: LT-3
Project: Pacific Gateway Specific Plan EIR
Meter: LDL 820-1
Location: North Eastern Project Boundary
Calibrator: CAL200
Coordinates: (37.6621503, -121.3872900)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Wednesday, June 14, 2023	0:00	40	50	39	38
Wednesday, June 14, 2023	1:00	42	64	41	39
Wednesday, June 14, 2023	2:00	40	49	39	38
Wednesday, June 14, 2023	3:00	40	52	39	36
Wednesday, June 14, 2023	4:00	44	55	42	39
Wednesday, June 14, 2023	5:00	44	52	44	42
Wednesday, June 14, 2023	6:00	43	54	43	41
Wednesday, June 14, 2023	7:00	41	52	40	38
Wednesday, June 14, 2023	8:00	40	63	38	36
Wednesday, June 14, 2023	9:00	38	56	35	33
Wednesday, June 14, 2023	10:00	39	57	32	30
Wednesday, June 14, 2023	11:00	40	62	33	30
Wednesday, June 14, 2023	12:00	40	55	36	33
Wednesday, June 14, 2023	13:00	39	55	36	33
Wednesday, June 14, 2023	14:00	49	77	39	36
Wednesday, June 14, 2023	15:00	48	76	42	39
Wednesday, June 14, 2023	16:00	47	69	41	38
Wednesday, June 14, 2023	17:00	42	57	39	35
Wednesday, June 14, 2023	18:00	42	57	40	37
Wednesday, June 14, 2023	19:00	40	50	39	36
Wednesday, June 14, 2023	20:00	41	51	41	38
Wednesday, June 14, 2023	21:00	42	52	41	40
Wednesday, June 14, 2023	22:00	41	49	41	39
Wednesday, June 14, 2023	23:00	41	51	40	38

Statistics	Leq	Lmax	L50	L90
Day Average	43	59	38	35
Night Average	42	53	41	39
Day Low	38	50	32	30
Day High	49	77	42	40
Night Low	40	49	39	36
Night High	44	64	44	42
Ldn	48	Day %		72
CNEL	48	Night %		28



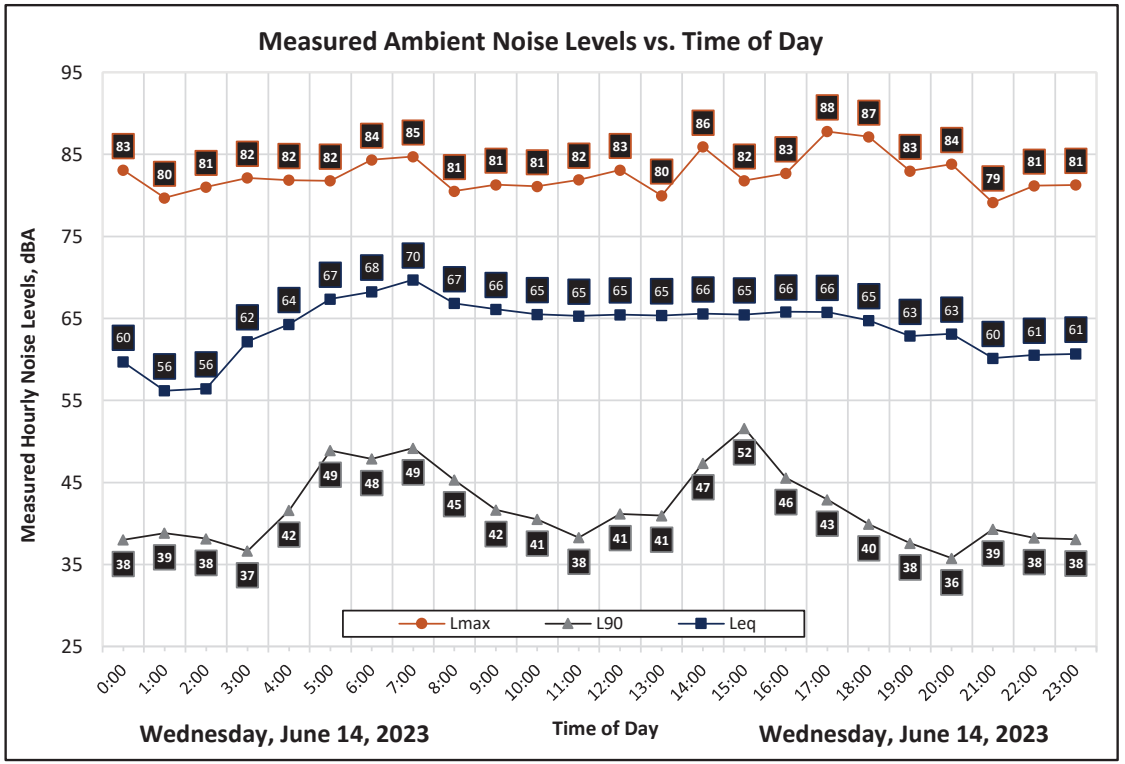


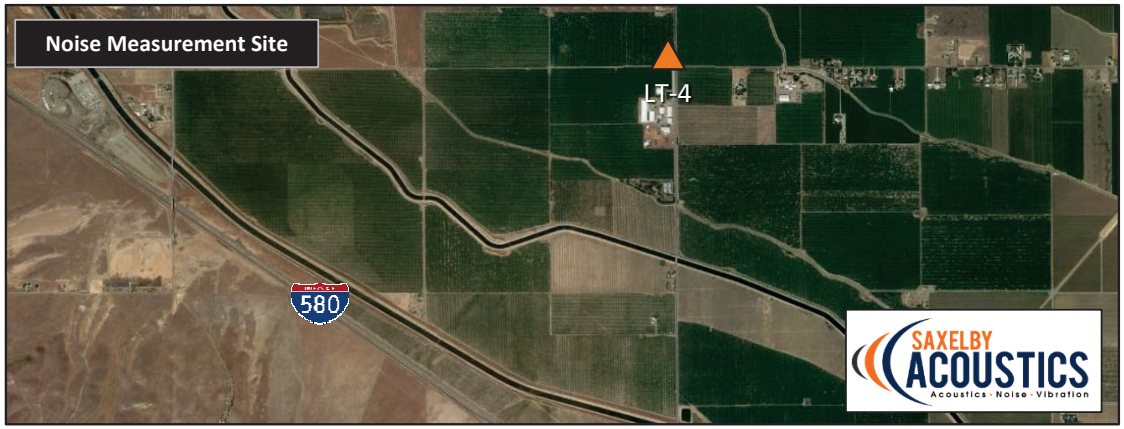
Appendix B4: Continuous Noise Monitoring Results

Site: LT-4
Project: Pacific Gateway Specific Plan EIR
Meter: LDL 820-2
Location: Northern Project Boundary
Calibrator: CAL200
Coordinates: (37.6669327, -121.3980953)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Wednesday, June 14, 2023	0:00	60	83	41	38
Wednesday, June 14, 2023	1:00	56	80	42	39
Wednesday, June 14, 2023	2:00	56	81	41	38
Wednesday, June 14, 2023	3:00	62	82	44	37
Wednesday, June 14, 2023	4:00	64	82	51	42
Wednesday, June 14, 2023	5:00	67	82	58	49
Wednesday, June 14, 2023	6:00	68	84	59	48
Wednesday, June 14, 2023	7:00	70	85	63	49
Wednesday, June 14, 2023	8:00	67	81	56	45
Wednesday, June 14, 2023	9:00	66	81	54	42
Wednesday, June 14, 2023	10:00	65	81	52	41
Wednesday, June 14, 2023	11:00	65	82	51	38
Wednesday, June 14, 2023	12:00	65	83	53	41
Wednesday, June 14, 2023	13:00	65	80	54	41
Wednesday, June 14, 2023	14:00	66	86	57	47
Wednesday, June 14, 2023	15:00	65	82	59	52
Wednesday, June 14, 2023	16:00	66	83	57	46
Wednesday, June 14, 2023	17:00	66	88	55	43
Wednesday, June 14, 2023	18:00	65	87	52	40
Wednesday, June 14, 2023	19:00	63	83	49	38
Wednesday, June 14, 2023	20:00	63	84	49	36
Wednesday, June 14, 2023	21:00	60	79	47	39
Wednesday, June 14, 2023	22:00	61	81	43	38
Wednesday, June 14, 2023	23:00	61	81	43	38

Statistics	Leq	Lmax	L50	L90
Day Average	66	83	54	42
Night Average	64	82	47	41
Day Low	60	79	47	36
Day High	70	88	63	52
Night Low	56	80	41	37
Night High	68	84	59	49
Ldn	70	Day %		74
CNEL	70	Night %		26



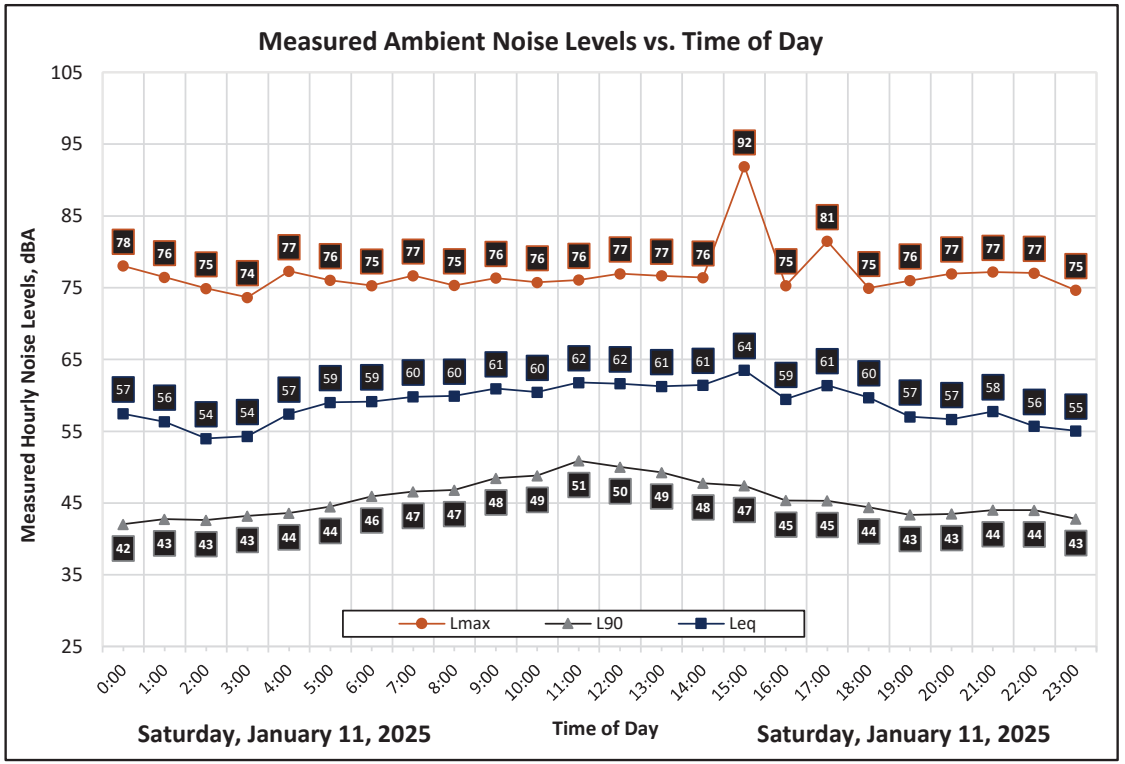


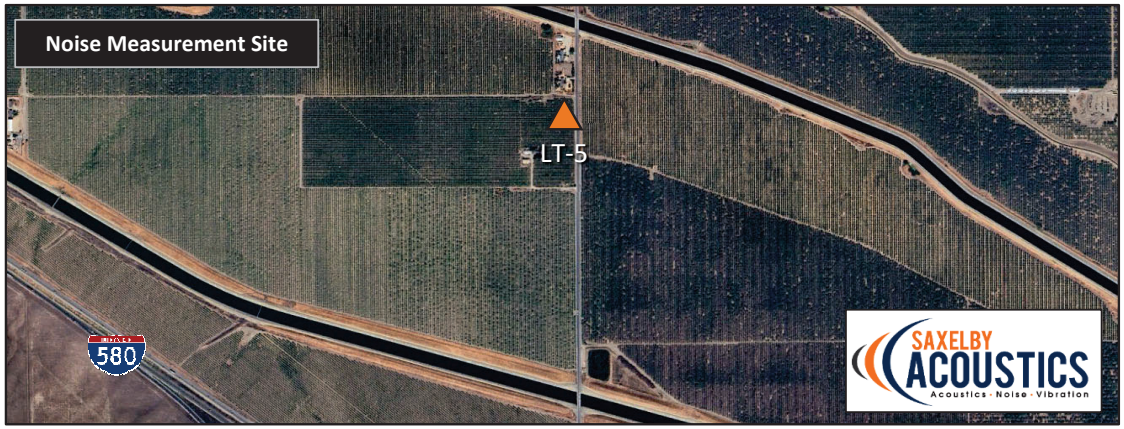
Appendix B5: Continuous Noise Monitoring Results

Site: LT-5
Project: Pacific Gateway Specific Plan EIR
Meter: LDL 820-3
Location: Northern Project Boundary
Calibrator: CAL200
Coordinates: (37.6524855, -121.3980363)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Saturday, January 11, 2025	0:00	57	78	46	42
Saturday, January 11, 2025	1:00	56	76	45	43
Saturday, January 11, 2025	2:00	54	75	45	43
Saturday, January 11, 2025	3:00	54	74	46	43
Saturday, January 11, 2025	4:00	57	77	47	44
Saturday, January 11, 2025	5:00	59	76	48	44
Saturday, January 11, 2025	6:00	59	75	50	46
Saturday, January 11, 2025	7:00	60	77	51	47
Saturday, January 11, 2025	8:00	60	75	52	47
Saturday, January 11, 2025	9:00	61	76	55	48
Saturday, January 11, 2025	10:00	60	76	55	49
Saturday, January 11, 2025	11:00	62	76	57	51
Saturday, January 11, 2025	12:00	62	77	57	50
Saturday, January 11, 2025	13:00	61	77	57	49
Saturday, January 11, 2025	14:00	61	76	57	48
Saturday, January 11, 2025	15:00	64	92	56	47
Saturday, January 11, 2025	16:00	59	75	52	45
Saturday, January 11, 2025	17:00	61	81	52	45
Saturday, January 11, 2025	18:00	60	75	50	44
Saturday, January 11, 2025	19:00	57	76	47	43
Saturday, January 11, 2025	20:00	57	77	47	43
Saturday, January 11, 2025	21:00	58	77	48	44
Saturday, January 11, 2025	22:00	56	77	48	44
Saturday, January 11, 2025	23:00	55	75	47	43

Statistics	Leq	Lmax	L50	L90
Day Average	61	78	53	47
Night Average	57	76	47	43
Day Low	57	75	47	43
Day High	64	92	57	51
Night Low	54	74	45	42
Night High	59	78	50	46
Ldn	64	Day %		81
CNEL	64	Night %		19



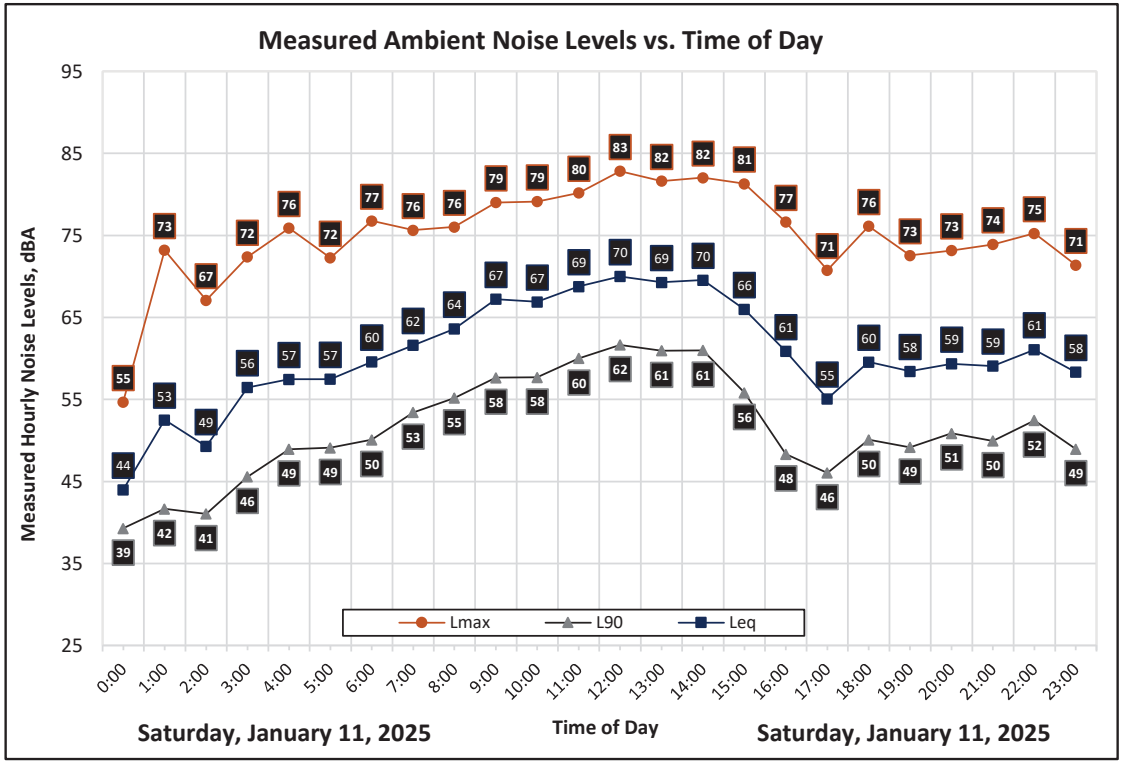


Appendix B6: Continuous Noise Monitoring Results

Site: LT-6
Project: Pacific Gateway Specific Plan EIR
Meter: LDL 820-5
Location: Eastern Project Boundary
Calibrator: CAL200
Coordinates: (37.6421293, -121.3687677)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Saturday, January 11, 2025	0:00	44	55	42	39
Saturday, January 11, 2025	1:00	53	73	47	42
Saturday, January 11, 2025	2:00	49	67	46	41
Saturday, January 11, 2025	3:00	56	72	53	46
Saturday, January 11, 2025	4:00	57	76	55	49
Saturday, January 11, 2025	5:00	57	72	55	49
Saturday, January 11, 2025	6:00	60	77	56	50
Saturday, January 11, 2025	7:00	62	76	59	53
Saturday, January 11, 2025	8:00	64	76	61	55
Saturday, January 11, 2025	9:00	67	79	65	58
Saturday, January 11, 2025	10:00	67	79	65	58
Saturday, January 11, 2025	11:00	69	80	67	60
Saturday, January 11, 2025	12:00	70	83	68	62
Saturday, January 11, 2025	13:00	69	82	67	61
Saturday, January 11, 2025	14:00	70	82	67	61
Saturday, January 11, 2025	15:00	66	81	63	56
Saturday, January 11, 2025	16:00	61	77	56	48
Saturday, January 11, 2025	17:00	55	71	51	46
Saturday, January 11, 2025	18:00	60	76	56	50
Saturday, January 11, 2025	19:00	58	73	56	49
Saturday, January 11, 2025	20:00	59	73	57	51
Saturday, January 11, 2025	21:00	59	74	56	50
Saturday, January 11, 2025	22:00	61	75	59	52
Saturday, January 11, 2025	23:00	58	71	55	49

Statistics	Leq	Lmax	L50	L90
Day Average	66	77	61	55
Night Average	56	71	52	46
Day Low	55	71	51	46
Day High	70	83	68	62
Night Low	44	55	42	39
Night High	60	77	59	52
Ldn	66	Day %		94
CNEL	66	Night %		6



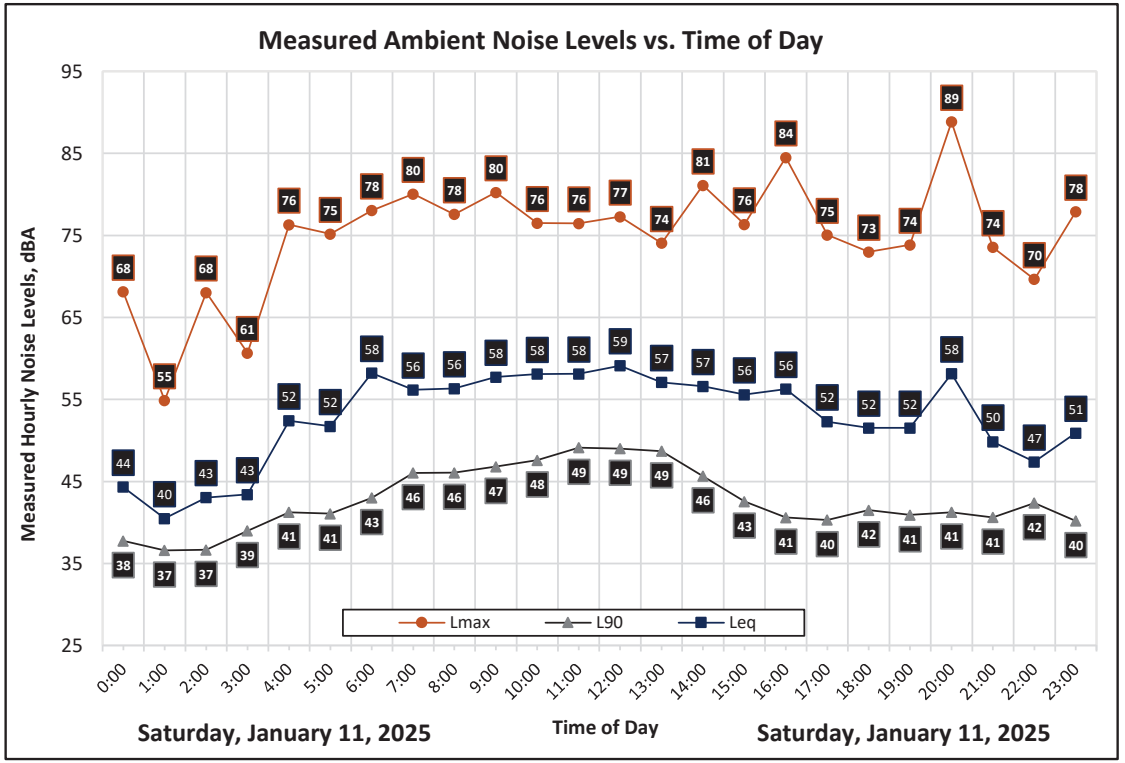


Appendix B7: Continuous Noise Monitoring Results

Site: LT-7
Project: Pacific Gateway Specific Plan EIR
Meter: LDL 820-6
Location: Eastern Project Boundary
Calibrator: CAL200
Coordinates: (37.6452554, -121.3609658)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Saturday, January 11, 2025	0:00	44	68	40	38
Saturday, January 11, 2025	1:00	40	55	40	37
Saturday, January 11, 2025	2:00	43	68	39	37
Saturday, January 11, 2025	3:00	43	61	42	39
Saturday, January 11, 2025	4:00	52	76	43	41
Saturday, January 11, 2025	5:00	52	75	43	41
Saturday, January 11, 2025	6:00	58	78	47	43
Saturday, January 11, 2025	7:00	56	80	49	46
Saturday, January 11, 2025	8:00	56	78	49	46
Saturday, January 11, 2025	9:00	58	80	51	47
Saturday, January 11, 2025	10:00	58	76	53	48
Saturday, January 11, 2025	11:00	58	76	54	49
Saturday, January 11, 2025	12:00	59	77	55	49
Saturday, January 11, 2025	13:00	57	74	53	49
Saturday, January 11, 2025	14:00	57	81	51	46
Saturday, January 11, 2025	15:00	56	76	50	43
Saturday, January 11, 2025	16:00	56	84	45	41
Saturday, January 11, 2025	17:00	52	75	43	40
Saturday, January 11, 2025	18:00	52	73	44	42
Saturday, January 11, 2025	19:00	52	74	43	41
Saturday, January 11, 2025	20:00	58	89	44	41
Saturday, January 11, 2025	21:00	50	74	43	41
Saturday, January 11, 2025	22:00	47	70	45	42
Saturday, January 11, 2025	23:00	51	78	43	40

Statistics	Leq	Lmax	L50	L90
Day Average	56	78	49	44
Night Average	52	70	42	40
Day Low	50	73	43	40
Day High	59	89	55	49
Night Low	40	55	39	37
Night High	58	78	47	43
Ldn	59	Day %		85
CNEL	59	Night %		15



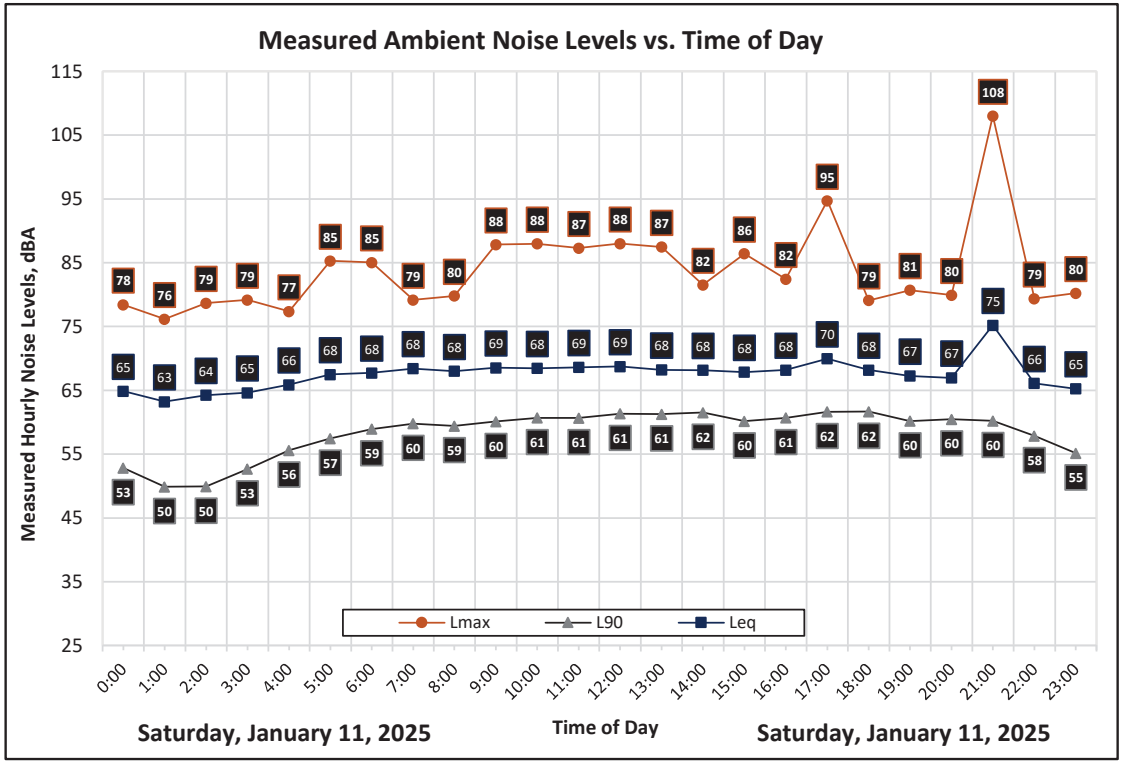


Appendix B8: Continuous Noise Monitoring Results

Site: LT-8
Project: Pacific Gateway Specific Plan EIR
Meter: LDL 812-2
Location: Southern Project Boundary
Calibrator: CAL200
Coordinates: (37.6371776, -121.4004198)

Date	Time	Measured Level, dBA			
		L_{eq}	L_{max}	L_{50}	L_{90}
Saturday, January 11, 2025	0:00	65	78	61	53
Saturday, January 11, 2025	1:00	63	76	59	50
Saturday, January 11, 2025	2:00	64	79	59	50
Saturday, January 11, 2025	3:00	65	79	60	53
Saturday, January 11, 2025	4:00	66	77	62	56
Saturday, January 11, 2025	5:00	68	85	65	57
Saturday, January 11, 2025	6:00	68	85	65	59
Saturday, January 11, 2025	7:00	68	79	66	60
Saturday, January 11, 2025	8:00	68	80	66	59
Saturday, January 11, 2025	9:00	69	88	66	60
Saturday, January 11, 2025	10:00	68	88	66	61
Saturday, January 11, 2025	11:00	69	87	66	61
Saturday, January 11, 2025	12:00	69	88	67	61
Saturday, January 11, 2025	13:00	68	87	66	61
Saturday, January 11, 2025	14:00	68	82	66	62
Saturday, January 11, 2025	15:00	68	86	66	60
Saturday, January 11, 2025	16:00	68	82	66	61
Saturday, January 11, 2025	17:00	70	95	67	62
Saturday, January 11, 2025	18:00	68	79	66	62
Saturday, January 11, 2025	19:00	67	81	65	60
Saturday, January 11, 2025	20:00	67	80	65	60
Saturday, January 11, 2025	21:00	75	108	65	60
Saturday, January 11, 2025	22:00	66	79	63	58
Saturday, January 11, 2025	23:00	65	80	61	55

Statistics	Leq	Lmax	L50	L90
Day Average	69	86	66	61
Night Average	66	80	62	54
Day Low	67	79	65	59
Day High	75	108	67	62
Night Low	63	76	59	50
Night High	68	85	65	59
Ldn	72	Day %		81
CNEL	73	Night %		19





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Appendix C: Traffic Noise Calculation Inputs and Results



Appendix C-1

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230309
Description: Pacific Gateway Specific Plan EIR - Existing
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S Chrisman Rd	11th St to W Schulte Rd	13,200	70	0	30	1.0%	11.0%	45	75	0	436	202	94	71.5
2	S Chrisman Rd	W Schulte Rd to Valpico Rd	9,500	70	0	30	1.0%	11.0%	45	115	-5	350	162	75	62.2
3	S Chrisman Rd	Valpico Rd to W Linne Rd	5,400	70	0	30	1.0%	16.0%	45	90	0	285	132	61	67.5
4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	7,600	70	0	30	1.0%	15.0%	45	50	0	347	161	75	72.6
5	S Tracy Blvd	W Linne Rd to I-580	2,600	70	0	30	1.0%	56.0%	45	50	0	350	162	75	72.7
6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7,100	70	0	30	1.0%	15.0%	35	70	0	267	124	58	68.7
7	S MacArthur Rd	W Linne Rd to Project	1,400	70	0	30	1.0%	43.0%	40	200	0	183	85	39	59.4
8	Chrisman Rd	W Linne Rd to Durham Ferry Rd	4,400	70	0	30	1.0%	20.0%	55	100	0	332	154	72	67.8
9	S Chrisman Rd	Durham Ferry Rd to SR-132	3,600	70	0	30	1.0%	20.0%	55	175	-5	291	135	63	58.3
10	Durham Ferry Rd	S Chrisman Rd to S Bird Rd	1,500	70	0	30	1.0%	8.0%	45	100	0	90	42	19	59.3
11	S. Bird	Durham Ferry Rd to SR-132	700	70	0	30	1.0%	20.0%	50	80	-5	89	42	19	55.7
12	S Bird Rd	S Lehman Rd to Durham Ferry Rd	800	70	0	30	1.0%	7.0%	55	115	0	72	33	15	56.9
13	Durham Ferry Rd	S Bird Rd to I-5	1,400	70	0	30	1.0%	6.0%	45	35	0	77	36	17	65.2
14	W Lehman Rd	S Bird Rd to Ahern Rd	400	70	0	30	1.0%	7.0%	45	60	-5	35	16	8	51.6

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Appendix C-2

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230309
Description: Pacific Gateway Specific Plan EIR - Ex. Plus Phase 1
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S Chrisman Rd	11th St to W Schulte Rd	13,700	70	0	30	1.0%	16.0%	45	75	0	531	246	114	72.7
2	S Chrisman Rd	W Schulte Rd to Valpico Rd	10,000	70	0	30	1.0%	18.0%	45	115	-5	456	212	98	64.0
3	S Chrisman Rd	Valpico Rd to W Linne Rd	6,100	70	0	30	1.0%	24.0%	45	90	0	381	177	82	69.4
4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	8,200	70	0	30	1.0%	15.0%	45	50	0	365	170	79	73.0
5	S Tracy Blvd	W Linne Rd to I-580	2,600	70	0	30	1.0%	56.0%	45	50	0	350	162	75	72.7
6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7,800	70	0	30	1.0%	14.0%	35	70	0	274	127	59	68.9
7	S MacArthur Rd	W Linne Rd to Project	1,400	70	0	30	1.0%	43.0%	40	200	0	183	85	39	59.4
8	Chrisman Rd	W Linne Rd to Durham Ferry Rd	6,000	70	0	30	1.0%	27.0%	55	100	0	472	219	102	70.1
9	S Chrisman Rd	Durham Ferry Rd to SR-132	5,500	70	0	30	1.0%	23.0%	55	175	-5	412	191	89	60.6
10	Durham Ferry Rd	S Chrisman Rd to S Bird Rd	1,800	70	0	30	1.0%	6.0%	45	100	0	91	42	20	59.4
11	S. Bird	Durham Ferry Rd to SR-132	700	70	0	30	1.0%	20.0%	50	80	-5	89	42	19	55.7
12	S Bird Rd	S Lehman Rd to Durham Ferry Rd	900	70	0	30	1.0%	4.0%	55	115	0	67	31	15	56.5
13	Durham Ferry Rd	S Bird Rd to I-5	1,600	70	0	30	1.0%	8.0%	45	35	0	94	43	20	66.4
14	W Lehman Rd	S Bird Rd to Ahern Rd	500	70	0	30	1.0%	3.0%	45	60	-5	32	15	7	50.9

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Appendix C-3

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230309
Description: Pacific Gateway Specific Plan EIR - Existing Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S Chrisman Rd	11th St to W Schulte Rd	18,300	70	0	30	1.0%	29.0%	45	75	0	878	407	189	76.0
2	S Chrisman Rd	W Schulte Rd to Valpico Rd	14,600	70	0	30	1.0%	32.0%	45	115	-5	798	370	172	67.6
3	S Chrisman Rd	Valpico Rd to W Linne Rd	11,700	70	0	30	1.0%	35.0%	45	90	0	724	336	156	73.6
4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	12,100	70	0	30	1.0%	14.0%	45	50	0	458	213	99	74.4
5	S Tracy Blvd	W Linne Rd to I-580	5,200	70	0	30	1.0%	25.0%	45	50	0	350	162	75	72.7
6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	12,600	70	0	30	1.0%	16.0%	35	70	0	405	188	87	71.4
7	S MacArthur Rd	W Linne Rd to Project	5,100	70	0	30	1.0%	20.0%	40	200	0	279	129	60	62.2
8	Chrisman Rd	W Linne Rd to Durham Ferry Rd	14,900	70	0	30	1.0%	30.0%	55	100	0	913	424	197	74.4
9	S Chrisman Rd	Durham Ferry Rd to SR-132	16,900	70	0	30	1.0%	21.0%	55	175	-5	833	387	180	65.2
10	Durham Ferry Rd	S Chrisman Rd to S Bird Rd	4,300	70	0	30	1.0%	11.0%	45	100	0	206	96	44	64.7
11	S. Bird	Durham Ferry Rd to SR-132	800	70	0	30	1.0%	22.0%	50	80	-5	103	48	22	56.6
12	S Bird Rd	S Lehman Rd to Durham Ferry Rd	2,400	70	0	30	1.0%	9.0%	55	115	0	161	75	35	62.2
13	Durham Ferry Rd	S Bird Rd to I-5	2,600	70	0	30	1.0%	14.0%	45	35	0	164	76	35	70.1
14	W Lehman Rd	S Bird Rd to Ahern Rd	1,800	70	0	30	1.0%	9.0%	45	60	-5	106	49	23	58.7

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Appendix C-4

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230309
Description: Pacific Gateway Specific Plan EIR - Cumulative
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S Chrisman Rd	11th St to W Schulte Rd	23,900	70	0	30	1.0%	8.0%	45	75	0	568	264	122	73.2
2	S Chrisman Rd	W Schulte Rd to Valpico Rd	23,400	70	0	30	1.0%	7.0%	45	115	-5	533	247	115	65.0
3	S Chrisman Rd	Valpico Rd to W Linne Rd	16,400	70	0	30	1.0%	9.0%	45	90	0	463	215	100	70.7
4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	32,700	70	0	30	1.0%	7.0%	45	50	0	666	309	144	76.9
5	S Tracy Blvd	W Linne Rd to I-580	2,800	70	0	30	1.0%	56.0%	45	50	0	368	171	79	73.0
6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	22,500	70	0	30	1.0%	8.0%	35	70	0	421	195	91	71.7
7	S MacArthur Rd	W Linne Rd to Project	1,400	70	0	30	1.0%	43.0%	40	200	0	183	85	39	59.4
8	Chrisman Rd	W Linne Rd to Durham Ferry Rd	9,100	70	0	30	1.0%	11.0%	55	100	0	420	195	91	69.4
9	S Chrisman Rd	Durham Ferry Rd to SR-132	8,300	70	0	30	1.0%	12.0%	55	175	-5	409	190	88	60.5
10	Durham Ferry Rd	S Chrisman Rd to S Bird Rd	2,500	70	0	30	1.0%	7.0%	45	100	0	120	56	26	61.2
11	S. Bird	Durham Ferry Rd to SR-132	700	70	0	30	1.0%	10.0%	50	80	-5	66	31	14	53.7
12	S Bird Rd	S Lehman Rd to Durham Ferry Rd	2,400	70	0	30	1.0%	6.0%	55	115	0	143	66	31	61.4
13	Durham Ferry Rd	S Bird Rd to I-5	3,700	70	0	30	1.0%	6.0%	45	35	0	148	69	32	69.4
14	W Lehman Rd	S Bird Rd to Ahern Rd	500	70	0	30	1.0%	6.0%	45	60	-5	39	18	8	52.2

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Appendix C-5

FHWA-RD-77-108 Highway Traffic Noise Prediction Model

Project #: 230309
Description: Pacific Gateway Specific Plan EIR - Cumulative Plus Project
Ldn/CNEL: Ldn
Hard/Soft: Soft

Segment	Roadway	Segment	ADT	Day %	Eve %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance	Offset (dB)	Contours (ft.) - No Offset 60 dBA	65 dBA	70 dBA	Level, dBA
1	S Chrisman Rd	11th St to W Schulte Rd	29,000	70	0	30	1.0%	22.0%	45	75	0	1028	477	221	77.1
2	S Chrisman Rd	W Schulte Rd to Valpico Rd	28,500	70	0	30	1.0%	21.0%	45	115	-5	991	460	214	69.0
3	S Chrisman Rd	Valpico Rd to W Linne Rd	22,700	70	0	30	1.0%	25.0%	45	90	0	934	434	201	75.2
4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	37,200	70	0	30	1.0%	8.0%	45	50	0	763	354	164	77.8
5	S Tracy Blvd	W Linne Rd to I-580	5,400	70	0	30	1.0%	24.0%	45	50	0	351	163	76	72.7
6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	28,000	70	0	30	1.0%	9.0%	35	70	0	514	239	111	73.0
7	S MacArthur Rd	W Linne Rd to Project	5,100	70	0	30	1.0%	20.0%	40	200	0	279	129	60	62.2
8	Chrisman Rd	W Linne Rd to Durham Ferry Rd	19,600	70	0	30	1.0%	26.0%	55	100	0	1020	473	220	75.1
9	S Chrisman Rd	Durham Ferry Rd to SR-132	21,600	70	0	30	1.0%	19.0%	55	175	-5	937	435	202	65.9
10	Durham Ferry Rd	S Chrisman Rd to S Bird Rd	5,300	70	0	30	1.0%	9.0%	45	100	0	218	101	47	65.1
11	S. Bird	Durham Ferry Rd to SR-132	800	70	0	30	1.0%	12.0%	50	80	-5	78	36	17	54.8
12	S Bird Rd	S Lehman Rd to Durham Ferry Rd	4,000	70	0	30	1.0%	8.0%	55	115	0	218	101	47	64.2
13	Durham Ferry Rd	S Bird Rd to I-5	4,900	70	0	30	1.0%	10.0%	45	35	0	216	100	47	71.9
14	W Lehman Rd	S Bird Rd to Ahern Rd	1,900	70	0	30	1.0%	8.0%	45	60	-5	105	49	23	58.6

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Appendix D:
Detailed Traffic Noise Calculations and Significance Summaries



Receiver ID	Segment #	Roadway	Segment	Address	# of Receivers	Distance	Additional Shielding Offset	Existing	Existing Plus Project	Change	Change, w/Quiet Pavement	Level w/Quiet Pavement	Future No Project	Future Plus Project	Change	Change, w/Quiet Pavement	Level w/Quiet Pavement	Existing + Phase I	Change	Change, w/Quiet Pavement	Level w/Quiet Pavement	Jurisdiction	Jurisdiction's Standard	Existing Plus Project: Increase Criteria	Existing Plus Project: Exceed Standard Due to Project?	Existing Plus Project: Impact?	with Quiet Pavement: Increase Criteria	with Quiet Pavement: Exceed Standard Due to Project?	with Quiet Pavement: Impact?	Existing Plus Phase 1 Project: Increase Criteria	Existing Plus Phase 1 Project: Exceed Standard Due to Project?	Existing Plus Phase 1 Project: Impact?	with Quiet Pavement: Increase Criteria	with Quiet Pavement: Exceed Standard Due to Project?	with Quiet Pavement: Impact?	Cumulative Plus Project: Increase Criteria	Cumulative Plus Project: Exceed Standard Due to Project?	Cumulative Plus Project: Impact?	with Quiet Pavement: Increase Criteria	with Quiet Pavement: Exceed Standard Due to Project?	with Quiet Pavement: Impact?
R1	1	S Chrisman Rd	11th St to W Schulte Rd	24169 S Chrisman Rd, Tracy, CA 95304	1	75	0	71.5	76.0	4.5	0.5	72.0	73.2	77.1	3.9	-0.1	73.1	71.5	72.7	1.2	-2.8	68.7	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R2	1	S Chrisman Rd	11th St to W Schulte Rd	24301 S Chrisman Rd Unit B, Tracy, CA 95304	1	130	-5	62.9	67.4	4.5	0.5	63.4	64.6	68.5	3.9	-0.1	64.5	62.9	64.1	1.2	-2.8	60.1	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R3	1	S Chrisman Rd	11th St to W Schulte Rd	24353 S Chrisman Rd, Tracy, CA 95304	1	185	-5	60.6	65.1	4.5	0.5	61.1	62.3	66.2	3.9	-0.1	62.2	60.6	61.8	1.2	-2.8	57.8	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R4	1	S Chrisman Rd	11th St to W Schulte Rd	24593 S Chrisman Rd, Tracy, CA 95304	1	185	-5	60.6	65.1	4.5	0.5	61.1	62.3	66.2	3.9	-0.1	62.2	60.6	61.8	1.2	-2.8	57.8	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R5	1	S Chrisman Rd	11th St to W Schulte Rd	24711 S Chrisman Rd, Tracy, CA 95304	1	200	-5	60.1	64.6	4.5	0.5	60.6	61.8	65.7	3.9	-0.1	61.7	60.1	61.3	1.2	-2.8	57.3	County	65	3.0	No	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R6	1	S Chrisman Rd	11th St to W Schulte Rd	25023 S Chrisman Rd, Tracy, CA 95304	1	145	-5	62.2	66.7	4.5	0.5	62.7	63.9	67.8	3.9	-0.1	63.8	62.2	63.4	1.2	-2.8	59.4	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R7	1	S Chrisman Rd	11th St to W Schulte Rd	25079 S Chrisman Rd, Tracy, CA 95304	1	175	-5	61.0	65.5	4.5	0.5	61.5	62.7	66.6	3.9	-0.1	62.6	61.0	62.2	1.2	-2.8	58.2	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R8	1	S Chrisman Rd	11th St to W Schulte Rd	25111 S Chrisman Rd, Tracy, CA 95304	1	190	-5	60.4	64.9	4.5	0.5	60.9	62.1	66.0	3.9	-0.1	62.0	60.4	61.6	1.2	-2.8	57.8	County	65	3.0	No	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R9	1	S Chrisman Rd	11th St to W Schulte Rd	25288 S Chrisman Rd, Tracy, CA 95304	1	225	-5	59.1	63.6	4.5	0.5	59.6	60.8	64.7	3.9	-0.1	60.7	59.1	60.3	1.2	-2.8	56.3	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R10	2	S Chrisman Rd	W Schulte Rd to Valpico Rd	25673 S Chrisman Rd, Tracy, CA 95304	1	115	0	62.2	67.6	5.4	1.4	63.6	65.0	69.0	4.0	0.0	65.0	62.2	64.0	1.8	-2.2	60.0	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	No	Yes	3.0	No	No
R11	2	S Chrisman Rd	W Schulte Rd to Valpico Rd	25969 S Chrisman Rd, Tracy, CA 95304	1	310	0	55.7	61.1	5.4	1.4	57.1	58.5	62.5	4.0	0.0	58.5	55.7	57.5	1.8	-2.2	53.5	County	65	5.0	No	Yes	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R12	2	S Chrisman Rd	W Schulte Rd to Valpico Rd	1728 Toulouse Ct, Tracy, CA 95304	29	115	0	62.2	67.6	5.4	1.4	63.6	65.0	69.0	4.0	0.0	65.0	62.2	64.0	1.8	-2.2	60.0	City	60	3.0	No	Yes	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R13	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27000 Hillview St, Tracy, CA 95304	1	90	0	67.5	73.6	6.1	2.1	69.6	70.7	75.2	4.5	0.5	71.2	67.5	69.4	1.9	-2.1	65.4	County	65	1.5	No	Yes	1.5	No	Yes	1.5	No	Yes	1.5	No	No	1.5	No	No
R14	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27070 Hillview St, Tracy, CA 95304	1	285	0	60.0	66.1	6.1	2.1	62.1	63.2	67.7	4.5	0.5	63.7	60.0	61.9	1.9	-2.1	57.9	County	65	5.0	Yes	Yes	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R15	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27120 Hillview St, Tracy, CA 95304	1	235	0	61.2	67.3	6.1	2.1	63.3	64.4	68.9	4.5	0.5	64.9	61.2	63.1	1.9	-2.1	59.1	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R16	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27150 Hillview St, Tracy, CA 95304	1	235	0	61.2	67.3	6.1	2.1	63.3	64.4	68.9	4.5	0.5	64.9	61.2	63.1	1.9	-2.1	59.1	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R17	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27200 Hillview St, Tracy, CA 95304	1	105	0	66.5	72.6	6.1	2.1	68.6	69.7	74.2	4.5	0.5	70.2	66.5	68.4	1.9	-2.1	64.4	County	65	1.5	No	Yes	1.5	No	Yes	1.5	No	Yes	1.5	No	No	1.5	No	No
R18	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27251 S Chrisman Rd, Tracy, CA 95304	1	70	0	69.1	75.2	6.1	2.1	71.2	72.3	76.8	4.5	0.5	72.8	69.1	71.0	1.9	-2.1	67.0	County	65	1.5	No	Yes	1.5	No	Yes	1.5	No	No	1.5	No	Yes	1.5	No	No
R19	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27320 Hillview St, Tracy, CA 95304	2	115	0	65.9	72.0	6.1	2.1	68.0	69.1	73.6	4.5	0.5	69.6	65.9	67.8	1.9	-2.1	63.8	County	65	1.5	No	Yes	1.5	No	Yes	1.5	No	No	1.5	No	Yes	1.5	No	No
R20	3	S Chrisman Rd	Valpico Rd to W Linne Rd	22360 Walnut Ct, Tracy, CA 95304	1	250	0	60.8	66.9	6.1	2.1	62.9	64.0	68.5	4.5	0.5	64.5	60.8	62.7	1.9	-2.1	58.7	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	Yes	Yes	3.0	No	No
R21	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27398 Walnut Ct, Tracy, CA 95304	1	175	0	63.2	69.3	6.1	2.1	65.3	66.4	70.9	4.5	0.5	66.9	63.2	65.1	1.9	-2.1	61.1	County	65	3.0	Yes	Yes	3.0	No	Yes	3.0	No	Yes	3.0	No	Yes	3.0	No	No
R22	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27503 S Chrisman Rd, Tracy, CA 95304	2	70	0	69.1	75.2	6.1	2.1	71.2	72.3	76.8	4.5	0.5	72.8	69.1	71.0	1.9	-2.1	67.0	County	65	1.5	No	Yes	1.5	No	Yes	1.5	No	Yes	1.5	No	Yes	1.5	No	No
R23	3	S Chrisman Rd	Valpico Rd to W Linne Rd	27527 S Chrisman Rd, Tracy, CA 95304	15	100	0	66.8	72.9	6.1	2.1	68.9	70.0	74.5	4.5	0.5	70.5	66.8	68.7	1.9	-2.1	64.7	County	65	1.5	No	Yes	1.5	No	Yes	1.5	No	Yes	1.5	No	No	1.5	No	No
R26	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	26900 W Linne Rd, Tracy, CA 95377	1	50	0	72.6	74.4	1.8	-2.2	70.4	76.5	78.3	1.8	-3.1	73.8	72.6	74.4	1.8	-3.6	69.0	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R27	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	10322 W Linne Rd, Tracy, CA 95377	2	185	-5	59.1	60.9	1.8	-2.2	56.9	63.4	64.3	0.9	-3.1	60.3	59.1	59.5	0.4	-3.6	55.5	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R28	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	4717 Bonsai Ave, Tracy, CA 95377	6	430	-5	53.6	55.4	1.8	-2.2	51.4	57.9	58.8	0.9	-3.1	54.8	53.6	54.0	0.4	-3.6	50.0	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R29	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	4739 Windchime Way, Tracy, CA 95377	4	340	0	60.1	61.9	1.8	-2.2	57.9	64.4	65.3	0.9	-3.1	61.3	60.1	60.5	0.4	-3.6	56.5	City	60	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R30	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	4723 Cherish Way, Tracy, CA 95377	5	440	-5	53.4	55.2	1.8	-2.2	51.2	57.7	58.6	0.9	-3.1	54.6	53.4	53.8	0.4	-3.6	49.8	City	60	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R31	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	187 Glenmoor Dr, Tracy, CA 95377	11	520	-5	52.3	54.1	1.8	-2.2	50.1	56.6	57.5	0.9	-3.1	53.5	52.3	52.7	0.4	-3.6	48.7	City	60	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R32	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	4740 Glenbrook Dr, Tracy, CA 95377	15	420	-5	53.7	55.5	1.8	-2.2	51.5	58.0	58.9	0.9	-3.1	54.9	53.7	54.1	0.4	-3.6	50.1	City	60	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R33	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	9382 Lorraine Rd, Tracy, CA 95377	1	270	0	61.6	63.4	1.8	-2.2	59.4	65.9	66.8	0.9	-3.1	62.8	61.6	62.0	0.4	-3.6	58.0	City	60	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R34	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	9310 Lorraine Rd, Tracy, CA 95377	1	235	0	62.5	64.3	1.8	-2.2	60.3	66.8	67.7	0.9	-3.1	63.7	62.5	62.9	0.4	-3.6	58.9	City	60	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R35	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	9262 Lorraine Rd, Tracy, CA 95377	1	330	0	60.1	62.1	1.8	-2.2	59.1	64.6	65.5	0.9	-3.1	61.5	60.1	60.7	0.4	-3.6	56.7	City	60	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R36	4	W Linne Rd	S Tracy Blvd to S MacArthur Rd	9255 S MacArthur Dr, Tracy, CA 95377	1	185	0	64.1	65.9	1.8	-2.2	61.9	68.4	69.3	0.9	-3.1	65.3	64.1	64.5	0.4	-3.6	60.5	City	60	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R37	5	S Tracy Blvd	W Linne Rd to I-580	28700 S Tracy Blvd, Tracy, CA 95377	1	50	0	72.7	72.7	0.0	-4.0	68.7	73.0	72.7	-0.3	-4.3	68.7	72.7	72.7	0.0	-4.0	68.7	County	65	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R38	5	S Tracy Blvd	W Linne Rd to I-580	28584 S Tracy Blvd, Tracy, CA 95377	1	300	-5	56.0	56.0	0.0	-4.0	52.0	60.2	60.1	0.0	-4.3	57.1	55.9	55.9	0.0	-4.0	52.3	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R39	5	S Tracy Blvd	W Linne Rd to I-580	28770 S Tracy Blvd, Tracy, CA 95377	1	105	-5	62.9	62.9	0.0	-4.0	58.9	63.2	62.9	-0.3	-4.3	58.9	62.9	62.9	0.0	-4.0	58.9	County	65	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R40	5	S Tracy Blvd	W Linne Rd to I-580	28839 S Tracy Blvd, Tracy, CA 95377	1	70	-5	65.5	65.5	0.0	-4.0	61.5	65.8	65.5	-0.3	-4.3	61.5	65.5	65.5	0.0	-4.0	61.5	City	60	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R41	5	S Tracy Blvd	W Linne Rd to I-580	30508 S Tracy Blvd, Tracy, CA 95377	1	240	-5	57.5	57.5	0.0	-4.0	53.5	57.8	57.5	-0.3	-4.3	53.5	57.5	57.5	0.0	-4.0	53.5	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R42	5	S Tracy Blvd	W Linne Rd to I-580	30773 S Tracy Blvd, Tracy, CA 95377	1	150	-5	60.5	60.5	0.0	-4.0	56.5	60.8	60.5	-0.3	-4.3	56.5	60.5	60.5	0.0	-4.0	56.5	County	65	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R43	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8300 W Linne Rd, Tracy, CA 95304	1	70	0	68.7	71.4	2.7	-1.3	67.4	71.7	73.0	1.3	-2.7	69.0	68.7	68.7	0.0	-3.8	64.9	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R44	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8362 Waterwell Way, Tracy, CA 95304	1	260	0	60.2	62.9	2.7	-1.3	58.9	63.2	64.5	1.3	-2.7	60.5	60.2	60.4	0.2	-3.8	56.4	County	65	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R45	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8738 Waterwell Way, Tracy, CA 95304	1	260	0	60.2	62.9	2.7	-1.3	58.9	63.2	64.5	1.3	-2.7	60.5	60.2	60.4	0.2	-3.8	56.4	County	65	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R46	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8706 Waterwell Way, Tracy, CA 95304	1	270	0	59.9	62.6	2.7	-1.3	58.6	62.9	64.2	1.3	-2.7	60.2	59.9	60.1	0.2	-3.8	56.1	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R47	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8672 Waterwell Way, Tracy, CA 95304	1	265	0	60.0	62.7	2.7	-1.3	58.7	63.0	64.3	1.3	-2.7	60.3	60.0	60.2	0.2	-3.8	56.2	County	65	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R48	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8650 Waterwell Way, Tracy, CA 95304	2	245	0	60.5	63.2	2.7	-1.3	59.2	63.5	64.8	1.3	-2.7	60.8	60.5	60.7	0.2	-3.8	56.7	County	65	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R49	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8556 Waterwell Way, Tracy, CA 95304	1	300	0	59.2	61.9	2.7	-1.3	57.9	62.2	63.5	1.3	-2.7	59.5	59.2	59.4	0.2	-3.8	55.4	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R50	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8538 Waterwell Way, Tracy, CA 95304	1	335	0	58.5	61.2	2.7	-1.3	57.2	61.5	62.8	1.3	-2.7	58.8	58.5	58.7	0.2	-3.8	54.7	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R51	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8512 Waterwell Way, Tracy, CA 95304	1	420	0	57.0	59.7	2.7	-1.3	55.7	60.0	61.3	1.3	-2.7	57.3	57.0	57.2	0.2	-3.8	53.2	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R52	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	28552 S MacArthur Dr, Tracy, CA 95377	1	180	-5	57.5	60.2	2.7	-1.3	56.2	60.5	61.8	1.3	-2.7	57.8	57.5	57.7	0.2	-3.8	53.7	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R53	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	28475 Depot Master Dr, Tracy, CA 95304	1	75	0	68.3	71.0	2.7	-1.3	67.0	71.3	72.6	1.3	-2.7	68.6	68.3	68.5	0.2	-3.8	64.5	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R54	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	28480 Depot Master Dr, Tracy, CA 95304	1	70	0	68.7	71.4	2.7	-1.3	67.4	71.7	73.0	1.3	-2.7	69.0	68.7	68.9	0.2	-3.8	64.9	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R55	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	8120 Depot Master Ct, Tracy, CA 95304	1	70	0	68.7	71.4	2.7	-1.3	67.4	71.7	73.0	1.3	-2.7	69.0	68.7	68.9	0.2	-3.8	64.9	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R56	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	28460 Jack Godwin Ct, Tracy, CA 95304	1	55	0	70.3	73.0	2.7	-1.3	69.0	73.3	74.6	1.3	-2.7	70.6	70.3	70.5	0.2	-3.8	66.5	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R57	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	28440 Jack Godwin Ct, Tracy, CA 95304	1	65	0	69.2	71.9	2.7	-1.3	67.9	72.2	73.5	1.3	-2.7	69.5	69.2	69.4	0.2	-3.8	65.4	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R58	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	28450 Jack Godwin Ct, Tracy, CA 95304	1	65	0	69.2	71.9	2.7	-1.3	67.9	72.2	73.5	1.3	-2.7	69.5	69.2	69.4	0.2	-3.8	65.4	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R59	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7807 W Linne Rd, Tracy, CA 95304	1	145	0	64.0	66.7	2.7	-1.3	62.7	67.0	68.3	1.3	-2.7	64.3	64.0	64.2	0.2	-3.8	60.2	County	65	1.0	No	Yes	1.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R60	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7860 Zilli Dr, Tracy, CA 95304	1	55	0	70.3	73.0	2.7	-1.3	69.0	73.3	74.6	1.3	-2.7	70.6	70.3	70.5	0.2	-3.8	66.5	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R61	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7831 W Linne Rd, Tracy, CA 95304	1	140	0	64.2	66.9	2.7	-1.3	62.9	67.2	68.5	1.3	-2.7	64.5	64.2	64.4	0.2	-3.8	60.4	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R62	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7807 W Linne Rd, Tracy, CA 95304	1	50	0	70.9	73.6	2.7	-1.3	69.6	73.9	75.2	1.3	-2.7	71.2	70.9	71.1	0.2	-3.8	67.1	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R63	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7783 W Linne Rd, Tracy, CA 95304	1	150	0	63.7	66.4	2.7	-1.3	62.4	66.7	68.0	1.3	-2.7	64.0	63.7	63.9	0.2	-3.8	59.9	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R64	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7757 W Linne Rd, Tracy, CA 95304	1	185	0	62.4	65.1	2.7	-1.3	61.1	65.4	66.7	1.3	-2.7	62.7	62.4	62.6	0.2	-3.8	58.6	County	65	3.0	No	Yes	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R65	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7705 W Linne Rd, Tracy, CA 95304	1	75	0	68.3	71.0	2.7	-1.3	67.0	71.3	72.6	1.3	-2.7	68.6	68.3	68.5	0.2	-3.8	64.5	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R66	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7681 W Linne Rd, Tracy, CA 95304	1	120	0	65.2	67.9	2.7	-1.3	63.9	68.2	69.5	1.3	-2.7	65.5	65.2	65.4	0.2	-3.8	61.4	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R67	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7594 W Linne Rd, Tracy, CA 95304	1	90	5	71.7	74.4	-1.3	-5.3	70.4	74.7	76.0	1.3	-2.7	72.0	71.7	71.9	0.2	-3.8	67.9	County	65	1.5	No	Yes	1.5	No	No	1.5	No	No	1.5	No	No	1.5	No	No
R68	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7700 W Linne Rd, Tracy, CA 95304	1	165	0	63.1	65.8	2.7	-1.3	61.8	66.1	67.4	1.3	-2.7	63.4	63.1	63.3	0.2	-3.8	59.3	County	65	3.0	Yes	Yes	3.0	No	No	3.0	No	No	3.0	No	No	3.0	No	No
R69	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7714 W Linne Rd, Tracy, CA 95304	1	105	0	59.1	61.8	2.7	-1.3	57.8	62.1	63.4	1.3	-2.7	59.4	59.1	59.3	0.2	-3.8	55.3	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R70	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7790 W Linne Rd, Tracy, CA 95304	1	315	0	58.9	61.6	2.7	-1.3	57.6	61.9	63.2	1.3	-2.7	59.2	58.9	59.1	0.2	-3.8	55.1	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R71	6	W Linne Rd	S MacArthur Rd to S Chrisman Rd	7834 W Linne Rd, Tracy, CA 95304	1	290	0	59.4	62.1	2.7	-1.3	58.1	62.4	63.7	1.3	-2.7	59.7	59.4	59.6	0.2	-3.8	55.6	County	65	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No	5.0	No	No
R72	6	W Linne Rd	S MacArthur Rd to S Chris

| | | |

Appendix E: Construction Noise Barrier Calculations

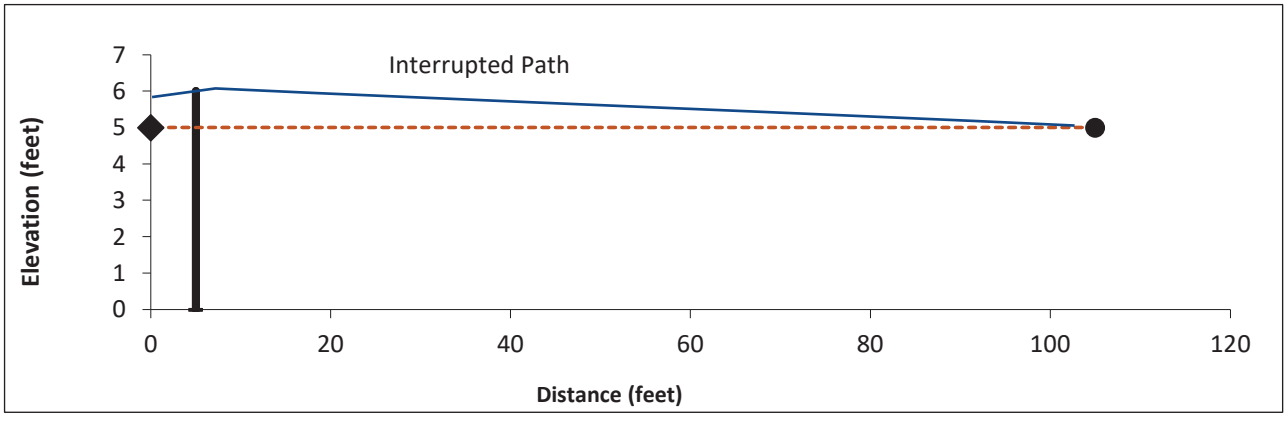
Appendix D-1 : Barrier Insertion Loss Calculation

Project Information:	Project Name: Pacific Gateway EIR Location(s): Adjacent Residential
Noise Level Data:	Source Description: Construction Source Noise Level, dBA Lmax: 90 Source Frequency (Hz): 1000 Source Height (ft): 5
Site Geometry:	Receiver Description: Adjacent Lots Source to Barrier Distance (C_1): 100 Barrier to Receiver Distance (C_2): 5 Pad/Ground Elevation at Receiver: 0 Receiver Elevation[1]: 5 Base of Barrier Elevation: 0 Starting Barrier Height 6

Barrier Effectiveness

Top of Barrier Elevation (ft)	Barrier Height (ft)	Insertion Loss, dB	Noise Level, dB	Barrier Breaks Line of Site to Source?
6	6	-7	83	Yes
7	7	-9	81	Yes
8	8	-11	79	Yes
9	9	-13	77	Yes
10	10	-15	76	Yes
11	11	-15	75	Yes
12	12	-16	74	Yes
13	13	-17	73	Yes
14	14	-17	73	Yes
15	15	-17	73	Yes
16	16	-17	73	Yes

Notes: [1] Standard receiver elevation is five feet above grade/pad elevations at the receiver location(s)



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Appendix N

Schaaf & Wheeler
CONSULTING CIVIL ENGINEERS

4699 Old Ironsides Drive, Suite 350
Santa Clara, CA 95054
(408) 246-4848
ganderson@swsv.com

TECHNICAL MEMORANDUM

DATE: August 21, 2025
TO: Carter Reiff, PE
FROM: Glen M. Anderson, PE
SUBJECT: Pacific Gateway – Water and Sewer Demands and System Requirements

Introduction

As part of the preliminary development plans for the Pacific Gateway development (Project), Kier & Wright has contracted Schaaf & Wheeler to establish required water demands for the proposed development, and to provide recommendations on water system requirements. This memorandum serves to provide estimated water requirements for the development as well as preliminary water system infrastructure requirements.

The Project consists of developing existing farmland into industrial usage, as well as the addition of a university. The Project will convert approximately 1,577 acres of existing agriculture land into a mixed-use, master planned development consisting of modern industrial facilities, a university, business park, general commercial and the VFW Tracy post. The property is located in San Joaquin County, south of the city of Tracy. The project is enclosed by Tracy Blvd. on the west, S Bird Rd. on the east, and is predominantly located between the California Aqueduct and the Delta Mendota Canal excepting the University, AB FAB, and VFW sites north of the Delta Mendota Canal, and a portion south of the California Aqueduct, and north of Highway 132. The project area is shown in Figure 1.

WATER DEMANDS

Domestic Water Demand

The San Joaquin Public Works (SJPW) Improvement Standard, Section 4-2.0, establishes that industrial development site water demands shall be set at levels of similar facilities, or a minimum of 1,800 gallons per day per acre (gpd/ac). The 1,800 gpd/ac water demand is inconsistent with, and substantially greater than, demand assumptions recently approved by the County for industrial developments. Following the County-approved demand patterns of nearby industrial developments and based on developer expectations of the reasonably foreseeable future uses within the proposed project, Schaaf & Wheeler has established a proposed average day demand of 10 gpd per 1,500 square feet of industrial building per shift and 10 gpd per 250 square feet of office space within the industrial development, per shift. For this project, it is assumed that industrial developments will work two shifts per day and that the industrial development is 95% warehouse and 5% office space.

For commercial parcels, the SJPW Improvement Standard requires 2,000 gpd/ac.

Schaaf & Wheeler assumed the University would accommodate an average of 600 students per day initially and 5,000 students per day at buildout, each generating an average day water demand of 12.81 gallons per day per student based upon research conducted. At buildout, 1,600 student beds are anticipated, bringing the total water use per day for those 1,600 students to 80 gallons per day.

The proposed development is in discussions to join the water system that currently serves Community Service Area 16 (CSA 16), to the south of the development. CSA 16 serves a total of 55 connections within

Par Country Estates and Hillside greens. An estimate of CSA 16's water demands is included in the water demand estimates, based on historic water use.

Due to the size of the Project, it is anticipated that construction will occur in phases. Refer to shading in Figure 1 indicating the initial phase of development.

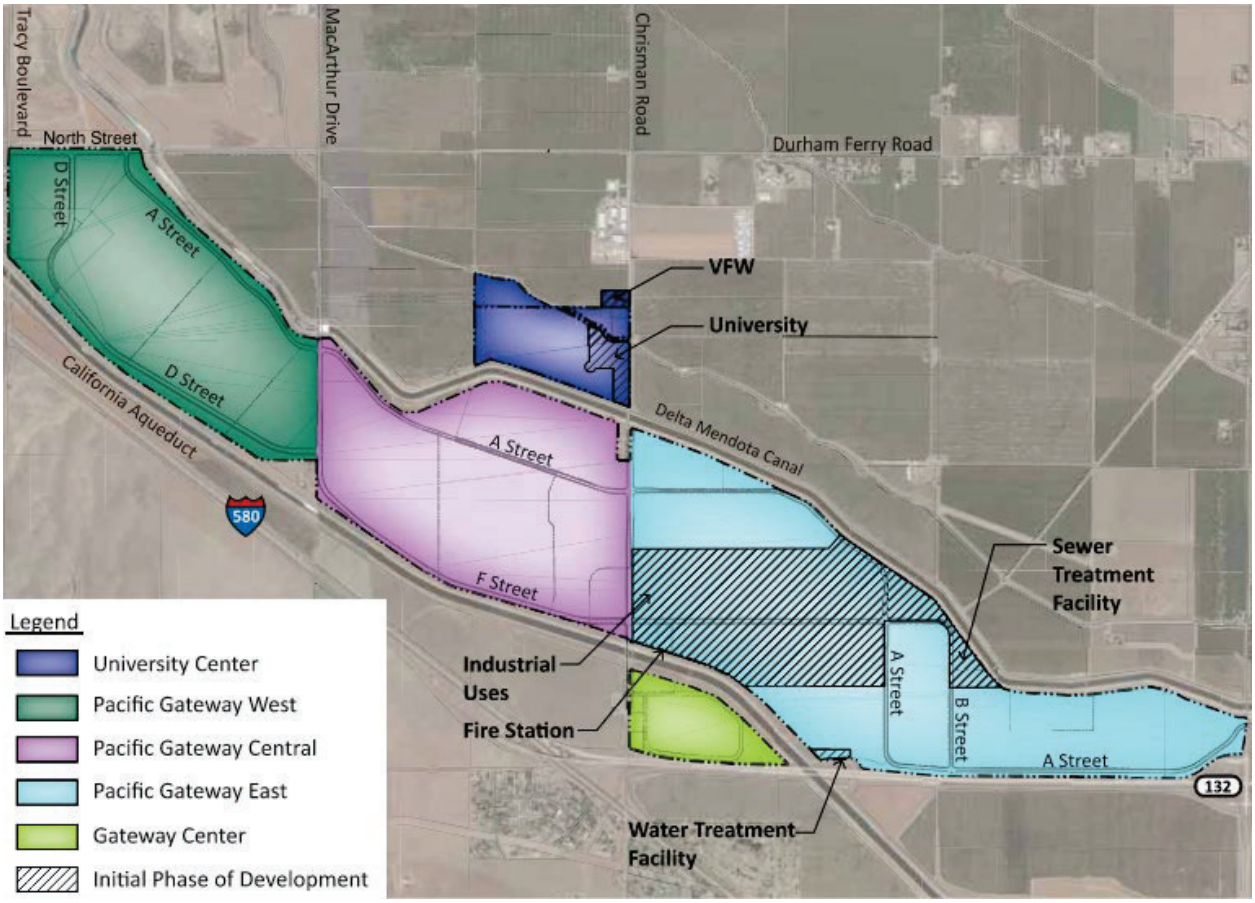

*Figure not OCR compatible

Figure 1. Project Area

Estimated building square footages are established for each of the areas identified. The estimated building size and associated average day water demands (ADD) for each area are summarized in Table 1.

The Maximum Day Demand (MDD) and Peak Hour Demand (PHD) are both essential when designing components of the overall water system for the project. Peaking factors of 2.2 (Maximum Day Demand) and 3.8 (Peak Hour Demand) were utilized from section 4-2.0 of the 2014 SJPW Standards.

Fire Water Demand

The expected fire flow demand requirements were established from the 2019 California Fire Code (CFC). With the large building sizes anticipated, a base fire flow of 8,000 gpm for 4 hours is assumed. However, it is presumed that the buildings will be equipped with fire suppression systems, that will allow for a significant reduction in fire flow to 2,000 gpm for 2 hours. To be conservative, the fire demand was set at 2,000 GPM for 4 hours. The final fire demand for the industrial warehouse buildings may be adjusted later in the planning process.

Table 1. Average Water Demands

Area	Landuse	Initial Phase Area (SF)	Buildout Area (SF)	Initial Phase Water Demand (GPD)	Buildout Water Demand (GPD)	Initial Phase Water Demand (AFY)	Buildout Water Demand (AFY)
Pacific Gateway East	Industrial	3,962,000	11,124,274	66,033	185,405	74.0	207.7
Pacific Gateway Central	Industrial	0	6,856,474	0	114,275	0.0	128.0
Pacific Gateway West	Industrial	0	6,168,882	0	102,815	0.0	115.2
Gateway Center	Industrial	0	525,370	0	8,756	0.0	9.8
Gateway Center	Hotel/Commercial	0	109,592	0	5,032	0.0	5.6
University Center	University*	25,000	1,379,150	7,686	171,554	8.6	192.2
University Center	VFW**	11,500	11,500	528	528	0.6	0.6
University Center	Industrial	0	93,000	0	1,550	0.0	1.7
University Center	Commercial	0	38,908	0	1,786	0.0	2.0
CSA-16	Residential***	NA	NA	123,290	123,290	138.1	138.1
	Total	3,998,500	26,307,150	197,537	714,990	221.3	800.9

*University Assumes 600 students in first phase and 5,000 at buildout, with each student accounting for 12.81 GPD. Also assumes that 1,600 student beds are included at buildout with and additional water demand of 67.19 GPD per bed (80 GPD per bed total).

**VFW treated as commercial

*** CSA-16 parcels presumed to be on Septic and treated at place of use. CSA-16 estimate is based on peak record water use for CSA-16.

Irrigation Water Demand

The anticipated irrigation demand for the project site was estimated using the Estimated Total Water Use (ETWU) calculations. It is assumed that fifteen percent (15%) of the total area will be designated as Landscape Area (LA). Additionally, since the project intends to join CSA 16, the irrigation calculation should include the required irrigation for the Golf Course served by CSA 16. In Total, the estimated landscape area is approximately 314 acres. The evapotranspiration (ETo) of 48 inches is used for the project to match the nearby City of Tracy, as directed by the County. The Evapotranspiration Adjustment Factor (ETAF) is 0.45 (non-residential). Table 2 displays the irrigation demand for the development totaling 266.2 ac-ft/year. To determine these values the formula ETWU = (Et) X (0.62) X [(ETAF X LA)] was used.

Table 2. Estimated Irrigation Demand

Pacific Gateway Irrigation Demand Estimates		
Total Area	1577	Acres
Landscape Area %	15	%
Landscape Area	236.6	Acres
Eto	48.4	in/year
Eto	4.03	ft/year
ETAF	0.45	unitless
Irrigation Demand	**266.2**	**ac-ft/year**

WATER SUPPLY

Capacity

As previously discussed, the Project site is currently used for agricultural purposes, with much of the land used for growing almonds. Water for the existing site is supplied through existing groundwater wells and surface water turnouts. Documentation on the existing wells indicate capacities ranging from 50 gpm to 1,500 gpm.

According to the University of California Drought Management program, almond trees require between 41 and 54 inches of water per year. This translates to between 3.4 and 4.5 acre-feet per acre. The Project's current land owner has indicated that the properties are currently watered at a rate between 3.0 and 3.5 acre-feet per acre With one acre-foot being equivalent to 325,851 gallons, and assuming the low end of required watering, this is an average flow of 2,678 gpd/acre (1.86 gpm/acre). For the proposed development, the predevelopment water demand is estimated at approximately 3.63 million gallons per day. Post development water demand is estimated at approximately 0.49 million gallons per day – approximately 1/7th the existing use.

Domestic Water Sources

It is anticipated that the Project's domestic water needs could be met through surface water supplies from the Byron-Bethany Irrigation District (BBID), use of existing groundwater wells, development of new groundwater wells, or some combination of these. The Project is located near County Service Area 16 (CSA-16), and it is possible the Project could be added and physically connect to the service area of CSA-16.

The Project's water source(s) will require treatment for domestic use to meet drinking water standards. Domestic water will be provided to the proposed project through a dedicated domestic water system.

Fire Water Sources

It is anticipated that the Project's fire water needs will be met through the domestic sources previously listed or through the construction of up to two groundwater wells, constructed in accordance with the State's standards or through an untreated surface water turnout. If untreated water is used for fire protection, it will be provided to the proposed project through a dedicated fire water system. If treated water is to be used for fire protection, it can be supplied through the domestic water system within the proposed project.

Irrigation Water Sources

It is anticipated that the Project's irrigation water needs will be met through use of recycled water in combination with untreated surface water from BBID. Irrigation water will be provided to the proposed project through a dedicated recycled water system.

WATER SYSTEMS

Domestic Water System

To determine required pipe sizing, a pipe network was created in EPANET, and peak hour water demands were placed strategically at locations to simulate maximum water demands at potential building location. In addition to the pipes, approximate booster pump station and storage tank sizes were determined.

Preliminary pipe sizes were determined using the EPANET model and vary between 6-inch through 12-inch pipe within the project. If domestic water is used for fire protection, it is assumed that the pipelines will be sized to meet the required fire flows as discussed later in this memorandum.

In addition to the system pipeline, storage tank(s) will be required for the domestic water system. State standards require a minimum storage volume equivalent to 8 hours of the MDD, plus the required fire flow demand. Since the fire system is entirely separate from domestic system, the domestic system is only required to store 8 hours of MDD flow. Table 3 summarizes the Project's required domestic storage in million gallons (MG). While only approximately 520,000 gallons of storage is required for domestic purposes, dead storage within tanks and commonly available storage tank requirements lead Schaaf & Wheeler to recommend a minimum of 700,000 gallons of domestic storage. This storage may be split between two reservoirs, depending on project phasing and ultimate pressure zone configuration. A booster pump system will be installed adjacent to the storage tank(s) to supply water to the domestic system.

Table 3. Required Domestic Storage

Area	Landuse	Initial Phase Area (SF)	Buildout Area (SF)	Initial Phase Water Storage (MG)	Buildout Water Storage (MG)
Pacific Gateway East	Industrial	3,962,000	11,124,274	0.0484	0.1360
Pacific Gateway Central	Industrial	0	6,856,474	0.0000	0.0838
Pacific Gateway West	Industrial	0	6,168,882	0.0000	0.0754
Gateway Center	Industrial	0	525,370	0.0000	0.0064
Gateway Center	Hotel/Commercial	0	109,592	0.0000	0.0037
University Center	University*	25,000	1,379,150	0.0056	0.1258
University Center	VFW**	11,500	11,500	0.0004	0.0004
University Center	Industrial	0	93,000	0.0000	0.0011
University Center	Commercial	0	38,908	0.0000	0.0013
CSA-16	Residential***	NA	NA	0.0904	0.0904
	Total	3,998,500	26,307,150	0.1449	0.5243

*University Assumes 600 students in first phase and 5,000 at buildout, with each student accounting for 12.81 GPD. Also assumes that 1,600 student beds are included at buildout with and additional water demand of 67.19 GPD per bed (80 GPD per bed total).

**VFW treated as commercial

*** CSA-16 parcels presumed to be on Septic and treated at place of use. CSA-16 estimate is based on peak record water use for CSA-16.

Fire Water System

Schaaf & Wheeler prepared a fire flow model, similar to the domestic model, using EPANET. The model revealed that for a fire flow of 2,000 gpm. 12-inch pipeline is sufficient.

As previously stated, the identified design fire flow assumed for this project is 2,000 gpm for a 4-hour duration. State standards require that the project store the fire flow, which will require 480,000 gallons of fire storage. Given dead volume within the storage tanks, it is estimated that a 600,000 gallon storage tank will be required. It may be possible to split this storage volume between multiple tanks, but a fire pump will be necessary at each tank location.

Irrigation Water System

Because little is known about the irrigation requirements at this time, no model has been created for the irrigation system. That said, because irrigation is a non-essential use, irrigation schedules can be adjusted to minimize system peaks and reduce system component size. It is estimated that 8-inch pipe will be sufficient to meet irrigation demands. The irrigation system will consist of a recycled water storage tank and booster station, located at the wastewater treatment plant.

WASTEWATER SYSTEMS

Sewage Collection System

The Project's wastewater will be collected from each parcel through a traditional wastewater gravity flow collection system that will be supplemented with lift stations at canal crossings and if dictated by the ultimate project design. Wastewater will be routed to the Project's wastewater treatment plant (WWTP), located at the south-eastern portion of the project. Figure 3 shows the conceptual layout of the collection system and the location of the WWTP.

Average day sewage flow is estimated to be 80% of the average daily potable water demand. Table 4 summarizes average daily sewage flow for the Project.

Manning's equation was used to generate a preliminary estimate of sewer pipe sizes within the project. It is estimated that 6-inch through 12-inch sewer pipes will be adequate for the Project.The Project's wastewater will be collected from each parcel through a traditional wastewater gravity flow collection system that will be supplemented with lift stations at canal crossings and if dictated by the ultimate project design. Wastewater will be routed to the Project's wastewater treatment plant (WWTP), located at the south-eastern portion of the project. Figure 3 shows the conceptual layout of the collection system and the location of the WWTP.

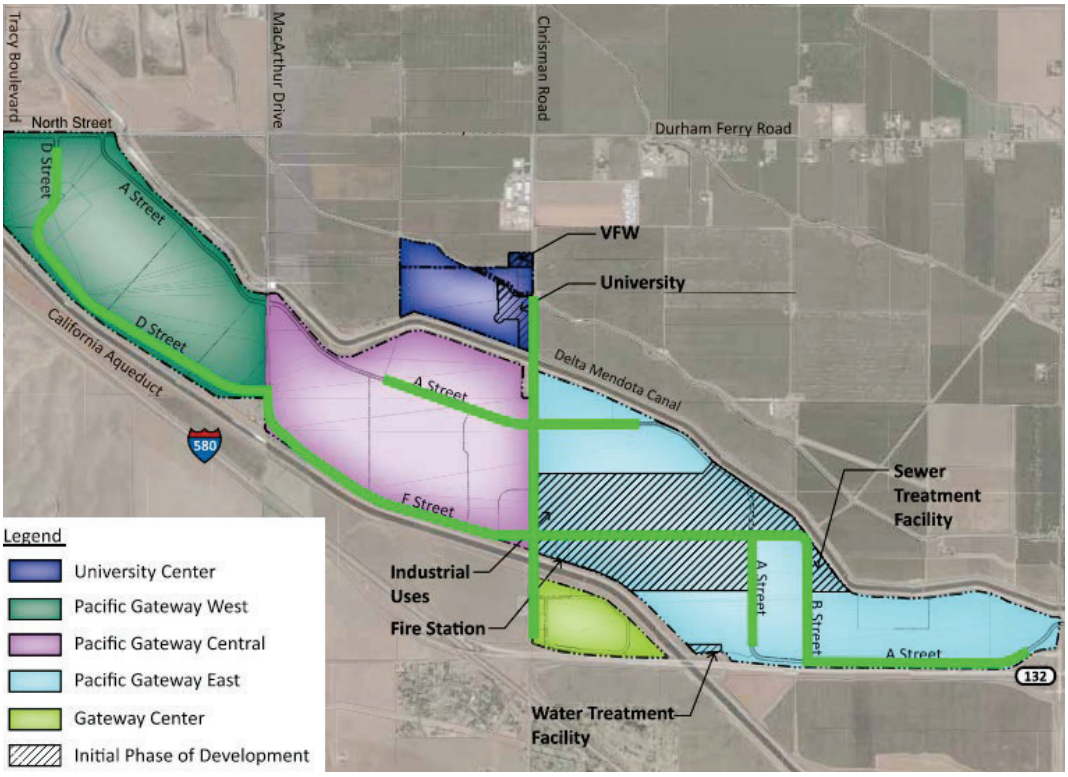

*Figure not OCR compatible

Figure 3. Wastewater Collection System

Table 4. Sewer Generation Rates

Area	Landuse	Initial Phase Area (SF)	Buildout Area (SF)	Initial Phase Water Demand (GPD)	Buildout Water Demand (GPD)	Initial Phase Sewage Generation (GPD)	Buildout Sewage Generation (GPD)
Pacific Gateway East	Industrial	3,962,000	11,124,274	66,033	185,405	52,827	148,324
Pacific Gateway Central	Industrial	0	6,856,474	0	114,275	0	91,420
Pacific Gateway West	Industrial	0	6,168,882	0	102,815	0	82,252
Gateway Center	Industrial	0	525,370	0	8,756	0	7,005
Gateway Center	Hotel/Commercial	0	109,592	0	5,032	0	4,025
University Center	University*	25,000	1,379,150	7,686	171,554	6,149	137,243
University Center	VFW**	11,500	11,500	528	528	422	422
University Center	Industrial	0	93,000	0	1,550	0	1,240
University Center	Commercial	0	38,908	0	1,786	0	1,429
CSA-16	Residential***	NA	NA	123,290	123,290	98,632	98,632
	Total	3,998,500	26,307,150	197,537	714,990	59,398	473,360

*University Assumes 600 students in first phase and 5,000 at buildout, with each student accounting for 12.81 GPD. Also assumes that 1,600 student beds are included at buildout with and additional water demand of 67.19 GPD per bed (80 GPD per bed total).

**VFW treated as commercial

*** CSA-16 parcels presumed to be on Septic and treated at place of use. CSA-16 estimate is based on peak record water use for CSA-16.

Sewage Treatment System

The project WWTP will be centered around a packaged membrane bioreactor wastewater treatment system with ultraviolet light disinfection. The WWTP will be expandable to accommodate phased construction, up to buildout. An operating permit issued by the Central Valley Regional Water Control Board (CVRWQB) will establish operating, performance, and reporting requirements for on-site treatment and disposal facilities.

It is proposed that the wastewater be treated to the Disinfected Tertiary Recycled Water Standard, suitable for use throughout the project site to irrigate landscaping and/or the surrounding farms in the area. The WWTP is proposed to include the following components, in quantities corresponding to the level of buildout:

1. A flow equalization system (sewage pump station wet well).
2. Rotary drum screens for screenings removal.
3. Compactor for screenings disposal at landfill.
4. Packaged MBR-based waste water treatment train.
5. Recycled water disinfection system.
6. Recycled water pump station.
7. Diesel engine-driven emergency generator.
8. Ancillary supporting equipment, as required.

Figure 4 depicts a preliminary WWTP site plan.

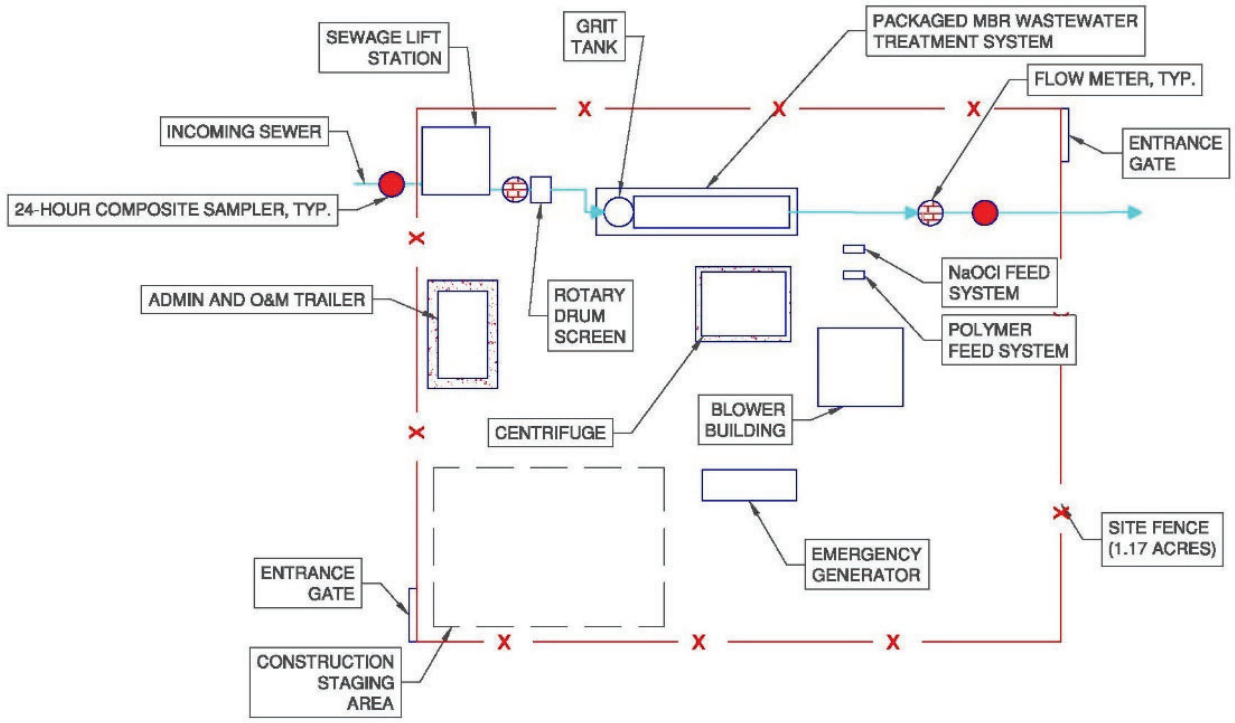

*Figure not OCR compatible **Figure 4. Preliminary WWTP Layout**

Appendix O

Final

CEQA Transportation Impact Analysis Report

For Pacific Gateway

Prepared for:

Pacific Gateway CA, LLC

September 2025

RS21-4076

FEHR PEERS

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EXECUTIVE SUMMARY

STUDY PURPOSE

This CEQA Transportation Impact Analysis Report will serve as an appendix to the Pacific Gateway Draft EIR. It focuses on the project's impacts to the transportation system based on its vehicle miles traveled (VMT). It also evaluates impacts to bicycle/pedestrian facilities, transit facilities and services, and roadway safety-related impacts including queuing and nonstandard design features.

A separate report, entitled "*Local Transportation Analysis (LTA) for Pacific Gateway*" analyzes the effects of the proposed project on traffic operations at potentially affected roadways and intersections. That report also evaluates the efficacy of potential operational improvements to address deficient operations. When Senate Bill (SB) 743 became effective statewide in 2020, it prohibited the use of automobile delay and level of service (LOS) from being used under CEQA as a performance measure to determine the transportation impacts of land development and transportation projects. The LTA focuses primarily on traffic operations and LOS and is therefore not used to identify significant impacts under CEQA.

PROJECT DESCRIPTION AND PHASING

The Pacific Gateway project ("proposed project") would be situated on 1,577 (gross) acres north of Interstate 580 (I-580) and State Route (SR) 132 in unincorporated San Joaquin County. It would be bounded by Tracy Boulevard on the west and Bird Road on the east. Chrisman Road and its interchange with SR 132 would be the primary vehicular access serving the project. Proposed land uses would include:

- Gateway West, Central and East would consist of general industrial (warehouse/logistics buildings) totaling 24,149,000 million square feet;
- The University Center would consist of a university with capacity for 5,000 students along with supporting ancillary uses and a Veterans of Foreign Wars (VFW) Post; and
- The Gateway Center, which would be situated along Chrisman Road north of SR 132, would feature a variety of highway commercial uses as well as 525,000 square feet of general industrial.

The "Initial Phase" of the project would consist of the development of 3,962,000 square feet of general industrial in Gateway East, several university buildings allowing for enrollment of 400 students, and the VFW building.

The project would widen Chrisman Road from two to four lanes along the project frontage. It would also widen parts of MacArthur Drive within the plan area to four lanes. Several new four-lane arterial and two-lane local industrial streets would be constructed within the project (see Figure 8). Five signalized intersections would be constructed along the project's frontage on Chrisman Road (see Figure 9). The traffic

operations analysis found that widening of Chrisman Road to six lanes would be necessary from SR 132 to B Street. In addition, the project would include a new street connection to Bird Road enabling project access via the SR 132/Bird Road interchange.

Environmental (Existing) Setting

Chrisman Road between SR 132 and Eleventh Street, and Eleventh Street are each Surface Transportation Assistance Act (STAA) routes, which allow large trucks (i.e., allows truck larger than California legal trucks) to operate on the interstate freeway system and certain primary routes. As shown in Figure 6, there are also several local or through truck routes in the study area. Between 1,000 and 1,100 trucks per day travel along portions of Chrisman Road between SR 132 and Eleventh Street. Just north of SR 132, trucks comprise 27% of the 3,900 ADT on Chrisman Road. The proportion of traffic consisting of trucks steadily decreases to the north along Chrisman Road as more auto traffic is present.

Several county roadways within the study area have signs posted to prohibit all truck travel or to prohibit trucks that exceed 7 tons (see Figure 6). There are currently no truck travel restrictions on Durham Ferry Road east of Chrisman Road. Of the 1,500 ADT measured on this segment, trucks represented 6% of the total, or about 85 trucks per day.

As the project site is rural and mostly undeveloped, there are no bicycle or pedestrian facilities in its immediate vicinity. Transit service is not provided to the area, although an Altamont Commuter Express (ACE) train station is situated on Tracy Boulevard at Linne Road (two miles north of the project).

Project Travel Characteristics

It was necessary to determine the total number of expected trips generated (separately for passenger vehicles and trucks) as well as the distribution/assignment of those trips for all land uses. The trip generation of the industrial component of the project was estimated based on a large database of traffic counts collected by Fehr & Peers in 2021 at warehouse buildings across San Joaquin County for the *San Joaquin Countywide Warehousing Travel Behavior Study*. The trip generation of the other project components was estimated using trip rates from the *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021). **Table ES-1** displays the trip generation of the Initial Phase and Project Buildout.

One particularly important input to the analysis is the expected residence locations of the project's warehouse workers. This was determined based on the use of "Big Data" (i.e., cell phone, etc.) to review employee residence locations at other warehouses in the area. That same big data source was also used to determine the expected distribution of heavy duty trucks.

Table ES-1: Proposed Project Trip Generation									
Phase	New Daily Trips			New AM Peak Hour Trips			New PM Peak Hour Trips		
	Autos	Heavy Duty Trucks	Total	Autos	Heavy Duty Trucks	Total	Autos	Heavy Duty Trucks	Total
Initial Phase	5,192	1,784	6,976	675	120	795	840	80	920
Project Buildout	41,736	11,171	52,907	5,154	745	5,899	6,120	496	6,616

Source: Fehr & Peers, 2024.

Project-Specific Impacts and Recommended Mitigation Measures

Significance thresholds were developed based on Appendix G of the CEQA Guidelines, and policies of San Joaquin County and other responsible agencies. For VMT analysis, guidance from the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, 2018) and *San Joaquin County VMT Thresholds Study* (GHD, 2020) were used. The project's potential adverse effects were analyzed based on thresholds developed from these documents. Separate impact statements and conclusions were reached for the Initial Phase and Project Buildout.

Table ES-2 summarizes the 12 project-specific impact statements, indicates whether the impact is significant under the Initial Phase or Project Buildout, and recommends mitigation measure(s) for significant impacts. As shown, the Initial Phase would cause five significant impacts, while Project Buildout would cause nine significant impacts.

Figure ES-1 illustrates the various recommended, project-specific, physical off-site mitigation measures identified for significant impacts.

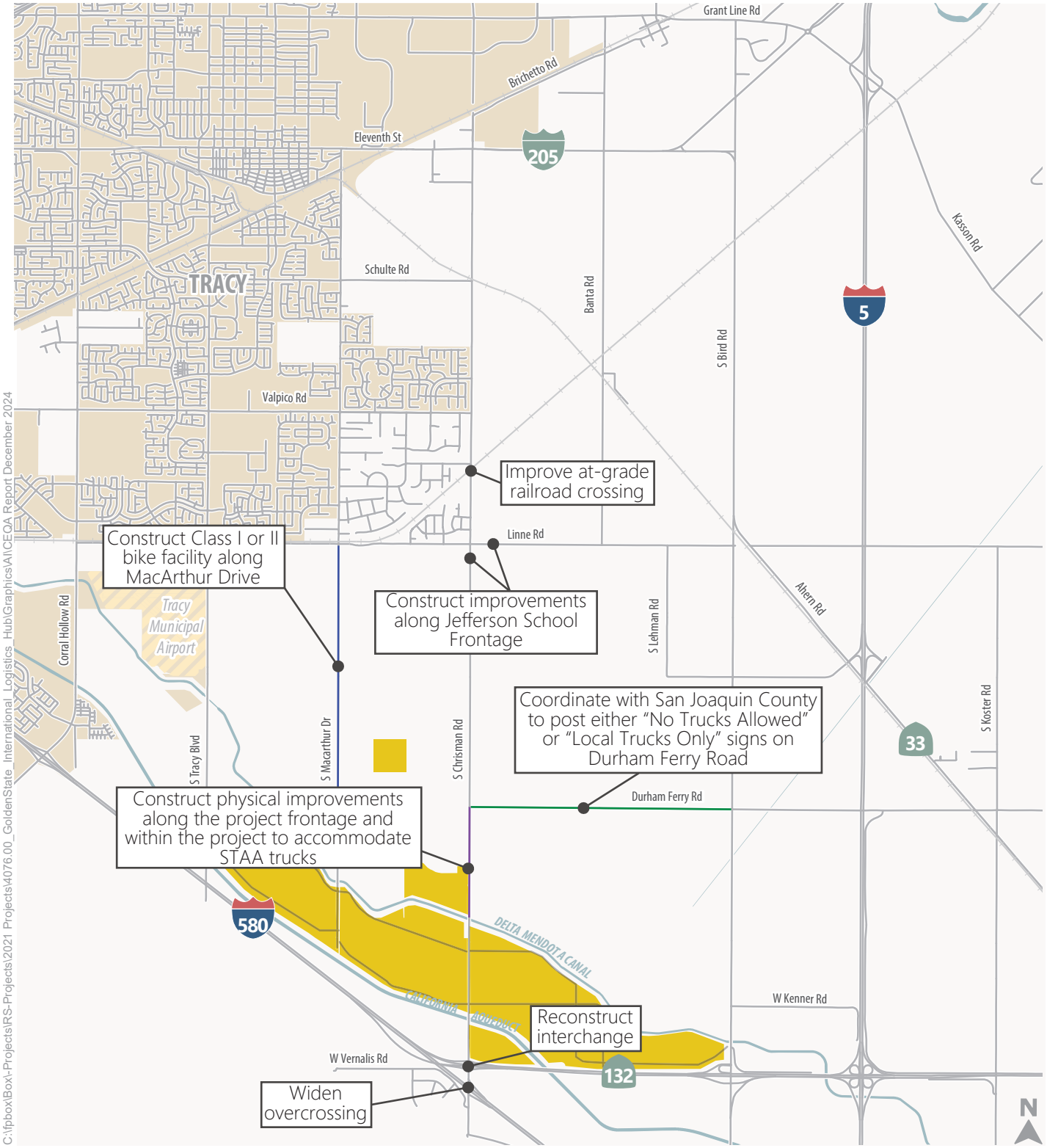
Table ES-2: Project-Specific Impacts and Mitigation Measures				
#	Topic	Impact Significant?		Recommended Mitigation Measure
		Initial Phase	Project Buildout	
TR-1	VMT Impacts Caused by Warehouse and Office Land Use	Yes	Yes	1a. Comply with SJVAPCD Rule 9410 (Employer Based Trip Reduction Program 1b. Implement Transportation Demand Management (TDM) strategies consisting of: 1. Voluntary Commute Trip Reduction (CTR) program 2. Employee Parking Cash-Out program 3. Expand Bikeway Network [1] 4. Extend Public Transit Service to Project Site 5. Operate a private employee shuttle system
TR-2	VMT Impacts Caused by University Project Land Use	Yes	Yes	Comply with SJVAPCD Rule 9410 (Employer Based Trip Reduction Program Implement TDM Strategies 1, 4, and 5 above. Implement TDM Strategy 2 or charge staff & students to park.
TR-3	VMT Impacts Caused by Retail, Restaurant, Gas Station, Hotel, VFW Tracy Post Project, and Electrified Truck and Auto Charging Lots Land Use	No	No	None
TR-4	VMT Impacts Associated with Widening Chrisman Road along project frontage and MacArthur Drive within the project site	No	No	None
TR-5	Inadequate Bicycle/Pedestrian Connectivity to Adjacent Land Uses to the North	No	Yes	Implement TDM Strategy 3 above.
TR-6	Inadequate Transit Service to Meet Demand	Yes	Yes	Implement TDM Strategies 4 and 5 above.
TR-7	Freeway Off-Ramp and State Highway Intersection Queues Exceed Available Storage	No	Yes	Construct the geometric improvements described in Table 26 and shown on Figure 21.
TR-8	Increased Hazards due to Geometric Design Features (Large Trucks)	Yes	Yes	Construct physical improvements on Chrisman Road project frontage to San Joaquin County design standards.
TR-9	Increased Hazards due to Incompatible Land Uses (along Durham Ferry Road)	Yes	Yes	Post a combination of either "No Trucks Allowed" or "Local Trucks only" signs on Durham Ferry Road between Chrisman Road and SR 33.
TR-10	Increased Hazards due to Incompatible Land Uses (near Chrisman Road/Linne Road Intersection)	No	Yes	Construct physical improvements along the Chrisman Road and Linne Road frontages of Jefferson School.

Table ES-2: Project-Specific Impacts and Mitigation Measures				
#	Topic	Impact Significant?		Recommended Mitigation Measure
		Initial Phase	Project Buildout	
TR-11	Increased Hazards due to Additional Vehicle/Train Conflicts	No	Yes	Contribute fair share funding to the City of Tracy to cover proportionate cost to upgrade road/rail crossings on Chrisman Road at Schulte Road. Work with UPRR and CPUC to determine the need for improvements at the Chrisman Road at-grade crossing north of Linne Road.
TR-12	Increased Hazards Associated with Emergency Vehicle Response Times	No	No	None

Notes: See Chapter 8 for details on Impacts and Mitigation Measures.
Unless otherwise noted, mitigation measure is to be implemented during Initial Phase if Initial Phase impact is significant.
[1] This specific mitigation measure is not required with Initial Phase, but necessary for subsequent phases beyond Initial Phase.
Source: Fehr & Peers, 2023.

Cumulatively Considerable Impacts and Recommended Mitigation Measures

The cumulative setting considers significant increases in planned land development within the City of Tracy and its Sphere of Influence as well as various roadway improvements. The project's impacts were analyzed under cumulative conditions using the same significance thresholds identified above. A set of 12 cumulative impact statements were developed. The impact conclusions and recommended mitigation measures are similar to those listed in Table ES-2.



Project Site City Boundary

Note:
Further discussions with various agencies are required to determine the precise type of improvements, timing, and financial responsibility.

The Pacific Gateway Local Transportation Analysis identifies various other intersection and roadway improvements that are required to maintain the County's General Plan LOS policy. Those will be project responsibilities, but are not considered mitigations for significant impacts under CEQA.

Figure ES-1

Recommended Physical Mitigation Measures for Significant Impacts under Existing Plus Project Buildout Conditions

1. INTRODUCTION

This chapter describes this report's purpose, provides an overview of the proposed project, lists applicable transportation-related policies that pertain to the proposed project under the California Environmental Quality Act (CEQA), and summarizes the transportation-related comments made by organizations and agencies on the Notice of Preparation (NOP) for this Environmental Impact Report (EIR).

Report Purpose

This CEQA Transportation Impact Analysis Report will serve as an appendix to the Pacific Gateway Draft EIR. It focuses on the project's impacts to the transportation system based on its vehicle miles traveled (VMT). It also evaluates impacts to bicycle/pedestrian facilities, transit facilities and services, and roadway safety-related impacts including queuing and nonstandard design features.

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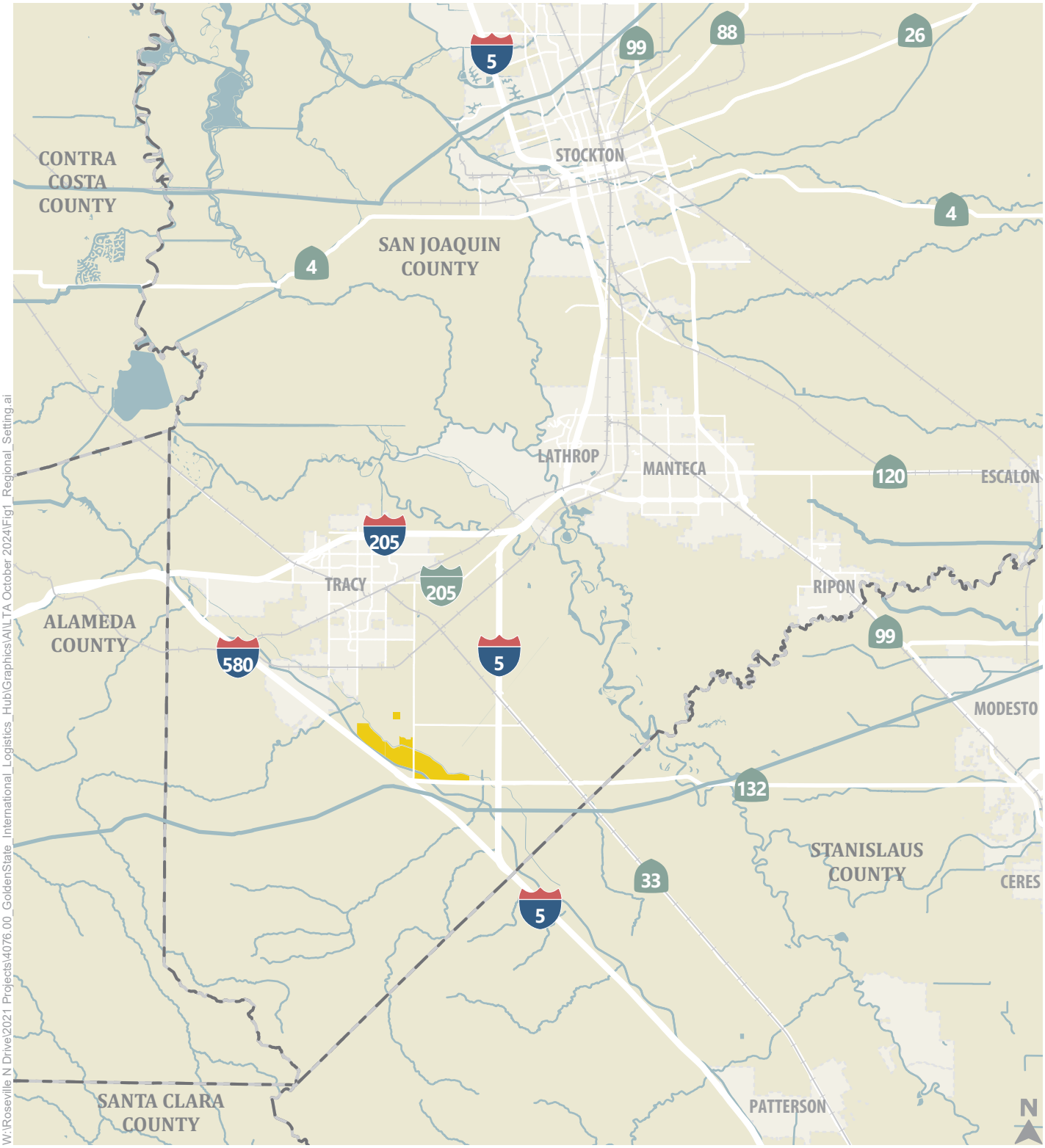
The Pacific Gateway project ("proposed project") would be situated on 1,577 (gross) acres located north of Interstate 580 (I-580) and State Route (SR) 132 in unincorporated San Joaquin County. It would be bounded by Tracy Boulevard on the west and Bird Road on the east. Chrisman Road and its interchange with SR 132 would be the primary vehicular access serving the project. In addition, the project would include a new street connection to Bird Road enabling project access via the SR 132/Bird Road interchange.

Figure 1 shows the regional setting and the location of the project. **Figure 2** shows the project land use map. Proposed land uses include:

- Gateway West, Central and East would consist of general industrial (warehouse/logistics buildings) totaling 24,149,000 million square feet;
- The University Center would consist of a university with capacity for 5,000 students along with supporting ancillary uses including a Veterans of Foreign Wars (VFW) Post; and



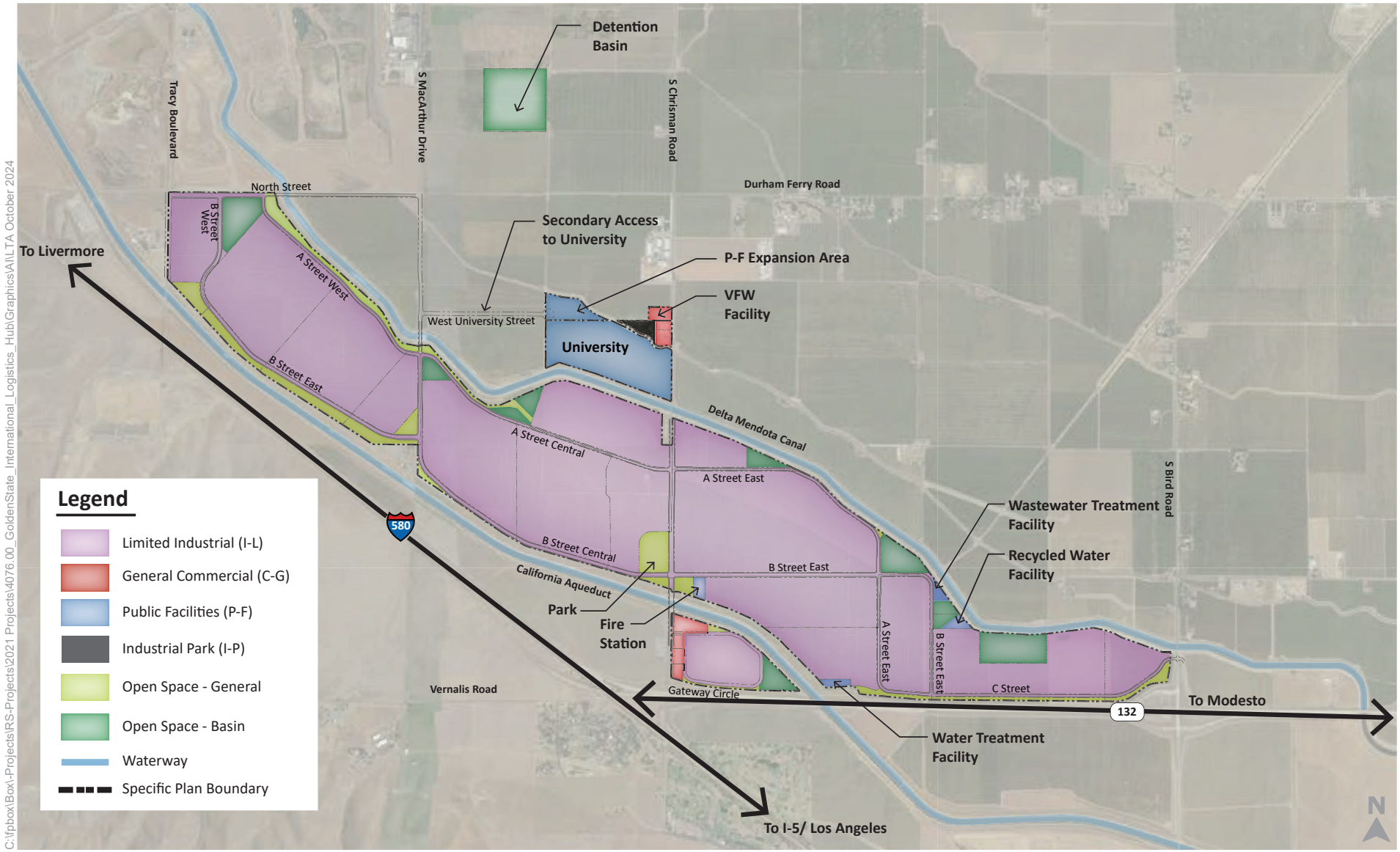
City Boundary

County Boundary

Project Site

Figure 1

Regional Setting



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DATA SOURCE: DAVID BABCOCK + ASSOCIATES ARCHITECTURE LANDSCAPE PLANNING

Figure 2

Project Land Use Map

- The Gateway Center, which would be situated just north of SR 132, would feature a variety of highway commercial uses as well as 525,000 square feet of general industrial.

The "Initial Phase" of the project would consist of the development of 3,962,000 square feet of general industrial in Gateway East, several university buildings allowing for enrollment of 400 students, and the VFW building.

Applicable Transportation-Related Policies

This section presents potentially applicable federal, state, regional, and local regulatory requirements applicable to the project.

Pursuant to Senate Bill (SB) 743, Public Resources Code (PRC) Section 21099, and California Code of Regulations (CCR) Section 15064.3, generally, VMT has replaced congestion as the metric for determining transportation impacts under CEQA. Section 15064.3 of the CEQA Guidelines provides that VMT is the "most appropriate measure of transportation impacts" and mandates analysis of VMT impacts effective July 1, 2020. A project's effect on automobile delay is no longer a consideration when identifying a significant impact; therefore, the impact of the project on delay-based traffic operations is not addressed in this EIR.

FEDERAL

Depending on the types of off-site improvements needed, policies of the Federal Highway Administration (FHWA) may be applicable. This is particularly the case for interstate freeways such as Interstate 5 and 580.

Surface Transportation Assistance Act (STAA)

The STAA of 1982 allows large trucks to operate on the Interstate and certain primary routes called collectively the National Network. These trucks, referred to as STAA trucks, are longer than California legal trucks. As a result, STAA trucks have a larger turning radius than most local roads can accommodate. On surface streets, STAA routes are designated either as Terminal or Service Access routes. Terminal routes are approved by the agency with jurisdiction over the roadway to enable the truck to reach its ultimate destination. Service Access routes allow STAA trucks to exit the interstate onto a local road, for one mile only, for food, fuel, lodging, or repair.

STATE

The State of California has enacted several pieces of legislation that outline the state's commitment to encourage land use and transportation planning decisions and investments that reduce VMT and contribute to reductions in greenhouse gas (GHG) emissions in line with state climate goals. Other recent state policies pertain to roadway safety.

Senate Bill 743

SB 743, passed in 2013, required the California Governor's Office of Planning and Research (OPR) to develop new guidelines that address transportation metrics under CEQA. Enacted as part of SB 743 (2013), PRC section 21099, subdivision (b)(1), directed the OPR to prepare, develop, and transmit to the Secretary of the Natural Resources Agency for certification and adoption proposed CEQA Guidelines addressing "criteria for determining the significance of transportation impacts of projects within transit priority areas. Those criteria shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses. In developing the criteria, [OPR] shall recommend potential metrics to measure transportation impacts that may include, but are not limited to, vehicle miles traveled, vehicle miles traveled per capita, automobile trip generation rates, or automobile trips generated."

Subdivision (b)(2) of PRC section 21099 further provides that "[u]pon certification of the guidelines by the Secretary of the Natural Resources Agency pursuant to this section, automobile delay, as described solely by level of service or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to [CEQA], except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to SB 743. The updated CEQA Guidelines were adopted on December 28, 2018; and according to the new CEQA Guidelines Section 15064.3, VMT replaced congestion as the metric for determining transportation impacts. The guidelines state that "lead agencies may elect to be governed by these provisions of this section immediately. Beginning July 1, 2020, the provisions of this section shall apply statewide."

OPR published the *Technical Advisory on Evaluating Transportation Impacts in CEQA* ("*Technical Advisory*") in December 2018 to provide guidance to agencies implementing the new CEQA requirements.

Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR, 2018)

The *Technical Advisory* provides advice and recommendations to CEQA lead agencies on how to implement the SB 743 changes. This includes technical recommendations regarding the assessment of VMT, thresholds of significance, VMT mitigation measures, and screening thresholds for certain land use projects. Lead agencies may consider and use these recommendations at their discretion and with the provision of substantial evidence to support alternative approaches. The *Technical Advisory* describes considerations agencies may use in selecting VMT metrics, calculation methodologies, and significance thresholds. The *Technical Advisory* does not mandate the use of specific metrics, methodologies or significance thresholds, because agencies have discretion to select those that are appropriate for the local land use and transportation context.

The *Technical Advisory* identifies "screening thresholds" to quickly identify when a project should be expected to cause a less-than-significant impact without conducting a detailed VMT analysis. The *Technical Advisory* suggests that projects meeting one or more of the following criteria should be expected to have a less-than-significant impact on VMT.

- Small projects – projects consistent with a SCS and local general plan that generate or attract fewer than 110 trips per day.
- Projects near major transit stops – certain projects (residential, retail, office, or a mix of these uses) proposed within ½ mile of an existing major transit stop or an existing stop along a high-quality transit corridor.
- Affordable residential development – a project consisting of a high percentage of affordable housing may be a basis to find a less-than-significant impact on VMT.
- Local-serving retail – local-serving retail development tends to shorten trips and reduce VMT. The *Technical Advisory* encourages lead agencies to decide when a project will likely be local-serving, but generally acknowledges that retail development including stores larger than 50,000 square feet might be considered regional-serving. The *Technical Advisory* suggests lead agencies analyze whether regional-serving retail would increase or decrease VMT (i.e., not presume a less-than-significant).
- Projects in low VMT areas – residential and office projects that incorporate similar features (i.e., density, mix of uses, transit accessibility) as existing development in areas with low VMT will tend to exhibit similarly low VMT.

The *Technical Advisory* identifies recommended numeric VMT thresholds for office and retail projects.

- Office projects that would generate vehicle travel exceeding 15 percent below (i.e., greater than 85 percent of) existing regional VMT per employee may indicate a significant transportation impact.
- Retail projects (and other non-residential/non-office projects) that result in a net increase in total VMT may indicate a significant transportation impact.

The *Technical Advisory* offers guidance regarding the above project types because "they tend to have the greatest influence on VMT". It does not specifically address schools/universities, instead stating that "lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types."

The *Technical Advisory* also provides guidance on impacts to transit. Specifically, the *Technical Advisory* suggests that lead agencies generally should not treat the addition of new transit users as an adverse impact. As an example, the *Technical Advisory* suggests that "an infill development may add riders to transit systems and the additional boarding and alighting may slow transit vehicles, but it also adds destinations, improving proximity and accessibility.

Regarding trucks, the *Technical Advisory* first points out that CEQA Section 15064 refers to automobiles when referencing VMT. The document then offers a definition that automobiles consist of on-road passenger vehicles, including cars and light duty trucks. It further states that "Heavy-duty truck VMT could be included for modeling convenience and ease of calculation." No further guidance is provided relating to how to address travel impacts of trucks, though Appendix 1 (Considerations About Which VMT to Count) and Appendix 2 (Induced Travel: Mechanisms, Research, and Additional Assessment Approaches) repeatedly refer to automobiles (and do not mention trucks) when describing these topics.

Caltrans is responsible for planning, designing, constructing, operating, and maintaining the State Highway System (SHS). Any improvements or modifications to the SHS within the study area would need to be approved by Caltrans. The following Caltrans planning documents emphasize the State of California's focus on transportation infrastructure that supports mobility choice through multimodal options, smart growth, and efficient development:

- Smart Mobility Framework (Caltrans February 2010),
- Complete Streets Implementation Action Plan (Caltrans 2010),
- California Transportation Plan 2040 (Caltrans 2016),
- Strategic Management Plan 2015-2020 – 2019 Update (Caltrans 2019),
- State Highway System Management Plan (Caltrans 2019),

- VMT-Focused Transportation Impact Study Guide (Caltrans 2020), and
- Caltrans 2020–2024 Strategic Plan (Caltrans 2021).

Among these various reports, the following three documents are most applicable to the project.

VMT-Focused Transportation Impact Study Guide (TISG)

On May 20, 2020, the *VMT-Focused Transportation Impact Study Guide ("TISG")* was adopted by Caltrans (2020). The *TISG* provides guidance on how Caltrans will review land use projects, with focus on VMT analysis and supporting state land use goals, state planning priorities, and GHG emission reduction goals; as well as identifying land use projects' possible transportation impacts to the State Highway System and potential non-capacity increasing mitigation measures. The *TISG* indicates that Caltrans intends to "transition away from requesting LOS or other vehicle operations analyses of land use projects," instead placing the focus on VMT and safety.

The *TISG* emphasizes that VMT analysis is Caltrans' primary review focus and references the *Technical Advisory* as a basis for the guidance in the *TISG*. Notably, the *TISG* recommends the use of the recommended thresholds in the *Technical Advisory* for land use projects. The *TISG* also references the *Technical Advisory* for screening thresholds that would identify projects and areas presumed to have a less-than-significant transportation impact. Caltrans supports streamlining for projects that meet these screening thresholds because they help achieve VMT reduction and mode shift goals.

Local Development Review (LDR) Safety Review Practitioners Guidance

The *Local Development Review (LDR) Safety Review Practitioners Guidance* (Caltrans, 2024) advises practitioners how to evaluate project-related safety impacts on the state highway system. It stops short of including specific thresholds of significance. The analytical approach described in the guidance focuses on vulnerable road users (i.e., bicyclists and pedestrians) and underserved communities; enhancing safety for pedestrians, bicyclists, transit, and vehicular modes; and applying both reactive and systemic perspectives. Lastly, it reiterates Caltrans supports for shifting away from using delay-based metrics for analysis in CEQA.

The guidance outlines how queuing should be reviewed for traffic safety impacts. Appendix B "Freeway Exit-Ramp Queuing Analysis" provides practitioners with specific guidance on analysis of project effects on freeway off-ramp queuing. The following test is applied at freeway off-ramps:

- If the Project adds two or more car lengths to the ramp queue that will extend into the freeway mainline, then the location must be reviewed for traffic safety impacts. This review must evaluate speed differential between the off-ramp queue and the mainline of the freeway during the same period.

Traffic safety mitigation may be requested if freeway exit ramp queuing does not occur under the existing condition, but project-generated traffic volumes will cause a queue to extend onto the freeway mainline, creating a speed differential of 30 miles per hour (mph) or greater. When the speed differential increases above the 30-mph threshold, rear-end collisions increase resulting in an increase in severe injury and fatal collisions. Traffic safety mitigation shall not be requested under conditions where queuing already exists on a freeway exit ramp. The significance of that traffic safety impact by the project must be determined on a case-by-case basis.

The guidance does not offer any suggested practices for evaluating queuing at turn lanes on the state highway system. However, queues that spill out of a left-turn lane on a conventional highway can present similar safety concerns as a freeway off-ramp. They are therefore evaluated in this study in the same manner as off-ramps are treated. Vehicle queuing is analyzed using 95th percentile queues (from Simtraffic) for key turning movements at turn lanes and off-ramps on the state highway system. Since the queuing results are reported on state highway facilities, the precise (non-rounded) 95th percentile queue (in feet) is reported in accordance with Caltrans District 10 preferences.

Lastly, the guidance identifies the following six challenge areas as high priorities in California as they represent the greatest opportunity to reduce fatalities and severe injuries: lane departures, impaired driving, speed management, pedestrians, bicyclists, and intersection. This topic, which pertains to details related to the collision history on the state highway system near the project site, is analyzed in detail in this report.

Caltrans 2020–2024 Strategic Plan

The *Caltrans 2020–2024 Strategic Plan* lists "Safety First" as its top goal through 2024 (Caltrans 2021). The 2020 Caltrans Annual Accomplishments Report describes the *Four Pillars of Traffic Safety*, which will help guide the department toward the ultimate goal of zero deaths or severe injuries on California roads by 2050. The Four Pillars of Traffic Study are:

- Double Down on What Works
- Accelerate Advanced Technology
- Lead Safety Culture Change
- Integrate Equity

Each of these pillars, including their applicability to the project, are described later in this report.

Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act Report

This report by the CA Department of Justice is meant to help lead agencies pursue CEQA compliance and promote environmentally-just development for warehouse project proposals. The document provides information on feasible best practices and mitigation measures. It describes how truck traffic from warehouses can present substantial safety issues, especially if truck traffic passes through residential areas, school zones, or other places where pedestrians are common. It recommends the following measures be considered for these conditions.

- Design, clearly mark, and enforce truck routes that keep trucks out of residential neighborhoods and away from other sensitive receptors.
- Install signs in residential areas noting that truck and employee parking is prohibited.
- Require preparation and approval of a truck routing plan describing the facility's hours of operation, types of items to be stored, and truck routing to and from the facility to designated truck routes that avoids passing sensitive receptors. The plan should hold facility operators responsible for violations of the truck routing plan, and a revised plan should be required from any new tenant that occupies the property before a business license is issued. The approving agency should retain discretion to determine if changes to the plan are necessary, including any additional measures to alleviate truck routing and parking issues that may arise during the life of the facility.
- Construct new or improved transit stops, sidewalks, bicycle lanes, and crosswalks, with special attention to ensuring safe routes to schools.
- Consult with the local public transit agency and secure increased public transit service to the project area.
- Designate areas for employee pickup and drop-off.
- Implement traffic control and safety measures, such as speed bumps, speed limits, or new traffic signs or signals.
- Place facility entry and exit points on major streets that do not have adjacent sensitive receptors.
- Restricting the turns trucks can make entering and exiting the facility to route trucks away from sensitive receptors.
- Construct roadway improvements to improve traffic flow.
- Prepare a construction traffic control plan prior to grading, detailing the locations of equipment staging areas, material stockpiles, proposed road closures, and hours of construction operations, and designing the plan to minimize impacts to roads frequented by passenger cars, pedestrians, bicyclists, and other non-truck traffic.

REGIONAL

San Joaquin Council of Governments (SJCOG) 2022 RTP/SCS

The San Joaquin Council of Governments (SJCOG) is comprised of the County of San Joaquin and the cities of Stockton, Lodi, Manteca, Tracy, Ripon, Escalon and Lathrop. SJCOG is the federally designated Metropolitan Planning Organization and serves as the regional transportation planning agency and a technical and informational resource for these jurisdictions. In August 2022, the SJCOG Board voted to adopt the *2022 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) ("2022 RTP/SCS)*. This document serves as the region's long-range transportation plan and provides guidance for decisions about transportation spending priorities. It includes a list of planned and funded transportation improvements utilized in this report. Chapter 3 includes various policies and strategies that may be relevant to this study including:

Policy: Enhance the Environment for Existing and Future Generations and Conserve Energy

- Strategy No. 4: Improve air quality by reducing transportation-related emissions.

Policy: Maximize Mobility and Accessibility

- Strategy No. 5: Optimize the public transportation system to provide efficient and convenient access for users of all income levels.
- Strategy No. 7: Provide transportation improvements to facilitate nonmotorized travel, including incorporation of complete streets elements as appropriate.
- Strategy No. 8: Improve freight access to key strategic economic centers.
- Strategy No. 9: Promote safe and efficient strategies to improve the movement of goods by air, water, rail, and roadway.

Policy: Increase Safety and Security

- Strategy No. 10: Facilitate projects that reduce the number and severity of traffic incidents.
- Strategy No. 11: Support local and state efforts for transportation network resiliency, reliability, and climate adaptation.

Policy: Preserve the Efficiency of the Existing Transportation System

- Strategy No. 12: Prioritize projects that make more efficient use of the existing road network.
- Strategy No. 13: Support the continued maintenance and preservation of the existing transportation system.

- Strategy No. 14: Promote electric power, alternative fuels and autonomous technologies for freight and agriculture.
- Strategy No. 15: Manage the adoption of electric vehicles and private connected and autonomous vehicles.
- Strategy No. 16: Promote electric power, alternative fuels, and autonomous technologies for public transit.

Policy: Support Economic Vitality

- Strategy No. 17: Support transportation improvements that improve economic competitiveness, revitalize commercial corridors and strategic economic centers, and enhance travel and tourism opportunities.

Policy: Promote Interagency Coordination and Public Participation for Transportation Decision-Making and Planning Efforts

- Strategy No. 21: Provide equitable access to transportation planning.

Policy: Maximize Cost-Effectiveness

- Strategy No. 25: Support the use of state and federal grants to supplement local funding and pursue discretionary grant funding opportunities from outside the region.
- Strategy No. 27: Maximize funding of existing transportation options.

Policy: Improve the Quality of Life for Residents

- Strategy No. 30: Enhance public health through active transportation projects.

San Joaquin County Regional Congestion Management Program (RCMP)

The Federal Congestion Management Process requires metropolitan planning organizations such as SJCOG to develop and implement a Regional Congestion Management Program (RCMP) to fulfill it SJCOG's requirements as a metropolitan area with a population exceeding 200,000. In addition, there is an opportunity to integrate Performance-Based Planning and Programming (PBPP) performance metrics and provide information of interest to our jurisdictions. Its focus is on reducing single occupant vehicle (SOV) travel while minimizing the need for increasing roadway capacity. It also provides additional resources for the development and deployment of new congestion management technologies.

The *SJCOG Regional Congestion Management Program 2022 Monitoring Report* (Kimley Horn, 2023) measures regional congestion and multimodal performance measures through ongoing systematic monitoring. Performance measures serves to gauge system performance and track progress toward achieving congestion management objectives. However, the CMP no longer includes roadway or

intersection operations targets such as LOS C. Instead, it focuses on multimodal performance metrics for bicycling, walking, and transit as well as VMT, travel reliability, pavement management, and safety.

SJCOG Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan

The *SJCOG Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan* (Alta, 2012) was developed to identify bikeways and pedestrian projects of regional significance in order to prioritize funding and facilitate project implementation. The plan's vision to the meet the needs for people of all ages and abilities in San Joaquin County by improving and enhancing the existing bicycle and pedestrian network. Its goals are to increase bicycle and pedestrian travel throughout the county, improve bicycle, pedestrian, and school access safety, and increase education and awareness of bicycling and walking in San Joaquin County. Its objectives are to increase the mileage of bicycle and pedestrian facilities in San Joaquin County by 20% between 2012 and 2022, and increase the competitiveness of local jurisdictions for grant funding for bicycle, pedestrian, and Safe Routes to School improvements.

Measure K Sales Tax

Measure K is a ½ cent sales tax that helps fund transportation improvements in San Joaquin County. The program is operated by SJCOG. Measure K was originally approved by voters in 1990. It was renewed by a 2006 vote, which will extend the sales tax through 2041. Major improvements target San Joaquin County freeways, streets and roads, public transit networks, pedestrian, and bicycle friendly programs. According to the Measure K interactive project map[1], the widening of Linne Road from two to four lanes between Tracy Boulevard and Chrisman Road is included in the program. No improvements are shown along Chrisman Road.

San Joaquin County Regional Transportation Impact Fee (RTIF)

The RTIF is a county-wide, multi-jurisdiction capital improvement funding program that covers a portion of the costs for new transportation facilities required to serve new development within the County. New development throughout the county is subject to the fee. The funding derived from the RTIF program is used in combination with other funding available to complete the needed transportation and transit improvements. The RTIF capital project list contained on RTD's website does not show any planned, funded transportation improvements within the study area (though partial funding is included for the I-205/Chrisman Road interchange).

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[1] Interactive Project Map | San Joaquin Council of Governments, CA (sjcog.org)

San Joaquin Regional Transit District Short-Range Transit Plan

The *San Joaquin Regional Transit District Short-Range Transit Plan (SRTP)* for fiscal years (FY) 2018-2019 to 2027-2028 serves as a guide for the development of the goals objectives, and policies for future transit services in the Stockton Metropolitan Area (SMA) and unincorporated San Joaquin County over the next 10 years. Official RTD boundaries do not include the incorporated San Joaquin County cities of Lodi, Lathrop, Manteca, Escalon, Ripon and Tracy. The SRTP proposes strategies that will guide transit development while containing costs within available revenues.

The SRTP outlines over $20 million in operating improvements and an additional $200 million in capital improvements to benefit San Joaquin County and its citizens. It identifies various service objectives to "provide the highest level of transit service to the greatest number of people within RTD's financial means". That includes enhanced service within the Stockton area, improved mobility for persons with disabilities, improved quality of intercity commuter service, and coordination with local jurisdictions and developers to incorporate transit services and amenities within land use planning to establish transit-oriented development. The SRTP does not explicitly cite any planned transit system improvements within the project vicinity.

San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 9410

San Joaquin Valley Air Pollution Control District (SJVAPCD) Rule 9410 (eTrip) requires major employers (with 100 or more employees) in the region to develop and implement TDM strategies. Adopted in 2009, the Employer Trip Reduction Implementation Plan (eTRIP) encourages employees to reduce single-occupancy vehicle trips, thus reducing pollutant emissions associated with work commutes. These strategies can include employee shuttles, staggered work hours, telecommuting options, transit subsidies, carpool/vanpool programs, and many other strategies. More information on this program can be found at: 4681 thru 4802 (valleyair.org). It is also discussed in more detail in Chapter 8 of the report.

LOCAL

Goals, policies, and objectives from various planning documents published by San Joaquin County are relevant to the project. After this information is presented, planning documents and potentially applicable policies of the City of Tracy are presented given its proximity to the project site.

San Joaquin County General Plan

The Transportation and Mobility component of Chapter 3.2 (Public Facilities and Services Element) of the *San Joaquin County General Plan* (2016) includes the following goals and policies:

- **<u>Goal TM-1</u>: To maintain a comprehensive and coordinated multimodal transportation system that enhances the mobility of people, improves the environment, and is safe, efficient, and cost effective.**
- Policy TM-1.1 [Transportation System Safety]: The County shall manage the transportation system to ensure safe operating conditions. (PSP).
- Policy TM-1.3 [Multimodal System]: The County shall encourage, where appropriate, development of an integrated multi-modal transportation system that offers attractive choices among modes including pedestrian ways, public transportation, roadways, bikeways, rail, waterways, and aviation, and reduces air pollution and greenhouse gas emissions. (RDR/PSP).
- Policy TM-1.4 [Regional Transportation Facilities]: The County shall work with Caltrans, SJCOG, and the cities in the County where appropriate to plan, develop, and maintain regional transportation facilities, and to identify existing and future transportation corridors that should be linked across jurisdictional boundaries so that sufficient right-of-way may be preserved. (PSP/IGC).
- Policy TM-1.5 [Regional Transportation Plan Development]; The County shall provide input into the development of the San Joaquin Council of Governments Regional Transportation Plan as appropriate to ensure County roads and facilities are adequately addressed. (PSP/IGC).
- Policy TM-1.6 [Automobile Dependency Alternatives]: The County shall support public and private efforts where appropriate to provide alternative choices to single occupant driving. (IGC/JP).
- Policy TM-1.7 [Energy Conservation]: The County shall develop the transportation system to reduce vehicle miles traveled, conserve energy resources, minimize air pollution, and reduce greenhouse gas emissions. (RDR/PSP).
- Policy TM-1.10 [Eliminate Gaps]: The County shall strive to eliminate "gaps" in roadways, bikeways, and pedestrian networks by planning and seeking funding to construct grade-separated crossings of rail lines, canals, creeks, and other barriers to improve connectivity and encourage construction of new bikeways and pedestrianways in and between existing communities where appropriate. (RDR/PSP/FB).
- Policy TM-1.11 [Transportation System Improvements]: The County shall require new development to provide transportation system improvements necessary to serve the development. (RDR/FB).
- Policy TM-1.12 [Transportation and Land Use]: The County shall ensure that transportation system investments and improvements support existing and future sustainable land use patterns.
- Policy TM-1.16 [Transportation Capacity and Development]: The County shall schedule transportation improvements to coordinate with land use development and transportation demand. Transportation investments and service capacity shall be planned to correspond to the development and travel demand identified by plans of local communities. (RDR/PSP).

- **<u>Goal TM-2</u>: To improve County roadways to include pedestrian, bicycle, and transit facilities to better serve people who use these active transportation modes.**
- Policy TM-2.4 [Rural Complete Streets]: The County shall strive to serve all users on rural roadways in the County and shall design and construct rural roadways to serve safely bicyclists, transit passengers, and agricultural machinery operators. This includes:
    - Constructing wide shoulders to provide a safe space for bicyclists, and agricultural machinery vehicles;
    - Removing visual barriers along rural roads, particularly near intersections, to improve the visibility of bicyclists; and
    - Coordinating with local jurisdictions and SJCOG to ensure multimodal connections are established and maintained between jurisdictions. (RDR/PSP)
- Policy TM-2.5 [Reconstructed Rural Complete Streets]: The County may require, based on community support and feasibility and the County's Bicycle Master Plan, reconstructed streets in rural areas to accommodate bicyclists and agricultural machinery, except where facility improvements are determined to be cost prohibitive. (RDR/PSP).
- Policy TM-2.7 [New Development]: The County shall require all new developments to provide their fair share of roadway facilities for alternative transportation modes to reduce automobile demand. (RDR).
- Policy TM-2.8 [Private Complete Streets]: The County shall encourage large private developments (e.g., office parks, apartment complexes, retail centers) to provide internal complete streets that connect to the existing roadway system. (RDR).

- **<u>Goal TM-3</u>: Maintain a safe, efficient, and cost-effective roadway system for the movement of people and goods.**
- Policy TM-3.2 [Urban Roadways]: The County shall require, where feasible, new development in Urban Communities to construct roadways to County standards and complete streets principles, including curb, gutter, and sidewalks. Bike lanes shall be required, where feasible, for improvements identified in the San Joaquin County Bicycle Master Plan. (RDR).
- TM-3.3 [Onsite Circulation Systems]: The County shall require new development to design on-site circulation systems and parking facilities to minimize backup on County roadways. (RDR).
- TM-3.4 [Roadway Plan Coordination]: The County shall coordinate roadway improvements with regional plans, such as the countywide Regional Transportation Plan and Regional Transportation Improvement Plan Program, the Congestion Management Program, and the Measure K Strategic Plan funding program. (PSP/IGC).

- TM-3.6 [Right-of-Way Preservation]: The County shall strive to preserve road rights-of-way necessary to implement the circulation system included in the General Plan using Special Purpose Plans or other means, where appropriate. (PSP).
- TM-3.7 [Frontage Standards]: For developments that are located adjacent to a County roadway, the County shall require access onto County roads. (RDR).
- TM-3.10 [Rural Road Traffic]: The County should monitor the use of rural roads by commuters as bypass routes from gridlocked arterials to gather data for use in any future traffic studies or plans designed to reduce the traffic impact on the operation of agricultural machinery. (PSP/PSR).
- TM-3.11 [Rural Traffic Management Areas]: The County shall mitigate excessive commuter diversion traffic through the development and adoption of rural traffic management plans. Where applicable, the County shall prepare a rural traffic management plan when public concerns are raised about excessive traffic or the County identifies issue areas, County Public Works Director confirms that a defined rural area is experiencing excessive commuter traffic due to diversion, and a survey of an area's property owners, with at least 33 percent responding, shows at least 50 percent are in support of a plan. (PSP).
- VM-3.12 [Development Rights-of-Way]: The County shall require dedication and improvement of necessary on and off-site rights-of-way at the time of new development, in accordance with the County's Functional Classification, Standard Drawings, and Level of Service Standards. (RDR).

- **Goal TM-4: To maintain and expand a safe, continuous, and convenient bicycle system and pedestrian network.**
- TM-4.1 [Pedestrian and Bicycle Network Continuity]: The County shall strive to eliminate gaps in the rural bicycle network by constructing or designating new bike facilities, where appropriate, and in accordance with the San Joaquin County Bicycle Master Plan.
- TM-4.2 [Speed Management Policies]: The County shall strive to implement current CVC codes for uses as speed management policies that support driving speeds on all streets within Urban and ural Communities and City Fringe Areas that are safe for pedestrians and bicyclist. (RDR).
- TM-4.1 [Pedestrian and Bicycle Network Continuity]: The County shall strive to eliminate gaps in the rural bicycle network by constructing or designating new bike facilities, where appropriate, and in accordance with the San Joaquin County Bicycle Master Plan.

San Joaquin County Bicycle Master Plan Update

The *San Joaquin County Bicycle Master Plan Update* (2020) is intended to provide a bicycle network that is well connected, safe, and enjoyable for County residents and visitors. The 2020 update of the prior 2010 plan included an updated vision, goals, and policies, updated existing conditions and current best practices,

presentation of a network of high-quality bikeways serving "all ages and abilities", recommendations for decreasing automobile/bicycle conflicts; and means to improve the quality of bikeways. [2]

Appendix A to the 2020 update includes a list of proposed bikeways including the following in the vicinity of the proposed project:

- Class II bike lane on Chrisman Road from Eleventh Street to Linne Road.
- Class II bike lane on Linne Road from MacArthur Drive to Chrisman Road.
- Class III bike route on Chrisman Road from Linne Road to Durham Ferry Road.
- Class III bike route on Durham Ferry Road from Chrisman Road to SR 33.
- Class IV separated bikeway on Linne Road from Corral Hollow Road to MacArthur Drive.

Chapter 2 describes each of these four classes of bicycle facilities in detail. It should be noted that the 2020 RTP/SCS project list does not explicitly include the above projects. However, it does indicate that specific projects listed in the *Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan* are included. That document included 'vision' projects near the project site including a Class III bike route on Chrisman Road from Eleventh Street to the California Aqueduct, and a Class III bike route on Durham Ferry Road from Chrisman Road to Kasson Road.

San Joaquin County VMT Thresholds Study

The *San Joaquin County VMT Thresholds Study* (GHD, 2020) describes how San Joaquin County will implement Senate Bill 743. The report has not been formally adopted by the San Joaquin County Board of Supervisors. Nevertheless, it has previously been applied on various studies requiring VMT analysis. The *San Joaquin County VMT Thresholds Study* describes how, in large part, the County is endorsing the majority of the recommendations from the *Technical Advisory*. As this report is highly technical and raises various concepts and topics not otherwise introduced, the detailed methods outlined in the study and applicability for project analysis are discussed in Chapter 6.

[2] final-sjc-bike-plan-update_nov-19_2020-optimized.pdf

San Joaquin County Local Road Safety Plan (LRSP)

The San Joaquin County LRSP provides a framework to develop a comprehensive transportation safety management program that proactively identifies potential safety issues in the unincorporated county and applies strategic and proven solutions to address them. It assesses roadway safety in the County, identifies locations for improvements, and recommends engineering countermeasures. An LRSP is a multi-disciplinary approach to traffic safety that creates the opportunity for the County to partner with stakeholders and other agencies who may have a role in implementing recommendations.

The LRSP adopts a Safe System Approach and encourages forward thinking strategies, addressing the fact that historical approaches to traffic safety have not been effective enough in preventing fatal and serious injuries. Commitment from County staff and road safety partners to prioritize safety in their efforts and implement both proven and innovative ideas are key to the LRSP being impactful and in line with recent commitments at the national and state level. The County's roadway network is large and complex, but incremental efforts focused on safety that are already occurring and expected to expand in future years aim to reduce collision risk on County roadways. The County is committed to reaching its goal of eliminating all preventable roadway fatalities and serious injuries by 2050.

Driving or biking under the influence was the most cited primary collision factor for fatal and serious injuries (45 percent), higher than the statewide average of 28 percent. There was a total of 1,428 DUI collisions, of which, 219 (5 percent) resulted in a fatal or serious injury outcome.

Table 4 of the LRSP shows a list of priority intersections by collision severity score. The Eleventh Street/Bird Road intersection is within the study area and ranks first overall. The LRSP cites a planned safety project at that location (though details of its components are not provided). The 5th ranked intersection is Eleventh Street/Kasson Road/Grant Line Road, with the LRSP mentioning that the roundabout present at the intersection was restriped in 2016.

Figure 30 of the LRSP shows priority intersections and segments for investment given their collision severity score. No facilities were identified within this project's vicinity aside from the two intersections mentioned above.

San Joaquin County Traffic Impact Mitigation Fee (TIMF) Program

This fee program applies to new development in unincorporated San Joaquin County. The fee schedule can be found on the County's website (at: Traffic Fees (sjgov.org)). The *San Joaquin County Traffic Impact Mitigation Fee (TIMF) Program Annual Report (2023)* describes various planned improvements that the TIMF would help fund. The only improvement within the study area that it would fund would be a roundabout at Eleventh Street/Bird Road.

City of Tracy General Plan

The *City of Tracy General Plan* (2011) is the principal policy and planning document for guiding future conservation, enhancement and development in the City. It represents the basic policy direction of the Tracy City Council on basic community values, ideals and aspirations to govern a shared environment through 2025. The General Plan addresses all aspects of development including land use, transportation, housing, economic development, public facilities and infrastructure and open spaces, among other topics.

The Circulation Element of the General Plan contains the following relevant goals, policies, objectives, and actions that may be related to the proposed project's transportation impacts:

Goal CIR-1 A roadway system that provides access and mobility for all of Tracy's residents and businesses while maintaining the quality of life in the community.

- *Objective CIR-1.1 Implement a hierarchical street system in which each street serves a specific, primary function and is sensitive to the context of the land uses served.*
  - Policy P2. The City shall preserve rights-of-way needed for future roadway and freeway interchange improvements through dedication or acquisition as adjacent properties develop or redevelop.
  - Policy P3. The City shall continue to apply traffic mitigation fee programs to fund transportation infrastructure, based on a fair share of facility use.
  - Policy P4. The City should continue to pursue regional, County and State funding to fund roadway projects. These potential funding sources may include Measure K sales tax revenues, a regional or countywide transportation impact fee, and other existing and future revenue sources.
  - Policy P5. The City shall continue to participate in regional transportation funding decisions, including Measure K reauthorization, regional or countywide transportation fees, and prioritization of State funded projects.
  - Policy P6. The Roadway Master Plan update shall identify necessary improvements to various interchanges on I-205 and I-580 based on land use designations and with particular attention to Terminal Access Routes in accordance with Surface Transportation Assistance Act of 1982 (STAA).
  - ➢ Action A3. Consult with San Joaquin County and the City of Lathrop to ensure that adequate rights-of-way are preserved in the City's Sphere of Influence.
- *Objective CIR-1.4 Protect residential areas from commercial truck traffic.*
  - Policy P1. Significant new truck traffic generating uses shall be limited to locations along designated truck routes, in industrial areas or within ¼-mile of freeways.
  - Policy P2. The City shall enforce designated truck routes based on the existing City ordinance.
  - ➢ Action A1. Update the truck route designations periodically as needed.

  - Action A2. Maintain a map of truck routes in the City.
- *Objective CIR-1.5 Protect residential areas from through traffic and high travel speeds by facilitating free flow of traffic on major streets.*
  - Policy P1. Use of local residential streets by non-local and commercial traffic shall be discouraged. The City may consider techniques such as route signs and route maps. This policy should not restrict the ability of local vehicle and nonmotorized transportation to utilize residential collectors as an effort to encourage higher levels of roadway connectivity.

City of Tracy Draft Infrastructure Master Plan Impact Fee Nexus Study (2023)

This plan, which is currently in draft form, would update impact fees for new development within the City of Tracy. The plan identifies $665 million in transportation improvements that would be funded by the project. The following improvements within the study area are included in this program:

- Chrisman Road widening from two to four lanes from Eleventh Street to Schulte Road ($16.2 million)
- Chrisman Road widening from two to four lanes from Schulte Road to Valpico Road ($12.8 million)
- Linne Road widening from two to four lanes from Corral Hollow Road to Tracy Blvd ($16.2 million)
- Linne Road widening from two to four lanes from Tracy Blvd to east City limits (1/4 mile west of MacArthur Drive) ($11.0 million)
- Widen Chrisman Road to four lanes (across railroad tracks) at Schulte Road ($1.7 million)
- Widen Corral Hollow Road to four lanes (across railroad tracks) north of Linne Road ($1.7 million)
- Widen Tracy Boulevard to four lanes (across railroad tracks) north of Linne Road ($1.7 million)
- Corral Hollow Road/Linne Road intersection improvements ($5.5 million)
- Tracy Boulevard/Linne Road intersection improvements ($4.7 million)
- Chrisman Road/Eleventh Street intersection improvements ($2.2 million)
- Chrisman Road/Valpico Road intersection improvements ($1.6 million)

City of Tracy Citywide Roadway and Transportation Master Plan ("*TMP*") (2022)

The *City of Tracy TMP* (2022) is a comprehensive document that describes existing and projected travel conditions in the City of Tracy. Besides including a detailed description of the City of Tracy travel demand model, it also describes specific planned roadway improvements, and other factors.

City of Tracy Truck Routes Map

The City of Tracy website includes a link (11x17 Portrait (cityoftracy.org) to its current truck route map (dated October 2022). That map shows the following truck routes in the project vicinity:

- Chrisman Road is a STAA truck route from SR 132 to Eleventh Street
- Eleventh Street is a STAA truck route from Mac Arthur Drive to I-205
- Through truck routes include Corral Hollow Road from Linne Road to I-580, Linne Road easterly to Tracy Boulevard, and Tracy Boulevard south of Linne Road
- Local truck routes include Tracy Boulevard from Linne Road to Valpico Road, Valpico Road from Tracy Boulevard to MacArthur Drive, and MacArthur Drive to Eleventh Street

The map specifies that only California legal trucks (and not STAA trucks) are permitted on through truck routes. Chapter 2 provides more information regarding truck routes in Tracy.

City of Tracy Bikeways Master Plan

The *City of Tracy Bikeways Master Plan* (2005) displays existing bikeways (as of 2005) and planned bikeway facilities including proposed bike segments and a long range bikeways plan. Proposed bikeways address bikeway system inconsistencies and gaps. The only planned bikeway in the project vicinity is the addition of Class II bike lanes on Linne Road from Corral Hollow Road to MacArthur Drive. The document also includes a long range 'Orbital' bikeway route that would run along the edge of the city for a 20-mile loop. This would include Chrisman Road north of Linne Road and Linne Road between Chrisman Road and Corral Hollow Road. The City is currently updating several of its infrastructure master plans. However, an updated plan regarding bicycle facilities is not currently (as of December 2024) on the City's website.

Transportation-Related Comments on the NOP of the EIR

A number of agencies, organizations, and individuals provided written comments on the Notice of Preparation (NOP) for the Pacific Gateway EIR. Those comments that are transportation-related and may necessitate analysis under CEQA are summarized below:

- Regarding improvements within the right-of-way of the Delta Mendota Canal, where existing or new proposed bridge crossings exceed 2 lanes of travel in either direction, additional requirements may be necessary to provide safe crossings. The proposed crossing modifications shall be reviewed and approved by Reclamation and SLDMWA.
- Consider the information in the linked document when preparing the draft environmental impact report (found at: https://oag.ca.gov/system/files/media/warehouse-best-practices.pdf.
- Consider measures to reduce emissions associated with the project to help the State meet its air quality goals.
- Include trip distribiton in transportation analysis to determine impacts to neabry city and county roads.
- The traffic analysis for the project needs to identify its impacts and per the San Joaquin County General plan, shall pay its fair share cost for the necessary improvements. Facilities of note include State Route 132 (SR 132), Interstate 5 (I-5), and State Route 33 (SR 33) in Stanislaus County.
- Project related impacts on air quality should be reduced to levels below the District's significance thresholds through incorporation of design elements such as the use of cleaner Heavy Heavy-Duty (HHD) trucks and vehicles, measures that reduce Vehicle Miles Traveled (VMTs), and measures that increase energy efficiency.
- Adequately characterize and justify an appropriate trip length distance for off-site Heavy Heavy-Duty (HHD) truck travel to and from the Project site. Based on the following factors: 1) the Project consists of a warehouse/distribution center that is expected to generate a high volume of HHD truck trips, and 2) HHD trucks generally travel further distances for distribution. The District recommends the environmental review include a discussion characterizing an appropriate trip length distance for HHD truck travel, and reflect such appropriate distance supported by project-specific factors.
- Require HHD truck routing patterns that limit exposure of residential communities and sensitive receptors to emissions.
- Incorporate signage and "pavement markings" to clearly identify on-site circulation patterns to minimize unnecessary on-site vehicle travel.
- Require truck entries be located on streets of a higher commercial classification.
- Incorporate bicycle racks and electric bike plug-ins.
- Evaluate HHD truck routing patterns for the Project, with the aim of limiting exposure of residential communities and sensitive receptors to emissions. evaluation would consider the current truck routes, the quantity and type of each truck (e.g., Medium Heavy-Duty, HHD, etc.), the destination

and origin of each trip, traffic volume correlation with the time of day or the day of the week, overall Vehicle Miles Traveled (VMT), and associated exhaust emissions. The truck routing evaluation would also identify alternative truck routes and their impacts on VMT and air quality

- Incorporate design elements (e.g., installing bikeways) within the Project that enhance walkability and connectivity to result in an overall reduction of vehicles miles traveled (VMT) and improve air quality within the area.
- The Project may be subject to District Rule 9410 (Employer Based Trip Reduction) if the project would result in employment of 100 or more "eligible" employees.
- Environmental review should include a discussion characterizing an appropriate trip length distance for HHD truck travel, and reflect such appropriate distance supported by project-specific factors

The vast majority of the bulleted items listed above are addressed in this report.

Several comments pertained to trip length information for off-site heavy duty truck travel. This information is included in the EIR based on resources described in this report. However, the heavy duty truck trip length data itself is not included here, because as described later, heavy duty truck VMT is not analyzed under CEQA.

2. ENVIRONMENTAL (EXISTING) SETTING

This chapter describes the existing transportation system including the roadway, bicycle, pedestrian, and transit facilities in the project vicinity.

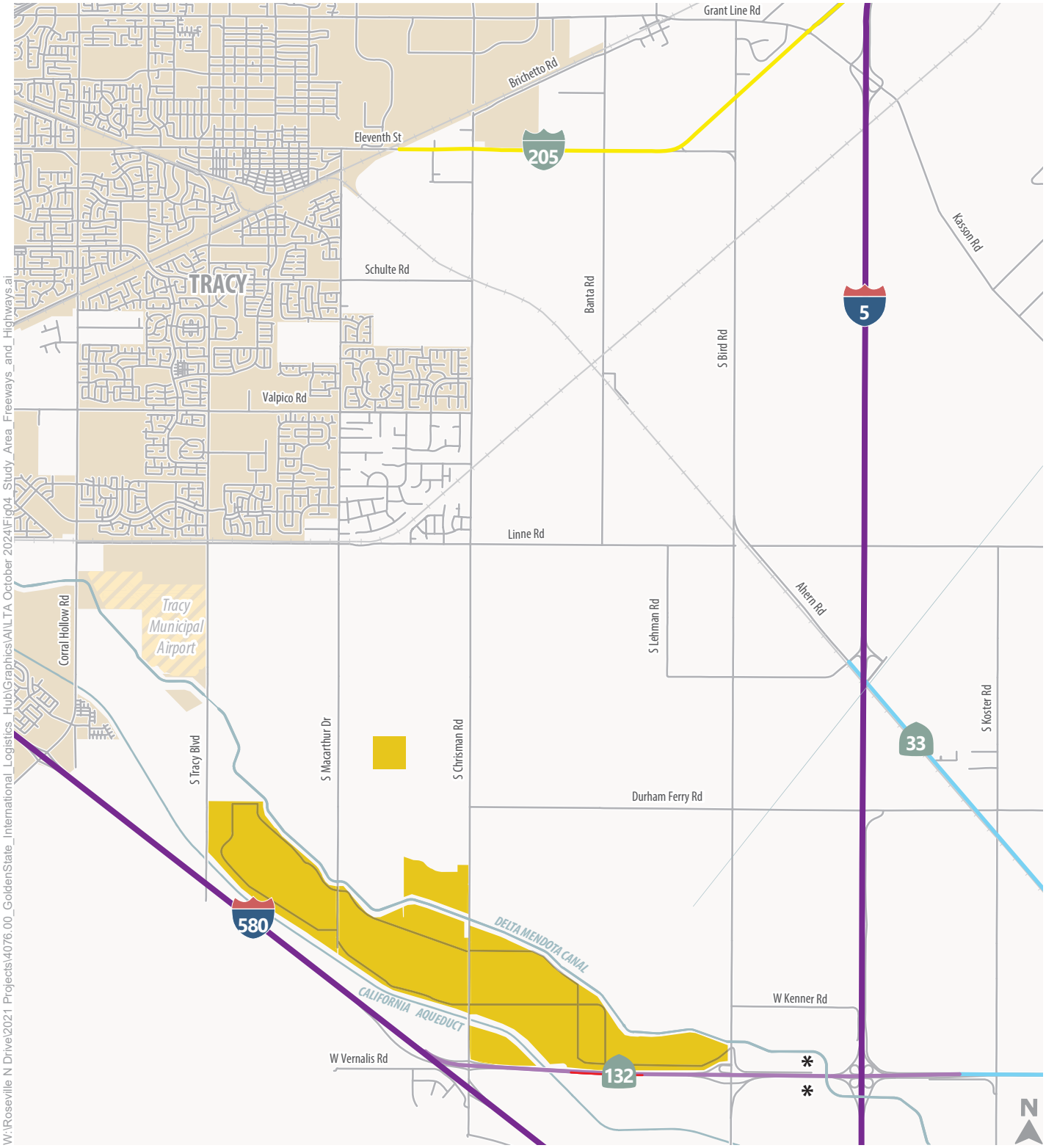
Roadway System

The roadway system in the project vicinity consists of a series of freeways, highways, and surface streets (See **Figure 3**). Freeways in the project vicinity include Interstate 5 (I-5), Interstate 580 (I-580), and State Route (SR) 132 between I-580 and I-5. Highways in the project vicinity include SR 132 east of I-5, and SR 33. These facilities represent the "State Highway System" in the project vicinity and are owned / operated by Caltrans.

Figure 4 displays the functional classification and number of lanes on roadways in the project vicinity. This figure is derived from Figure TM-1 of the Public Facilities and Services Element of the *San Joaquin County General Plan* (2016). Portions of Tracy Boulevard and MacArthur Drive are designated as principal arterials, while Chrisman Road and portions of Linne Road and Corral Hollow Road are designated as minor arterials. Durham Ferry Road, Bird Road, Ahern Road, and portions of Linne Road, Tracy Boulevard, MacArthur Drive, and Corral Hollow Road are designated as major or minor collectors.

Most of the freeways in the project vicinity consist of two or three lanes in each direction. However, the eastbound direction of SR 132 features an approximate 3,500-foot segment that is a single lane within the two mile distance between the Chrisman Road and Bird Road interchanges. I-5 and I-580 in the study area have posted speed limits of 70 miles per hour (mph), while SR 132 features a 55-mph speed limit. Speed limits on surface street roadways in the project vicinity range from 35 to 55 mph with Chrisman Road ranging from 45 to 55 mph.

Figure 5 displays the location of bridges on surface streets within the study area. These are primarily two-lane crossings of either the California Aqueduct or Delta Mendota Canal. This figure also shows the location of 11 at-grade railroad crossings on surface streets in the project vicinity.



Project Site

City Boundary

4-lane Interstate Freeway

4-lane State Freeway

Eastbound direction narrows to a single lane for 3,500 feet

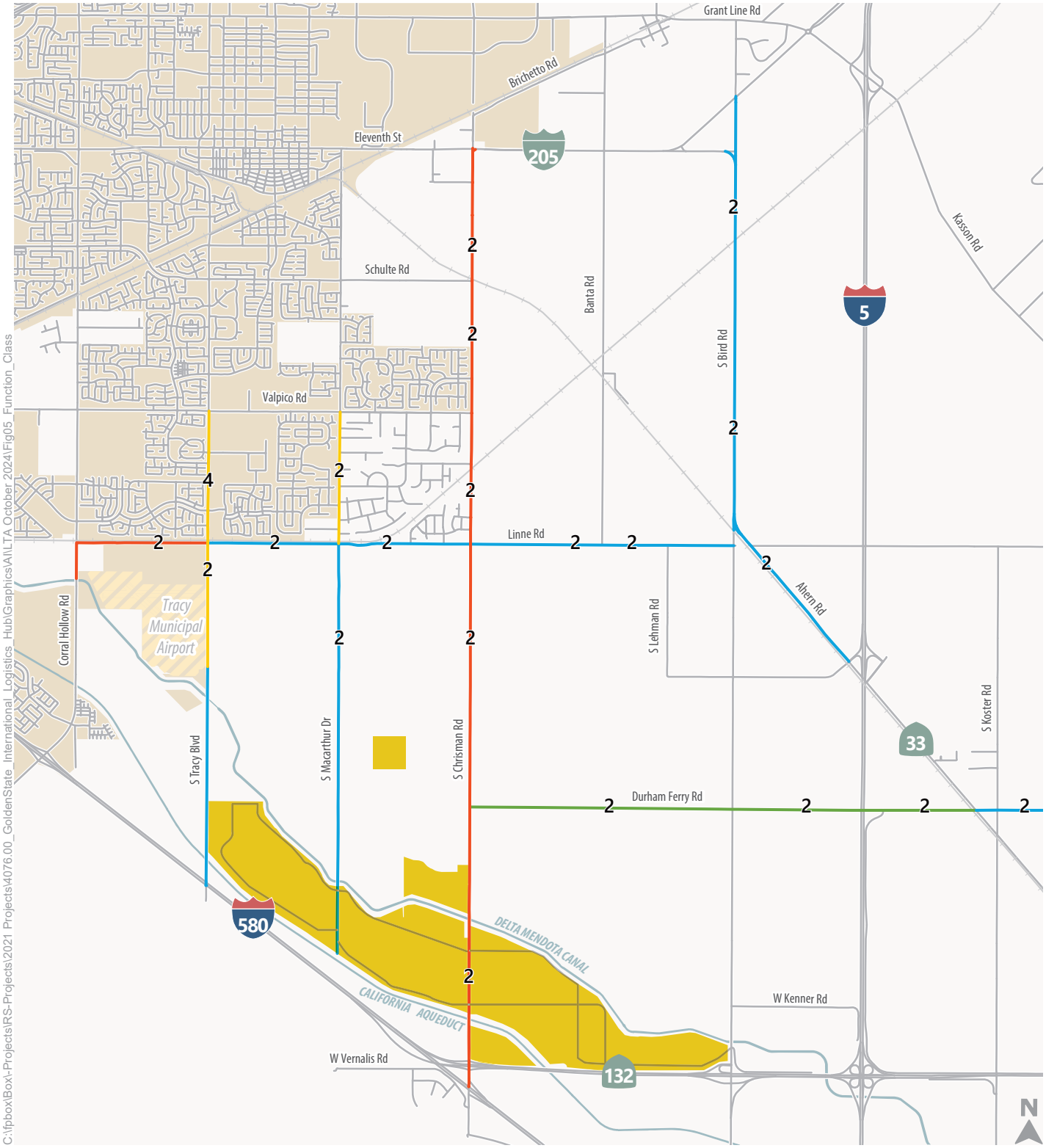
2-lane Conventional Highway

4-lane Conventional Highway

* A third (auxiliary) lane is provided in each direction between Bird Road and I-5

Figure 3

Study Area Freeways and Highways



Project Site

City Boundary

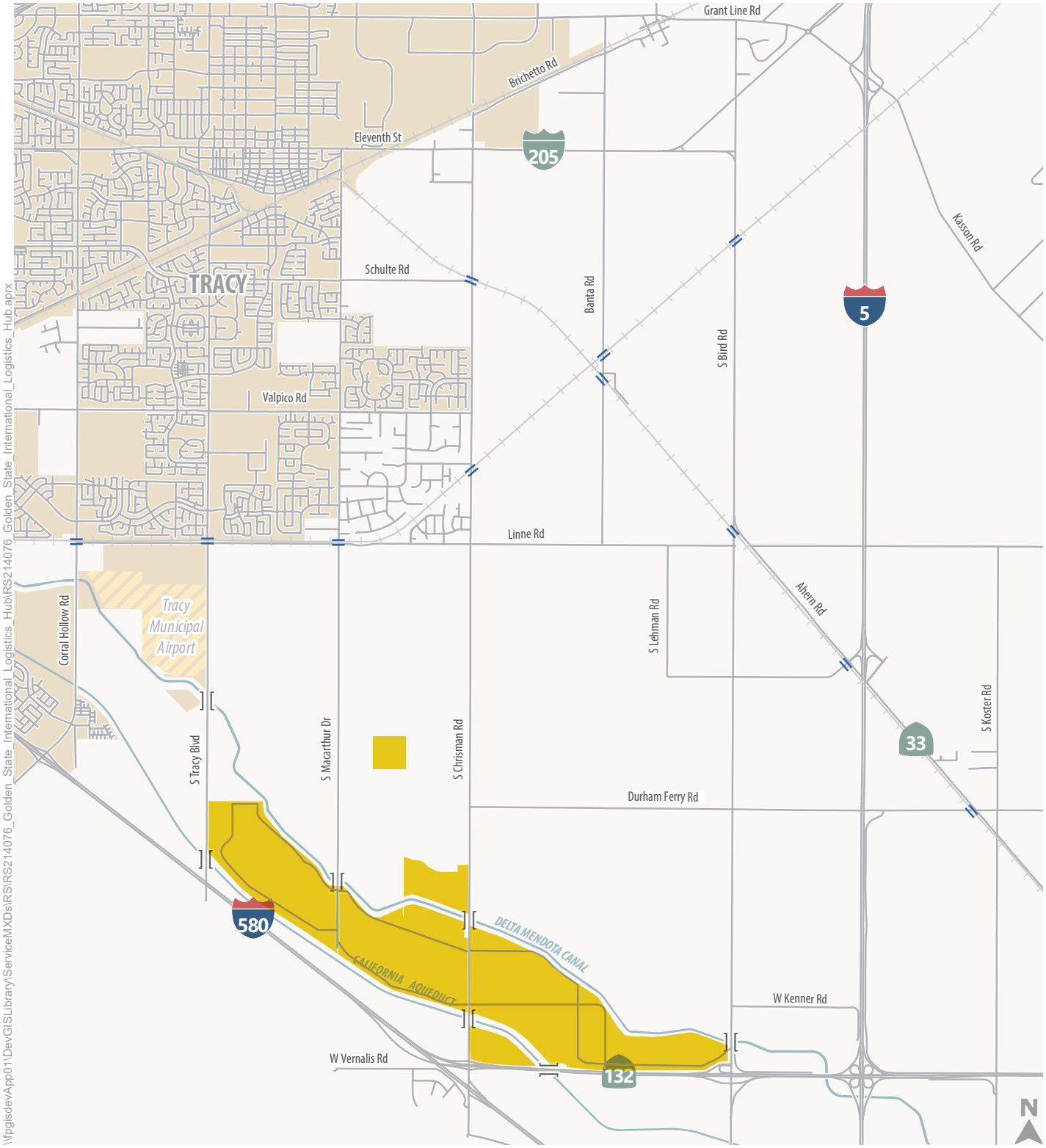
Function Classification

- Principal Arterials
- Minor Arterials
- Major Collector
- Minor Collector
- Local Road

X Roadway Number of Lanes
(Excluding turn pockets or center turn lanes)

Figure 4

Existing Roadway Network
Number of Lanes & Function Classification



Project Site

City Boundary

][Bridge Over Canal or Aqueduct

= At-Grade Railroad Crossing

Railroad

Figure 5

Study Area Bridges and At-Grade Railroad Crossings

The current City of Tracy City limits map (per City of Tracy GIS viewer[3]) shows a one-half mile segment of Chrisman Road north of Valpico Road and a 0.75-mile segment of Linne Road east of Tracy Boulevard being within the City limits. Tracy's Sphere of Influence (SOI) boundary includes Chrisman Road northerly from Valpico Drive to Eleventh Street. This information is insightful to understand when considering City of Tracy fee programs and project fair share responsibilities.

Truck Routes

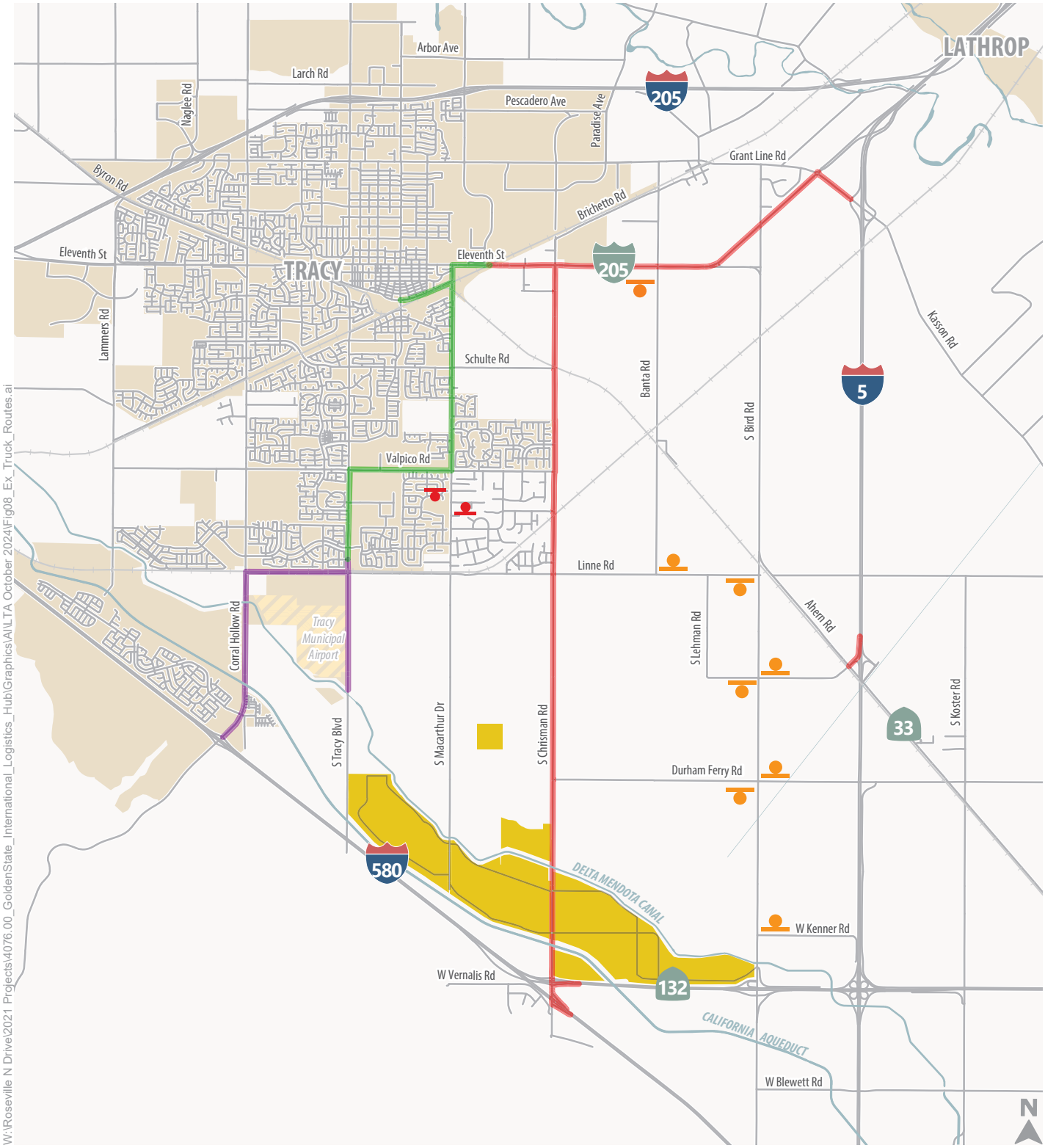
Figure 6 displays the location of existing truck routes in the project vicinity. As shown, Chrisman Road between SR 132 and Eleventh Street is a Surface Transportation Assistance Act (STAA) route. Eleventh Street is also a STAA route. This figure also shows the various truck restrictions signs present in the project vicinity. These signs are important because they determine where project heavy duty trucks can travel and where they cannot.

There are also several local or through routes in the study area as shown in Figure 6. Through truck routes are generally defined as primary routes for trucks traveling within and through a city. Local truck routes are typically on major thoroughfares that provide direct access to local origins and destinations.

Existing Traffic Volumes

Figure 7 displays the existing Average Daily Traffic (ADT) on roadways in the project vicinity based on traffic counts performed at most locations in Fall 2024. In some cases, counts from 2022 were used in instances where comparisons of 2022 to 2024 volumes at adjacent locations did not yield any traffic growth. Schools were in session, the weather was clear, and no unusual traffic conditions were noted during the counts. The roadway counts included both the volume of traffic and number of axles, collected during two mid-weekdays.

[3] Source: https://cityoftracy.maps.arcgis.com/apps/webappviewer/index.html?id=4887f49856a846f4923ee99275b335bf

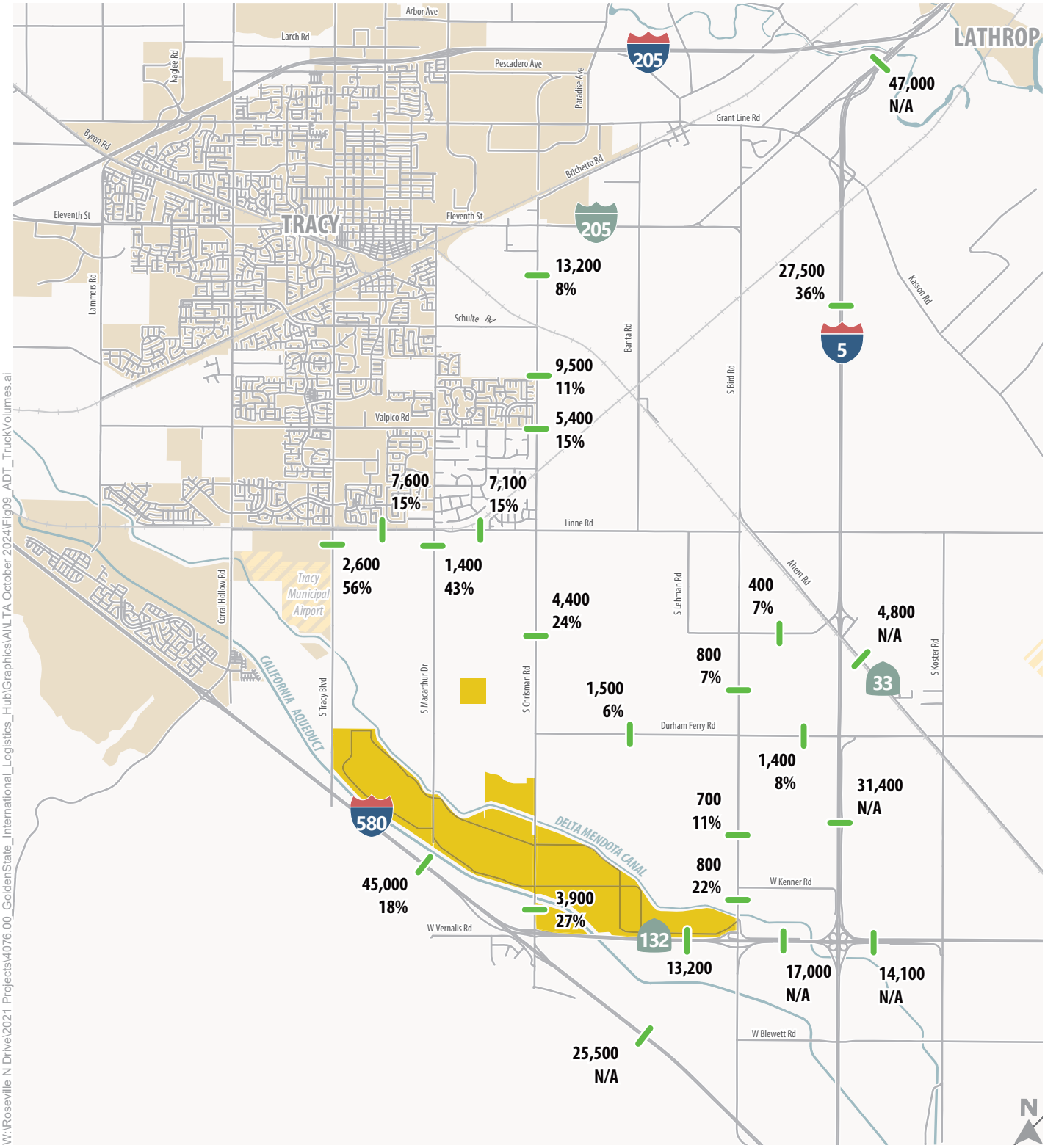


Project Site
City Boundary
Local Truck Route
Thru Truck Route
STAA Truck Route
"No Trucks" Sign
"Commercial Vehicles Over 7 Tons Prohibited" Sign

Figure 6

Source: STAA Terminal Access Routes San Joaquin County (May 2019) and City of Tracy Truck Route Map (December 2019)

Study Area Existing Truck Routes



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— Study Roadway Segment

Project Site

X,XXX Average Daily Traffic Volume
XX% & Truck Traffic Percentage

City Boundary

N/A Not Applicable (As Truck Percentage Was Estimated, not Verified)

Notes:
In this context, HCM definition of trucks is used which is any truck with 2 axle and 6 wheels, and all trucks with 3 or more axles.

Figure 7

Average Daily Traffic Volumes & Truck Percentages - Existing Conditions

The data on Figure 7 is not directly used for any type of operational analysis. Rather, it is intended for informational purposes only and as inputs for other parts of the EIR. This figure indicates that Chrisman Road carries approximately 3,900 ADT north of SR 132 with volumes gradually increasing to 13,200 ADT south of Eleventh Street. Durham Ferry Road east of Chrisman Road carries 1,500 ADT.

Trucks are defined (using the *Highway Capacity Manual, TRB, 2022* definition) as vehicles consisting of three or more axles as well as vehicles with two axles and dual tires on the rear axle. Figure 7 shows the percentage of daily trips that are trucks on roadways in the project vicinity. As shown, truck volumes are a large percentage of existing traffic on several roadways near the project site**. Table 1** shows the number of daily trucks on those roadways. As shown, truck traffic on Chrisman Road varies from about 1,030 to 1,100 trucks per day depending on the segment. Truck traffic is also considerable on portions of other roadways including Linne Road, MacArthur Drive (south of Linne Road) and Tracy Boulevard (south of Linne Road). Approximately 85 trucks per day were observed on Durham Ferry Road east of Chrisman Road.

Table 1:
Truck Traffic on Surface Streets – Existing Conditions

Segment [1]	Average Daily Traffic (All vehicles) [1]	Percent Trucks [2]	Number of Trucks Per Day [2]
Chrisman Road north of SR 132	3,902	26.5%	1,034
Chrisman Road between Eleventh Street and Schulte Road	13,188	8.3%	1,095
Tracy Boulevard south of Linne Road	2,644	55.3%	1,462
MacArthur Drive south of Linne Road	1,382	43.2%	597
Bird Road between Durham Ferry Road and Kenner Road	740	10.8%	80
Durham Ferry Road east of Chrisman Road	1,470	5.8%	85
Linne Road west of Chrisman Road	7,124	14.7%	1,047

Notes:
1. Based on counts collected in 2022 or Fall 2024.
2. Trucks shown here are based on the HCM definition of trucks which is vehicles with three or more axles and vehicles with two axles and dual tires on the rear axle.

Source: Fehr & Peers, 2024.

Vehicle Queuing

Vehicle queuing is analyzed for freeway off-ramps and State Highway System surface street intersections that could potentially be adversely affected by the project. Traffic volumes, lane configurations, vehicle fleet mix, traffic controls, and many other inputs are entered into a Simtraffic microsimulation model, which then reports the 95th percentile queues for critical movements. This queue, which is often used for design

purposes (along with the need for deceleration) represents the length of queued traffic for which there is a 5% or less chance that the actual queue would be greater. Because trucks represent a considerable portion of the vehicle fleet mix in the project vicinity, the proportion of trucks and their average lengths were entered into the model. The methodology is consistent with procedures described in the *Highway Capacity Manual (HCM) (Transportation Research Board, 2022)*. Since the queuing results are reported on state highway facilities, the precise (non-rounded) 95th percentile queue (in feet) is reported in accordance with Caltrans District 10 guidance.

The SimTraffic models were validated to existing conditions using performance metrics such as volume served and 95th percentile queue length (as measured during the traffic counts). Consistent with Caltrans District 10 requirements, SimTraffic analysis results are the average of 12 SimTraffic runs.

The following State Highway System intersections were selected for vehicle queuing analysis (based on expected usage by project trips):

- Ahern Road/SR 33/I-5 SB Ramps/Lehman Road – I-5 SB off-ramp and SR 33 southbound left-turn
- Ahern Road/SR 33/I-5 NB Ramps/Lehman Road – SR 33 southbound left-turn
- Chrisman Road/SR 132 WB Ramps – off-ramp
- Chrisman Road/SR 132 EB Ramps – off-ramp
- Chrisman Road/I-580 WB Ramps – off-ramp
- Bird Road/SR 132 EB Ramps – off-ramp
- Bird Road/SR 132 WB Ramps – off-ramp

The lane configurations and existing AM and PM peak hour volumes at each intersection listed above are shown in Figure 16. Traffic volumes are modest at most locations and no vehicle queues exceeding the existing storage currently occur. The existing 95th percentile queues are reported in Chapters 3 and 4 as part of comparative queuing analyses with 'plus project' scenarios.

Bicycle and Pedestrian System

As the project site and adjacent areas are rural, bicycle and pedestrian facilities are generally not present. The nearest pedestrian facilities are crosswalks at three of the four legs of the signalized Chrisman Road/Linne Road intersection, which is adjacent to Jefferson School.

Below is an illustration of the four types of bicycle facilities that exist in many communities. Facilities in the project vicinity include primarily Class II bike lanes.

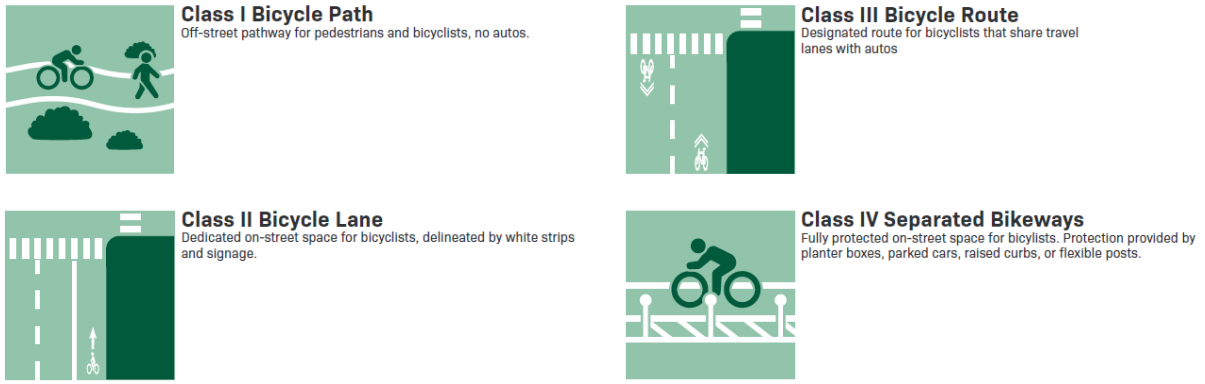


Illustration of Class I through IV bicycle facilities

Bicycle and pedestrian travel were recorded as part of the intersection counts. No bicyclists or pedestrians were observed during the four-hour count period at the Chrisman Road/Durham Ferry Road intersection, two pedestrians and no bicyclists were observed at the Chrisman Road/Linne Road intersection, and six pedestrians and one bicyclist was observed at the MacArthur Drive/Linne Road intersection. Thus, travel by walking and biking is infrequent in the project vicinity.

Transit System

No public transportation facilities or routes exist in the immediate vicinity of the project site. However, transit services are provided in the study area by Altamont Commuter Express (ACE) train service, Tracy's TRACER Bus Service, and buses operated by San Joaquin Regional Transit District (RTD).

The ACE train operates as a commuter rail service between Stockton and San Jose. A station is situated in the northeast quadrant of the Tracy Boulevard/Linne Road intersection. On weekdays, four westbound trains stop at this station in the morning (at 4:41 AM, 6:06 AM, 7:11 AM, and 8:03 AM) and four eastbound trains stop at this station in the evening (at 5:11 PM, 6:11 PM, 7:11 PM, and 8:14 PM). It is a 30 to 35 minute ride between the Tracy and Stockton stations, and a 12-minute ride between the Tracy and Lathrop/Manteca stations. The daily round trip fare from Stockton to Tracy is $12.25 and daily round trip fare from Lathrop/Manteca to Tracy is $11.75.

TRACER operates several bus routes within the City of Tracy. The majority of these routes operate north of Linne Road with the exception of Route H, which services the neighborhood of Tracy Hills (along Corral Hollow Road). Two different commuter routes and one local route within City of Tracy stop at the ACE Station on Tracy Boulevard. San Joaquin RTD operates three routes that have stops in Tracy at its main transit station located on Central Avenue south of Eleventh Street.

It is noteworthy to mention that no bus services currently operate in the International Park of Commerce (IPC) located several miles to the north of the project site along I-580. RTD Routes 90 and 97 include three stops in each direction of Grant Line Road between MacArthur Drive and Eleventh Street, adjacent to the Northeast Industrial (NEI) warehousing area.

Nearby Schools

The following two schools are located in the project vicinity:

- Jefferson School – situated in the southeast quadrant of the Chrisman Road/Linne Road intersection, about two miles north of the project's northerly boundary. A middle school serving grades 5 – 8, Jefferson School is part of the Jefferson School District (source: Jefferson School / Overview (jeffersonschooldistrict.com).
- New Jerusalem Elementary School – situated in the northeast quadrant of the Durham Ferry Road/Koster Road intersection, about four miles east of the project site. Serving grades K – 8, this school is part of the New Jerusalem School District (source: https://www.njesd.net/en-US).
- Delta Charter Elementary School – situated along Koster Road north of New Jerusalem Elementary School. Serving grades K – 8, this school is also part of the New Jerusalem School District.

Jefferson School

On regular school days, instructions begins at 8:15 AM and concludes at 3 PM. The school, which opened in approximately 2016, features a 'north' parking lot along Linne Road and a 'south' parking lot along Chrisman Road. Each parking lot is described below:

- North Parking Lot Along Linne Road – features 79 parking spaces. The westerly driveway (located 480 feet east of Chrisman Road) on Linne Road permits inbound movements only. The easterly driveway permits both inbound and outbound movements. This parking lot is the primary location for student pick-up and drop-off. To provide space for student drop-off and pick-up from private vehicles, the westerly driveway widens to two inbound lanes for a distance of about 300 feet, with the outside lane reserved for student pick-up and drop-off and the inside lane for through traffic. The easterly driveway features stop-control approaching Linne Road.

- South Parking Lot Along Chrisman Road – features 58 parking spaces. Its more northerly driveway (located 365 feet south of Linne Road) permits outbound movements only, while its more southerly driveway permits both inbound and outbound movements. This parking lot is used for some student pick-up and drop-off, bus loading, and staff parking. Similar to the north parking lot, this

lot features a counterclockwise on-site drive aisle for student pick-up and drop-off. The northerly driveway features stop-control approaching Chrisman Road.

Linne Road approaching and along the school frontage has the following characteristics:

- One lane in each direction separated by centerline double-yellow line striping (i.e., passing prohibited). A dedicated left-turn lane on westbound Linne Road is not provided at either school driveway.
- SCHOOL ZONE and SCHOOL SPEED LIMIT 25 WHEN CHILDREN ARE PRESENT (with flashing light) signs are posted on eastbound Linne Road west of Chrisman Road and westbound Linne Road east of the school. A 330-foot right-turn lane is provided on eastbound Linne Road at the westerly driveway. NO STOPPING ANY TIME signs are posted along this turn lane, to presumably discourage parents/guardians from waiting in this lane to drop-off/pick-up their student.

Chrisman Road approaching and along the school frontage has the following characteristics:

- One lane in each direction separated by centerline double-yellow line striping (i.e., passing prohibited). A dedicated left-turn lane is not provided at either school driveway.
- SCHOOL ZONE, SPEED LIMIT 45, and SCHOOL SPEED LIMIT 25 WHEN CHILDREN ARE PRESENT sign (with flashing light) signs are posted on northbound Chrisman Road approaching the school and on southbound Chrisman Road north of Linne Road.

Pavement markings showing a 45 MPH speed limit are in place on portions of Chrisman Road south of the school and Linne Road west of the school.

Field observations were performed at Jefferson School on a weekday in December 2023. The afternoon peak hour condition was chosen for observation because it typically has more severe queuing (than the morning) due to parents waiting in queue to pick-up students. Key observations at the north parking lot were:

- Motorists began to queue at the westerly driveway on Linne Road at about 2:45 PM, 15 minutes prior to the school instruction ending. The queue eventually spilled back into the eastbound right-turn lane on Linne Road (see **Image 1**). During the observations, no vehicles were observed waiting in the westbound through lane on Linne Road to turn into the westerly driveway (though such occurrences likely happen on occasion).
- School staff were present in the north parking lot to urge motorists to pull forward to pick-up students, thereby lessening the queue. At one point, school staff were positioned at the easterly driveway to direct outbound traffic onto Linne Road. Traffic levels and queuing subsided about 3:15 PM, 15 minutes after students were released for the day.

Key observations at the south parking lot were:

- The severity and duration of queuing was generally less than at the north parking lot. This driveway was used by school buses (see **Image 2**). Although queues did not spill back onto Chrisman Road during the observation day, it is conceivable such occurrences do occur.



Image 1: Vehicles queued in eastbound Linne Road right-turn lane at westerly Jefferson School driveway at 3 PM.



Image 2: School buses in south parking lot during student release at 3 PM.

New Jerusalem and Delta Charter Elementary Schools

This subsection describes that intersection including its traffic controls, lane configurations, nearby school facilities, relevant street signs, bicycle/pedestrian facilities, traffic volumes, and collision history.

- Traffic Control: All Way Stop.
- Lane Configuration: Single (shared left/through/right) lane on all four approaches.
- Nearby School Facilities: the southeast and northwest quadrants of the intersection are used for staff/parent parking and school bus staging. Multiple driveways are located along Durham Ferry Road serving both of these unpaved lots.
- Relevant Street Signs: SCHOOL ZONE signs are located in both directions of Durham Ferry Road approaching Koster Road and on southbound Koster Road approaching the schools. SPEED LIMIT 25 MPH signs (when children are present) are located on all four approaches to the intersection.
- Bicycle/Pedestrian Facilities: No sidewalks or bicycle facilities exist in the intersection vicinity. High visibility (striped yellow) crosswalks are located on the north and east legs of the intersection to accommodate travel between the schools and parking lots in the northwest and southeast corners of the intersection. The northeast corner crosswalk treatment is atypical given the proximity of a northbound one-way only drive aisle that begins at Durham Ferry Road.
- Traffic Volumes: In 2024 (while schools were in session), Durham Ferry Road west of Koster Road was measured to carry (in both directions) 315 AM peak hour vehicles and 290 PM peak hour vehicles.
- Collision History: The Traffic Injury Management System (https://tims.berkeley.edu/) database indicates that there were no reported injury collisions at the Durham Ferry Road/Koster Road intersection between January 1, 2018 and December 31, 2022.

3. PROJECT TRAVEL CHARACTERISTICS

This chapter presents the proposed project's land uses and expected travel characteristics. This chapter also analyzes how project trips (both the Initial Phase and Project Buildout) would affect queuing at off-ramps and turn lanes on the State Highway System.

Project Description

Figure 2 shows the project land use map. There are five distinct development areas: Gateway West, Central and East (consisting of general industrial uses), University Center (consisting of university plus mix of retail, business park, and the VFW Building), and Gateway Center (featuring general industrial, electrified truck and auto charging, retail, restaurants, and hospitality uses). **Table 2** displays the land use type and assumed quantity of development in each area. As shown, much of the site would be developed with general industrial uses, which would total 24,674,000 million square feet. The industrial space is specifically being contemplated to consist of warehouse/logistics buildings similar in nature and size to those existing elsewhere in the area.

The initial phase would consist of construction of the VFW Building, development for the first University Building (25,000 square feet) to support 400 students, and 3,962,000 square feet of industrial in Gateway East (30% of its buildout).

Figure 8 shows the project's internal roadway network under Project Buildout conditions. The following existing roadways would be widened to accommodate project buildout:

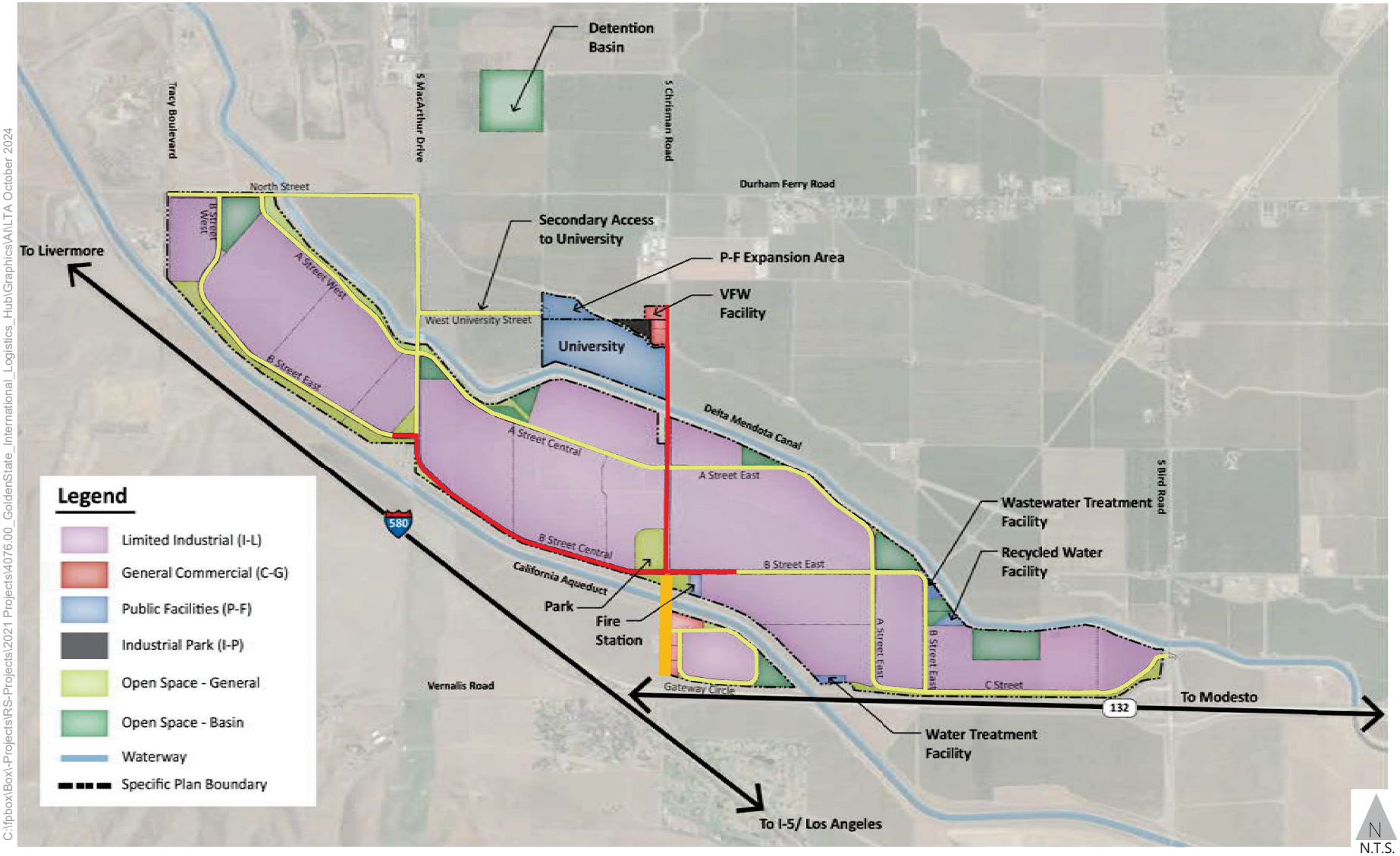
- Chrisman Road would be widened to a four-lane arterial along the entirety of the project frontage, which extends for 1.3 miles from SR 132 northerly to 1,200 feet north of the Delta Mendota Canal. The traffic operations analysis (conducted as part of the LTA) found that widening of Chrisman Road to six lanes would be necessary from SR 132 to B Street to meet County LOS requirements.
- MacArthur Drive would be widened to a two-lane industrial street from North Street to A Street, and to a four-lane arterial from A Street to B Street.

Figure 9 shows the project's spacing of five signalized intersections along Chrisman Road. The spacing is the result of early planning efforts that focused on achieving at least 1,000 feet between signalized intersections to facilitate traffic flow along the corridor. Corridor constraints included the California Aqueduct, Delta Mendota Canal, a small drainage channel located directly north of the university property, and differences in grade between Chrisman Road and adjacent properties that dictated where signalized intersections could be located.

Table 2:
Project Buildout Land Uses

Development Area	Land Use	Quantity	Notes
Gateway West	Limited Industrial	6,169 ksf	-
Gateway Central	Limited Industrial	6,856 ksf	-
Gateway East	Limited Industrial	11,124 ksf	-
University Center	University	5,000 students	1,600 dorm beds and 1,379 ksf of buildings with expansion in place (assumed in analysis)
	Industrial Park (Business)	93 ksf	Business Professional located along Chrisman Road
	Commercial/Retail (Service)	38.91 ksf	Shopping Plaza located along Chrisman Road
	VFW Tracy Post	11.5 ksf	Veterans of Foreign Wars (VFW) Building
Gateway Center	Limited Industrial	525 ksf	-
	Vehicle Fueling & Restaurants (Lot 1)	8 auto / 8 truck fuel positions, 8 ksf convenience store, 4 ksf fast food restaurant with drive-through lane, 8 ksf sit-down restaurant	No long-term (overnight) truck parking provided. Thus, does not qualify as a truck stop.
	Commercial/Retail/ Service/Hotel (Lot 2)	4 ksf fast casual restaurant, 6 ksf sit-down restaurant, 5 ksf bank, and 5 ksf retail	-
	Fast-Food Restaurants with Drive-Through (Lot 3)	9.6 ksf	Two restaurants
	Hotel (Lot 4)	60 ksf	120 room Business Hotel
	Electrified Truck and Auto Charging Lots	- [1]	-

Notes:
[1] Refer to Table 8 for details.
ksf = thousand square feet.
Source: *Pacific Gateway Revised Project Description* (September 29, 2024) and information from project applicant regarding likely specific uses in Gateway Center.



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4 Lane Arterial

2 Lane Local Industrial Street

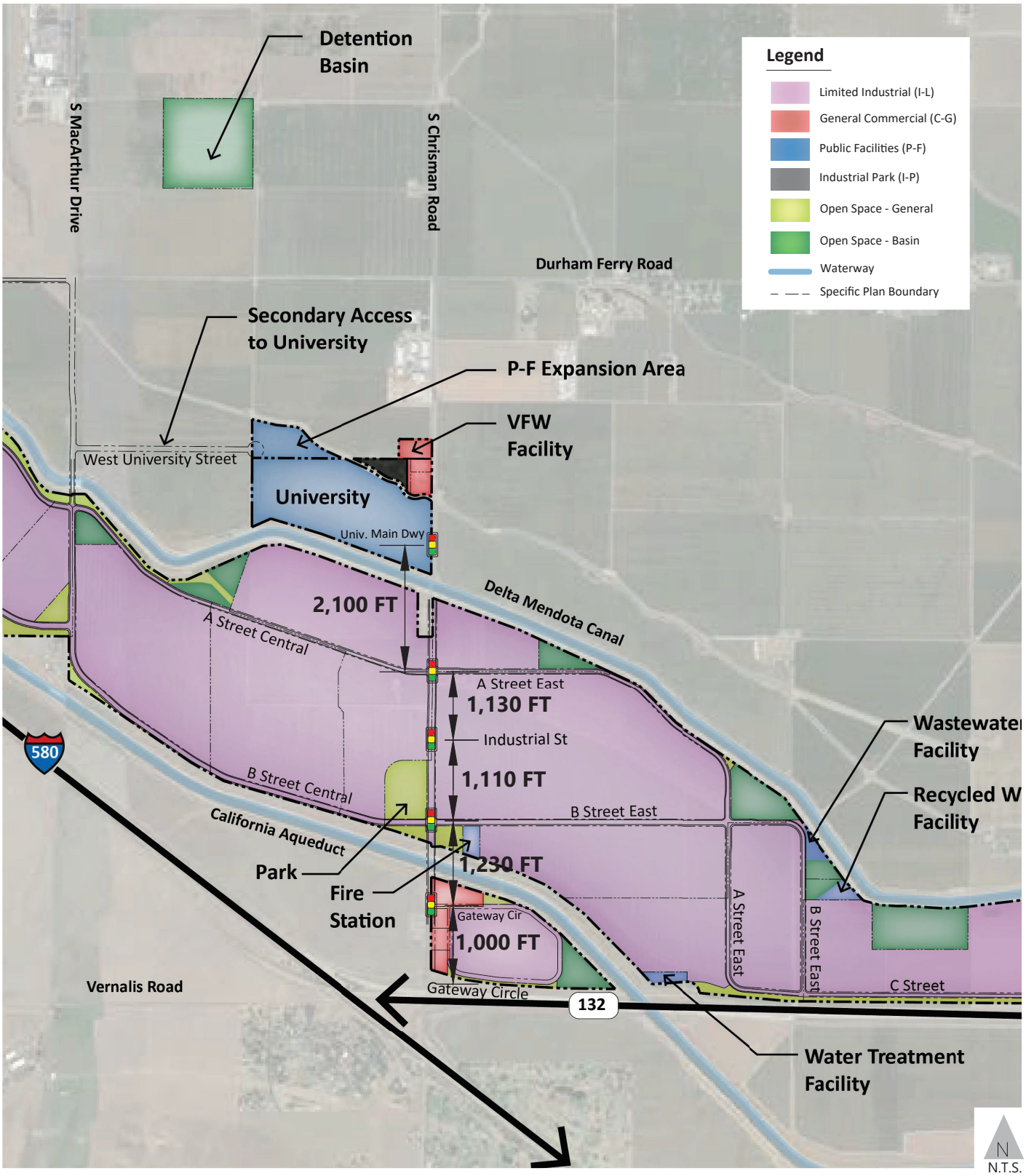
Subsequent traffic operations analysis revealed that Chrisman Road would need to be six lanes between SR 132 and B Street*

* Three northbound and two southbound lanes are recommended across the California Aqueduct.

*Figure not OCR compatible

Figure 8

Project Roadway Network



Proposed Traffic Signal

*Figure not OCR compatible

Figure 9

Project Intersection Spacing on Chrisman Road

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Nov 26, 2024

Each signalized intersection is described below from south to north:

- Gateway Center Signalized Driveway – would be situated on Chrisman Road 1,000 feet north of the SR 132 WB ramps. This would be a T-intersection.[4]
- B Street Signalized Intersection – would be spaced 1,230 feet north of the Gateway Center Signalized Driveway and function as the primary access to the industrial areas from the south.
- Gateway East Industrial Signalized Driveway – would be spaced 1,110 feet north of the B Street intersection. It would be a T-intersection, serving exclusively the East industrial area.
- A Street Signalized Intersection – would be spaced 1,130 feet north of the East Area Industrial Signalized Driveway and function as the primary access to the industrial areas from the north.
- University Main Signalized Driveway – would be spaced 2,100 feet north of A Street. This would be a T-intersection.

Unsignalized driveways (with total numbers proposed shown in parentheses) would also be provided along Chrisman Road as follows: Gateway Center (1), Gateway East (5), Gateway Central (4), and University Center (1). All unsignalized driveways would be restricted to right-turns only except for the unsignalized university driveway that would also allow left-turn ingress.

The new Bird Road/C Street/Vernalis Drive intersection would be relocated 150 to 200 feet south of the current Vernalis Drive intersection location. The new intersection would be designed either as a signalized intersection or as a single-lane roundabout including appropriate geometrics to accommodate truck turning radius requirements. According to the site civil engineer (Kier & Wright), the intersection's spacing along Bird Road would exceed the minimum 400-foot spacing distance (as described in the latest version of Caltrans' *Highway Design Manual*) to the SR 132 WB ramps intersection.

The initial phase of development would consist of partial buildout of Gateway East, University Center, and the VFW Building. The following accesses were assumed for each initial phase component:

- Gateway East – Construction of B Street and Private Driveway (north of B Street) east of Chrisman Road. Both would be signalized and include dedicated northbound right-turn and southbound left-turn lanes on Chrisman Road and westbound left- and right-turn lanes.
- University Center – Construction of Main University driveway as an unsignalized intersection. It would include a dedicated northbound left-turn lane on Chrisman Road and a stop-controlled eastbound left/right lane exiting the university.

[4] For analysis purposes, it is assumed that movements to the Shell gas station on the west side of Chrisman Road would be restricted to right-turns only. However, it would potentially be feasible for a new driveway connection to be created opposite the Gateway Center signalized driveway to provide access to the gas station.

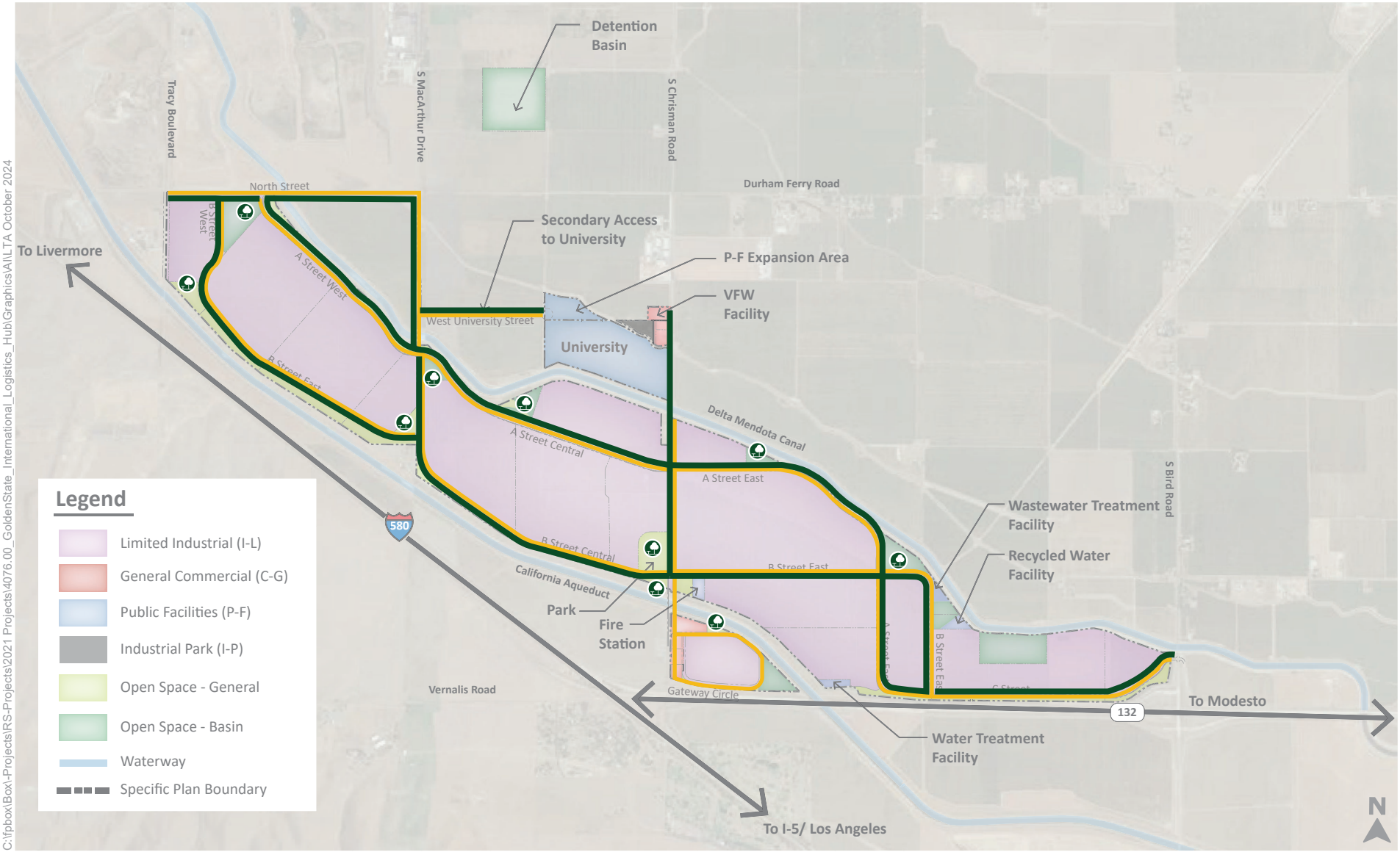
- VFW Building – would have its own driveway access north of the university. Under initial phase conditions, this driveway would permit all movements and Chrisman Road would remain as is (i.e., not be widened).

Under the initial phase of development, direct access (via C Street) to Bird Road would not be provided.

The *Pacific Gateway Specific Plan* (David Babcock & Associates, November 2024) provides typical cross-sections for project streets. The following describes the typical cross-sections for the two main types of streets to be constructed within the project site and along the project frontages:

- Four-Lane Major Arterial: two travel lanes (26 feet total) in each direction would be separated by a 14-foot raised median.
- Two-Lane Local Industrial Street: one travel lane in each direction would be separated by either a two-way left-turn lane (TWLTL) or raised median. Lane widths would vary from 15 to 16 feet and median width would range from 13 to 14 feet.

Figure 10 shows the project's planned bicycle and pedestrian network, as well as the location of ten on-site parks. The vast majority of new on-site roadways would feature a 12-foot multi-use (two-way) path on either the south or west side of street and a 5-foot wide sidewalk on the other side. Although not shown on the figure, crosswalks would be provided at signalized intersections and some unsignalized intersections.



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DATA SOURCE: DAVID BABCOCK + ASSOCIATES ARCHITECTURE LANDSCAPE PLANNING and Kier Wright

Class I Multi-Use Path
(12-foot width permitting two-way travel by both bicylists and pedestrians)

Sidewalk

Park

Notes:
1. Bicycle and pedestrian facilities are shown for each side of the street.
2. Crosswalks to be provided at all signalized intersections and certain unsignalized intersections. They are not shown here.

Figure 10

Project Bicycle and Pedestrian Network

Project Travel Characteristics

This section presents the project's (both Initial Phase and Project Buildout) expected trip generation and distribution/assignment characteristics.

Trip Generation Rates

The project's trip generation was estimated using both published trip rates from the most recent version of the *Trip Generation Manual, 11th Edition* (Institute of Transportation Engineers, 2021) and locally collected data for warehouse/logistics operations in San Joaquin County. **Table 3** presents the unadjusted (i.e., without consideration for internal trips or pass-by trips to retail) vehicular trip generation rates for the retail, restaurants, bank, hotel, gas station, community center, business park, and university land uses. Various footnotes at the bottom of Table 8 describe in detail how specific land uses were treated.

San Joaquin Countywide Warehousing Data Collection and Travel Behavior Study (Fehr & Peers, 2021)

This study, henceforth referenced as the "*San Joaquin Countywide Warehousing Travel Behavior Study*" is being introduced during the proposed project's trip generation discussion because this study was a fundamental part of estimating the proposed project's travel characteristics. This study is described in detail below. Fehr & Peers undertook the *San Joaquin Countywide Warehousing Travel Behavior Study* in 2021 to better understand the travel behavior of existing warehousing buildings across San Joaquin County. It was prepared in response to an initial review of local and regional planning efforts, which had revealed a lack of data and understanding of the travel characteristics of these types of facilities. This data was used to estimate the trips generated by the industrial component of the project.

Fehr & Peers collected 72 hours of driveway vehicle classification count data at 39 warehousing buildings across San Joaquin County in June 2021.[5]

[5] Six of the 39 sites were also counted in June 2019 prior to the onset of the COVID-19 pandemic. All but one of these locations was situated in IPC. Together, they total just over 5 million square feet of warehouse space. Comparison of the June 2021 to June 2019 trip generation totals revealed that the June 2021 weighted average daily trip rate was 16% greater than the June 2019 rate. This implies that the use of trip generation data collected during the COVID-19 pandemic did not understate trips (and if anything, resulted in a more conservative trip generation total due to increased ecommerce during the pandemic).

Table 3:
Unadjusted Trip Generation Rates (Non-Industrial Uses) by Land Use Type

Land Use	ITE Code	Amount	Unit Type	Daily Trip Rate [1]	AM Peak Hour [1]		PM Peak Hour [1]	
					Trip Rate	%in/ %out	Trip Rate	%in/%out
University	550	5,000	students	1.56	0.15	78%/22%	0.15	32%/68%
Business Professional	710	93	ksf	11.71	1.69	88%/12%	1.68	17%/83%
Retail	822	5 & 38.9	ksf	54.45	2.36	60%/40%	6.58	50%/50%
Community Center (VFW Post)	495	11.5	ksf	28.82	1.91	66%/34%	2.50	47%/53%
Convenience Store/Gas Station [2]	945	8	Auto Fuel Positions	345.75	31.6	50%/50%	26.9	50%/50%
Truck Fuel Station [3]	-	8	Truck Fuel Positions	90.13	13.25	53%/47%	2.0	50%/50%
Fast-Food Restaurant with Drive-Through Window	934	4 & 9.6	ksf	467.48	44.61	51%/49%	33.03	52%/48%
Sit-Down Restaurant	932	8 & 6	ksf	107.2	9.57	55%/45%	9.05	61%/39%
Fast Casual Restaurant	930	4	ksf	97.14	1.43	50%/50%	12.55	55%/45%
Bank with Drive-Through Window	912	5	ksf	100.35	9.95	58%/42%	21.01	50%/50%
Business Hotel	312	120	Rooms	4.02	0.36	39%/61%	0.36	55%/45%
EV Charging Lot – Autos [4]	-	-	Auto Charge Positions	-	-	50%/50%	-	50%/50%
EV Charging Lot – Trucks [5]	-	24	Truck Charge Positions	12	0.6	45%/55%	0.5	55%/45%

Note:

1. Rates derived from the *Trip Generation Manual, 11th Edition* unless otherwise specified. Weighted average rate applied in all cases (due to lack of equation available, poor R^2 value) with exception of business professional, where equations were used.
2. Subcategory chosen was size of Convenience Market: 5.5 – 10 ksf.
3. AM and PM peak hour trip rates based on data collected on Tuesday, August 20, 2024 at truck fueling station at 490 Devlin Road in Napa. Data showed substantially fewer trucks fill up in the afternoon than in the morning. This station is adjacent to SR 12 / SR 29, which carry a combined 3,000 trucks per day that could divert into fueling station. Daily trip rate based on applying AM plus PM peak hour to daily rate ratio from ITE code 945 to AM and PM peak hour rates for this land use.
4. Trip generation estimates derived from StreetLight Data, Inc. from March - May 2023 at the Tesla Supercharger lot situated on SR 41 just east of I-5 in Kings County showed an average of 25 inbound vehicles on mid-week days; peak hours were mid-day. Trips generated appear not to depend on the amount of charging parking spaces, for which there are 53.
5. Though several electric truck charging stations have been recently constructed in Southern California, none are considered viable count locations yet because usage is very limited (due to low volumes of EV trucks on roadways). Trip rates and in/out percentages based on likely truck driver behavior (i.e., partial charges mid-day) and overnight longer charges.

ksf = thousand square feet.

Source: Fehr & Peers, 2024.

The data collection was performed by National Data & Surveying Services (NDS) using cameras to count and classify vehicles entering and exiting the individual building driveways. The 39 warehousing buildings totaled over 25.7 million square feet, representing roughly 28% of all warehousing building space in San Joaquin County based on Colliers 21Q1 estimates. This data was used to develop weighted average trip generation rates per thousand square feet (ksf) for warehousing uses in San Joaquin County including within the cities of Tracy, Stockton, Lathrop, Manteca, and Lodi. The 39 warehousing buildings, including their occupying tenant, type of warehouse, and square footage, are shown in **Image 3** below.

City	Customer	Prologis	# Driveways	Type	Square Feet
Lathrop	California Logistics	Yes	3	Warehouse	1,235,000
Lathrop	Tesla, Inc.	Yes	1	Manufacturing	92,747
Manteca	Ford Motor Company	Yes	2	Warehouse	608,860
Stockton	Innovel Solutions Inc	Yes	2	Warehouse	780,393
Tracy	UPS Supply Chain	Yes	2	Warehouse	795,732
Stockton	Pratt Corrugated Holdings	Yes	2	Warehouse	350,892
Stockton	HJ Heinz	Yes	2	Warehouse	500,199
Stockton	Prism Team Services, Inc.	Yes	3	Warehouse	443,640
Tracy	Leggett & Platt	Yes	1	Warehouse	158,065
Tracy	Orchard Supply Company	Yes	2	Warehouse	346,524
Stockton	Fox Head, Inc.	Yes	2	Warehouse	388,000
Stockton	General Mills Sales, Inc.	Yes	2	Warehouse	735,980
Stockton	Amazon.com Services, Inc.	Yes	2	Warehouse	388,183
Stockton	Pitney Bowes	Yes	2	Warehouse	186,944
Stockton	Niagara Bottling, LLC	Yes	1	Warehouse	512,000
Stockton	Homesite Services, Inc.	Yes	1	Warehouse	39,200
Stockton	Masonite Corporation	Yes	2	Warehouse	180,000
Stockton	Kraft Foods Group, Inc.	Yes	1	Warehouse	351,788
Stockton	Coastal Pacific Food	Yes	1	Warehouse	500,004
Tracy	Restoration Hardware	Yes	4	Warehouse	283,712
Tracy	IPC Best Buy	Yes	5	Warehouse	641,364
Lathrop	Wayfair	No	2	Warehouse	1,167,000
Lathrop	Home Depot	No	1	Distribution Center	953,000
Lodi	Pacific Coast Producers	No	4	Warehouse	1,500,000
Lodi	Dart Container	No	2	Warehouse	340,000
Manteca	Lowes	No	3	Warehouse	570,000
Stockton	Dollar Tree	No	1	Warehouse	855,000
Manteca	UPS	No	2	Warehouse	560,000
Manteca	Cargill Food	No	2	Warehouse	350,000
Stockton	KeHE Distributors	No	2	Warehouse	770,000
Tracy	International Paper	No	1	Warehouse	375,000
Tracy	IPC Zinus	Yes	2	Warehouse	664,333
Tracy	IPC Medline	Yes	3	Warehouse	1,005,500
Tracy	IPC Smuckers	Yes	3	Warehouse	403,560
Tracy	IPC Amazon	Yes	4	Warehouse	1,001,449
Tracy	PP Costco	No	2	Warehouse	1,161,306
Tracy	PP Safeway	No	4	Warehouse	2,200,000
Tracy	NEI Amazon	Yes	3	Fulfillment	1,124,921
Tracy	NEI Crate & Barrel	Yes	5	Warehouse	1,225,680
	Total		**89**		**25,745,976**

Image 3: Specific warehouses (including location, tenant and size) counted as part of San Joaquin Countywide Warehousing Travel Behavior Study

Trip generation data collected at each warehouse was classified as generated either by autos (which include light and medium duty trucks) and heavy-duty trucks. **Table 4** shows the average trip generation rates that were observed for daily, AM peak hour, and PM peak hour conditions. These trip rates were used to estimate the number of auto and truck trips generated by the project's industrial uses.

*Table not OCR compatible

Table 4: Average Trip Generation Rates per KSF from San Joaquin Countywide Warehousing Data Collection and Travel Behavior Study

Source	Daily Trip Rate per ksf			AM Peak Hour Trip Rate per ksf			PM Peak Hour Trip Rate per ksf		
	Autos	Heavy Duty Trucks	All Vehicles	Autos	Heavy Duty Trucks	All Vehicles	Autos	Heavy Duty Trucks	All Vehicles
All 39 Buildings	1.07 (70%)	0.45 (30%)	1.52	0.15 (83%)	0.03 (17%)	0.18	0.19 (91%)	0.02 (9%)	0.21

Notes:
ksf = thousand square feet.
Source: Fehr & Peers, data collected in June 2021.

The trip rates in Table 4 were compared against potentially applicable warehousing categories contained in the *Trip Generation Manual*. The following categories were examined:

- Industrial Park (ITE Code 130) – was not used due to the uncertainty of the types of uses contained in the parks that were surveyed and the age of the ITE database (i.e., more than half of the data points used to develop trip rates were collected in Year 2000 or prior).
- Warehousing (ITE Code 150) – displayed average trip rates per ksf of 1.71, 0.17, and 0.18 for daily, AM peak hour, and PM peak hour conditions, respectively. This is in the same general range as the values shown in Table 9. Additionally, this database has a large number of data points and data is fairly recent (i.e., less than one-quarter were collected prior to 2000). It also includes trips made by trucks, which are also similar to values shown in Table 4.
- High-Cube Fulfillment Center Warehouse Non-Sort (ITE Code 155) – displayed average trip rates per ksf of 1.81, 0.15, and 0.16 for daily, AM peak hour, and PM peak hour conditions, respectively, which is also within the same general range as the values shown in Table 4.

The primary drawback to using the trip rates from the ITE Warehousing land use category is that it is based on case studies of much smaller sized projects (when compared to the project's size) from across the US. Whereas the project proposes over 24 million square feet of warehouse space, the average size of those case studies is below 500,000 square feet.

The primary drawback to using the trip rates from the ITE High-Cube Fulfillment Center Warehouse Non-Sort land use category is that it may result in an underestimate of truck trips. Whereas Table 4 shows a truck trip rate of 0.45 trucks per ksf, this category's rate was 0.23 trucks per ksf, nearly half as much as observations made at 39 different warehousing sites in San Joaquin County.

Table 4 indicates that, on a daily basis, trucks represented about 30% of all trips generated by the 39 warehouse buildings. However, during the AM and PM peak hours, trucks represented only 17% and 9% of total trips generated, respectively. This occurs for two primary reasons. First, the AM and PM peak hours

experience surges in employee arrivals/departures. Second, the temporal distribution of arriving/departing truck trips across a typical weekday shows surges during the mid-morning and early afternoon periods (i.e., outside of the traditional AM and PM peak hours). Refer to **Images 4** and **5** for hourly auto and truck arrival/departure profiles from the *San Joaquin Countywide Warehousing Data Collection and Travel Behavior Study*. The project is expected to have similar temporal travel behavior characteristics.

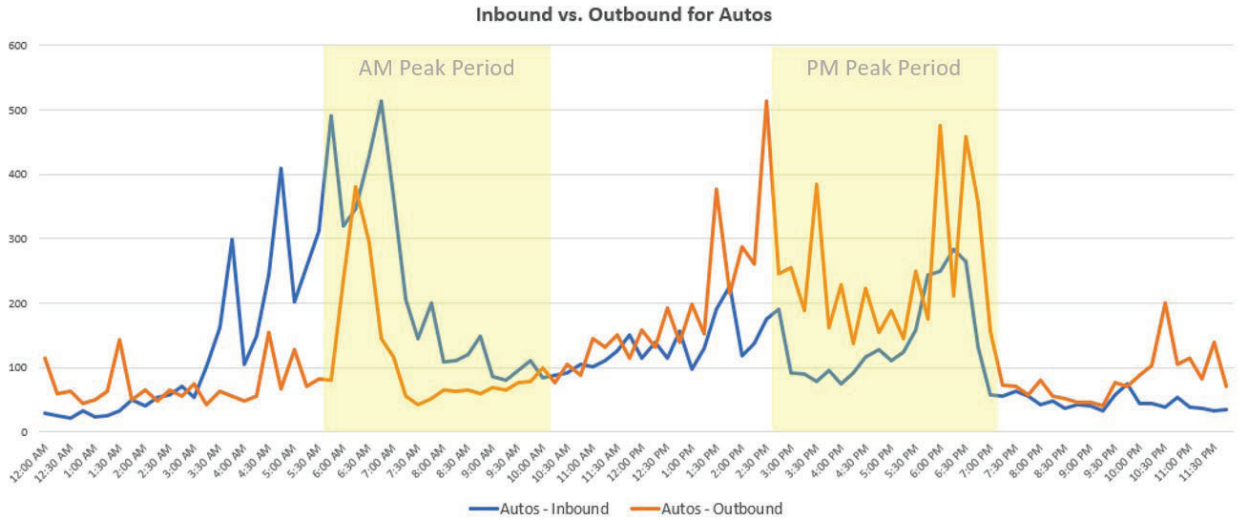

Image 4: Temporal Arrival and Departure Patterns of autos (source: *San Joaquin Countywide Warehousing Travel Behavior Study*)

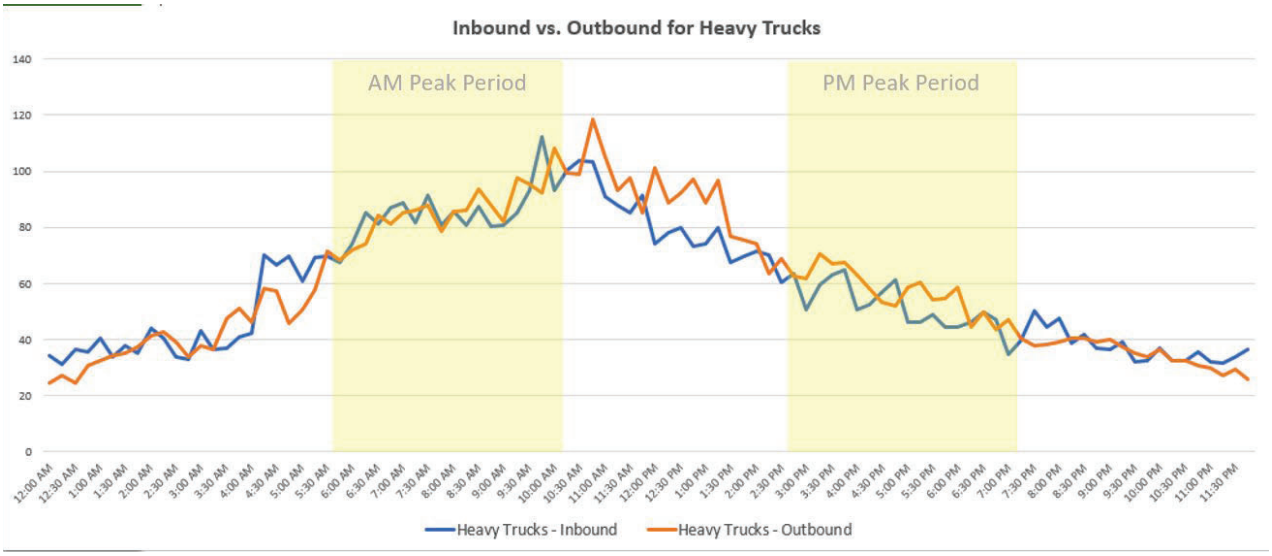

Image 5: Arrival and Departure Patterns of Trucks (source: *San Joaquin Countywide Warehousing Travel Behavior Study)*

*Tables not OCR compatible

Project Trip Generation Estimates

Table 5 shows the Project Buildout estimated trip generation during weekday AM and PM peak hours, and on a weekday daily basis for Gateway West, Central, and East industrial areas.

Table 6 shows the Project Buildout estimated trip generation during weekday AM and PM peak hours, and on a weekday daily basis for the University Center area. Note that this table includes reductions in trips due to internal trip-making between the university and adjacent on-site uses. These estimates were developed using the Mixed-Use Trip Generation (MXD+) model.[6] Adjustments were also made for pass-by trips to the shopping plaza.

Table 7 shows the Project Buildout estimated trip generation during weekday AM and PM peak hours, and on a weekday daily basis for the Gateway Center area. This table also shows expected internal and pass-by trips. Some of the pass-by trips are made by trucks that are en route to or from the adjacent project industrial areas. Additionally, there are also some diverted-link trips from SR 132 and I-580 to access the truck and auto EV charging lots.

Pass-by trips do not represent new vehicles added to Chrisman Road, whereas diverted-link trips are considered new trips added to this segment.

Table 8 displays the number of new trips generated by the three industrial areas, University center, and Gateway Center. As shown, project buildout would generate 52,900 new trips per day with about 21% (11,200) being trucks. Project buildout would generate 5,900 new AM peak hour trips and 6,600 new PM peak hour trips. The three industrial areas are responsible for 69% of all new daily trips generated (including 97% of new truck trips). University Center generates 18% of all new daily trips while Gateway Center generates 13%.

Table 9 displays the number of new trips generated by the initial phase of development. As shown, project buildout would generate 7,000 new trips per day with about 26% (1,784) being trucks. The initial phase would generate 800 AM peak hour trips and 920 PM peak hour trips.

Table 10 compares the new trips generated by the initial phase versus project buildout. This table indicates that the initial phase's trip generation represents about 13% of the total buildout trips generated.

[6] More information on MXD+ can be found at: mxd+ - Fehr & Peers

Table 5: Proposed Project Buildout Trip Generation – Gateway West, Central, and East Industrial Areas

Area	Land Use	Daily [1]						AM Peak Hour [1]						PM Peak Hour [1]					
		Autos			Trucks			Autos			Trucks			Autos			Trucks		
		In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Gateway West	Limited Industrial (6,169 ksf)	3,300	3,300	6,601	1,388	1,388	2,776	629	296	925	93	93	185	457	715	1,172	62	62	123
Gateway Central	Limited Industrial (6,856 ksf)	3,668	3,668	7,336	1,543	1,543	3,085	699	329	1,028	103	103	206	508	795	1,303	69	69	137
Gateway East	Limited Industrial (11,124 ksf)	5,951	5,951	11,903	2,503	2,503	5,006	1,135	534	1,669	167	167	334	824	1,289	2,114	111	111	222
Total		12,919	12,919	25,840	5,434	5,434	10,867	2,463	1,159	3,622	363	363	725	1,789	2,799	4,589	242	242	482

Notes:
[1] Based on trip rates in Table 4.
Values may not sum exactly due to rounding.
ksf = thousand square feet.
Source: Fehr & Peers, 2024.

Table 6: Proposed Project Buildout Trip Generation – University Center

Land Use	Daily [1]						AM Peak Hour [1]						PM Peak Hour [1]					
	Autos			Trucks			Autos			Trucks			Autos			Trucks		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
University	3,890	3,890	7,780	10	10	20	583	165	748	1	1	2	239	509	748	1	1	2
Business Professional	540	540	1,081	4	4	8	138	19	157	0	0	0	27	129	156	0	0	0
Shopping Plaza	1,049	1,049	2,098	10	10	20	54	36	90	1	1	2	127	127	254	1	1	2
VFW Tracy Post	165	165	331	0	0	0	14	7	21	0	0	0	13	14	27	0	0	0
Gross Trips	5,644	5,644	11,290	24	24	48	789	227	1,016	2	2	4	406	779	1,185	2	2	4
Internal Trips (BP/Retail) [2]	-63	-63	-126	0	0	0	-5	-5	-10	0	0	0	-8	-8	-16	0	0	0
Internal Trips (Univ/Retail) [3]	-508	-508	-1,016	0	0	0	-21	-21	-42	0	0	0	-62	-62	-124	0	0	0
External Trips University	3,636	3,636	7,272	10	10	20	575	152	727	1	1	2	208	478	687	1	1	2
External Trips Business Prof	509	508	1,017	4	4	8	136	16	152	0	0	0	23	125	148	0	0	0
External Trips Shopping Plaza	763	764	1,526	10	10	20	38	26	64	1	1	2	92	92	185	1	1	2
External Trips VFW Tracy Post	165	165	331	0	0	0	14	7	21	0	0	0	13	14	27	0	0	0
Shopping Plaza Pass-by Trips [3]	-305	-306	-610	0	0	0	-15	-10	-26	0	0	0	-37	-37	-74	0	0	0
Shopping Plaza New Trips	458	458	916	10	10	20	23	16	38	1	1	2	55	55	111	1	1	2
Total New Trips	4,768	4,767	9,535	24	24	48	748	191	939	2	2	4	301	672	973	2	2	4

Notes:
[1] Based on trip rates in Table 5 (from *Trip Generation Manual*.).
[2] Estimated internalization of (auto) trips between business professional and shopping plaza of 4% during each time period based on MXD+ model output.
[3] Internalization of 25% of retail trips with university assumed given their proximity to one another and large student presence.
[4] Pass-by percentages (40% for retail) are based on the *Trip Generation Manual*.
Values may not sum exactly due to rounding.
Source: Fehr & Peers, 2024.

Table 7: Proposed Project Buildout Trip Generation – Gateway Center

Land Use	Daily [1]						AM Peak Hour [1]						PM Peak Hour [1]					
	Autos			Trucks			Autos			Trucks			Autos			Trucks		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Limited Industrial	281	281	562	118	118	236	54	25	79	8	8	16	39	61	100	5	5	11
Convenience Store/Gas Station	1,381	1,381	2,762	2	2	4	127	127	254	0	0	0	108	107	215	0	0	0
Truck Fuel Station	0	0	0	360	360	720	0	0	0	56	50	106	0	0	0	8	8	16
Fast-Food Restaurant with Drive-Through Window	3,174	3,174	6,348	5	5	10	309	298	607	0	0	0	234	215	449	0	0	0
Sit-Down Restaurant	428	428	856	1	1	2	42	35	77	0	0	0	44	28	72	0	0	0
Fast Casual Restaurant	194	194	389	1	1	2	3	3	6	0	0	0	27	23	50	0	0	0
Bank with Drive-Through Window	251	251	502	0	0	0	29	21	50	0	0	0	53	53	105	0	0	0
Business Hotel	240	240	480	1	1	2	17	26	43	0	0	0	20	17	37	0	0	0
EV Charging Lot – Autos	38	38	76	0	0	0	3	3	6	0	0	0	2	2	4	0	0	0
EV Charging Lot – Trucks	0	0	0	144	144	288	0	0	0	7	7	14	0	0	0	6	6	12
Gross Trips	5,987	5,987	11,975	632	632	1264	584	538	1,122	71	65	136	527	506	1,032	19	19	39
Internal Trips (bet retail, bank, hotel, restaurants, gas station) [2]	-170	-170	-340	0	0	0	-16	-16	-32	0	0	0	-14	-14	-28	0	0	0
Retail / Restaurant / Gas Pass-by Trips [3]	-2,599	-2,599	-5,198	0	0	0	-245	-245	-490	0	0	0	-221	-221	-442	0	0	0
Truck Fueling / EV (Truck & Auto) Charging Pass-by Trips [3]	-28	-28	-57	-378	-378	-756	-2	-2	-4	-45	-45	-90	-2	-2	-3	-11	-11	-22
Truck Fueling / EV (Truck & Auto) Charging Diverted-Link Trips	-10	-10	-20	-126	-126	-252	-1	-1	-2	-15	-15	-30	-1	-1	-1	-3	-3	-6
New External Trips	3,180	3,180	6,360	128	128	256	320	274	594	11	5	16	289	268	558	5	5	10

Table 7: Proposed Project Buildout Trip Generation – Gateway Center

Land Use	Daily [1]						AM Peak Hour [1]						PM Peak Hour [1]					
	Autos			Trucks			Autos			Trucks			Autos			Trucks		
	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot

Notes:
[1] Based on trip rates in Table 5 (from *Trip Generation Manual.*) and other sources.
[2] Estimated internal (auto) trips of 3% for all time periods based on MXD+ model output.
[3] Pass-by percentages per the *Trip Generation Manual.*
Truck Fueling / EV (Truck & Auto) Charging trips are expected to be 75% pass-by and 25% diverted-link.
Values may not sum exactly due to rounding.
Source: Fehr & Peers, 2024.

Table 8: Proposed Project Buildout Trip Generation

District	New Daily Trips [1]			New AM Peak Hour Trips [1]			New PM Peak Hour Trips [1]		
	Autos	Trucks	Total	Autos	Trucks	Total	Autos	Trucks	Total
Gateway West, Central, and East	25,840	10,867	36,707	3622	725	4,347	4,589	482	5,071
University Center	9536	48	9,584	938	4	942	973	4	977
Gateway Center	6,360	256	6,615	594	16	610	558	10	568
New Trips	**41,736**	**11,171**	**52,906**	**5,154**	**745**	**5,899**	**6,120**	**496**	**6,616**

Notes:
[1] Based on trip totals in previous tables.
Source: Fehr & Peers, 2024.

Table 9: Proposed Project Initial Phase Trip Generation

District	Land Use & Amount	Daily [1]						AM Peak Hour [1]						PM Peak Hour [1]					
		Autos			Trucks			Autos			Trucks			Autos			Trucks		
		In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot	In	Out	Tot
Gateway East	3,962 ksf Limited Industrial	2,120	2,120	4,240	891	891	1,782	404	190	594	60	60	120	294	459	753	40	40	80
University Center	400 students	311	311	622	1	1	2	47	13	60	0	0	0	19	41	60	0	0	0
	11.5 ksf VFW Tracy Post	165	165	330	0	0	0	14	7	21	0	0	0	13	14	27	0	0	0
Gross (New) Trips [2]		2,596	2,596	5,192	892	892	1,784	465	210	675	60	60	120	326	514	840	40	40	80

Notes:
[1] Based on trip rates in Tables 4 and 5.
[2] Due to non-complementary nature of uses, no internalization expected.
Values may not sum exactly due to rounding.
Ksf = thousand square feet.
Source: Fehr & Peers, 2024.

Table 10: Proposed Project Buildout versus Initial Phase Trip Generation

Scenario	Daily New Trips [1]			AM Peak Hour New Trips [1]			PM Peak Hour New Trips [1]		
	Autos	Trucks	Total	Autos	Trucks	Total	Autos	Trucks	Total
Initial Phase	5,192	1,784	6,976	675	120	795	840	80	920
Project Buildout	41,736	11,171	52,907	5,154	745	5,899	6,120	496	6,616
Ratio	12.4%	16.0%	13.2%	13.1%	16.1%	13.5%	13.7%	16.1%	13.9%

Notes:
[1] Based on trip rates in previous tables.
Source: Fehr & Peers, 2024.

Project Trip Distribution/Assignment

The *San Joaquin Countywide Warehousing Travel Behavior Study* included the purchase of multiple Big Data datasets from StreetLight Data, Inc. for the warehousing sites. These data sources are derived from location-based services (LBS) data and complex machine learning algorithms to understand travel behavior across the country.[7]

Mobile device data was obtained for warehouses located within and near the City of Tracy (i.e., consisting of IPC, NEI, and Patterson Pass collectively referred to as the "Central Valley Gateway"). By studying where mobile devices are located over the course of the day (i.e., during overnight vs. daytime hours), it was possible to determine which devices were associated with employee trips versus visitor trips. Global Positioning System (GPS)-based freight metrics for medium to heavy duty commercial trucks were also obtained to understand the origin-destination and length of commercial vehicle trips. Trip origins and destinations were then tracked at a Census Block Group level.

Figure 11 displays the expected residence location of employees that would work at the proposed project's warehouses. These percentages were derived from the closely located Central Valley Gateway employee residence locations, but also took into consideration the project's location. To accomplish this, a statistical model was built to calibrate the relative proportion of Central Valley Gateway employee residence locations for both major and minor cities in the region against the StreetLight data.

What is "Big Data"?

"Big Data" is used in a variety of disciplines such as retail/market studies, transportation, and economics. It uses anonymous location records from smart phones and in-vehicle navigation devices to understand travel behaviors, patterns, and user types.

The modeling relied on 2020 US Census statistics (related to population, age, employed persons, and college educated) and travel time/distance. Once the model was adequately calibrated to match Central Valley Gateway employee residence locations, it was then applied to the proposed project in consideration of its specific location. **Appendix A** of separately bound appendix contains the model.

[7] StreetLight Data, Inc. processes approximately 40 billion anonymized location records per month from smart phones and navigation devices in connected cars and trucks and uses machine learning to transform these records into aggregated and normalized route-based travel patterns. Data is validated using permanent traffic counters and embedded sensors, and normalized with multiple data sources, including parcel data, digital road network data, and census information.

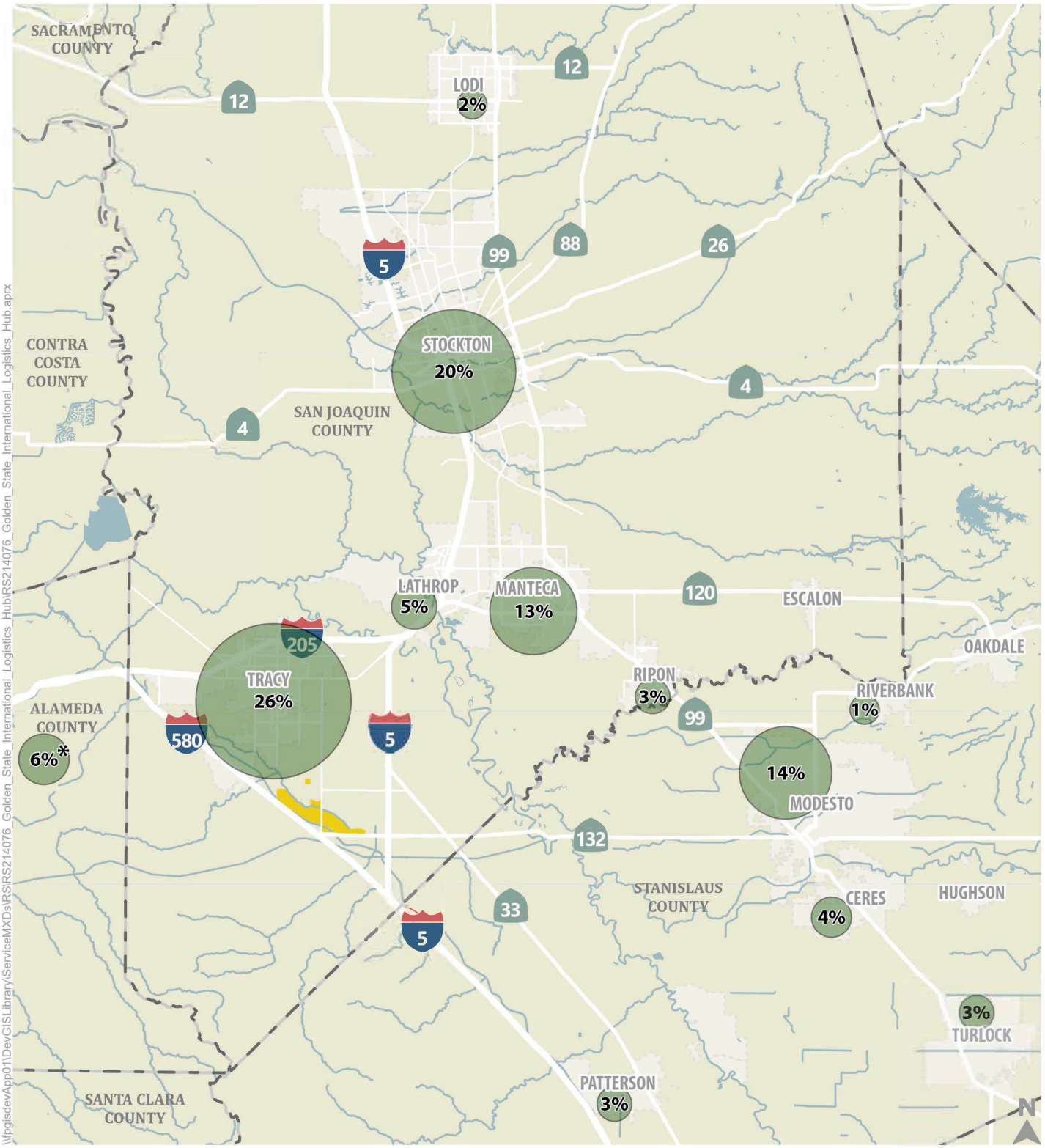

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*Figure not OCR compatible

Figure 11

Warehouse Employee Residence Distribution - Existing Plus Project Conditions

* Includes cities of Pleasanton, Livermore, and Dublin

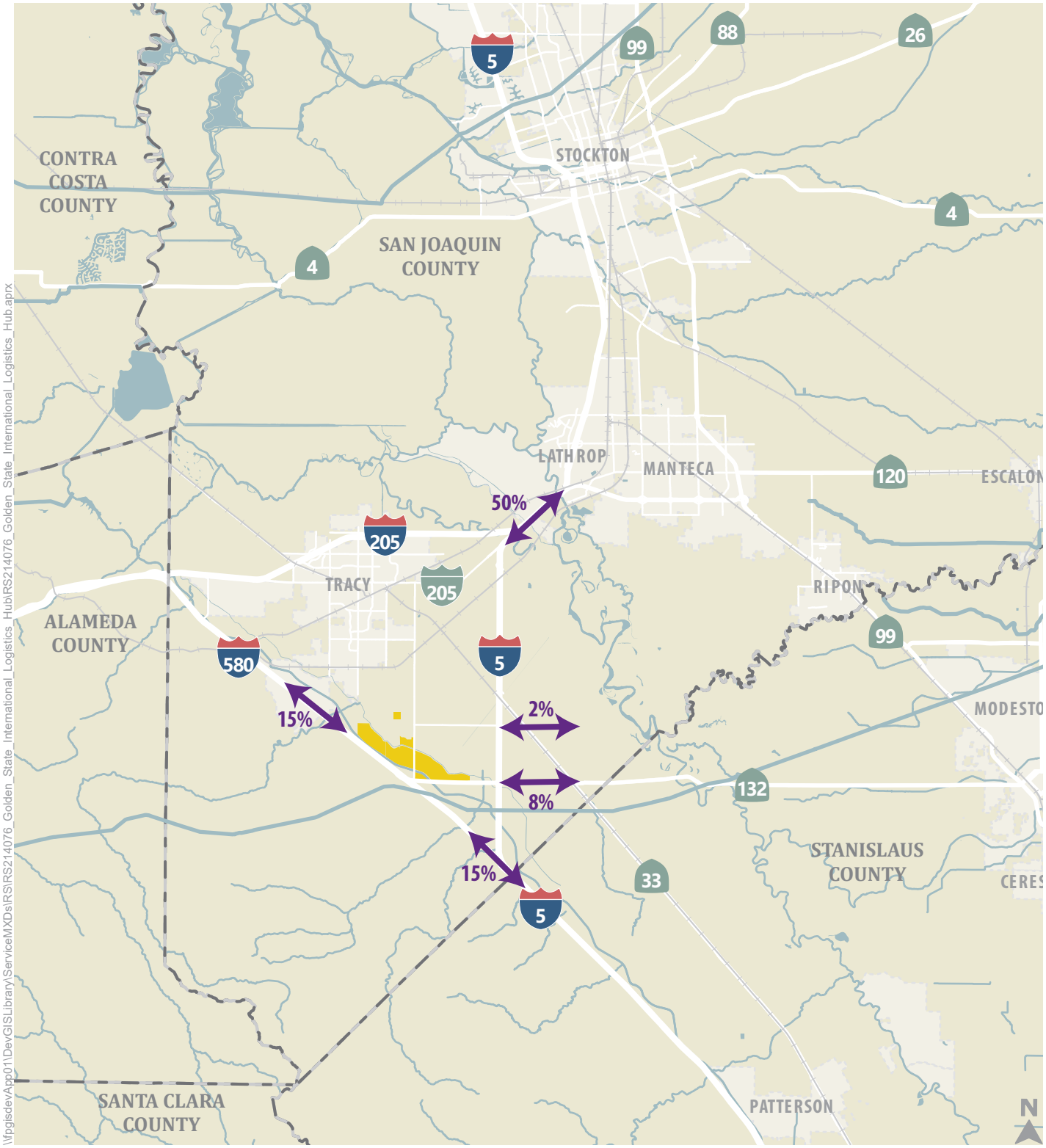
Figure 11 indicates that the largest share of employees is expected to come from the City of Tracy (26%), followed by Stockton (20%), Modesto (14%), and Manteca (13%). Among those passenger vehicle trips that would utilize I-5 between SR 120 and the City of Tracy, they would have the choice of several competing routes to access the project site. The Pacific Gateway LTA provided a detailed analysis (based on travel time surveys) of which routes project trips would be likely to use. This route assignment is factored into the VMT analyses presented in Chapter 6.

Figure 12 displays the expected distribution of trucks generated by the proposed project's warehousing buildings. As shown, truck access is provided via Chrisman Road, which is an STAA route between SR 132 and Eleventh Street. These percentages were derived from the *San Joaquin Countywide Warehousing Travel Behavior Study*. As shown, 50% of truck trips are expected to be distributed to/from the north on I-5 toward Stockton. Another 15% would be distributed to/from south on I-5 and 15% would be distributed to/from the northwest on I-580 (toward the Bay Area). Heavy duty truck trips are expected to utilize designated truck routes, which are shown on Figure 6. They were not assumed to use roads that have current weight restrictions.

Durham Ferry Road between Chrisman Road and SR 33 is a special circumstance (as it relates to trucks) that warrants further discussion. It does not currently have any truck weight restrictions on it. And trucks were observed using it (85 of the 1,500 daily trips are trucks). Based on input from San Joaquin County Department of Public Works Department staff,[8] it is anticipated that should the project be approved and constructed, signage would be placed on this segment of Durham Ferry Road prohibiting through truck travel. However, it is possible that some truck drivers may not adhere to these signs. Accordingly, the analysis that follows assumes a modest level of trucks would use this segment of Durham Ferry Road despite the presence of these signs. The specific volumes and directions of travel are presented later in this chapter.

The retail, business park, and university land uses were entered into the City of Tracy travel demand model. The model was then applied to estimate their expected distribution of trips for each land use. Nearly half of the retail and university trips are expected to be distributed to/from the north on Chrisman Road toward the City of Tracy.

[8] Personal communication with Jeffrey Levers, Senior Transportation Engineer, November 23, 2022.



City Boundary

County Boundary

XX% Inbound Trip Distribution

Note: External truck distribution totals sum to 90%. Remaining 10% are trips between project site and other logistics/warehouse sites in the area.

Figure 12

Warehouse Truck Trip Distribution

Traffic Forecasts

Project Buildout and Initial Phase trips were assigned to the surrounding roadway system based on each scenario's expected trip generation, distribution, and assignment procedures. **Figures 13** and **14** show the ADT on existing and new project study roadways under Existing Plus Project Buildout conditions. **Figure 15** shows volumes on the existing street network for Existing Plus Initial Phase conditions.

The prior pages displayed numerous different components of the project's trip distribution. To understand the distribution of trips for all land uses combined, it is necessary to calculate the net increase in trips between existing and existing plus project buildout conditions for each of the five gateway streets that would be used to access the project site. This data is shown in **Table 11.** This table reveals the following key conclusions:

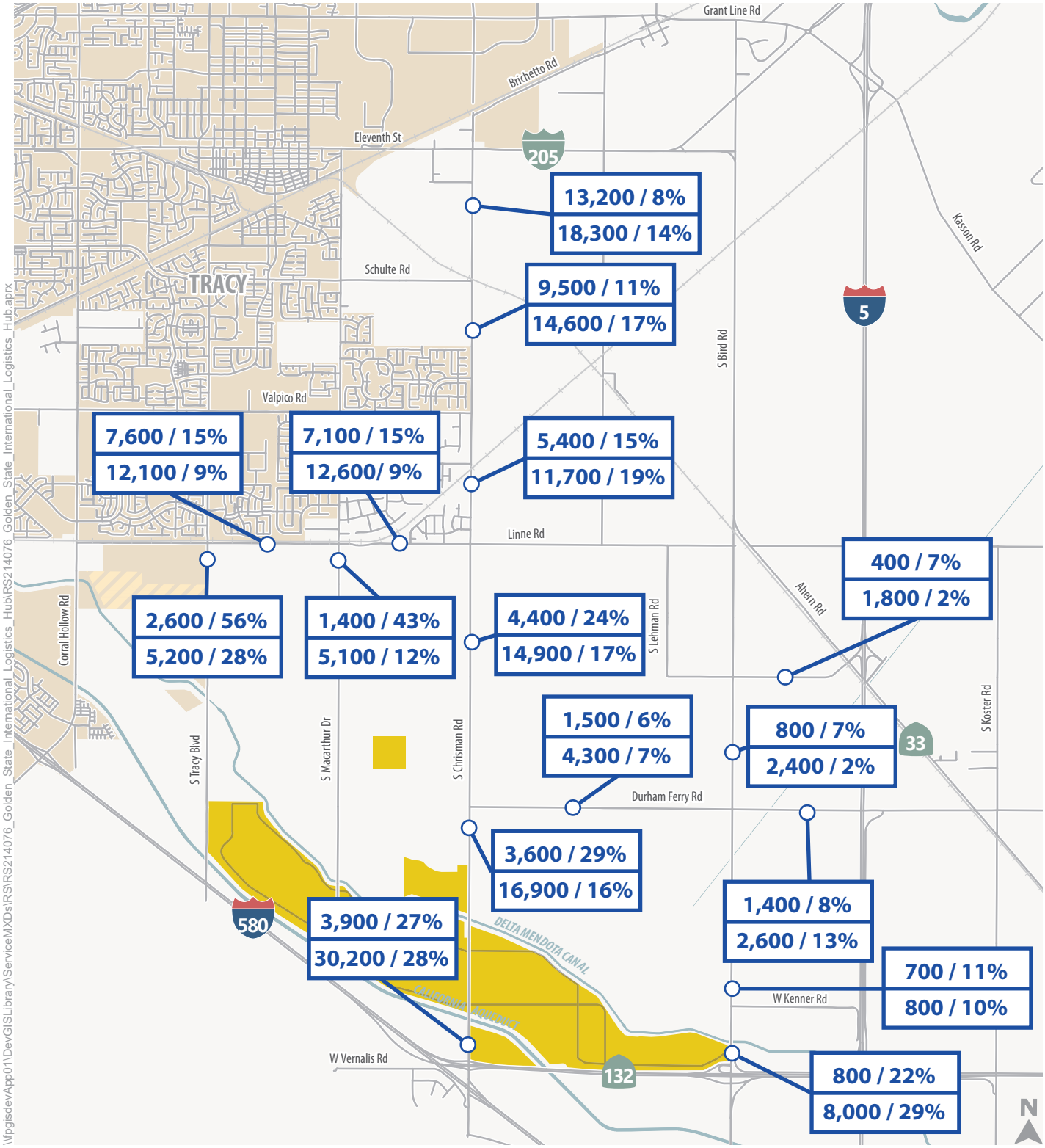
- Auto trips are well-distributed across the various gateway streets. The majority (73%) of these trips are expected to use Chrisman Road from the north or south to access the project site. The secondary accesses of Tracy Boulevard, MacArthur Drive and C Street west of Bird Road would each serve between 6% and 12% of project trips.
- Approximately two-thirds of truck trips are expected to enter/exit the project site via Chrisman Road north of SR 132. These trips would pass through the SR 132/Chrisman Road interchange.
- Chrisman Road north of SR 132 would experience the largest increase in traffic of any roadway segment. Project buildout would add 26,300 daily trips (28% trucks), which is about 50% of all external project trips.

Table 11:
Distribution of Daily Project Buildout Trips – Existing Plus Project Conditions

Project Gateway Access	Project Buildout Trips Only					
	Autos		Trucks		Total	
	#	%	#	%	#	%
Tracy Boulevard south of Linne Road	2,550	6%	0	0%	2,550	5%
MacArthur Drive south of Linne Road	3,670	9%	0	0%	3,670	7%
Chrisman Road south of Durham Ferry Road	11,650	28%	1,640	15%	13,290	25%
C Street west of Bird Road	5,040	12%	2,160	19%	7,200	14%
Chrisman Road north of SR 132	18,880	45%	7,420	66%	26,300	50%
Total	41,790	100%	11,220	100%	53,010	100%

Notes:
Values are rounded to the nearest 10 vehicles.

Source: Fehr & Peers, 2024.



Average Daily Traffic (Both Directions)

xx,xxx / xx%
xx,xxx / xx%

Existing ADT / HV%

Existing Plus Project ADT / HV%

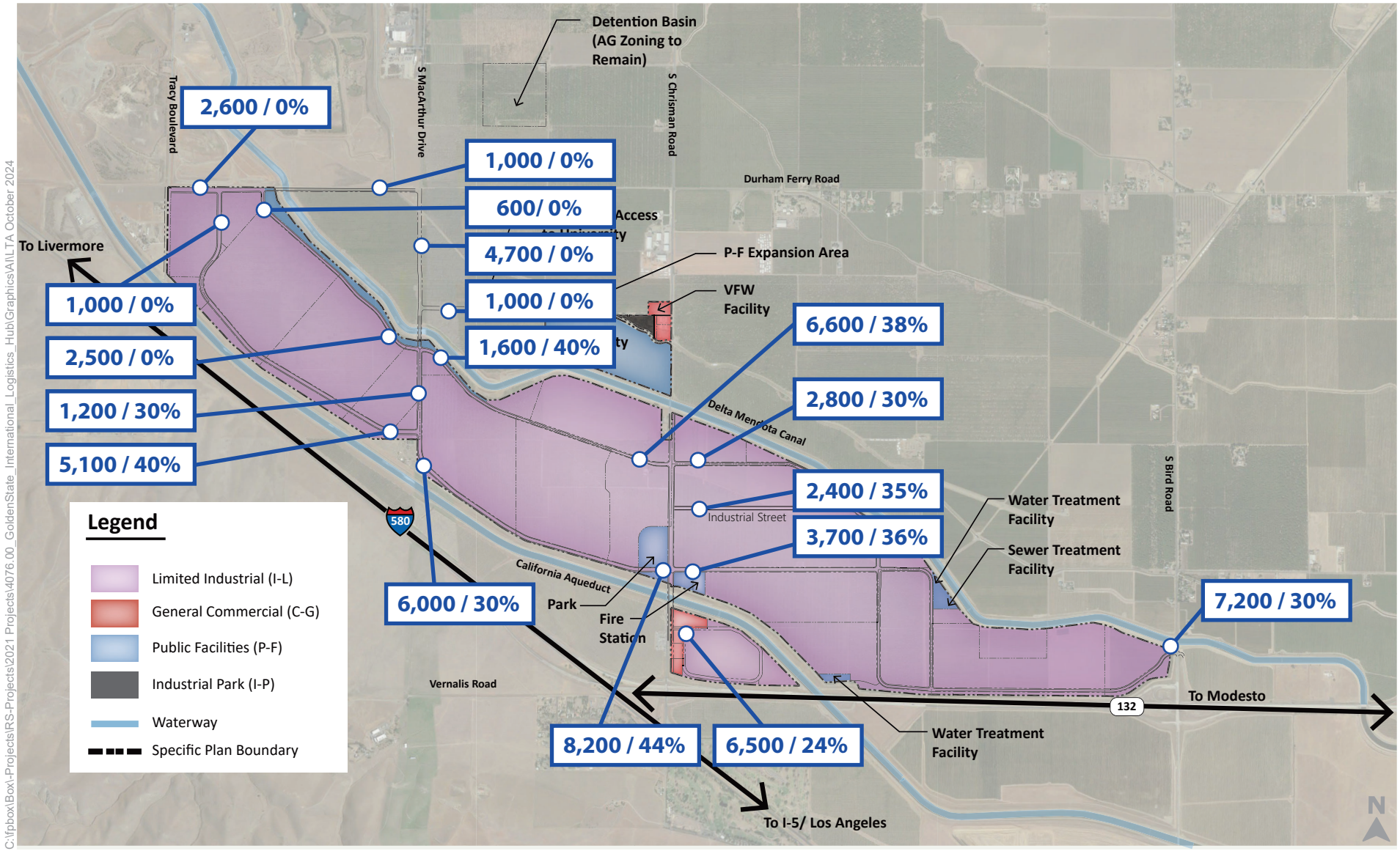
HV = Heavy Vehicle

Project Site

City Boundary

Figure 13

Average Daily Traffic Volumes - Existing Plus Project Buildout Conditions



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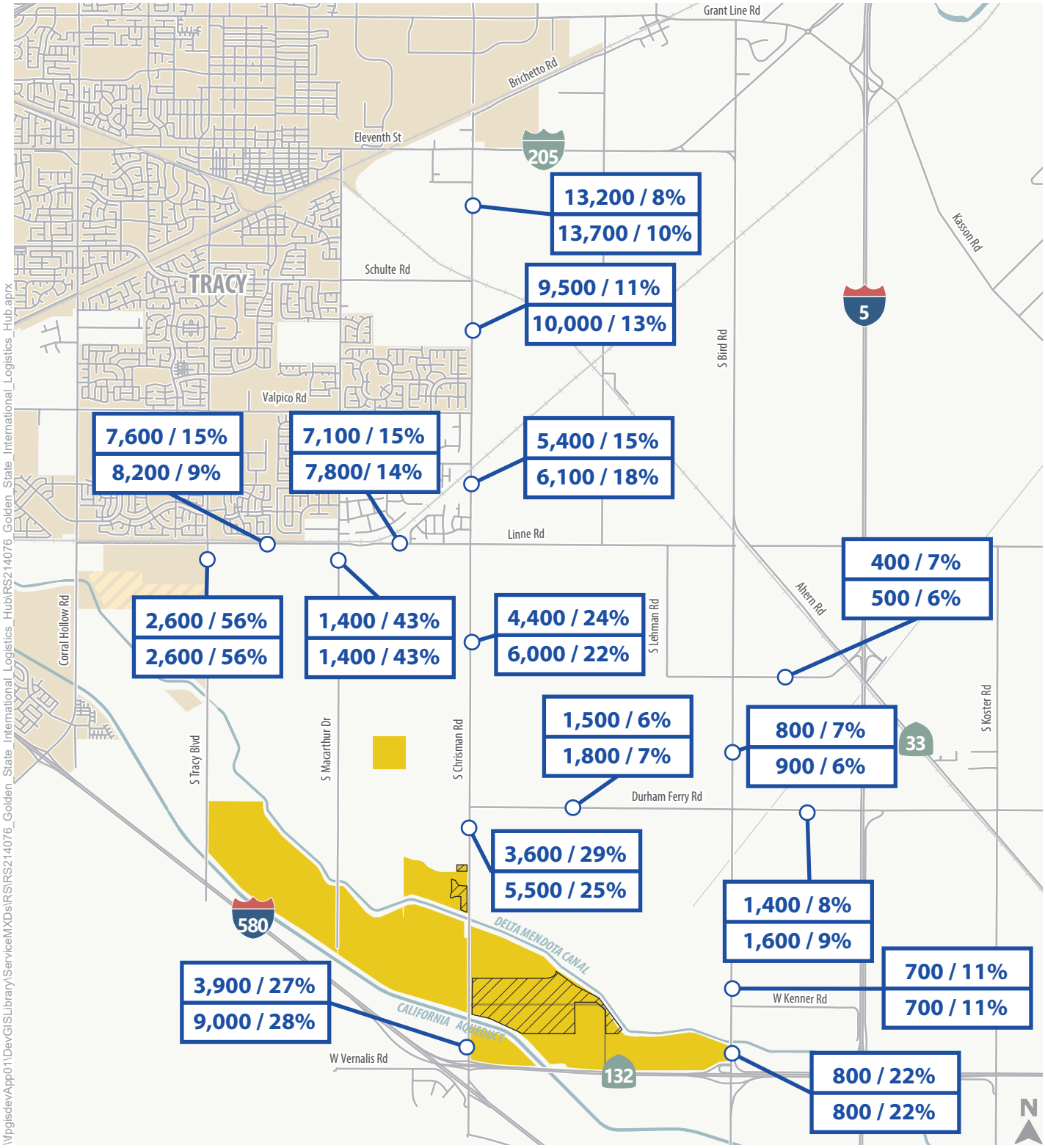
DATA SOURCE: DAVID BABCOCK + ASSOCIATES ARCHITECTURE LANDSCAPE PLANNING

Average Daily Traffic (Both Directions)

xx,xxx / xx% Existing Plus Project ADT / HV%

Figure 14

Average Daily Traffic Volumes - Existing Plus Project Buildout Conditions



Average Daily Traffic (Both Directions)

xx,xxx / xx%
xx,xxx / xx%

Existing ADT / HV%

Existing Plus Initial Phase ADT / HV%
HV = Heavy Vehicle

Project Site

City Boundary

Initial Phase

Figure 15

Average Daily Traffic Volumes - Existing Plus Project Phase 1 Conditions

The project would add 2,800 vehicles to Durham Ferry Road east of Chrisman Road, of which trucks would constitute 220 of those trips. The initial phase would add 300 vehicles to this segment, with 25 being trucks.

Vehicular queuing is analyzed at the five intersections located on the State Highway System in the project vicinity. The chosen locations represent intersections in which project trips could cause or exacerbate queuing concerns. **Figure 16** shows the AM and PM peak hour traffic volumes, lane configurations, and traffic controls at these intersections under Existing, Existing Plus Initial Phase, and Existing Plus Project Buildout Conditions.

95th Percentile Vehicle Queues – Existing Plus Initial Phase Conditions

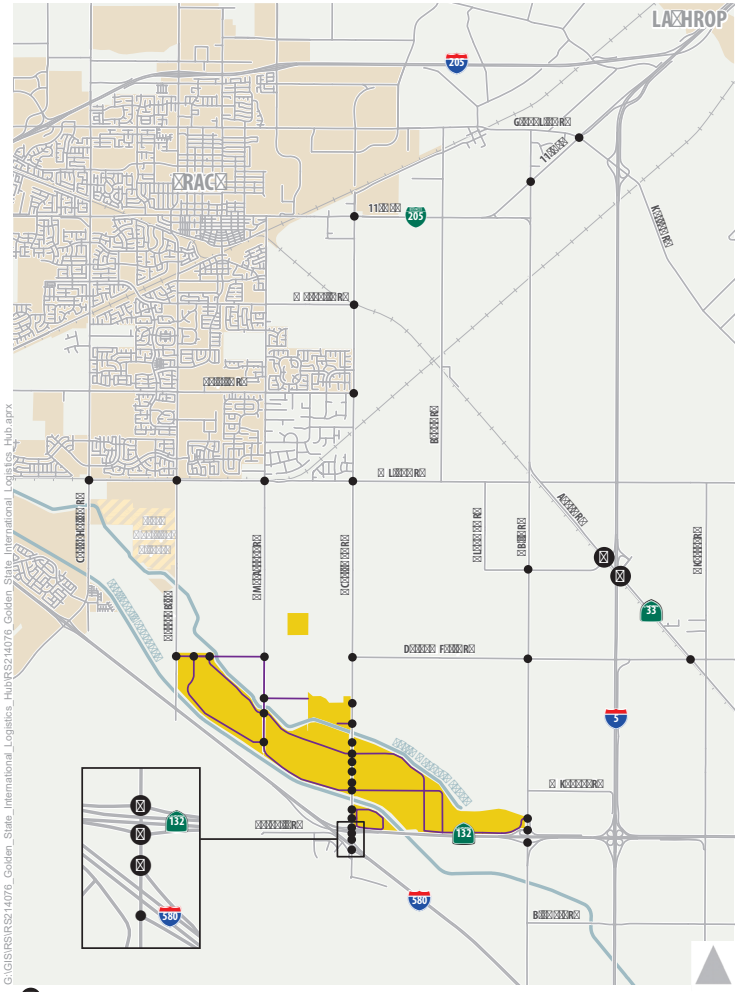
Table 12 shows Existing Plus Initial Phase AM and PM peak hour 95th percentile queue lengths at state highway study locations. As shown, initial phase trips would not cause any vehicle queues to spill back onto a freeway mainline at a study highway intersection. Refer to **Appendix B** of separately bound appendix for technical calculations.

95th Percentile Vehicle Queues – Existing Plus Project Buildout Conditions

Table 13 shows Existing Plus Project Buildout AM and PM peak hour 95th percentile queue lengths at state highway study locations. Refer to **Appendix B** of separately bound appendix for technical calculations.

Key findings from this table are:

- Project buildout would cause 95th percentile queues to spill back onto the freeway mainline at both off-ramps at the SR 132/Chrisman Road interchange. These queues would cause queuing on Chrisman Road, which would cause the queue on the I-580 westbound off-ramp to also spill back to the mainline.



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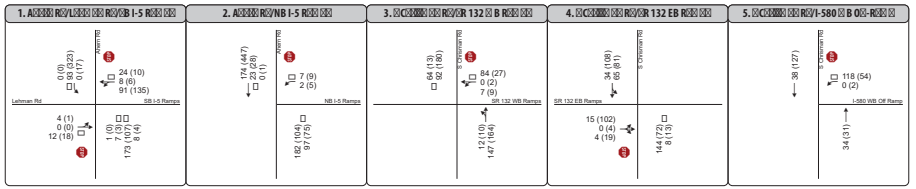
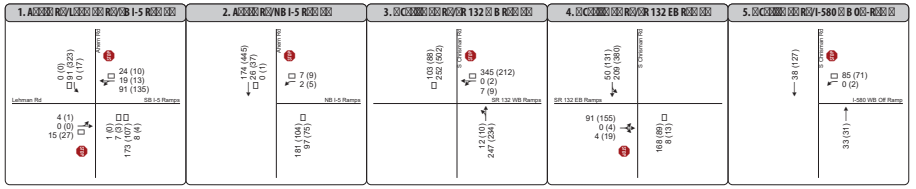
Vehicle Queuing Study Locations
Other Study Intersections
Project Roadways
Project Site
City Boundary

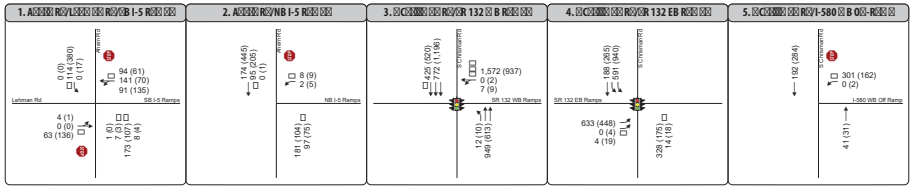
Existing



Initial Phase



Existing Plus Project Buildout



Turn Lane
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Stop Sign

Figure 16

Peak Hour Traffic Volumes and Lane Configurations at Vehicle Queuing Study Locations - Existing Conditions Scenarios

Table 12:
95th Percentile Vehicle Queues – Existing Plus Project Initial Phase Conditions

Intersection	Movement	Available Storage[1]	Existing Conditions		Existing Plus Initial Phase Conditions	
			95th Percentile Queue (ft.) [2]			
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
10. Ahern Road/SR 33/I-5 SB Ramps/Lehman Road	WB Off-Ramp LT/TH/RT	1,250 ft.	114 ft.	158 ft.	90 ft.	118 ft.
	SB LT	175 ft.	0 ft.	21 ft.	0 ft.	18 ft.
11. Ahern Road/SR 33/I-5 NB Ramps	SB LT	185 ft.	49 ft.	32 ft.	36 ft.	29 ft.
14. Chrisman Road/SR 132 WB Ramps	WB Off-Ramp LT/TH	850 ft.	74 ft.	25 ft.	835 ft.	91 ft.
	WB Off-Ramp RT	850 ft.	114 ft.	75 ft.	113 ft.	102 ft.
15. Chrisman Road/SR 132 EB Ramps	EB Off-Ramp LT/TH/RT	825 ft.	59 ft.	89 ft.	90 ft.	153 ft.
16. Chrisman Road/I-580 WB Ramps [3]	WB Off-Ramp LT/TH	1,160 ft.	0 ft.	0 ft.	6 ft.	3 ft.
	WB Off-Ramp RT	1,160 ft.	0 ft.	0 ft.	0 ft.	0 ft.

Notes:
1. Defined as distance to the freeway off-ramp gore point.
2. 95th percentile queue based on output from SimTraffic model.
3. Off-ramp consists of a stop-controlled left-turn lane and an uncontrolled right-turn lane that merges onto Chrisman Road. In addition to this storage, an additional 950 feet of off-ramp queuing space is provided downstream of the gore point.
SR 132/Bird Road interchange off-ramps not shown because Initial Phase would not provide a connection to Bird Road.
Bolded values indicate that 95th percentile queue exceeds available storage.
Source: Fehr & Peers, 2024.

Table 13:
95th Percentile Vehicle Queues – Existing Plus Project Buildout Conditions

Intersection	Movement	Available Storage[1]	Existing Conditions		Existing Plus Project Buildout Conditions	
			95th Percentile Queue (ft.) [2]			
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
10. Ahern Road/SR 33/I-5 SB Ramps/Lehman Rd	WB Off-Ramp LT/TH/RT	1,250 ft.	114	158	161	239
	SB LT	175 ft.	0	21	0	25
11. Ahern Road/SR 33/I-5 NB Ramps	SB LT	185 ft.	49	32	65	69
14. Chrisman Road/SR 132 WB Ramps	WB Off-Ramp LT/TH	850 ft.	74	25	**> 1,500**	**> 1,500**
	WB Off-Ramp RT	850 ft.	114	75	**> 1,500**	**> 1,500**
15. Chrisman Road/SR 132 EB Ramps	EB Off-Ramp LT/TH/RT	825 ft.	59	89	**925**	**914**
16. Chrisman Road/I-580 WB Ramps [3]	WB Off-Ramp LT/TH	1,160 ft.	0	0	224	**1,231**
	WB Off-Ramp RT	1,160 ft.	0	0	49	192
18. Bird Road/SR 132 EB Ramps	EB Off-Ramp LT	1,535 ft.	16	73	19	111
19. Bird Road/SR 132 WB Ramps	WB Off-Ramp LT	1,485 ft.	17	27	409	430
	WB Off-Ramp RT	260 ft.	158	19	245	19

Notes:
1. Defined as distance to the freeway off-ramp gore point.
2. 95th percentile queue based on output from SimTraffic model.
3. Off-ramp consists of a stop-controlled left-turn lane and an uncontrolled right-turn lane that merges onto Chrisman Road. In addition to this storage, an additional 950 feet of off-ramp queuing space is provided downstream of the gore point.
Bolded values represent a 95th percentile queue length that exceeds the available storage.
"> 1,500 " is shown to represent queuing that spills onto freeway mainline a considerable distance.
Source: Fehr & Peers, 2024.

Image 6 is a screenshot from the Simtraffic microsimulation model that illustrates how traffic operations would be impacted at the SR 132/Chrisman Road interchange under project buildout conditions if no improvements were made. As shown, extensive queuing would occur on the eastbound off-ramp, westbound off-ramp, and southbound approaches.

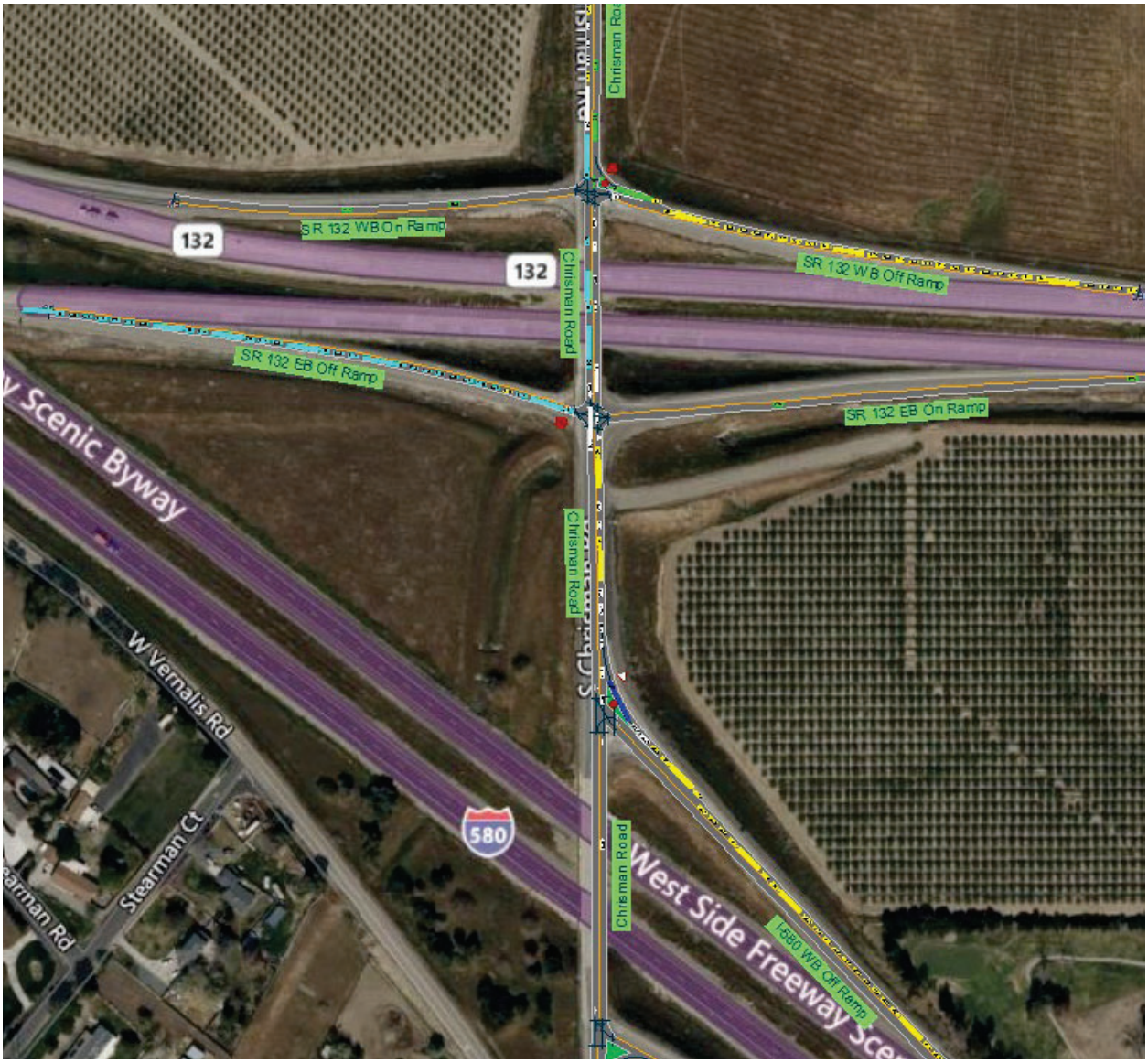


Image 6: PM peak hour queuing at the SR 132/Chrisman Road interchange under Existing Plus Project Buildout conditions

*Figure not OCR compatible

4. CUMULATIVE SETTING

This chapter describes the cumulative setting, which is a CEQA-required scenario that considers reasonably foreseeable land developments and transportation improvements. As is discussed in more detail below, both the City of Tracy and SJCOG travel demand models are used in this study. The City of Tracy travel demand model has a 2042 horizon year, while the SJCOG travel demand model has a 2046 horizon year.

Land Use Assumptions

The City of Tracy Refined travel demand model was used to develop estimates of cumulative background traffic forecasts on roadways in the project vicinity. This model has more granularity than the more regional SJCOG model and is therefore better capable of developing forecasts at a neighborhood/community level. The City of Tracy Refined travel demand model projects the following increases in dwelling units and employment in the project vicinity[9] between the base year (2019) and 2042 models:

- 7,262 single-family units
- 3,920 multi-family units
- 5,402 retail employees [10]
- 4,260 service employees [10]
- 10,751 other employees [10]

This growth represents a 33% increase in single-family and 51% increase in multi-family units. Non-residential growth is even greater at a 201% increase for retail employees, 48% increase for service employees, and 126% increase in other employees. The *City of Tracy TMP* specifies that retail, service, and other employees have unit yields of 2 employees per ksf, 3 employees per ksf, and 1 employee per ksf, respectively. Further, the *City of Tracy TMP* notes that service employees are generally professional office-related while "other employees" work at industrial uses such as warehouses. Using those definitions, the additional employment translates into the following non-residential growth within the study area:

- 2,700 ksf retail
- 1,420 ksf office
- 10,751 ksf industrial

[9] For purposes of this comparison, a large geographic area bounded by SR 132 on the south, I-5 on the east, I-205 on the north, and I-580 on the west was chosen.

[10] These represent jobs situated within the City of Tracy, which may be filled either by Tracy residents or persons residing outside of Tracy.

Most land use growth is expected to occur in the north and west parts of the City of Tracy. Minimal growth is forecast for the area east of Chrisman Road between SR 132 and Eleventh Street. The totals on the previous page only represent the growth within the defined boundary. Additional development is also expected elsewhere in the City of Tracy and within its SOI. The City's model extends westerly into Alameda County and easterly covering the cities of Stockton, Lathrop, and Manteca within San Joaquin County as well as various cities in Stanislaus County such as Modesto.

Similar to the City of Tracy model, the SJCOG model covers the entirety of San Joaquin County as well as adjacent counties. By being regional in nature, the model is able to capture the full length of vehicle trips being made (as required under SB 743) versus only the portion of the trip within SJCOG boundaries.

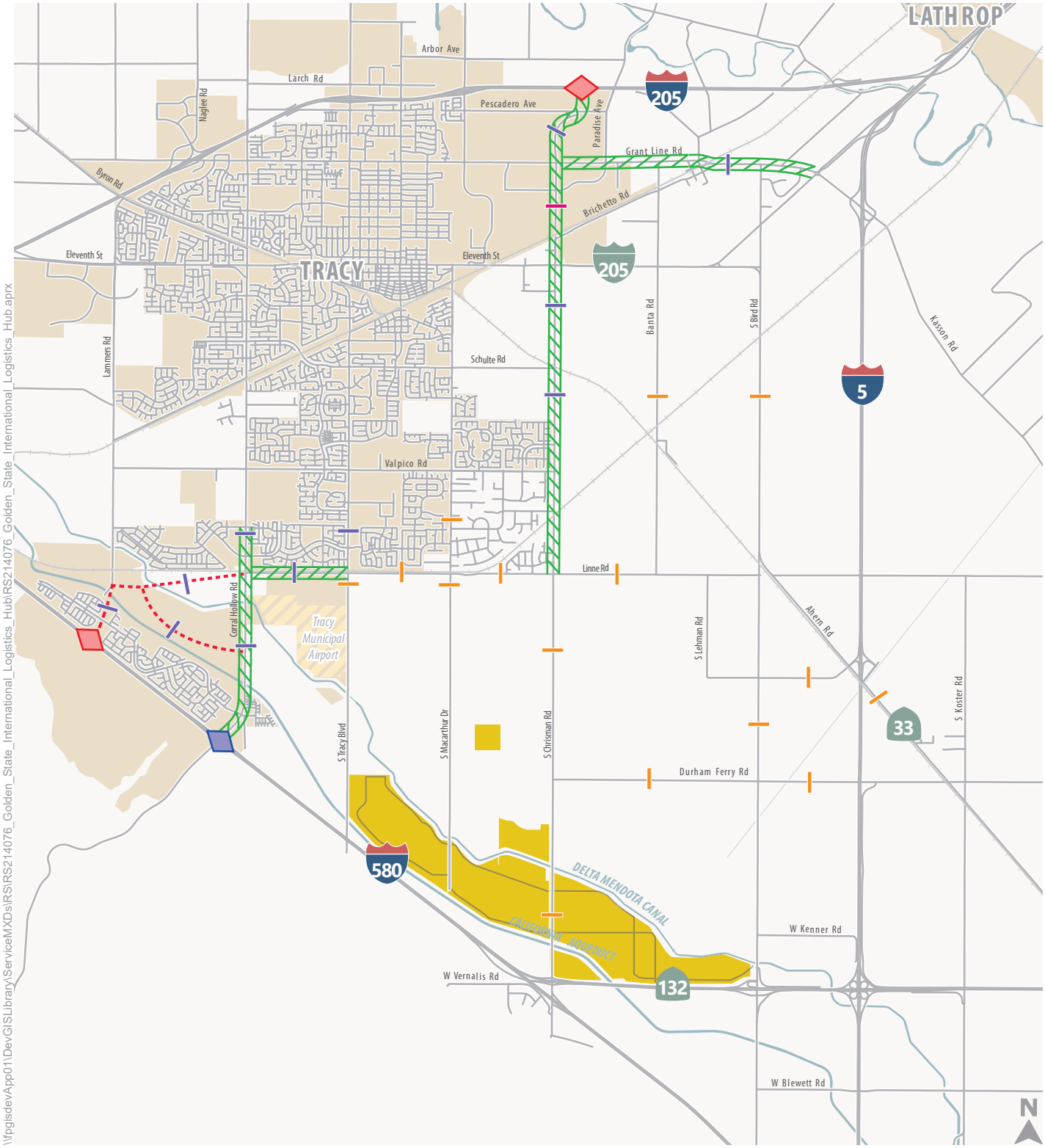
Roadway Network Assumptions

Figure 17 displays the planned cumulative roadway network improvements within the project vicinity. This figure shows several extended existing roadways, widened existing roadways, and new roadways that are planned for construction by 2042. The list of cumulative roadway improvements was derived from Appendix F (Project List) of the *San Joaquin Council of Governments (SJCOG) Adopted 2022 Regional Transportation Plan/Sustainable Communities Strategy.*[11] Appendix F lists specific freeway, interchange, and surface street improvements that are assumed to be funded as well as an "open to traffic date." The *City of Tracy TMP* was also consulted to identify specific roadways assumed to be in place within its jurisdiction by 2042. The following cumulative roadway project list was reviewed and approved by San Joaquin County staff.[12] These improvements were assumed in place under cumulative conditions.

- New I-205/Chrisman Road interchange
- Chrisman Road widening to four lanes between I-205 and Linne Road (with exception of segment between Eleventh Street and Grant Line Road, which would be six lanes)
- Grant Line Road widened to four lanes from Chrisman Road to Eleventh Street
- New I-580/Lammers Road interchange
- Extension of Lammers Road southerly as four-lane road from current terminus to new interchange
- Extension of Linne Road with four lanes from Corral Hollow Road to Lammers Road
- Widening of Linne Road to four lanes from Corral Hollow Road to Tracy Boulevard
- Upgrade of I-580/Corral Hollow Road interchange
- Widening of Corral Hollow Road to four lanes from I-580 to north of Linne Road
- I-205 Managed Lanes project (one freeway lane added in each direction)

11 Source: Adopted 2022 RTP/SCS Plan | San Joaquin Council of Governments, CA (sjcog.org)

12 Email from Jeffrey Levers, San Joaquin County Department of Public Works, March 3, 2023.



Number of Lanes
- 2 lanes
- 4 lanes
- 6 lanes

- Roadway Widening
- Roadway Extension
- New Interchange
- Upgraded Existing Interchange

- Project Site
- City Boundary

Notes:
Improvements only within study area are shown.
Additional improvements beyond study area also planned and assumed (see report text).

Figure 17
Cumulative Roadway Network

Per San Joaquin County staff input, the model also includes the planned I-580/Iron Horse Parkway interchange. This interchange, which would be situated between the existing Patterson Pass/International Parkway interchange and the future Lammers Road interchange, was assumed because the model also includes future land development whose ability to develop would depend on the new interchange's presence.

Traffic Forecasting Methodology

A set of Cumulative No Project traffic forecasts were developed using the City of Tracy Travel Demand Model. These forecasts are provided for informational purposes and as inputs to other parts of analyses contained in the EIR. The following forecasting adjustment procedure known as the "difference method" was utilized to develop these forecasts:

Cumulative No Project Forecast = Existing Traffic Count +
(Cumulative Model Forecast – Base Year Model Forecast)

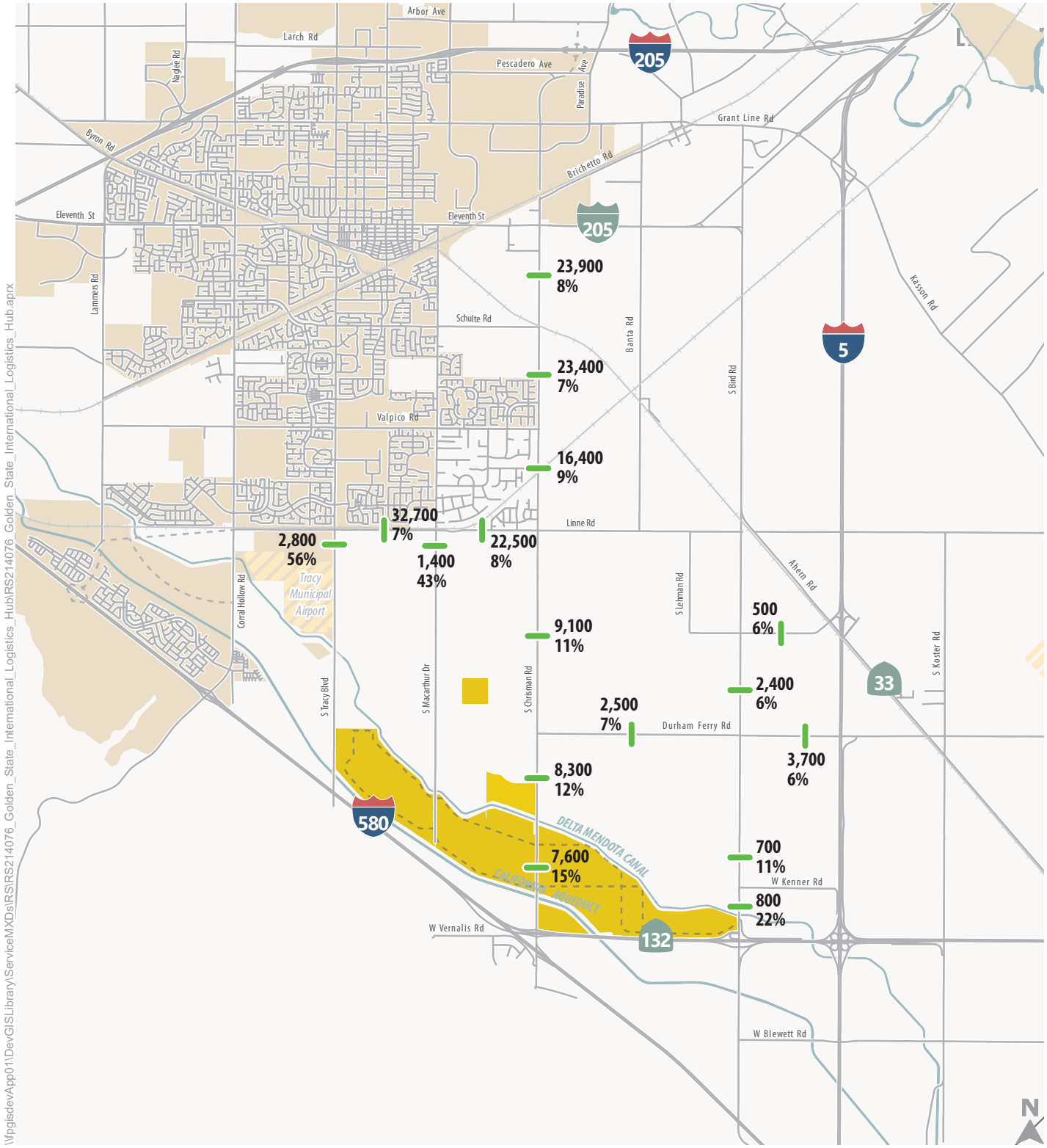
In instances where the roadway currently does not exist, the direct model forecast is used. This well-known and frequently utilized approach accounts for any inaccuracies in forecasts in the base year model that otherwise could translate to the cumulative year model.

Traffic Forecasts

Figure 18 shows the ADT on roadways near the project site under Cumulative No Project conditions. The following describes expected traffic growth on study roadways between existing and cumulative conditions:

- The greatest increase occurs on Linne Road east of Tracy Boulevard, in which the volume increases from 7,600 to 32,700 ADT. This is driven by land use growth in the area as well as the extension of Linne Road to Lammers Road near its new interchange with I-580.
- The ADT increases from 13,200 to 23,900 on Chrisman Road between Eleventh Street and Schulte Road.
- The ADT increases from 3,900 to 7,600 on Chrisman Road north of SR 132.
- The ADT increases from 1,500 to 2,500 on Durham Ferry Road east of Chrisman Road.

In summary, considerable background traffic growth (total volume nearly doubles and over 10,000 ADT are added) is expected on Chrisman Road between Eleventh Street and Linne Road. Traffic growth on Chrisman Road from Linne Road to SR 132, while representing more than a doubling of traffic, is only a net increase of 3,700 daily vehicles. Modest traffic growth occurs on Durham Ferry Road east of Chrisman Road.



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— Study Roadway Segment

X,XXX Average Daily Traffic Volume
XX% & Truck Traffic Percentage

Project Site

City Boundary

- - - - Future Roadway

Figure 18

Average Daily Traffic Volumes & Truck Percentages - Cumulative No Project Conditions

95th Percentile Vehicle Queues – Cumulative No Project Conditions

Table 14 shows the 95th percentile queues for key turning movements at state highway study intersections under Cumulative No Project conditions. As shown, the 95th percentile queue in the I-5 southbound off-ramp at SR 33 would spill back to the I-5 mainline. All other 95th percentile queues would remain within the available storage.

Table 14:
95th Percentile Vehicle Queues – Cumulative No Project Conditions

Intersection	Movement	Available Storage[1]	95th % Queue[1]	
			AM Peak Hour	PM Peak Hour
10. Ahern Road/SR 33/I-5 SB Ramps/Lehman Road	WB Off-Ramp LT/TH/RT	1,250 ft.	153 ft.	**1,602 ft.**
	SB LT	175 ft.	8 ft.	43 ft.
11. Ahern Road/SR 33/I-5 NB Ramps	SB LT	185 ft.	93 ft.	25 ft.
14. Chrisman Road/SR 132 WB Ramps	WB Off-Ramp LT/TH	850 ft.	96 ft.	40 ft.
	WB Off-Ramp RT	850 ft.	116 ft.	77 ft.
15. Chrisman Road/SR 132 EB Ramps	EB Off-Ramp LT/TH/RT	825 ft.	66 ft.	132 ft.
16. Chrisman Road/I-580 WB Ramps [2]	WB Off-Ramp LT/TH	1,160 ft.	13 ft.	13 ft.
	WB Off-Ramp RT	1,160 ft.	13 ft.	10 ft.
18. Bird Road/SR 132 EB Ramps	EB Off-Ramp LT	1,535 ft.	16 ft.	73 ft.
19. Bird Road/SR 132 WB Ramps	WB Off-Ramp LT	1,485 ft.	17 ft.	27 ft.
	WB Off-Ramp RT	260 ft.	158 ft.	19 ft.

Notes:
1. 95th percentile queue based on output from SimTraffic model.
2. Off-ramp consists of a stop-controlled left-turn lane and an uncontrolled right-turn lane that merges onto Chrisman Road. In addition to this storage, an additional 950 feet of off-ramp queuing space is provided downstream of the gore point.

Bolded cells represent 95th percentile queues that exceed the available storage.
Source: Fehr & Peers, 2024.

5. CUMULATIVE PLUS PROJECT CONDITIONS

This chapter presents the estimated number of daily trips the surrounding roadways would carry under this scenario. It also analyzes the project's effects on vehicle queuing. Refer to **Appendix C** of separately bound appendix for technical calculations. As there would not be an initial phase of development under cumulative conditions, such a scenario is not presented in this chapter.

Project Travel Characteristics

The project's travel characteristics under cumulative conditions are expected to be similar to the Existing Plus Project scenario. Thus, the same trip generation, distribution, and traffic assignment procedures described in Chapter 3 were utilized under cumulative conditions.

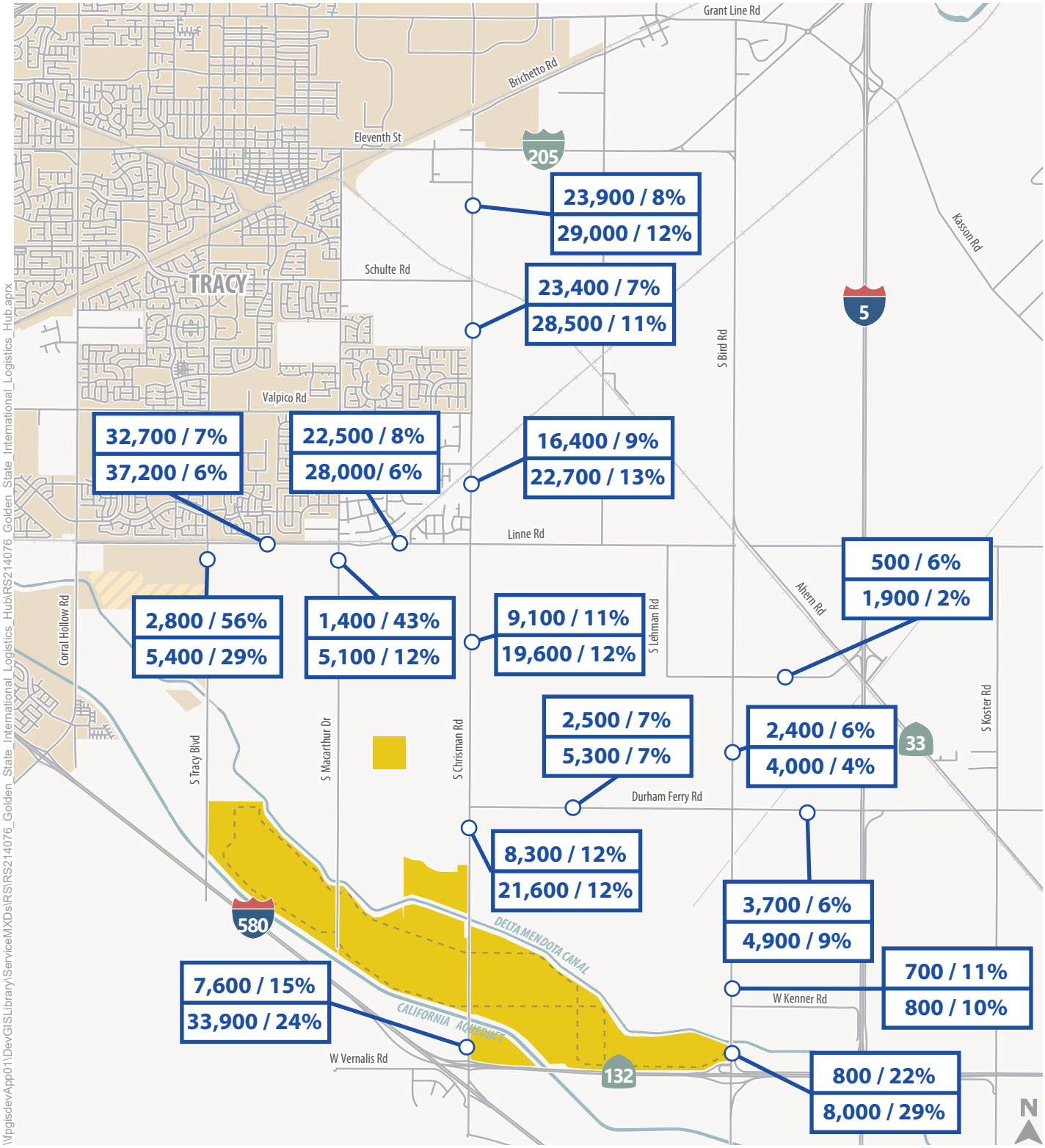
Traffic Forecasts

Figure 19 shows the ADT on the existing study roadways under Cumulative Plus Project conditions. As the volumes on project roadways are not expected to appreciably change between Existing Plus Project and Cumulative Plus Project conditions, they are not shown here.

The following key findings are derived from these figures:

- Under Cumulative Plus Project conditions, traffic volumes on Chrisman Road between SR 132 and Eleventh Street would range from about 20,000 to 34,000 ADT with higher volumes near the two end points, and lower volumes in the middle portion of the corridor.
- Durham Ferry Road east of Chrisman Road would experience an increase in traffic from 2,500 (no project) to 5,300 (plus project) vehicles per day. Approximately 305 trucks per day (85 existing plus 220 project buildout trucks) are expected to use this segment.
- Under Cumulative Plus Project conditions, traffic volumes on Bird Road north of SR 132 would carry 8,000 ADT with 29% of those trips being trucks.

Figure 20 shows the AM and PM peak hour traffic volumes, lane configurations, and traffic controls at the intersections on the State Highway System being analyzed for vehicular queuing under Cumulative No Project and Cumulative Plus Project Buildout Conditions.



Average Daily Traffic (Both Directions)

xx,xxx / xx%
xx,xxx / xx%

Cumulative No Project ADT / HV%

Cumulative Plus Project ADT / HV%
HV = Heavy Vehicle

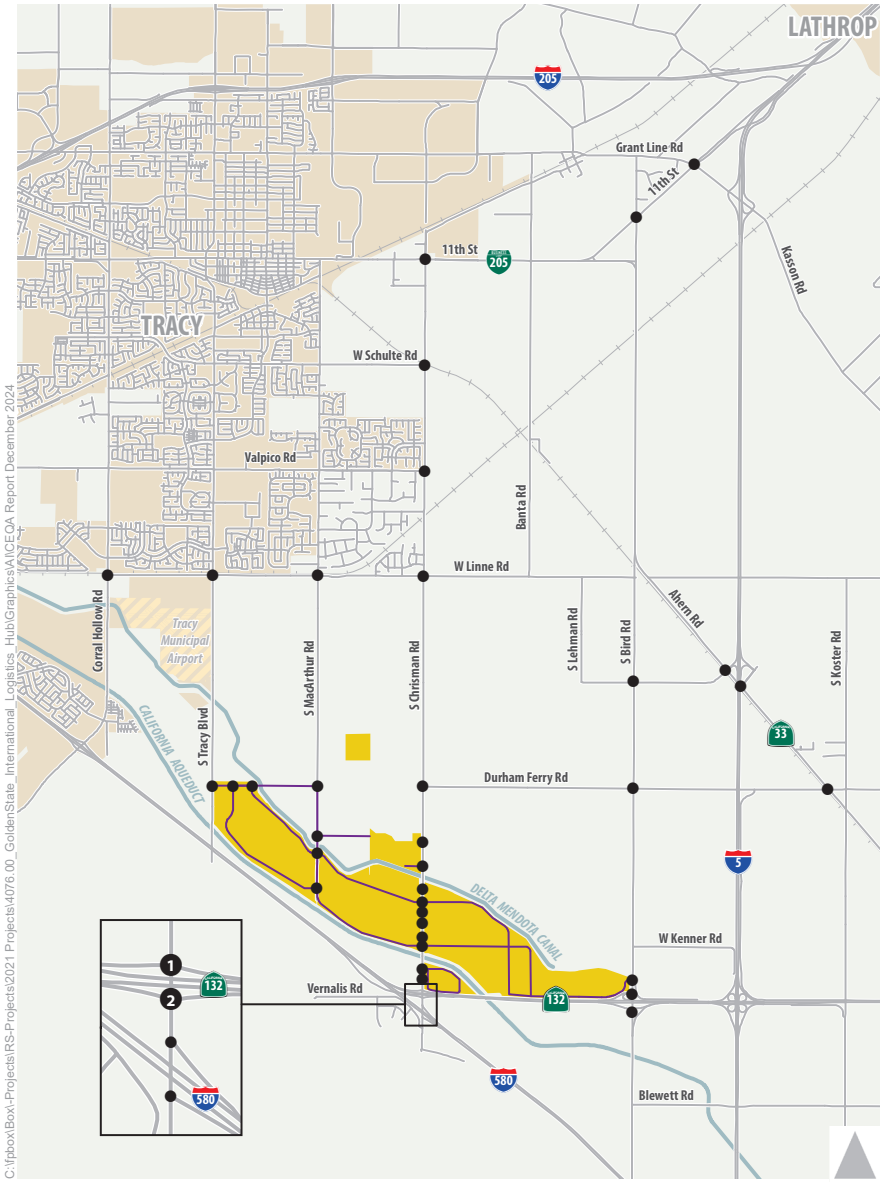
Project Site

City Boundary

Future Roadway

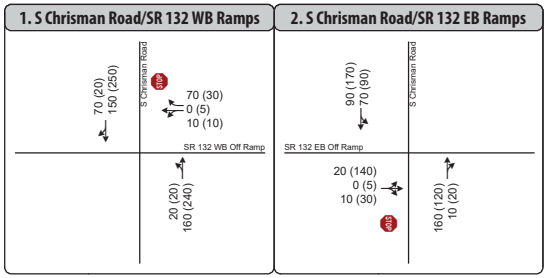
Figure 19

Average Daily Traffic Volumes - Cumulative Plus Project (Buildout)

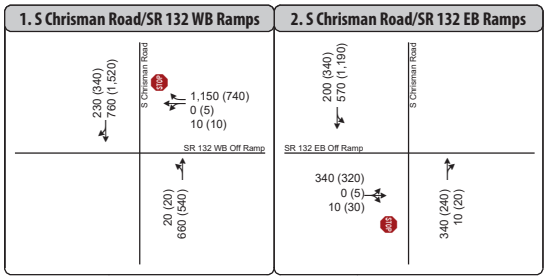


1 Vehicle Queuing Study Locations
Other Study Intersections
Project Roadways
Project Site
City Boundary

Cumulative No Project



Cumulative Plus Project



Turn Lane
AM (PM) Peak Hour Traffic Volume
Traffic Signal
Stop Sign

Figure 20

Peak Hour Traffic Volumes and Lane Configurations at Vehicle Queuing Study Locations - Cumulative Conditions Scenarios

95th Percentile Vehicle Queues – Cumulative Plus Project Conditions

Table 15 shows the Cumulative Plus Project AM and PM peak hour 95th percentile queue lengths at state highway study locations. As shown, the number of movements having 95th percentile queue lengths that exceed their available storage would increase from one to five locations. Refer to **Appendix C** of separately bound appendix for technical calculations.

Table 15:
95th Percentile Vehicle Queues – Cumulative Plus Project Conditions

Intersection	Movement	Available Storage[1]	Cumulative No Project Conditions		Cumulative Plus Project Conditions	
			95th Percentile Queue (ft.) [1]			
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
10. Ahern Road/SR 33/I-5 SB Ramps/Lehman Road	WB Off-Ramp LT/TH/RT	1,250 ft.	153 ft.	**1,602 ft.**	240 ft.	**1,623 ft.**
	SB LT	175 ft.	8 ft.	43 ft.	9 ft.	37 ft.
11. Ahern Road/SR 33/I-5 NB Ramps	SB LT	185 ft.	93 ft.	25 ft.	102 ft.	79 ft.
14. Chrisman Road/SR 132 WB Ramps	WB Off-Ramp LT/TH	850 ft.	96 ft.	40 ft.	**> 1,500 ft.**	**> 1,500 ft.**
	WB Off-Ramp RT	850 ft.	116 ft.	77 ft.	**> 1,500 ft.**	**> 1,500 ft.**
15. Chrisman Road/SR 132 EB Ramps	EB Off-Ramp LT/TH/RT	825 ft.	66 ft.	132 ft.	**> 1,500 ft.**	**> 1,500 ft.**
16. Chrisman Road/I-580 WB Ramps [2]	WB Off-Ramp LT/TH	1,160 ft.	13 ft.	13 ft.	332 ft.	**1,406 ft.**
	WB Off-Ramp RT	1,160 ft.	13 ft.	10 ft.	65 ft.	165 ft.
18. Bird Road/SR 132 EB Ramps	EB Off-Ramp LT	1,535 ft.	16 ft.	73 ft.	19 ft.	111 ft.
19. Bird Road/SR 132 WB Ramps	WB Off-Ramp LT	1,485 ft.	17 ft.	27 ft.	409 ft.	430 ft.
	WB Off-Ramp RT	260 ft.	158 ft.	19 ft.	245 ft.	19 ft.

Notes:
1. 95th percentile queue based on output from SimTraffic model.
2. Off-ramp consists of a stop-controlled left-turn lane and an uncontrolled right-turn lane that merges onto Chrisman Road. In addition to this storage, an additional 950 feet of off-ramp queuing space is provided downstream of the gore point.

"> 1,500 " is shown to represent queuing that spills onto freeway mainline a considerable distance. Specific values shown for intersection 10 due to subsequent significance determination.

Source: Fehr & Peers, 2024.

6. VMT ANALYSIS

This chapter first describes the various methods used to calculate the proposed project's VMT under baseline and cumulative conditions. It then presents VMT results for each of the project's land use components.

VMT Defined

VMT is defined as one mile of travel driven by a motorist in a vehicle regardless of the number of occupants or type of engine (e.g., internal combustion engine versus electric). Per the *Technical Advisory*, VMT is expressed on a daily (weekday) basis. VMT totals are not truncated at agency boundaries; rather, they represent the entire distance of the trip. Although this simple definition of VMT may be helpful, methodologies recommended by the two documents described in the following section require a more nuanced approach to calculating and analyzing VMT, which is described in this chapter.

VMT, in and of itself, is not a measure of traffic congestion, though it is used to compare the relative efficiency of multiple land use-transportation planning scenarios.

VMT Analysis Methodologies

The following two documents are the most influential in how the VMT analysis is performed in this study:

- *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, 2018)
- *San Joaquin County VMT Thresholds Study* (GHD, 2020)

The *Technical Advisory* was discussed at length in Chapter 1. This section summarizes the content of the *San Joaquin County VMT Thresholds Study* and describes how it is being applied in this study.

As noted previously, the *San Joaquin County VMT Thresholds Study* adopts many of the recommended technical approaches and guidance contained in the *Technical Advisory*. **Table 16** describes the considerable extent to which this analysis is being performed consistent with the *San Joaquin County VMT Thresholds Study*.

Table 16:
Usage of Methodologies and Guidance from *San Joaquin County VMT Thresholds Study*

General Topic	Guidance from *San Joaquin County VMT Thresholds Study*	Notes / Comments
Selection of Travel Demand Model	Use SJCOG travel demand model	The 2016 base year and 2046 future year SJCOG models were used to conduct the VMT analysis of employment uses.
Employment Land Use VMT Measurement	Home-based-work (HBW) Auto VMT per employee	This VMT metric was used. This metric is not all VMT generated by an employment center divided by total employees. It is the VMT specifically associated with employees driving between home and work. Since employees are not expected to be driving heavy duty trucks to/from work and home, the VMT is associated with autos only.
Specific Employment VMT Threshold	15% below the unincorporated countywide average	San Joaquin County staff sent an email on November 7, 2023 showing an updated average VMT per employee of 38.1 for unincorporated San Joaquin County. As is described later, the 2016 base year SJCOG model applied by Fehr & Peers yields an average VMT per employee within unincorporated San Joaquin County that is within 1.3% of this statistic, meaning a consistent approach is attained by using this model. This study also utilizes the 15% below unincorporated countywide average threshold.
Treatment of Retail Projects	Endorses the *Technical Advisory* guidance that local-serving retail (i.e., 50,000 square feet or less) is presumed to cause a less than significant VMT impact.	This study utilizes this guidance.
Treatment of Truck VMT	"The County may elect to include an assessment of truck VMT if it is reasonable to assume that the project would result in a significant change in the pattern, frequency, or length of truck trips. Truck VMT would be assessed in terms of net change in total truck VMT."	This study presents VMT for automobiles. VMT associated with heavy duty trucks has also been calculated for analysis of greenhouse gas emissions and is included in other parts of the EIR.
Treatment of Transportation Projects	"Transportation impacts of a transportation project should be calculated based on the net change in total VMT. If a project would likely lead to a substantial or measurable increase in vehicle travel, the County should conduct an analysis to assess the amount of induced travel."	This report includes analysis of VMT impacts associated with any proposed project roadway widenings.

Note: See following pages for additional VMT-related analysis methodologies and discussions.
Source: Fehr & Peers, 2024.

Use of Various Travel Demand Models

As noted in Table 16, VMT associated with the employment uses is being estimated using the SJCOG travel demand model consistent with the *San Joaquin County VMT Thresholds Study*. However, this model is regional in nature and may not be best suited to calculate the VMT for some of the project's smaller land use components. Accordingly, the City of Tracy Refined travel demand model was used to calculate the VMT of the university, VFW, and retail uses. It is noteworthy that those land uses do not require a comparison against a countywide VMT per employee threshold.

VMT Analysis under Baseline and Cumulative Conditions

The tables that follow report both baseline and cumulative VMT for each project land use component. The baseline VMT is derived from the 2016 SJCOG model or the 2019 City of Tracy Model. The cumulative VMT is derived from the 2046 SJCOG model or the 2042 City of Tracy Model. Different VMT values occur under each horizon year because the existing and planned land uses and roadway networks are different between the two horizons.

VMT Calculated Separately for Various Project Land Use Components

VMT is calculated separately for the warehouse, office, university, and VFW Tracy Post. This is necessary to determine the significance of project impacts for each of these land use types, and also needed as inputs into other technical areas of the DEIR. VMT for the retail and other ancillary support uses was combined into a single table for documentation purposes.

VMT Analysis for Initial Phase and Project Buildout

Because the environmental effects of Initial Phase are being analyzed separately, separate VMT estimates are developed under baseline with Initial Phase conditions.

Qualitative Evaluation of Significance of VMT Impacts Associated with University

Neither the *Technical Advisory* nor the *San Joaquin County VMT Thresholds Study* provide guidance on how to analyze VMT associated with a new university. In light of this and with the overall intent of SB 743 in mind, the significance of VMT generated by the university is examined relative to the expected VMT characteristics of other universities in San Joaquin County and in consideration of the proposed university's land uses and location.

Project-Generated Versus Project Effect on VMT

All VMT calculations reported in this study are "project-generated VMT", not "project effect on VMT". Project-generated VMT refers to the amount of travel its users would generate. In contrast, project effect on VMT refers to how the VMT of an entire area would change if a project was approved and constructed. Project effect on VMT is mentioned prominently in the *Technical Advisory*, but only raised in the *San Joaquin County VMT Thresholds Study* in the context of studying the effects of adding new retail uses. Project effect on VMT is not calculated in this study because no such analysis is necessary to achieve consistency with the *San Joaquin County VMT Thresholds Study*.

VMT Generated by Project Land Use Type

Table 17 displays the home-based work (HBW) auto VMT per employee for the warehouse uses under baseline conditions (Initial Phase and Project Buildout) and cumulative (Project Buildout). Also shown is the number of warehouse employees including those in Gateway West, Central, and East, and Gateway Center. The far right column shows the total HBW auto VMT generated by all warehouse employees.

Table 17:
Warehouse Auto VMT Generated

Scenario	HBW Auto VMT per Employee [1]	Number of Employees [2]	HBW Auto VMT Generated by Employees [3]
Baseline Plus Initial Phase	59.1	2,401	141,899
Baseline Project Buildout	46.5	14,953	695,315
Cumulative Project Buildout	43.3	14,953	647,465

1 Calculated using the 2016 and 2046 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and residence.

2 Number of employees based on assumption of 1,650 sq. ft. per employee. Buildout total includes 24,149,000 sq. ft. in Gateway West, Central, and East, and 525,000 sq. ft. in Gateway Center. Initial Phase consists of 3,962,000 sq. ft. in Gateway East.

3 Calculated by multiplying average VMT per employee by number of employees. VMT shown is only associated with employee travel between the project and home.

HBW = Home-based work (i.e., travel from home to work).

Source: Fehr & Peers, 2024.

As shown, under Baseline Project Buildout conditions, approximately 46.5 VMT per employee is generated. Since most employees do not leave the worksite during their shift, this amounts to a pair of 23-mile one-way commutes between the job site and residence. The reasonableness of this value was checked by calculating the average commute distance for warehouse employees based on the employee residence data in Figure 11. That calculation yielded a one-way commute distance of 20 miles. It is unrealistic to expect a regional travel demand

model to precisely estimate warehouse employee trip lengths. But the model does provide a reasonable estimate given the average calculated from Figure 11. The VMT per employee decreases by 7% under cumulative conditions likely due to the introduction of additional residential in Tracy, which results in shorter overall commute distances to the project site.

Table 18 displays the HBW auto VMT per employee for the office component within the University Center under baseline and cumulative conditions. The SCJOG model has a different employment input for office versus industrial employees. The result of this different classification is greater VMT per office employee versus warehouse employee. This outcome is aligned with academic research showing that all else being equal, trip lengths tend to increase as employee salary increases (i.e., greater willingness to drive further if higher salary offered).

Table 18:
Office Auto VMT Generated

Scenario	HBW Auto VMT per Employee [1]	Number of Employees [2]	HBW Auto VMT Generated by Employees [3]
Baseline Project Buildout	66.8	372	24,850
Cumulative Project Buildout	62.1	372	23,101

1 Calculated using the 2016 and 2046 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and residence.

2 Number of employees based on assumption of 250 sq. ft. per employee (93,000 sq. ft. / 250 sq. ft/emp = 372 employees).

3 Calculated by multiplying average VMT per employee by number of employees. VMT shown is only associated with employee travel between the project and home.

Source: Fehr & Peers, 2024.

Tables 19 and 20 display the total auto VMT generated by the university campus and its adjacent shopping plaza.

Table 21 compiles the total auto VMT generated by the commercial uses in Gateway center including convenience store/gas station, fast-food, sit-down, and fast casual restaurants, bank, business hotel and EV charging lot.

Table 22 displays the total auto VMT generated by the VFW Tracy Post building.

Table 19:
University Campus Auto VMT Generated

Scenario	Measure	External Daily Auto Trips [1]	Average Trip Length [2]	Total Auto VMT Generated [3]
Baseline Plus Initial Phase	VMT Generated by Autos	622	15.7	9,765
Baseline Project Buildout		7,272	15.7	114,170
Cumulative Project Buildout		7,272	15.9	115,625

1 Calculated based on university (non-internalized) auto trip generation estimates.
2 Average trip length calculated from the base year and future year City of Tracy travel demand model.
3 VMT generated is the product of the non-internalized university auto trips and the average trip length.
Source: Fehr & Peers, 2024.

Table 20:
University Center Shopping Plaza Auto VMT Generated

Scenario	Measure	External Daily Auto Trips [1]	Average Trip Length [2]	Total Auto VMT Generated [3]
Baseline Project Buildout	VMT Generated by Autos	916	11.2	10,259
Cumulative Project Buildout		916	12.6	11,542

1 Calculated based on non-internalized, non-pass-by trips.
2 Average trip length calculated from the base year and future year City of Tracy travel demand model.
3 VMT generated is the product of the non-internalized, non-pass-by retail auto trips and the average trip length.
Source: Fehr & Peers, 2024.

Table 21:
Gateway Center Commercial Uses Auto VMT Generated

Scenario	Measure	External Daily Auto Trips [1]	Average Trip Length [2]	New Trips - Auto VMT Generated [3]	Diverted-Link Trips - Auto VMT Generated [4]
Baseline Project Buildout	VMT Generated by Autos	5,798	11.2	64,938	10
Cumulative Project Buildout		5,798	12.6	73,055	10

1 Includes new auto trips generated by convenience store/gas station, fast-food, sit-down, and fast casual restaurants, bank, business hotel and EV charging lot. Auto trips associated with industrial are excluded here and instead shown in Table 19.

2 Average trip length calculated from the base year and future year City of Tracy travel demand model.

3 VMT generated is the product of the non-internalized, non-pass-by retail auto trips and the average trip length.

4 20 diverted-link auto trips that would come from SR 132. These trips would be about 0.5 mile in length, resulting in 10 added VMT.

Source: Fehr & Peers, 2024.

Table 22:
VFW Building Auto VMT Generated

Scenario	Measure	External Daily Auto Trips [1]	Average Trip Length[1]	Total Auto VMT Generated [3]
Baseline Plus VFW Post [4]	VMT Generated by Autos	330	11.2	3,696
Cumulative Project Buildout		330	12.6	4,158

1 Calculated based on trip generation estimates.

2 Since model does not have a 'community center/VFW Building' land use category, average trip length assumed to be the same as for retail, which is a similar type of trip attractor.

3 VMT generated is the product of the non-internalized auto trips and the average trip length.

4 VMT result is the same for VFW Post whether part of Initial Phase only or buildout of full Specific Plan.

Source: Fehr & Peers, 2024.

Project Roadway Widening Effect on VMT

The proposed project would construct new roadways and widen existing roadways. These capacity expansions could induce more VMT due to changes in background travel demand, route choice, and other factors. The following describes several analyses performed for this topic.

City of Tracy Travel Demand Model Estimates of Induced Near-Term VMT Caused by Project Roadways

The new roadways constructed by the project would accommodate primarily project trips only. The project would widen a portion of MacArthur Drive within the project site to four lanes, which would accommodate primarily project trips only. The project would widen 1.3 miles of Chrisman Road from SR 132 to the north project limits from two to four lanes. These two roadway widenings were added first to the base year City of Tracy travel demand model and then also added to the cumulative year version of the model. The models were then run and the total VMT within the model area was compared without and with the improvements. The base year model has network-wide (i.e., all travel on all streets/highways/freeways in the model extents on a daily basis) approximately 79 million VMT, while the cumulative year model has network-wide approximately 128 million VMT. The model was not sensitive to the change in capacity along these roadways (i.e., VMT didn't change at all under the base year model and decreased by 5 VMT under the cumulative model).

Long-Term Induced VMT due to Roadway Capacity Increase

The National Center for Sustainable Transportation at UC Davis developed an induced VMT calculator to estimate how adding lane-miles to a roadway network would increase VMT in the 5 to 10 year range. The calculator (found at California Induced Travel Calculator (ucdavis.edu)) applies only to Principal Arterials and higher (i.e., freeway/highway) classifications. Chrisman Road is classified as a Minor Arterial (per California Road System - Functional Classification (arcgis.com)). Thus, this tool is not appropriate to estimate any induced VMT that could be caused by the widening of this roadway.

7. ROADWAY SAFETY ASSESSMENT

This chapter begins by providing an overview of Caltrans' "Four Pillars of Traffic Safety", which will help guide the department toward the ultimate goal of zero deaths or severe injuries on California roads by 2050. It then presents the collision history for state highways in the project vicinity. Finally, it includes a detailed analysis of expected changes in travel and potential needed infrastructure upgrades on SR 132 adjacent to the project site.

Four Pillars of Traffic Safety

Caltrans' *2020-2024 Strategic Plan*[13] lists "Safety First" as its top goal through 2024. The *2020 Caltrans Annual Accomplishments Report* describes the Four Pillars of Traffic Safety, which are:

1. *Double Down on What Works*
2. *Accelerate Advanced Technology*
3. *Lead Safety Culture Change*
4. *Integrate Equity*

Each of these pillars, including their applicability to the proposed project, are described below.

1. *Double Down on What Works*

This pillar focuses on implementing applicable countermeasures from FHWA's Proven Safety Countermeasures program (https://safety.fhwa.dot.gov/provencountermeasures/). This program contains 20 types of countermeasures including several crosscutting strategies that address multiple safety focus areas.

Caltrans and San Joaquin County design standards include many of these treatments including: roadway design improvements at horizontal curves, reduced left-turn conflicts at intersections, median barriers, traffic signals with retroreflective backplates, corridor access management, dedicated left/right turn lanes at intersections, roundabouts, medians/pedestrian crossing islands, road diets, and walkways. Other treatments from the FHWA program that could be considered for the proposed project include systemic application of low-cost countermeasures at stop-controlled intersections (e.g., advanced warning signs), leading pedestrian intervals (i.e., pedestrians receive WALK indication before motorists to enhance visibility), USLIMITS2 (a free, web-based tool designed to help practitioners assess and establish safe, reasonable, and consistent speed limits for specific segments of roadway), horizontal curve enhanced delineation and pavement friction, and pedestrian hybrid beacons.

[13] Caltrans 2020-2024 Strategic Plan

2. *Accelerate Advanced Technology*

This pillar refers to increased and proactive usage of advanced technologies known to improve safety. Examples at traffic signals include vehicle queue spillback detection, coupled with a fixed Changeable Message Sign (CMS) sign upstream to alert drivers of either slowed or stopped traffic ahead. Other examples include extinguishable / blankout signs placed on traffic signal poles to advise travelers of regulatory or advisory conditions (e.g., no right-turn on red, look left for vehicles, etc.). Additionally, adaptive traffic signal systems are now being implemented in a number of corridors in urban areas. These systems can update their traffic signal timings in real-time, in response to changes in traffic flows, to better serve travelers (source: Adaptive Traffic Management: SCOOT | Traffic Management | Siemens Mobility USA).

3. *Lead Safety Culture Change*

The Safe System approach represents a paradigm shift in roadway safety philosophy. Whereas previously the focus of roadway safety was on preventing collisions, now it is on preventing fatal and severe collisions. Before, the emphasis was on improving human behavior to reduce collision frequency, but now it is recognized that humans make mistakes and are vulnerable, and that roadway design must consider these factors. The Safe System approach refocuses transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity and save lives. In the Safe System approach, the principles related to prevention of collision-related deaths and serious injuries are:

- Reduce System Kinetic Energy/Control Speeding
- Coordinate and Share Responsibility
- Proactively Address Risks

Some of these Safe System principles (e.g., reduce system kinetic energy) can be employed as part of the project design. Others are more regional and programmatic in nature, requiring leadership and commitment by regional and state agencies and other stakeholders. Through preparation of a Local Roadway Safety Plan (LRSP), San Joaquin County has proactively addressed risks through a systemic approach to safety (versus simply reacting to high collision locations).

4. *Integrate Equity*

The *2020-2024 Strategic Highway Safety Plan* lists "Integrate Equity" as one of its four guiding principles and a way to address institutional and systemic biases. This principle supports a better understanding of the effects of socioeconomic and demographic influences on fatal and serious injury crashes. Understanding these effects includes use of data related to race, income, population density, and other demographic, socioeconomic, and location-based information. Equity in safety may also relate to disparate treatment of different modes of travel.

The proposed project has been designed to accommodate all modes of travel by adding a robust network of bicycle and pedestrian facilities along its boundary and within its site. Accommodation of public transportation is also provided. Along the majority of project roadways, facilities supporting these modes of travel are physically separated from the roadway system to provide greater levels of protection to these vulnerable users. However, active transportation modes do not extend to adjacent communities from which some project employees may reside. This condition is specifically addressed in Chapter 8 (Impacts and Mitigation Measures).

Collision History on State Highway System in Study Area

The collision history of the three freeways that would be used by project traffic was analyzed using the Transportation Injury Mapping System (TIMS) database. This is a free and publicly available dataset of reported injury collisions on local and state roadways. TIMS data was obtained for a 6.5-year period from January 1, 2018 through June 30, 2024. The dataset consists of numerous variables associated with each collision including time of day, day of week, date, primary collision factor, collision type, number of involved parties, collision severity, weather conditions, lighting, pavement conditions, involvement of bicyclist, pedestrian, or motorcycle, driver impaired, driver age and gender. The TIMS database classifies collisions as either fatal, severe, or injury-only. The results are shown in **Table 23**. Key findings from this table are:

- I-580 experienced far more injury collisions than either I-5 or SR 132. This is primarily attributable to much greater traffic levels on this freeway than the other facilities. Similarly, I-580 had more fatal and severe injury collisions than the two other two freeways combined. The most common type of collision on I-580 was a rear-end type and the most common primary collision factor was unsafe speed.
- In terms of number of injury collisions involving trucks, 22 of 35 such collisions occurred on I-580. Only two collisions within the study portion of SR 132 (between the I-580/Chrisman Road interchange and I-5 interchange) involved trucks. Given that Caltrans' online traffic count data suggests this segment of SR 132 carries about 3,000 trucks per day, this represents a relatively low crash rate.
- Regarding vulnerable road users (i.e., bicyclists and pedestrians), a total of three such injury collisions were reported.

Table 23: Roadway Safety Injury Collision Statistics on State Highway System in Project Vicinity

Segment	Dist.	Number of Collisions [1]			Most Common Collision Type	Most Common Primary Collision Factor	Specific Collision Types		
		Total	# Resulting in a Fatality	# Resulting in a Severe Injury			# Involving Bicyclist or Pedestrian	# Involving Trucks	# DUI Collisions
SR 132 from Chrisman Road to I-5	2.97 mi	27	2	3	Rear End	Unsafe Speed	1	2	3
I-5 from I-205 to I-580	12.70 mi	52	2	7	Sideswipe	Improper Turning	0	11	12
I-580 from Corral Hollow Road to I-5	8.80 mi	136	5	13	Rear End	Unsafe Speed	2	22	13

Notes:
1 Data only shows reported collisions that involved an injury.
DUI: Driving Under the Influence (of alcohol or drugs).
Source: TIMS data from January 1, 2018 through June 30, 2024.

8. IMPACTS AND MITIGATION MEASURES

This chapter begins by presenting the thresholds of significance to be used to identify significant adverse transportation impacts. It then identifies project-specific and cumulative impacts of the proposed project based on those thresholds. Impact statements are provided for the topics of VMT and roadway safety/hazards, which are the criteria used to evaluate roadway system impacts. Impact statements are also provided for the bicycle, pedestrian, and transit systems, and emergency access.

Mitigation measures are recommended to lessen the significance of identified impacts. This chapter does not draw conclusions as to whether the mitigation measure would mitigate the impact to a less than significant level or whether the impact would remain significant after mitigation. Such conclusions are presented in the EIR based on the data provided here.

Thresholds of Significance

The following thresholds of significance are used to determine whether implementing the proposed project would result in a significant environmental impact. The thresholds are based on guidance from Appendix G of the CEQA Guidelines, and policies of San Joaquin County and other responsible agencies listed previously. The proposed project would cause a significant impact if it would:

Roadway Network

1. For project land use components whose VMT impacts are otherwise not presumed to be less-than-significant based on *San Joaquin County VMT Thresholds Study* thresholds, exceed the applicable VMT threshold as follows:
    - Warehouse and University Center Office: Average VMT per employee exceeds 85% of the unincorporated countywide average.
    - University Campus: VMT generation rate is not considered 'efficient' based on its placement and on-site amenities (note that San Joaquin County does not have quantitative thresholds for universities; hence, the approach taken here was necessary).
    - University Center Retail, VFW Building, and Gateway Center Retail/Restaurants/Service: a determination is made as to whether these uses would qualify as local-serving retail based on the *San Joaquin County VMT Thresholds Study*.

Bicycle and Pedestrian Network

2. Conflict with adopted policies, plans, or programs regarding bicycle or pedestrian facilities.

Transit Services and Facilities

3. Disrupt existing or planned transit facilities or conflict with adopted policies, plans, or programs regarding transit facilities or service.
4. Create a demand for transit that is currently unmet.

Hazards

5. Cause the 95th percentile queue length at a freeway off-ramp to extend beyond the gore point onto the mainline (or exacerbate a current or future deficient condition by increasing the 95th percentile queue by two or more vehicles).
6. Cause the 95th percentile queue length in the left-turn lane at an at-grade intersection on the State Highway System to exceed the available storage (or exacerbate a current or future deficient condition by increasing the 95th percentile queue by two or more vehicles).
7. Substantially increase hazards due to geometric design features (e.g., sharp curves or dangerous intersections) or incompatible uses.

Emergency Vehicle Response

8. Adversely affect emergency vehicle response times.

Note that the thresholds pertaining to vehicle queue lengths exceeding freeway off-ramp or left-turn lane storage on state highways is based on guidance from the *Local Development Review (LDR) Safety Review Practitioners Guidance* (Caltrans, 2024).

Unless otherwise noted, all identified mitigation measures should be applied to all phases of the project.

Project-Specific Impacts and Mitigation Measures

With regard to the significance criterion related to VMT per employee, it is noted that the methodology treats all employees the same. But in reality, different outcomes should be expected when considering VMT per office versus warehouse employee. Placing office space near residential or other sensitive receptors (e.g., schools, parks, etc.) does not cause the same type of nuisance or potential environmental harm as placing warehouse/industrial uses in that same location. To avoid those adverse effects, responsible planning dictates that the warehouse space be situated a sufficient distance away from those uses to avoid or minimize these effects. The SJVAPCD comment letter on the NOP reiterates this. However, this has the effect of increasing the distance between the warehouse location and most employee residences. Unless a robust multi-modal transportation system is available to provide alternatives to driving, average VMT per warehouse employee will normally be greater than average VMT per office employee.

The above concept is described in *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act Report (*CA Department of Justice, 2022), albeit in a slightly different form by stating, "Proactive planning can take many forms. Land use designation and zoning decisions should channel development into appropriate areas. For example, establishing industrial districts near major highway and rail corridors but away from sensitive receptors can help attract investment while avoiding conflicts between warehouse facilities and residential communities."

Roadway Network VMT

Impact TR-1: Significant Adverse VMT Impacts Caused by Warehouse and Office Land Use Components

Table 24 shows that the unincorporated countywide average VMT per employee is 38.6 under baseline conditions. The significance threshold is 85% of that value or 32.8 VMT per employee. The last two rows show the warehouse and office VMT per employee under baseline conditions with Initial Phase and Project Buildout.

Initial Phase

Table 24 indicates Initial Phase of the warehouse uses would have a VMT per employee rate that is 80% above the significance threshold. Accordingly, this impact is **significant**.

Project Buildout

Table 24 indicates that both the warehouse and office uses would have VMT per employee averages that are 42% and 104%, respectively, above the significance threshold. Accordingly, this impact is **significant**.

Table 24:
Comparison of Warehouse and Office Baseline Auto VMT per Employee against Significance Threshold

Scenario	Measure	HBW Auto VMT per Employee [1]	
		Warehouse Uses	Office Uses
Unincorporated Countywide Average – Baseline	VMT Generated by Autos	38.6	
85% of Unincorporated Countywide Average - Baseline		32.8	
Project Initial Phase		59.1	N / A
Project Buildout		46.5	66.8

1 Calculated using the 2016 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and residence.

N / A = Not Applicable (as Initial Phase does not include office space).

Source: Fehr & Peers, 2024.

Mitigation TR-1a (Initial Phase and Project Buildout): *The project applicant shall comply with SJVAPCD Rule 9410 (Employer Based Trip Reduction).*

SJVAPCD Rule 9410 (found at: https://ww2.valleyair.org/media/tlbogtid/rule-9410.pdf) was adopted by the District Governing Board in 2009 and requires major employers in the region to implement an Employer Trip Reduction Implementation Plan (ETRIP). Two types of worksites are identified: Tier 1 worksites consist of 100 to 249 eligible employees, while Tier 2 worksites have at least 250 eligible employees (who worked at least 16 consecutive weeks during the previous fiscal year). Eligible employees are any employees excluding the following: emergency health and safety employees, employment agency personnel, farm workers; field personnel, field construction workers, home garage employees, on-call employees, part-time employees, seasonal employees, volunteers, and employees who do not report to work during the peak period, which is defined as 6 AM to 10 AM. The number of eligible employees that work for a major employer would determine whether that employer falls into a Tier 1 or 2 worksite.

Table 1 of Rule 9410 indicates that Tier 1 and 2 worksites shall implement an ETRIP that achieves at least 44 and 66 points, respectively, based on selecting various TDM strategies, which fall into the following four groups: Marketing Strategies, Program Support Strategies, Service and Facilities Strategies, and Transportation, Alternative Schedule, and Incentives Strategies. Table 2 of Rule 9410 contains 59 different strategies that could be considered to reduce vehicle trips. Strategies are applicable only to eligible employees.

It is not known how many of the individual warehouse tenants will qualify as a Tier 1 or 2 worksite because of uncertainties around start time, shift hours and amount of square feet per employee. And it is not possible to identify which specific strategies that tenants of individual buildings would select since they have not been

identified, signed leases, etc. Accordingly, it is not possible to quantify the VMT savings achieved by the strategies that would be selected.

Mitigation TR-1b (Initial Phase and Project Buildout): *The project applicant shall implement the following transportation demand management (TDM) strategies, some of which may overlap with strategies selected under Rule 9410, that have been determined to be feasible and will have a material effect on reducing VMT.*

1. *Implement a Voluntary Commute Trip Reduction (CTR) program. Required elements of the program include:*
   - *Commute Trip Reduction Marketing - implements a marketing strategy to promote the project site employer's CTR program (which includes a guaranteed ride home program).*
   - *Ridesharing Program - implements a ridesharing program and establishes a permanent transportation management association with funding requirements for employers.*
   - *Subsidized or Discounted Transit Program - provides subsidized or discounted, or free transit passes for employees.*
   - *End-of-Trip Bicycle Facilities - installs and maintains end-of-trip facilities (including bike parking, bike*
   - *lockers, showers, and personal lockers) for employee use.*
   - *Employer-Sponsored Vanpool - implements an employer-sponsored vanpool service for employee groups of 5 to 15 people.*

2. *Implement Employee Parking Cash-Out program – requires project employers to offer employees the choice of foregoing their current subsidized/free parking for a cash payment (in exchange for not driving).*

3. *Expand Bikeway Network – construct a Class I off-street multi-use path or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance from the north edge of the project site to Linne Road.*

4. *Extend Public Transit Service to Project Site – expand San Joaquin RTD fixed-route bus service to the project site.*

5. *Operate a private employee shuttle system during peak periods that circulates within the site and off-site to the ACE Station located on Tracy Boulevard at Linne Road.*

Most of the above strategies are ongoing measures that would begin in Initial Phase and continue through Project Buildout. The exception is Strategy #2 (Expand Bikeway Network), which would be a one-time physical improvement. As is discussed in more detail in Impact TR-5 (Bicycle/Pedestrian Facilities), this measure would be triggered with subsequent development phases beyond the initial phase.

Most of the above TDM strategies are included in the *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity* (California Air Pollution Control Officer Association (CAPCOA), 2021). In late 2021, the CAPCOA Board of Directors adopted this report (henceforth known as the "*CAPCOA GHG Reduction Handbook*"). In addition to listing a variety of TDM strategies, the *CAPCOA GHG Reduction Handbook* presents the maximum effectiveness that a given strategy or set of strategies can have. However, that effectiveness can vary considerably depending on geographic context (urban, suburban, versus rural), tenant type, and availability of non-auto modes). The following pages investigate in more detail each of the five recommended TDM strategies above.

Voluntary Commute Trip Reduction (CTR) Program

The *CAPCOA GHG Reduction Handbook* suggests that the voluntary CTR program could achieve up to a 4% reduction in employee generated VMT. However, given the project's location and type of employment uses, less than a 4% reduction is to be expected. For analysis purposes, a 2% reduction is assumed based primarily on the program achieving an increase in carpooling and usage of the vanpool program.

Employee Parking Cash-Out Program

The *CAPCOA GHG Reduction Handbook* suggests that this program could achieve up to a 12% reduction in VMT (based on 6 case studies in California in 1992). This program will only be effective if combined with the other strategies that improve project access via biking and transit. Further, there is clear overlap when considering how this program will overlap with transit. For analysis purposes, a 3% reduction is assumed based on the premise that other modes of travel are also upgraded to become viable.

Expand Bikeway Network

The *CAPCOA GHG Reduction Handbook* suggests that expanding the bike network could achieve up to a modest 0.5% reduction in VMT. This generic value does not consider any of the project-specific conditions, such as a large workforce a relatively short distance from the project and typical warehouse worker wages, which may encourage greater usage of active transportation modes.

Figure 12 indicates that 26% of warehouse employees are estimated to reside in the City of Tracy. According to the 2022 ACS[14], about 2.5% of Tracy residents (who do not work at home) commute to work by walking or bicycle. For analysis purposes, it is assumed that 2% of City of Tracy residents who work at the project site commute to the project site by bicycling as a result of this dedicated bicycle facility. Each one-way bicycle commute is assumed to be five miles in length for analysis purposes. Mathematically, assuming each bicycle

[14] S0801: Commuting Characteristics ... - Census Bureau Table

commute trip averages five miles, the VMT reduction is 125 for Initial Phase and 778 for Project Buildout.[15] When reported as an overall decrease in VMT per employee, these VMT reduction totals represent approximately a 0.01% decrease. This very small decrease is due to the measure not applying to three-quarters of employees and only saving 10 VMT for a small subset of employees that it would apply to.

Extend Public Transit Service to Project Site

The *CAPCOA GHG Reduction Handbook* suggests that providing transit service to the project site could achieve up to a 4.6% reduction in VMT. However, it is unknown what routes would be operated, service duration, headways, etc. To be conservative, a 2% bus public mode split is assumed based on at least 30-minute headways during peak commute periods.

Private Employee Shuttle System

This scenario, if operated in combination with discounted transit passes to financially incentivize its use, offers considerable VMT savings opportunities. According to Figure 12, 38% of project employees would reside in Stockton, Lathrop, and Manteca. However, given ACE train schedules, only a small subset of employees residing in these three cities that work at the project site would be able to take advantage of the subsidized ACE train ride and private shuttle service package. Based on automobile-only (i.e., employee travel) traffic data collected at various warehouses, 15% of all auto trips entered the selected warehouse driveways during a time period where a substitute westbound ACE train ride (followed by a short shuttle ride to the warehouse) would allow for on-time arrival for their shift[16]. Further, not all employees whose shift times align with these train schedules will choose to take advantage of the service. For analysis purposes, it is assumed that one in five (20%) of employees eligible to use this service will choose to use it. This translates into a VMT reduction of 972 for the Initial Phase and 6,056 for Project Buildout.[17] Although the program appears to be an effective means to

[15] Calculated as follows:
Initial Phase: 2,401 employees * 26% live in Tracy * 2% bike * 5 mile trip * 2 trips per day = 125 VMT savings
Project Buildout: 14,953 emps * 26% live in Tracy * 2% bike * 5 mile trip * 2 trips per day = 778 VMT savings

[16] The morning arrival window was determined to be more restrictive than the afternoon return window in which 19% of all auto trips exiting the selected warehouse driveways did so during a time period where a short shuttle ride from the warehouse to the ACE train would enable the employee to catch an eastbound ACE train heading toward Lathrop/Manteca or Stockton.

[17] Calculated as follows:
Initial Phase: 2,401 employees * 18% live in Lathrop/Manteca * 15% of employees with schedules that enable program use * 20% that choose to use program * 25 mile round trip + 2,401 employees * 20% live in Stockton * 15% of employees with schedules that enable program use * 20% that choose to use program * 45 mile round trip = 972 VMT savings
Project Buildout: 14,953 employees * 18% live in Lathrop/Manteca * 15% of employees with schedules that enable program use * 20% that choose to use program * 25 mile round trip + 14,953 employees * 20% live in Stockton * 15% of employees with schedules that enable program use * 20% that choose to use program * 45 mile round trip = 6,056 VMT savings

transport employees to/from work without relying on auto VMT for the majority of the trip, it would only apply to an estimated 6% of all employees (given residence location and work start/end scheduling). Assuming 20% of the eligible employees choose to use it, that translates into about 179 of the 14,953 warehouse employees using the program. When reported as an overall decrease in VMT per employee, this program achieves a 0.7% reduction for Initial Phase and a 0.9% reduction for Project Buildout.

Table 25 displays the expected effectiveness of the mitigation measures included in Mitigation TR-1b at reducing the VMT per employee of warehouse employees. While the net effect of these measures was an 8% reduction in VMT, the resulting VMT per employee estimates would remain well above the significance threshold for determination of a VMT impact. While the Mitigations from TR-1a (Rule 9410) would also provide some VMT savings, it is not known how much savings would be achieved given the uncertainty of what strategies would be selected and to how many employers that program would apply.

Table 25:
Mitigation Measure Effectiveness at Reducing Warehouse Auto VMT Generated for Baseline Conditions

Mitigation Measures (TDM Strategies) [1]	Percent Auto VMT Reduced per Employee [1]	
	Initial Phase [2]	Project Buildout
Voluntary Commute Trip Reduction (CTR) Program	2%	2%
Employee Parking Cash-Out Program	3%	3%
Expand Bikeway Network	-	0.01%
Extend Public Transit Service to Project Site	2%	2%
Private Employee Shuttle System	0.7%	0.9%
Total	7.7%	7.9%
Mitigation Measures (TDM Strategies) Overall Effectiveness	**HBW Auto VMT per Employee**	
	Initial Phase	**Project Buildout**
Without Mitigation Measures	59.1	46.5
With Mitigation Measures	54.5	42.8
Significance Threshold	32.8	32.8
VMT Reduced to Below Threshold?	No	No

1 See discussion and calculations of TDM strategy effectiveness on previous pages.

2 Initial Phase would have identical TDM strategies as Project Buildout with the exception of excluding the expanded bike network.

HBW = Home-based work (i.e., travel from home to work).

Source: Fehr & Peers, 2024.

A similar table could not be prepared for the office employees because details of their likely residence locations, work shifts, etc. are not known. However, the same general conclusion is drawn for office employee VMT as warehouse employee VMT, which is that the identified mitigation measures would not reduce VMT to below the identified threshold.

The *CAPCOA GHG Reduction Handbook* offers cautions on the effects of combining different TDM Strategies, stating the following: "*The combining of some measures is not always beneficial, linear, complementary, or accurate…There may be diminishing returns when certain measures are implemented together…. There may be competition between measures*." The VMT reduction totals in Table 25 were calculated by summing each individual strategy's own expected effectiveness. If they had alternatively been calculated using "multiplicative dampening", the overall result would have been a 7.7% reduction for Project Buildout. This illustrates that the cautionary language contained in the *CAPCOA GHG Reduction Handbook* is more applicable when there are a number of TDM strategies that would have a moderate to substantial effect on VMT when applied.

With the exception of the bikeway network described previously, programs that would be expected to generate less than a 0.5% VMT reduction were excluded because they were deemed ineffective at reducing employee VMT. These include implementing carshare, bikeshare, or scootershare programs, and implementing transit-supportive roadway treatments. Providing bus rapid transit (BRT) is effective at reducing VMT but requires an existing bus route to be present that becomes converted to BRT. Since no such route exists, this strategy would not apply under baseline conditions.

Pricing workplace parking may be considered a viable TDM strategy under certain circumstances and geographic contexts. However, none of the other warehouse project owner/operators in the Central Valley Gateway area require their employees to pay for parking. Implementing such a requirement would put the proposed project at an economic disadvantage versus the other projects, both in terms of competing for tenants and employees. Pricing employee parking is typically only considered in urban contexts where there are many forms of alternative non-auto transport available. For these reasons, pricing workplace parking is considered an infeasible mitigation measure. A mandatory CTR program, which includes penalties for non-compliance, regular monitoring and reporting is also considered infeasible for the same reason. In lieu of a mandatory program, a voluntary program is recommended as a mitigation.

Monitoring

With regard to Mitigation Measure TR-1a (Comply with SJVAPD Rule 9410), employers must complete and submit an Employer Registration form to the Air Pollution Control Officer (APCO) of the SJVAPCD within 180 days of becoming subject to the trip reduction requirements of Rule 9410. According to Rule 9410, ETRIP strategies are phased in over a period of three years. An employer may submit a single ETRIP that covers multiple

worksites when those worksites are using the same ETRIP measures. If worksites are using differing ETRIP measures, then each worksite should have its own ETRIP.

Rule 9410 also requires employers to collect information on the modes of transportation used for each employee's commute each day of the Commute Verification Period, which is a period of at least one week (selected by the employer) that is representative of typical work week conditions. The employer is required to submit its sampling methodology to the District 120 days prior to the start of the calendar year in which the employer intends to use the method. The APCO shall notify employers of its approval or disapproval of this method within 60 days of receipt.

No later than March 31st of each year, the employer shall submit a report to the APCO containing the results of the Commute Verification for the previous calendar year (including number of forms distributed, the number completed and returned, total number of trips to and from work, and the total number of each commute mode for the employees during the Commute Verification period).

Although truck generated VMT is not being evaluated for potentially significant VMT impacts, it is worth noting that the project site is considered to be in an efficient location as it relates to truck VMT. First, it is situated along a STAA route. Second, it is adjacent to SR 132, which provides direct connectivity to I-580 (for travel to/from the west toward the Bay Area) and I-5, which is the main north-south goods movement corridor in California. Third, by being situated within this area of the Central Valley, truck travel is convenient to a number of large cities including Stockton, Modesto, Manteca, and several Bay Area cities. It would almost certainly be less efficient if the project were instead situated many miles to the south on I-5 or along the State Route 99 corridor.

Impact TR-2 Significant Adverse VMT Impacts Caused by University Project Land Use Component

A table similar to Table 24 cannot be prepared for the university uses because a quantitative VMT threshold for universities has not been established by San Joaquin County.

Although the university would include some student housing, the considerable travel distance between the university and likely off-site student and staff residence locations suggests that the university would not be considered a "VMT efficient" land use. San Joaquin County has only one other private, four-year university (University of Pacific). That university is located in the central part of the City of Stockton, has student dormitories, and is well-served by transit. Part of the intent of SB 743 relates to the placement of land uses in VMT-efficient areas. This is accomplished by comparing proposed projects against similar land uses to determine whether they would be located in more or less VMT-efficient locations. The proposed university would be much less transportation efficient than the other four-year private university in San Joaquin County for reasons cited above.

Initial Phase and University Buildout

Initial Phase and buildout of the university are each considered non-VMT efficient for reasons cited above. Accordingly, this impact is **significant**.

Mitigation TR-2a (University Initial Phase and University Buildout): *The project applicant shall comply with SJVAPCD Rule 9410 (Employer Based Trip Reduction).* See Mitigation Measure TR-1a for details including monitoring requirements.

Mitigation TR-2b (University Initial Phase and Buildout): *Implement TDM Strategies 1, 4, and 5 from Mitigation Measure TR-1b (TDM Strategies).*

Mitigation TR-2c (University Initial Phase and Buildout): *Either implement TDM Strategy 2 from Mitigation Measure TR-1b (TDM Strategies) or charge staff and students a fee to park.*

TDM Strategies 1, 4, and 5 consist of a voluntary CTR program, extending public transit service to the project, and providing a private employee shuttle system. These strategies are also applicable to university students and staff. Consistent with guidance from the *CAPCOA GHG Reduction Handbook,* Mitigation Measure TR-2b has a choice of two options (i.e., employee parking cash-out or paid parking). Both should not be pursued simultaneously as it would represent application of the same concept twice.

It would be speculative to estimate the VMT savings associated with the above measures as it is not known precisely where university students and staff would live and it is not known how they would react to parking pricing. Additionally, the proportion of the university's VMT that is attributable to students versus staff is not known making such calculations difficult.

Impact TR-3 Less Than Significant VMT Impacts Caused by Retail, Restaurant, Gas Station, Hotel, VFW Tracy Post Project, and Electrified Truck and Auto Charging Lots Land Use Components

The following land use components are considered local-serving for reasons that follow:

- University Center (39,000 square foot shopping plaza and 11,500 VFW Building) – The shopping plaza is considered local-serving given its small size and immediate proximity to the university. The VFW Tracy Post is considered a local-serving use since it is to be a resource to the surrounding community.
- Gateway Center (20,000 square feet of convenience store and restaurants associated with vehicle fueling, 20,000 square feet of restaurant, bank, and retail service, 10,000 square feet of fast-food restaurants, 60,000 square foot hotel, and Electrified Truck and Auto Charging Lots) – These uses would be situated immediately adjacent to or along the main commute route to the project's job center (i.e., Gateway West, Central, and East). In total, the project would have 14,953 warehouse employees, 372

office employees, and 5,000 university students (plus staff). These ancillary uses are intended to support the project's job and student population. They will help reduce VMT by shortening trips for essential goods and services. The gas station and electrified truck and auto charging lots will serve a similar purpose given the amount of auto and truck traffic expected on the adjacent segment of Chrisman Road at project buildout. Additionally, these uses are situated in close proximity to SR 132 and I-580, thereby allowing short detours off each freeway for refueling/recharging. In this sense, they are 'local-serving' to these freeways.

Page 41 of the *County of San Joaquin VMT Thresholds Study* (GHD, 2020) recommends the following with respect to retail uses: "Retail projects less than 50,000 square feet shall be presumed to have less than significant VMT effects if they are deemed locally serving. If the County determines the market geography of a retail project is in question an analysis should be conducted to verify the project does not generate regional trips."

In summary, the project's potential retail, restaurant, gas station, hotel, VFW Tracy post uses, and electrified truck and auto charging lots are considered local-serving for reasons stated above. No further VMT analysis of these uses is conducted as their VMT impacts are **less than significant** and no mitigation is required.

Impact TR-4: Less Than Significant VMT Impacts Associated with Widening Chrisman Road Along Project Frontage and MacArthur Drive within the project site

The section of Chapter 6 entitled "Project Roadway Widening Effect on VMT" concluded that under near-term conditions, the widening of Chrisman Road along the project frontage and widening of MacArthur Drive within the project site would not cause a net increase in travel and VMT. This conclusion was reached by adding both roadway improvements to the City of Tracy travel demand model and calculating the total VMT generated within the model boundary without and with the widenings in place. Accordingly, this impact is **less than significant,** and no mitigation is required.

Bicycle and Pedestrian Facilities

Impact TR-5: Conflicts with Adopted Policies, Plans, or Programs Regarding Bicycle or Pedestrian Facilities

The project would not eliminate or adversely affect an existing bikeway or pedestrian facility in a way that would discourage its use. It would also not interfere with the implementation of any of the proposed or planned bikeways in the project vicinity (see Page 30 for list). However, it would cause an inconsistency with several San Joaquin County General Plan policies (1.3, 1.6, 1.10, 2.5, and 2.7) pertaining to providing multimodal transportation options, reducing auto dependency, and eliminating gaps in the bikeway system.

Initial Phase

The initial phase would construct frontage improvements along Chrisman Road in Gateway East and University Center to facilitate development in those areas. There would continue to not be any dedicated bicycle facilities north of the project that would connect it to the existing residential land uses (north of Linne Road) that could serve as potential residences for some Initial Phase employees, students, and staff. The initial phase's industrial land uses are in Gateway East (east of Chrisman Road) and further from these residential areas than anywhere else in the Specific Plan. An employee residing in South Tracy would be required to ride at least four miles one-way on Linne Road and Chrisman Road to reach the Initial Phase land uses. That considerable biking distance, along with the fact that the initial phase is about 14% of the project's total industrial employment and number of university students (i.e., would generate few riders), suggests that Initial Phase impacts are **less than significant,** and no mitigation is required.

Project Buildout

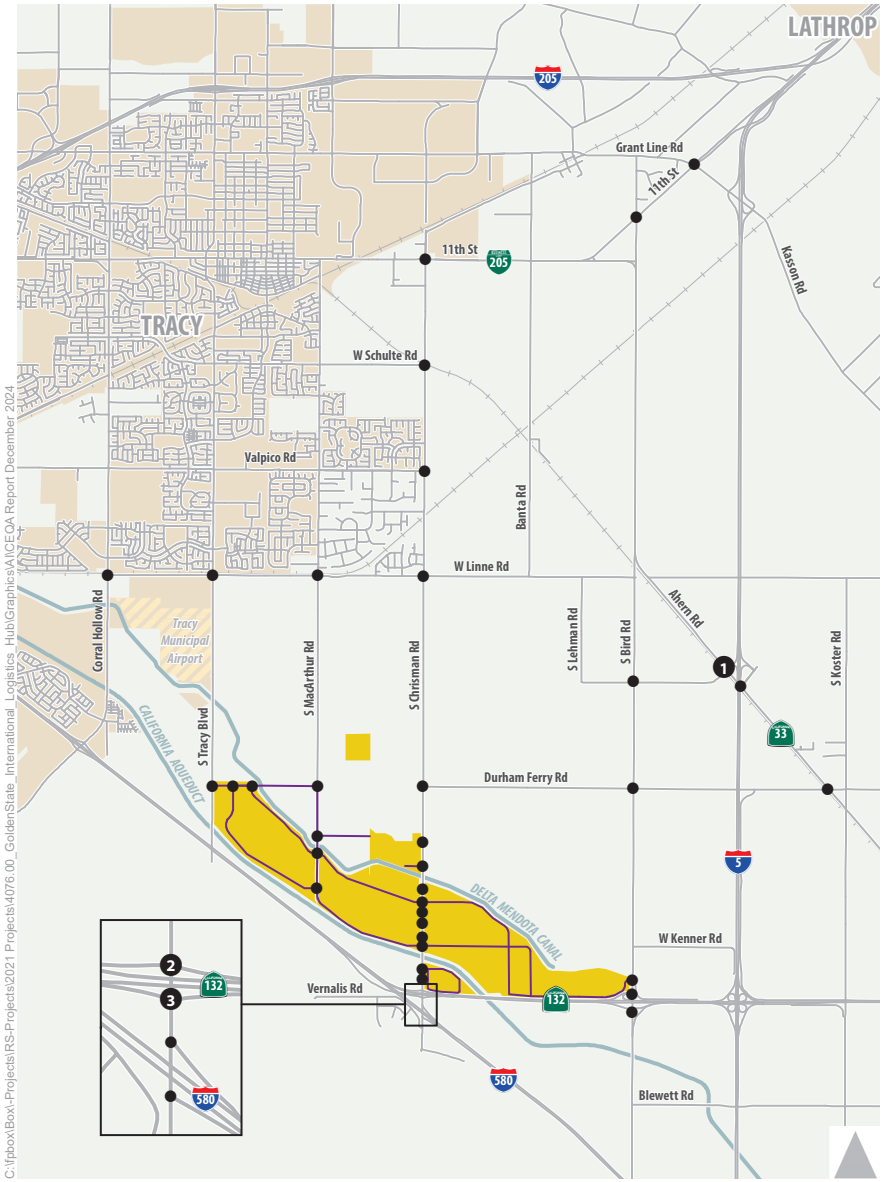
At Project Buildout, approximately 1.33 miles of bicycle and pedestrian improvements would be constructed along one or both sides of the project frontage along Chrisman Road. However, there would continue to be no dedicated bicycle facilities between the project site and residential areas to the north (i.e., north of Linne Road). Given the project's number of employees and students and the lack of any planned bicycle facilities to connect the project site with residential areas to the north, this impact is **significant**.

It is unlikely that project employees would choose to walk from the nearest residential areas in South Tracy. Thus, the need for connecting pedestrian facilities is much less than the need for bicycle facility connectivity.

Mitigation TR-5 (Triggered by Subsequent Phases of Development Beyond Initial Phase): *Implement TDM Strategy 3 from Mitigation Measure TR-1b (TDM Strategies).*

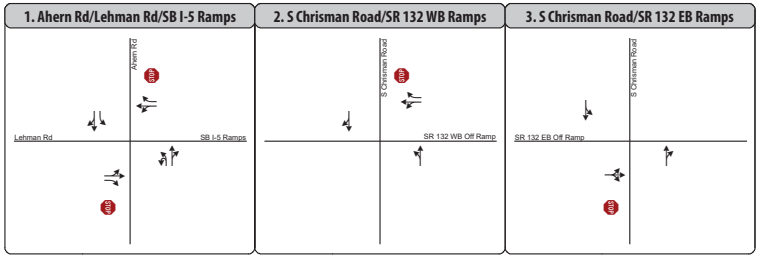
This measure requires the project applicant to construct a Class I off-street multi-use path or Class II on-street bike lane in each direction of MacArthur Drive for the two-mile distance between the north edge of the project and Linne Road. This would provide much improved bicycle connectivity between the project site and existing uses to the north. It would also provide alternatives to driving for Tracy residents who work at the site, consistent with General Plan Policies TM-1.3 and 1.6. This would be required for subsequent phases of project development beyond Initial Phase. It is not required for Initial Phase because it is located east of Chrisman Road, far from where this connection would be. According to San Joaquin County Assessor Maps, this segment of MacArthur Drive has a minimum right-of-way (ROW) of 40 feet. This is sufficient to provide a 12-foot travel lane and 6-foot bike lane in each direction, or to provide two 12-foot travel lanes and a 12-foot multi-use Class I path. Widening could either occur on both sides of the street, or on one side only depending on available ROW.

Figure 22 illustrates the location of the above bicycle lane improvement project, as well as various other recommended project-specific physical off-site mitigation measures identified for significant impacts.



1 Vehicle Queuing Study Locations
Other Study Intersections
Project Roadways
Project Site
City Boundary

Existing



Recommended Improvements

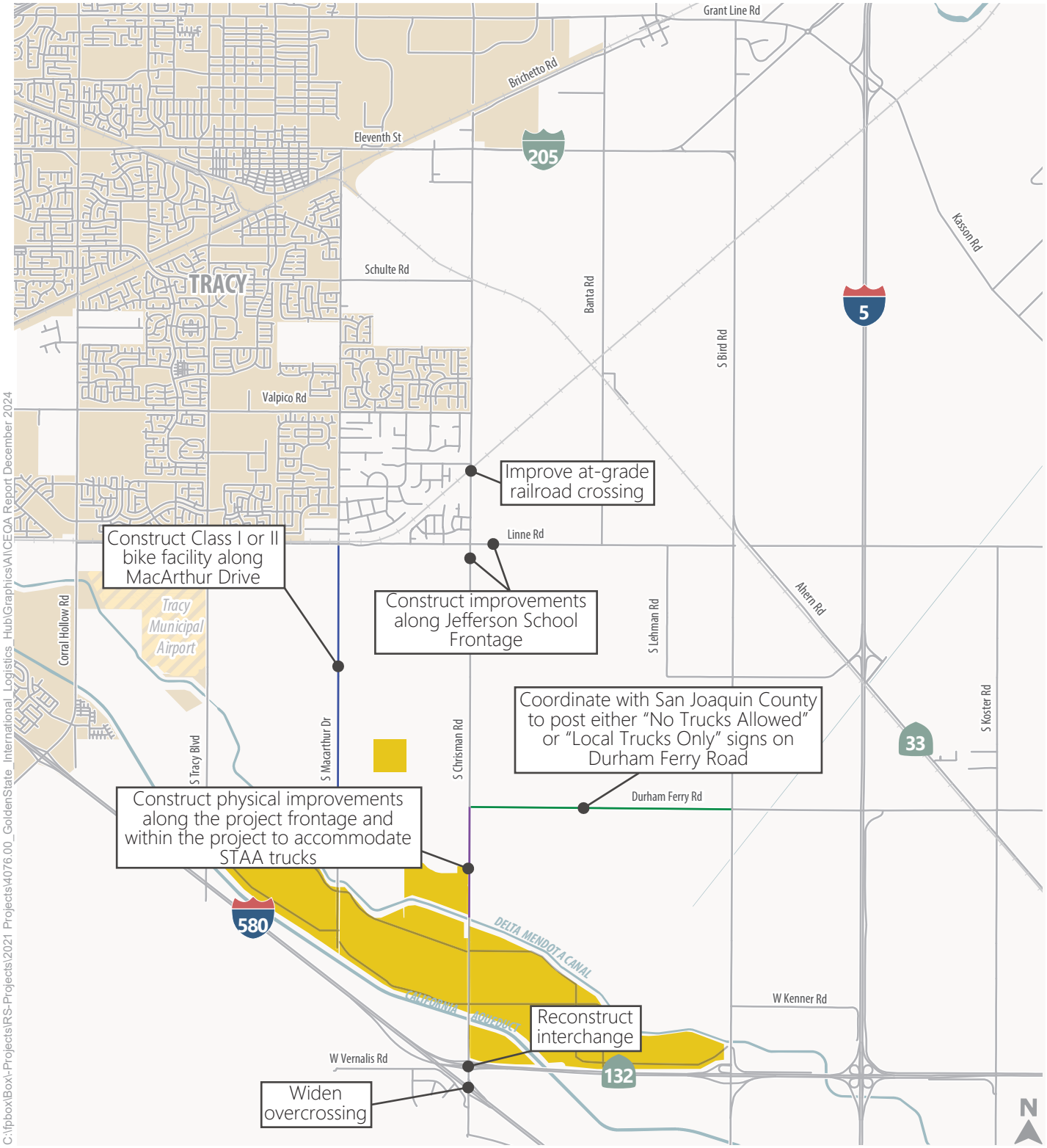


Existing Turn Lane
Recommended Turn Lane
Existing Traffic Signal
Recommended Traffic Signal
Stop Sign

Note: Only intersections improvements are recommended are shown.

Figure 21

Existing Plus Project Buildout Recommended
Off-Site Improvements to Address Queuing Deficiencies



Project Site City Boundary

Note:
Further discussions with various agencies are required to determine the precise type of improvements, timing, and financial responsibility.

The Pacific Gateway Local Transportation Analysis identifies various other intersection and roadway improvements that are required to maintain the County's General Plan LOS policy. Those will be project responsibilities, but are not considered mitigations for significant impacts under CEQA.

Figure 22

Recommended Physical Mitigation Measures for Significant Impacts under Existing Plus Project Buildout Conditions

Transit Services and Facilities

Impact TR-6: Inadequate Transit Service to Meet Demand

The project would not eliminate or adversely affect existing transit access as no service is currently provided in the immediate project vicinity. The lack of any existing or planned fixed-route bus service to the area would lead to an unmet demand for transit service. According to earlier calculations in this chapter, approximately 170 industrial employees are estimated to use the ACE train to travel between the site, and Lathrop/Manteca, and Stockton. Usage of the RTD fixed-route bus is unknown as it depends on routing, frequency, etc. This impact is **significant**.

Mitigation TR-6 (Initial Phase and Project Buildout): *Implement TDM Strategies 4 and 5 from Mitigation Measure TR-1b (TDM Strategies)*

These strategies would extend San Joaquin RTD fixed-route bus service to the project site and operate a private shuttle that circulates within the site and off-site to the ACE Station in Tracy. Although implementing these measures would provide transit service to the project site, there is no guarantee that RTD would approve the service change.

Roadway Safety / Design Standards:

Impact TR-7: Freeway Off-Ramp and State Highway Intersection Queues Exceed Available Storage

Initial Phase

Table 12 displays the AM and PM peak hour 95th percentile queues at queuing study locations (located on the State Highway System) under Existing Plus Initial Phase conditions. As shown, none of these locations would experience new adverse queuing conditions or worsening of an already deficient condition under Existing Plus Initial Phase conditions. Therefore, this impact would be **less than significant**.

Project Buildout

Table 13 shows the AM and PM peak hour 95th percentile queues at queuing study locations (located on the State Highway System) under Existing Plus Project Buildout conditions. As shown, four of the seven locations shown in this table would experience queuing that exceeds the available storage. This impact would be **significant**.

Mitigation TR-7 (Triggered by Subsequent Phases of Development Beyond Initial Phase): *The project applicant shall prepare transportation phasing analyses, to the satisfaction of the San Joaquin County Public Works*

*Department, that determines when subsequent phases of project development (beyond Initial Phase) trigger construction of the geometric improvements described in **Table 26** and shown on **Figure 21** (or an equivalent or more effective set of alternate improvements).*

Table 26:
Recommended Improvements to Address Queuing Deficiencies – Existing Plus Project Buildout Conditions

#	Facility	Lead Agency	Description of Improvement(s)
		Interchange Improvements	
	SR 132/Chrisman Road interchange	Caltrans	Reconstruct with wider (6-lane) overcrossing, ramp widening, and signals at both ramp intersections. Secondary improvements will likely include a deceleration lane on westbound SR 132 at the interchange, on-ramp ramp metering, and widening of the adjacent Chrisman Road overcrossing at I-580 (for lane alignment purposes).
		Intersection Improvements	
14	Chrisman Road/SR 132 WB Ramps	Caltrans	Signalize with lanes shown on Figure 21, operate with protected left-turn phasing, and provide a deceleration lane and a two-lane off-ramp approaching the interchange on westbound SR 132.
15	Chrisman Road/SR 132 EB Ramps	Caltrans	Signalize with lanes shown in Figure 21, widen eastbound SR 132 on-ramp to accommodate two receiving lanes, and operate with protected left-turn phasing.
16	Chrisman Road/I-580 WB Off-Ramp	Caltrans	Widening of existing overcrossing or construction of second parallel overcrossing likely needed for lane alignment with widened SR 132/Chrisman Road interchange.
17	Chrisman Road/I-580 EB On-Ramp	Caltrans	

Notes:
Additional improvements may be required on County-maintained roadways to maintain consistency with General Plan LOS policy goals. This includes a traffic signal at SR 132 WB Ramps/Bird Road interchange due to operational problems that would otherwise occur if it remained side-street stop.
Source: Fehr & Peers, 2024.

The effectiveness of the improvements shown in Table 26 were analyzed under Existing Plus Project Buildout conditions using the SimTraffic microsimulation model. The results are shown in **Table 27** and indicate that the proposed improvements would reduce the extent of queuing such that all 95th percentile queues would be less than the available storage. Refer to **Appendix D** of separately bound appendix for technical calculations. Therefore, no excess queuing would occur.

Table 27:
95th Percentile Vehicle Queues – Existing Plus Project Buildout Conditions with Improvements

Intersection	Movement	Available Storage[1]	95th Percentile Queue (ft.) [2]						
			Existing Conditions		Existing Plus Project Buildout Conditions				
					Without Improvements		With Improvements [3]		
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	95th Percentile Queue Requirement Met?
14. Chrisman Road/SR 132 WB Ramps	WB Off-Ramp LT/TH	850 ft. [4]	74	25	**> 1,500**	**> 1,500**	30	36	Yes
	WB Off-Ramp RT	850 ft. [4]	114	75	**> 1,500**	**> 1,500**	360	230	Yes
15. Chrisman Road/SR 132 EB Ramps	EB Off-Ramp LT/TH/RT	825 ft.	59	89	**925**	**914**	518	334	Yes
16. Chrisman Road/I-580 WB Off-Ramp	WB Off-Ramp LT/TH	1,160 ft.	0	0	224	**1,231**	52	24	Yes

Notes:
1. Defined distance to the freeway off-ramp gore point. Represented on a per lane basis.
2. 95th percentile queue based on output from SimTraffic model.
3. Refer to Table 26 for description of improvements.
4. Amount of storage to be provided is unknown. For analysis purposes, it is assumed to be identical to existing conditions.
Bolded values represent a 95th percentile queue length that exceeds the available storage.
"> 1,500 " is shown to represent queuing that spills onto freeway mainline a considerable distance.
Source: Fehr & Peers, 2024.

Once development continues beyond the initial phase, an interim set of improvements at the SR 132/Chrisman Road interchange (i.e., less than what is described in Table 26, likely maintaining overcrossing structures and signalizing both ramp intersections) would be needed. That interim improvement would eventually be replaced with the ultimate improvements.

The improvements described above are on the State Highway System, which is owned and operated by Caltrans. There is no guarantee they will support the identified improvements.

Impact TR-8: Increased Hazards due to Geometric Design Features

Initial Phase and Project Buildout

The project would generate a substantial amount of new truck trips, which have greater turning radius requirements, pavement deterioration effects, and vehicle storage requirements than passenger vehicles. This impact is **significant**.

Mitigation TR-8 (Initial Phase and Project Buildout): *The project applicant shall construct physical improvements at project access intersections along Chrisman Road (and within the various industrial areas) in accordance with San Joaquin County design standards. Additional considerations should be made for the need to accommodate STAA trucks, enhanced pavement structural sections, and increased truck turn lane storage.*

It would be premature at this juncture to identify every specific design detail required at each project access and on-site intersection. Instead, to ensure that the project roadway designs provide the necessary infrastructure improvements to accommodate the special travel needs of trucks, the following performance standards are established for this mitigation measure:

- All street sections that would be constructed, replaced, or widened by the project are designed with the appropriate Traffic Index (TI) to ensure that the structural section can accommodate the added weight of trucks for that street section.
- All left and right turn lanes constructed at intersections along Chrisman Road and within the various project industrial areas provide adequate vehicle storage to accommodate the 95th percentile vehicle queues (considering cumulative travel demands and the effects of trucks on storage requirements).
- Intersection designs consider curb return radii requirements, width of receiving travel lanes, placement of traffic control equipment, and other design parameters to ensure that trucks can perform left and right-turns without encroaching onto oncoming travel lanes, running over curbs, or colliding with signal equipment or signs.

The roadway design review process (overseen by the San Joaquin County Public Works Department) will ensure that these performance standards are met.

Impact TR-9: Increased Hazards due to Incompatible Land Uses on Durham Ferry Road

Initial Phase and Project Buildout

Durham Ferry Road features a number of rural residential dwellings east of Chrisman Road. There are currently no truck weight restriction signs posted on Durham Ferry Road. As shown on Figure 6, "Commercial Vehicles Over 7 Tons Prohibited" signs are posted in each direction of Bird Road between Durham Ferry Road and Lehman Road. Thus, trucks of any weight traveling to/from the project site and I-5 to the north could use the I-5/SR 33 interchange via Durham Ferry Road. Trucks weighing less than seven tons could use Lehman Road to Bird Road.

Assuming no truck movement restrictions remain, the initial phase of the project would add an estimated 25 trucks per day to this segment, while full Project Buildout would add 220 trucks per day. These would represent 30% and 260% increases, respectively, over the current level of truck traffic (85 trucks per day). The increase in project truck trips to Durham Ferry Road east of Chrisman Road would create an incompatibility with the adjacent rural residences. This impact is **significant**.

Mitigation TR-9 (Initial Phase and Project Buildout): *The project applicant shall coordinate with San Joaquin County to post a combination of either "No Trucks Allowed" or "Local Trucks only" signs on Durham Ferry Road between Chrisman Road and SR 33.*

The addition of these signs would discourage trucks from using this segment of Durham Ferry Road east of Chrisman Road. Depending on the degree that truck drivers comply with them, supplemental enforcement activities could also be necessary. Truck travel characteristics from concrete plants situated south of the SR 132/Bird Road interchange and helpful in understanding compliance in this geographic area. During AM peak hour, 306 trucks use Bird Road south of the SR 132 interchange. Only 6 trucks were observed traveling to/from the north of the interchange beyond Kenner Road where trucks over 7 tons are prohibited (via posted signs). This indicates very strong compliance, though this is not the case everywhere in Joaquin County.

Impact TR-10 Increased Hazards due to Incompatible Land Uses near Chrisman Road/Linne Road Intersection

Jefferson School is located in the southeast quadrant of the Chrisman Road/Linne Road intersection. It features vehicular accesses from both streets and experiences surges in traffic during morning student drop-off and afternoon student pick-up. Excluding minimum days, school starts at 8:15 AM and ends at 3 PM. Chrisman Road north of Linne Road carries a bi-directional volume of 569 vehicles from 8-9 AM, 609 vehicles from 3-4 PM, and 428 vehicles from 4-5 PM. Similarly, Linne Road west of Chrisman Road carries a bi-directional volume of 564 vehicles from 8-9 AM, 686 vehicles from 3-4 PM, and 520 vehicles from 4-5 PM. It is apparent from these counts (i.e., more traffic from 3-4 PM than 4-5 PM) and field observations that trips associated with Jefferson School influence traffic levels on these roadways.

Initial Phase

During the AM peak hour, Initial Phase would add approximately 180 vehicles to Chrisman Road south of Linne Road. Initial Phase would add almost no traffic to Linne Road east of Chrisman Road. Additionally, the total trips generated under the Initial Phase is modest compared to Project Buildout, and diversion of trips away from Chrisman Road south of Eleventh Street is not expected. This impact is considered **less than significant** and no mitigation is required.

Project Buildout

During the AM peak hour, Project Buildout would increase the volume of traffic on Chrisman Road south of Linne Road from 580 to 1,330 vehicles (both directions combined). During this same hour, Project Buildout would increase the volume of traffic on Linne Road east of Chrisman Road from 750 to 1,030 vehicles. The considerable increases that would occur along Linne Road east of Chrisman Road are a result of project trips (both autos and trucks) diverting from Chrisman Road to Bird Road (to access Eleventh Street) which carries far less traffic. These increases are considerable and are likely to cause conflicts with motorists entering/exiting Jefferson School from both public streets to drop-off or pick-up students.

In addition, the widening of Chrisman Road south of Linne Road from two to four lanes would eventually be necessary to meet San Joaquin County LOS policy standards. Some of the widening would require roadway encroachment into the school property, resulting in the roadway travel lanes being closer to school buildings than today. This impact is considered **significant**.

Mitigation TR-10 (Triggered by Subsequent Phases of Development Beyond Initial Phase): *The project applicant shall coordinate with the San Joaquin County Public Works Department and administrators at Jefferson School and Jefferson School District to identify and construct a set of improvements that minimize conflicts between project trips and motorists entering/exiting Jefferson School. Potential improvements to be considered include (but are not limited to):*

- *Installation of traffic signal at Linne Road/Jefferson School Easterly Driveway*
- *Construction of westbound left-turn lanes on Linne Road at both Jefferson School Driveways*
- *Construction of southbound left-turn lane on Chrisman Road at Jefferson School Southerly Driveway (including a guard rail or cable barrier system along the Chrisman Road school frontage)*
- *Speed feedback signs in each direction of Linne Road approaching Jefferson School and on northbound Chrisman Road approaching Jefferson School*

The new signal on Linne Road would be 750 feet from the Chrisman Road/Linne Road signalized intersection, which is considered adequate signal spacing. If a traffic signal were to be installed on Chrisman Road to serve the south parking lot, the northerly driveway would be the logical choice (as it is the primary exit). However, it

is situated only 410 feet south of the Chrisman Road/Linne Road signalized intersection, which is considered too close to install a new traffic signal (based on standard engineering practices for suburban signal spacing).

Bullet 3 above includes installation of a standard guard rail (such as found on highway/roadway curves) or a cable barrier system (which are now commonly being installed in highway medians to prevent run-off-road collisions involving the opposite direction of travel). This recommendation is intended to address potential concerns over the widening of Chrisman Road adjacent to Jefferson School.

The above improvements are considered physically feasible as right-of-way is available for their construction. However, coordination with the Jefferson School District would be required to construct some of these improvements, as they would involve minor modifications (i.e., addition of signal equipment, such as vehicle loop detection) within the school district property. As noted in the final bullet above, the project applicant would be responsible for adding turn lanes, modifying signal phasing, and adding upgraded pedestrian facilities at the Chrisman Road/Linne Road intersection. Those improvements would improve the pedestrian environment at that intersection.

The following performance standards have been established for this mitigation measure (presuming the above or other equally effective physical improvements are chosen for construction):

- School-related trips do not queue beyond the storage provided in the left-turn lanes on westbound Linne Road constructed as part of this mitigation measure.
- School-related trips do not queue beyond the storage provided in the southbound left-turn lane at the Jefferson School southerly driveway constructed as part of this mitigation measure.
- The traffic signal at the Jefferson School Easterly Driveway/Linne Road does not cause undue delays (i.e., as measured by more lengthy queues forming at the north parking lot entrance) to school-related trips exiting this driveway during peak school hours.
- The northbound Chrisman Road approach to Linne Road is redesigned (as part of separate applicant-required widening to meet San Joaquin County General Plan LOS policies) to accommodate u-turn movements made by buses.

Impact TR-11: Increased Hazards due to Additional Vehicle/Train Conflicts

The project would add passenger vehicle and truck trips to various at-grade railroad crossings situated throughout the study area. **Table 28** shows the seven crossings that would experience the largest increases. The table describes the crossing location, number of trains, collision history, crossing equipment present, and roadway traffic volumes.

Table 28:
Project-Added Traffic to At-Grade Railroad Crossings

#	Crossing Location [1]	Trains Per Day [2]	# of Collisions (Year) [2]	Equipment Present [2]			Average Daily Traffic (HV%)		
				Gate Arms	Warning Lights & Bells	Advanced Warning	Existing	Existing Plus Initial Phase	Existing Plus Project Buildout
1	Chrisman Road north of Schulte Road	4	0	Yes	Yes (including Overhead Light Assembly)	Warning Signs, Pavement Markings	13,200 (8%)	13,700 (10%)	18,300 (14%)
2	Chrisman Road north of Linne Road	12	3 (1980, 1985, 1987)	Yes	Yes	Warning Signs, Pavement Markings	5,400 (15%)	6,100 (18%)	11,700 (19%)
3	Lehman Road west of SR 33	4	0	Yes	Yes	Warning Signs, Pavement Markings [3]	400 (7%)	500 (6%)	1,800 (2%)
4	Durham Ferry Road west of SR 33	4	0	Yes	Yes	Warning Signs, Pavement Markings [3]	1,400 (8%)	1,600 (9%)	2,600 (13%)
5	Corral Hollow Road north of Linne Road	12	4 (1978, 1986, 2008, 2015)	Yes	Yes	Warning Signs, Pavement Markings	N / A	N / A	N / A
6	Tracy Boulevard north of Linne Road	12	1 (2011)	Yes	Yes	Warning Signs, Pavement Markings [4]	N / A	N / A	N / A
7	MacArthur Drive north of Linne Road	12	1 (1977)	Yes	Yes	Warning Signs, Pavement Markings [4]	N / A	N / A	N / A

Notes:
[1] Crossings shown here would experience the largest increase in traffic as a result of the project (among 11 crossings shown on Figure 5).

[2] Source: Federal Railroad Administration Railroad Crossing inventory found at: Crossing Inventory Lookup | FRA (dot.gov)

[3] Crossings are situated less than 75 feet west of the edge of the SR 33 intersection. Warning signs and pavement markings clearly visible on eastbound approach to crossings. Warning signs (for westbound traffic) are present immediately east of each crossing, but not readily visible to northbound left-turn and southbound right-turning traffic.

[4] Crossings are situated 50 feet north of Linne Road intersection. Warning signs and pavement markings clearly visible on southbound approach to crossings. Warning signs (for northbound traffic) are present immediately east of each crossing, but not readily visible to eastbound left-turn and westbound right-turning traffic.

HV% = Percent of Average Daily Traffic consisting Heavy Duty trucks

N / A = No traffic volume information is available.

Source: Fehr & Peers, 2024.

Initial Phase

As shown in Table 28, Initial Phase would add 700 vehicles per day or less to the four crossings for which traffic forecasts were developed. Although forecasts were not developed for the other three locations, they would generally be used to a lesser degree by project trips. Because the level of traffic added by Initial Phase trips would be modest (relative to the existing volume) or would not cause the crossing to carry substantial levels of traffic overall, increased hazards at these railroad crossings are deemed **less than significant** and no mitigation is required.

Project Buildout

As indicated in Table 28, Project Buildout would add between 4,000 and 5,000 trips per day to the two at-grade crossings on Chrisman Road between Linne Road and Eleventh Street. Project-added traffic would be modest at the other crossings. Because the project would add considerable levels of traffic to the two Chrisman Road at-grade railroad crossings, there is a potential for increased conflicts between vehicles and trains, which is considered a **significant** impact.

The *City of Tracy Draft Infrastructure Master Plan Impact Fee Nexus Study* identifies the widening *of* Chrisman Road to four lanes (across railroad tracks) at Schulte Road. However, the widening of Chrisman Road north of Linne Road is not included.

Mitigation TR-11a (Triggered by Subsequent Phases of Development Beyond Initial Phase): *The project applicant shall make a fair share contribution to the City of Tracy to cover its proportionate cost to upgrade the Chrisman Road at Schulte Road at-grade railroad crossing.*

Mitigation TR-11b (Triggered by Subsequent Phases of Development Beyond Initial Phase): *The project applicant shall work with Union Pacific Railroad and CPUC to determine the need for appropriate upgrades to the Chrisman Road at-grade crossing north of Linne Road and to implement those improvements during subsequent phases beyond initial phase.*

Improvements are not warranted at the at-grade crossing on Durham Ferry Road west of SR 33 or Lehman Road west of SR 33 because there have not been any reported collisions involving trains at it and project-added traffic would be modest. Improvements are not warranted at the at-grade crossing on MacArthur Drive north of Linne Road as there has been just one reported collision in the past 48 years.

The types of improvements will vary by location. It may also be appropriate to install pedestrian/bicycle facilities and gates approaching/departing the crossing. Some locations may be candidates for constructing a narrow raised median approaching the at-grade crossing to physically prohibit motorists from being able drive around gate arms that are down. Where crossings are adjacent to an intersection and that intersection is planned to be

signalized, coordinated traffic signal timing plans with the railroad crossing pre-emption would likely be necessary. The improvements described above would require approvals from multiple agencies and public utilities. There is no guarantee they will support the identified improvements.

Impact TR-12: Increased Hazards Associated with Emergency Vehicle Response Times

The project includes an on-site fire station within Initial Phase (east of Chrisman Road) and robust on-site fire water distribution system and design elements intended to prevent fires. The project would also be situated within the Tracy Rural Fire District's and the San Joaquin County Sheriff's District. Station 93 is situated on Durham Ferry Road four miles to the east of the project site. Sutter Tracy Community Hospital is located in downtown Tracy, seven miles away. The Pacific Gateway LTA documents how improvements are available to maintain acceptable levels of service (per the San Joaquin County General Plan) at roadways and intersections throughout the study area under Existing Plus Project Buildout conditions. Thus, emergency vehicles are not expected to experience undue delays due to increased traffic in the area. This is a **less than significant** impact and no mitigation is required.

Cumulative Project Impacts and Mitigation Measures

This section presents the cumulatively considerable significant project impacts. Impacts are identified only for Project Buildout (and not for Initial Phase) given the cumulative nature of the analysis.

Roadway Network VMT

Impact TR-13: Cumulatively Significant Adverse VMT Impacts Caused by Warehouse and Office Land Use Components

Table 29 shows that the unincorporated countywide average VMT per employee is 29.5 under cumulative conditions. The significance threshold is 85% of that value or 25.1 VMT per employee. The last row shows the warehouse and office VMT per employee under cumulative conditions. This table indicates that both the warehouse and office uses would have VMT per employee averages that exceed the cumulative unincorporated Countywide average. Accordingly, this impact is considered cumulatively **significant**.

Table 29
Comparison of Warehouse and Business Park Cumulative Auto VMT per Employee against Significance Threshold

Scenario	Measure	HBW Auto VMT per Employee [1]	
		Warehouse Uses	Office Uses
Unincorporated Countywide Average – Cumulative	VMT Generated by Autos	29.5 VMT per employee	
85% of Unincorporated Countywide Average – Cumulative		25.1 VMT per employee	
Cumulative Project Buildout		43.3 VMT per employee	62.1 VMT per employee

1 Calculated using the 2046 SJCOG travel demand model. VMT shown is only associated with employee travel between the project and home.

Source: Fehr & Peers, 2024.

Mitigation TR-13 (Project Buildout): *Implement Mitigation Measures TR-1a (Rule 9410) and TR-1b (TDM Strategies).*

The effectiveness of these measures would be similar under both baseline and cumulative conditions. The main difference is that there is likely to be more robust transit service in the region under cumulative conditions. This would enable the private shuttle to become more effective.

Impact TR-14 Cumulatively Significant Adverse VMT Impacts Caused by University Project Land Use Component

The university's location a considerable distance from any existing or planned off-site student housing or staff residence locations suggests that the university would not be considered a "VMT efficient" land use. The proposed university would be much less transportation efficient than the other four-year private university (University of Pacific) in Central Stockton. Buildout of the university is considered non-VMT efficient for reasons cited above. Accordingly, this impact is considered cumulatively **significant**.

Mitigation TR-14 (University Buildout): *Implement Mitigation Measure TR-1a (Rule 9410) and TDM Strategies 1, 2, 4, and 5 from Mitigation Measure TR-1b (TDM Strategies).*

Impact TR-15 Cumulatively Less Than Significant VMT Impacts Caused by Retail, Restaurant, Gas Station, Hotel, VFW Tracy Post Project, and Electrified Truck and Auto Charging Lots Land Use Components

Similar to the finding under Existing Plus Project Buildout conditions, the project's retail, restaurant, gas station, hotel, VFW Tracy post project, and electrified truck and auto charging lots are considered local-serving uses given that they will support the project's combined 14,953 warehouse employees, 372 office employees, and 5,000 university students (plus staff). Additionally, these uses are situated in close proximity to SR 132 and I-580, thereby allowing short detours off each freeway for refueling/recharging. In this sense, they are 'local-serving' to these freeways. No further VMT analysis of these uses is conducted as their VMT impacts are **less than significant** and no mitigation is required

Impact TR-16: Cumulatively Less Than Significant VMT Impacts Associated with Widening Chrisman Road Along Project Frontage and MacArthur Drive within the project site

The section of Chapter 6 entitled "Project Roadway Widening Effect on VMT" concluded that under cumulative conditions, the widening of Chrisman Road along the project frontage and the widening of MacArthur Drive within the project site would not cause a net increase in travel and VMT. This conclusion was reached by adding both roadway improvements to the City of Tracy cumulative travel demand model and calculating the total VMT generated within the model boundary without and with the widenings in place. That same analysis also included a discussion of the project's potential to generate long-term induced VMT due to these roadway widenings. No applicable evaluations were available to perform such analyses. Accordingly, this impact is cumulatively **less than significant,** and no mitigation is required.

Bicycle and Pedestrian Facilities

Impact TR-17: Conflicts with Adopted Policies, Plans, or Programs Regarding Bicycle or Pedestrian Facilities under Cumulative Conditions

The project would not eliminate or adversely affect a planned bikeway or pedestrian facility in a way that would preclude its construction. However, it would cause an inconsistency with several San Joaquin County General Plan policies (1.3, 1.6, 1.10, 2.5, and 2.7) pertaining to providing multimodal transportation options, reducing auto dependency, and eliminating gaps in the bikeway system. Under cumulative conditions, there would continue to be no dedicated bicycle facilities between the project site and residential areas to the north (i.e., north of Linne Road). However, additional development is expected to occur, which will further increase the need for bicycle and pedestrian facilities. Given the project's large number of employees and students and the lack of any planned bicycle facilities to connect the project site with residential areas to the north, this impact is considered cumulatively **significant**.

It is unlikely that project employees would choose to walk from the nearest residential areas in South Tracy. Thus, the need for connecting pedestrian facilities is much less than the need for bicycle facility connectivity.

Mitigation TR-17 (Project Buildout): *Implement TDM Strategy 3 from Mitigation Measure TR-1b (TDM Strategies).*

Transit Services and Facilities

Impact TR-18: Cumulatively Inadequate Transit Service to Meet Demand

The project would not eliminate or adversely affect planned transit access as no service is currently provided or planned in the immediate project vicinity. Background development in the region will increase the demand for fixed-route bus service, and the project would further contribute to that increased demand. The lack of any existing or planned fixed-route bus service to the area would lead to an unmet demand for transit service. This impact is considered cumulatively **significant**.

Mitigation TR-18 (Project Buildout): *Implement TDM Strategies 4 and 5 from Mitigation Measure TR-1b (TDM Strategies)*

Roadway Safety / Design Standards

Impact TR-19: Freeway Off-Ramp and State Highway Intersection Queues Exceed Available Storage Under Cumulative Conditions

Table 15 shows the AM and PM peak hour 95th percentile queues at queuing study locations (located on the State Highway System) under Cumulative Plus Project Buildout conditions. As shown, four of the seven locations shown in this table would experience queuing that exceeds the available storage. This impact would be **significant**.

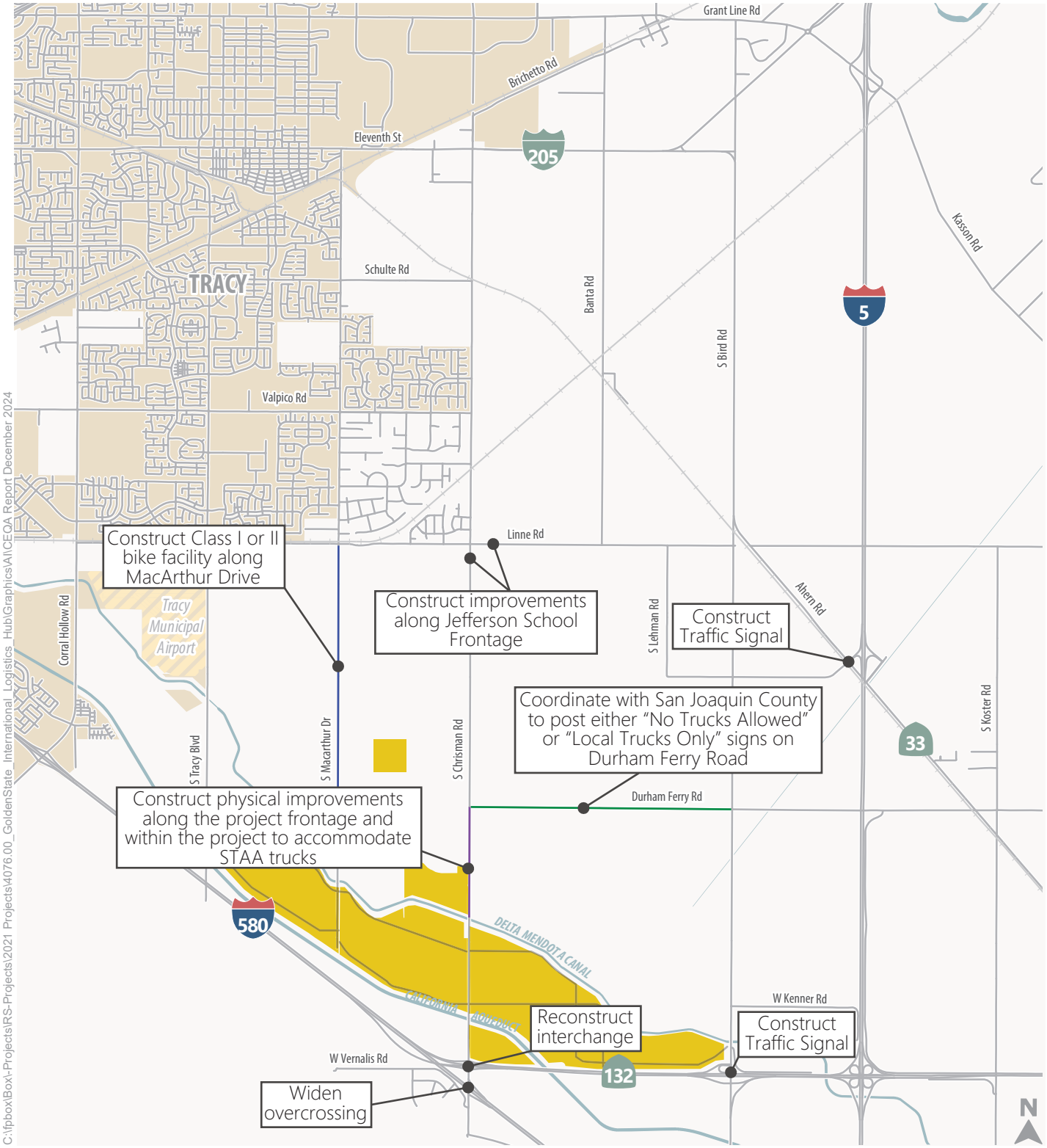
Mitigation TR-19 (Project Buildout): *The project applicant shall construct the geometric improvements described in **Table 30** (or an equivalent or more effective set of alternate improvements) and shown on **Figure 23**.*

Table 30:
Recommended Improvements to Address Queuing Deficiencies – Cumulative Plus Project Conditions

#	Facility	Lead Agency	Description of Improvement(s)
		Interchange Improvements	
SR 132/Chrisman Road interchange		Caltrans	Same as existing plus project improvement.
		Intersection Improvements	
2	Ahern Road/SR 33/I-5 SB Ramps/Lehman Road	Caltrans	Install traffic signal and widen westbound and eastbound approaches to consist of a left-turn lane and a shared through/right lane. [1]
14	Chrisman Road/SR 132 WB Ramps	Caltrans	Same as existing plus project improvement.
15	Chrisman Road/SR 132 EB Ramps	Caltrans	Same as existing plus project improvement.
16	Chrisman Road/I-580 WB Off-Ramp	Caltrans	Widening of existing overcrossing or construction of second parallel overcrossing likely needed for lane alignment with widened SR 132/Chrisman Road interchange.
17	Chrisman Road/I-580 EB On-Ramp	Caltrans	
19.	Bird Road/SR 132 WB Ramps	Caltrans	Signalize intersection with lane configurations present.

Notes:
[1] May require widening of at-grade railroad crossing situated on Lehman Road just west of SR 33.
Additional improvements may be required on County- or City-maintained roadways to maintain consistency with applicable LOS policy goals.
Source: Fehr & Peers, 2024.

The effectiveness of these improvements was analyzed under Cumulative Plus Project Buildout conditions using the SimTraffic microsimulation model. The results are shown in **Table 31** and indicate that the proposed improvements would reduce the extent of queuing such that all 95th percentile queues would be less than the available storage. Refer to **Appendix D** of separately bound appendix for technical calculations.



Project Site City Boundary

Note:
Further discussions with various agencies are required to determine the precise type of improvements, timing, and financial responsibility.

The Pacific Gateway Local Transportation Analysis identifies various other intersection and roadway improvements that are required to maintain the County's General Plan LOS policy. Those will be project responsibilities, but are not considered mitigations for significant impacts under CEQA.

Figure 23

Recommended Physical Mitigation Measures for Significant Impacts under Cumulative Plus Project Buildout Conditions

Table 31:
95th Percentile Vehicle Queues – Cumulative Plus Project Conditions with Improvements

Intersection	Movement	Available Storage[1]	95th Percentile Queue (ft.) [2]					
			Cumulative No Project Conditions		Cumulative Plus Project Buildout Conditions			
					Without Improvements		With Improvements[3]	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
10. Ahern Road/SR 33/I-5 SB Ramps/Lehman Road	WB Off-Ramp LT/TH/RT [4]	1,250 ft.	153 ft.	**1,602 ft.**	240 ft.	**1,623 ft.**	147 ft.	281 ft.
	SB LT	175 ft.	8 ft.	43 ft.	9 ft.	37 ft.	20 ft.	32 ft.
14. Chrisman Road/SR 132 WB Ramps	WB Off-Ramp LT/TH	850 ft. [4]	96 ft.	40 ft.	**> 1,500 ft.**	**> 1,500 ft.**	38 ft.	40 ft.
	WB Off-Ramp RT	850 ft. [4]	116 ft.	77 ft.	**> 1,500 ft.**	**> 1,500 ft.**	339 ft.	242 ft.
15. Chrisman Road/SR 132 EB Ramps	EB Off-Ramp LT	825 ft. [4]	66 ft.	132 ft.	**> 1,500 ft.**	**> 1,500 ft.**	608 ft.	511 ft.
16. Chrisman Road/I-580 WB Ramps	WB Off-Ramp LT/TH	1,160 ft.	13 ft.	13 ft.	332 ft.	**1,406 ft.**	116 ft.	7 ft.
	WB Off-Ramp RT	1,160 ft.	-	-	65 ft.	165 ft.	79 ft.	7 ft.
19. Bird Road/SR 132 WB Ramps	WB Off-Ramp LT	1,485 ft.	17 ft.	17 ft.	**> 1,500 ft.**	**> 1,500 ft.**	416 ft.	373 ft.

Notes:
1. Defined as distance to the freeway off-ramp gore point.
2. 95th percentile queue based on output from SimTraffic model.
3. Refer to Table 30 for description of geometric modifications.
4. Amount of storage to be provided is unknown. For analysis purposes, it is assumed to be identical to existing conditions.
Bolded values represent a 95th percentile queue length that exceeds the available storage.
"> 1,500 " is shown to represent queuing that spills onto freeway mainline a considerable distance.
Source: Fehr & Peers, 2024.

Impact TR-20: Increased Hazards due to Geometric Design Features under Cumulative Conditions

Additional development is expected to occur in the project vicinity under cumulative conditions. That development, some of which is industrial-related, will increase traffic levels on roadways in the project vicinity. Development of the project would generate a substantial amount of new truck trips, which have greater turning radius requirements, pavement deterioration effects, and vehicle storage requirements than passenger vehicles. The project's contribution toward cumulative traffic growth and its proportion of trucks added is considered cumulatively considerable. Therefore, this impact is considered cumulatively **significant**.

Mitigation TR-20 (Project Buildout): *Implement Mitigation TR-7 (Construct Physical Improvements to San Joaquin County Design Standards).*

Impact TR-21: Increased Hazards due to Incompatible Land Uses on Durham Ferry Road under Cumulative Conditions

Additional development is expected to occur in the project vicinity under cumulative conditions. That development is expected to add approximately 100 trucks per day to Durham Ferry Road east of Chrisman Road. Project buildout (assuming no restrictions in truck travel are posted and enforced) would add an additional 220 trucks per day. There are no truck weight restriction signs posted on Durham Ferry Road. As shown on Figure 6, "Commercial Vehicles Over 7 Tons Prohibited" signs are posted in each direction of Bird Road between Durham Ferry Road and Lehman Road. Thus, trucks of any weight traveling to/from the project site and I-5 to the north could use the I-5/SR 33 interchange via Durham Ferry Road. Trucks weighing less than seven tons could use Lehman Road to Bird Road. Given that the project contributes about 69% of the growth in truck traffic under cumulative conditions to Durham Ferry Road east of Chrisman Road, its contribution is considered cumulatively considerable. The increase in project truck trips to Durham Ferry Road east of Chrisman Road would create an incompatibility with the adjacent rural residences. This impact is considered cumulatively **significant**.

Mitigation TR-21 (Project Buildout): *Implement Mitigation TR-9 (Post a combination of either "No Trucks Allowed" or "Local Trucks only" signs on Durham Ferry Road between Chrisman Road and SR 33).*

The addition of these signs would discourage trucks from using this segment of Durham Ferry Road east of Chrisman Road. Depending on compliance with them, enforcement activities could also be necessary.

Impact TR-22 Increased Hazards due to Incompatible Land Uses near Chrisman Road/Linne Road Intersection under Cumulative Conditions

Project increases in traffic along the frontages of Jefferson School are considerable when compared to overall traffic growth on this segment. Project trips are likely to cause conflicts with motorists entering/exiting Jefferson School to drop-off or pick-up students. This impact is considered cumulatively **significant**.

Mitigation TR-22 (Project Buildout): *Implement Mitigation TR-10 (Construct improvements along Jefferson School frontages).*

Impact TR-23: Increased Hazards due to Additional Vehicle/Train Conflicts under Cumulative Conditions

Additional development is expected to occur in the project vicinity under cumulative conditions. That development is expected to add vehicle trips to the various at-grade railroad crossings in the project vicinity. However, the project's contribution of passenger vehicle and truck trips to those at-grade railroad crossings would be considerable based on the overall level of expected background growth and amount of project traffic. Because the project would add cumulatively considerable levels of traffic to the two Chrisman Road crossings shown in Table 28, the potential for increased conflicts between vehicles and trains at these two crossings is considered a cumulatively **significant** impact.

Mitigation TR-24 (Project Buildout): *Implement Mitigation Measures TR-11a and 11b (Fair Share Contributions and At-grade Crossing Upgrades).*

Impact TR-25: Increased Hazards Associated with Emergency Vehicle Response Times

The project includes an on-site fire station and robust on-site fire water distribution system and design elements intended to prevent fires. The project would also be situated within the Tracy Rural Fire District and the San Joaquin County Sheriff's District. Station 93 is situated on Durham Ferry Road four miles to the east of the project site. Sutter Tracy Community Hospital is located in downtown Tracy, seven miles away. The Pacific Gateway LTA documents how improvements are available to maintain acceptable levels of service (per the San Joaquin County General Plan) at roadways and intersections throughout the study area under Cumulative Plus Project Buildout conditions. That scenario contemplates traffic from additional development expected to occur in the project vicinity under cumulative conditions. Emergency vehicles are not expected to experience undue delays due to increased traffic in the area under cumulative conditions. This is a cumulatively **less than significant** impact and no mitigation is required.

Construction Impacts Discussion

Project development would entail extensive construction to install backbone site roadway infrastructure, erect industrial and other buildings, and implement other project features. Improvements would be required to Chrisman Road along the project frontage, Bird Road, MacArthur Drive, and Tracy Boulevard. Off-site improvements are required at several different intersections and roadways as discussed previously. Among the required improvements are replacement bridges across the California Aqueduct and Delta Mendota Canal.

The initial phase of project development (i.e., partial buildout of Gateway East and University Center) would only require improvements at the six access points (two signalized accesses and four unsignalized accesses) along Chrisman Road serving these uses. **Image 7** shows Kier + Wright improvement drawings along Chrisman Road at Gateway East. As shown, left- and right-turns lanes would be added to Chrisman Road at the B Street and Private Industrial Driveway signalized intersections, requiring widening of Chrisman Road. However, that widening would not require any modifications to the California Aqueduct bridge located just south of B Street. Additionally, construction of these access points would not likely require any sustained closures of Chrisman Road. Temporary lane shifts, and manual traffic control during workdays may be be required.

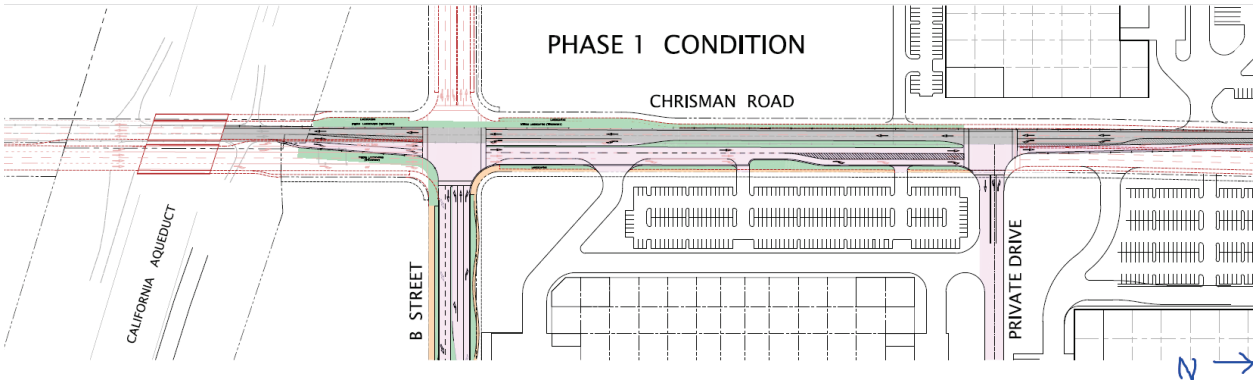


Image 7: Kier + Wright Improvement Drawings for Initial Phase Access from Chrisman Road (north is facing to the right)

As the project develops beyond the initial phase, additional on-site and off-site construction will be necessary. Due to the uncertainty of exact location and timing of subsequent phases, it is not possible to conclusively describe and evaluate what types of construction effects could occur. Supplemental studies, development of traffic control plans, etc. would be needed at that time.

*Figure not OCR compatible

It is recommended that the project be conditioned to develop a Construction Traffic Management Plan. An important part of that plan will relate to construction staging of bridge replacements of the California Aqueduct and Delta Mendota Canal, and the need for some travel lanes to remain open. That plan should include performance standards that should be met throughout project construction. Specific performance standards that could be considered include:

- Construction-related trucks operate only on designated truck routes (i.e., not on Durham Ferry Road) and do not idle or stage on any public streets.
- Construction-related employees do not park along public streets.
- Public streets are regularly maintained to be free of rocks and dirt.
- Construction hours and days of the week adhere to applicable policies.

The Construction Traffic Management Plan and any detour or construction traffic handling plans would be subject to review and approval by the San Joaquin County Department of Public Works.



Technical Appendix to

Final CEQA Transportation Impact Analysis Report

For Pacific Gateway

Prepared for:

Pacific Gateway CA, LLC

Sept 2025

RS21-4076

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Appendix A: Trip Distribution Model

Model Calibration for Central Valley Gateway (June 2021 Conditions)

Purpose: This model uses a variety of demographic data to develop an independent estimate of expected commute shares to CVG for each of the 15 cities shown. This is then compared to Streetlight Data for calibration purposes.

	Effect of variables
Travel Distance Effectiveness Variable (short)	1.3 Shorter commute distances have an added attraction for jobs paying $50,000/yr or less.
Discount for Well Above Average Education	0.4 Stiff penalty due to much lower likelihood that employed persons from that city will work at site.
Credit for for Well Below Average Education	1.1 Slight credit given for larger percentage of population without college decrease.
	1

Area Name	Employed Persons	% of Households Making $50,000 per year or less	Percent of Population Age 20-40	Percent of Population with Bachelors or Higher	Census Mean Travel Time to Work (min)	Employed Persons Age 20-40 YO and without Bachelors	Travel Distance (mi)	Travel Dist as % of Avg.	Factored Population	CVG Estimated Share	StreetLight Data Inc. Predicted Share
Lathrop city	9,800	24%	30%	19%	44.50	2,381	14.96	57%	4,776	3.06%	5%
Lodi city	29,500	48%	27%	21%	26.30	6,292	39.00	149%	4,231	2.71%	2%
Manteca city	38,300	36%	27%	17%	39.80	8,583	16.80	64%	15,327	9.82%	12%
Ripon city	7,700	29%	23%	22%	27.40	1,381	22.80	87%	1,652	1.06%	2%
Stockton city	125,600	36%	29%	19%	31.90	29,503	23.80	91%	37,190	23.83%	23%
Tracy city	44,700	20%	27%	22%	44.50	9,414	4.90	19%	52,397	33.57%	31%
Ceres city	20,200	45%	30%	11%	32.70	5,393	34.60	132%	4,497	2.88%	3%
Modesto city	91,200	33%	28%	19%	28.70	20,684	30.60	117%	19,499	12.49%	11%
Oakdale city	10,100	46%	24%	20%	37.70	1,939	39.60	151%	1,284	0.82%	0%
Patterson city	9,900	35%	28%	14%	45.60	2,384	29.00	111%	2,371	1.52%	3%
Riverbank city	10,400	35%	32%	14%	29.60	2,862	44.60	170%	1,851	1.19%	0%
Turlock city	32,400	34%	29%	25%	26.00	7,047	44.60	170%	4,144	2.65%	2%
Pleasanton city	38,500	14%	21%	66%	35.60	2,749	26.20	100%	1,431	0.92%	
Livermore city	47,300	18%	25%	45%	32.40	6,504	18.20	69%	3,898	2.50%	6%
Dublin city	33,000	13%	30%	68%	41.00	3,168	28.20	108%	1,532	0.98%	
	548,600			151607		110,286	2892172		156,080	100%	100%
			Weighted Avg.	28%		Weighted Avg.	26.2				

Source of Employment Levels: CA Employment Development Department (September 2022)
p://www.labormarketinfo.edd.ca.g

Source of Household Income (2018-2021 Inflation Adjusted Annual Average Household Income)
https://data.census.gov/cedsci

Source of Education and TT to work:
https://www.census.gov/quickfacts/fact/table

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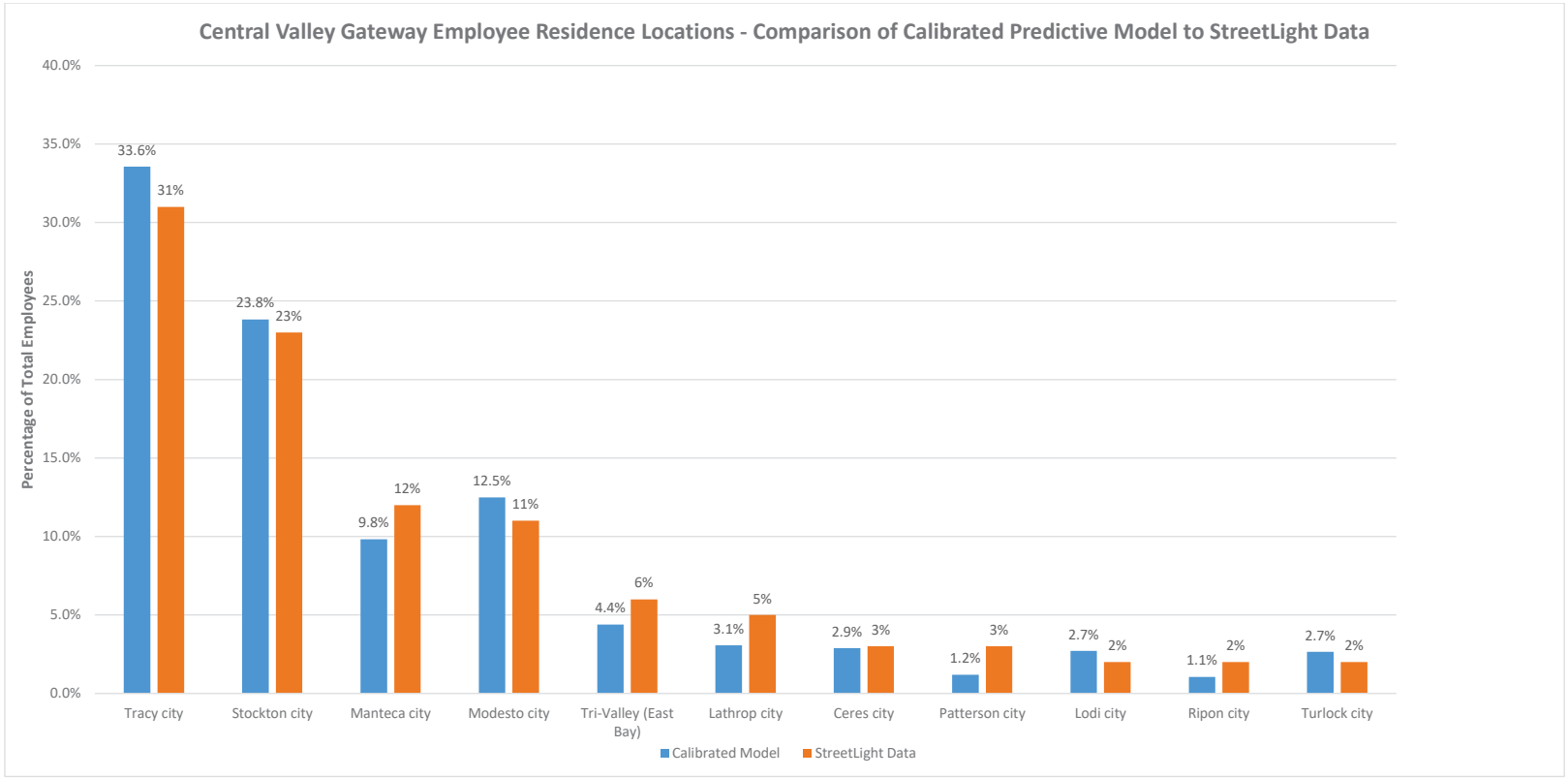

Explanation of outliers:
1. City of Tracy share overestimated likely due to excess influence (within the model framework) of very short commute distance.

Conclusion:
This chart indicates that this model closely matches the data collected through StreetLight Data, Inc for employees at CVG. Accordingly, the model is suitable to be applied to an alternate warehouse/logistics location within the same geographic proximity.

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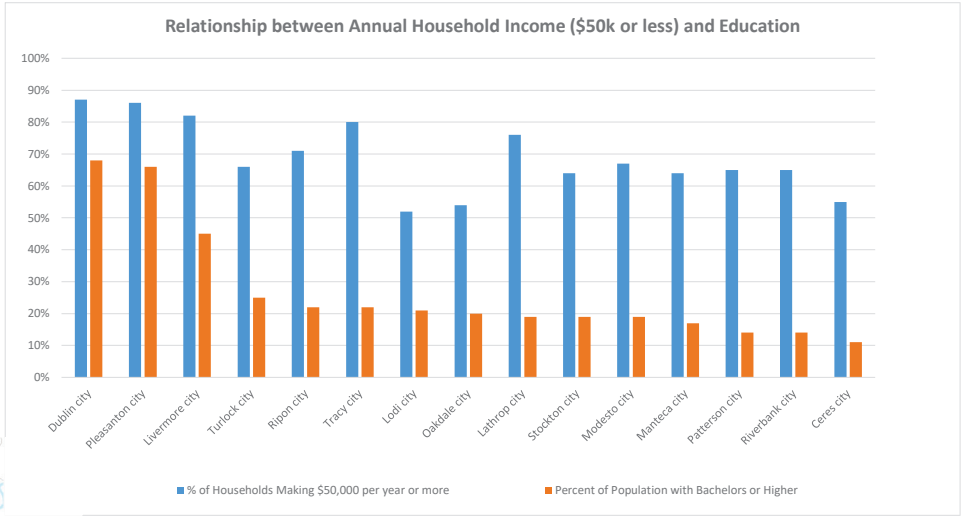
Correlation of Household Income and Education

	% of Households Making $50,000 per year or more	Percent of Population with Bachelors or Higher
Dublin city	87%	68%
Pleasanton city	86%	66%
Livermore city	82%	45%
Turlock city	66%	25%
Ripon city	71%	22%
Tracy city	80%	22%
Lodi city	52%	21%
Oakdale city	54%	20%
Lathrop city	76%	19%
Stockton city	64%	19%
Modesto city	67%	19%
Manteca city	64%	17%
Patterson city	65%	14%
Riverbank city	65%	14%
Ceres city	55%	11%
Correlation Coeff =	0.763341	



40% of square footage in NEI. 60% in IPC and PP.



Correlation Coefficient 0.763341

A correlation coefficient close to 1 indicates a strong correlation between the two datasets. Conversely, a large negative correlation coefficient represents an opposing correlation, while a correlation near zero represents no relationship between the datasets.

This outcome explains why only education level (and not household income) was used in the model calibration.

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Model Application for Proposed Project

Travel Distance Effectiveness Variable (short)	1.3
Discount for Well Above Average Education	0.4
Credit for for Well Below Average Education	1.1

Effect of variables
1.3 Shorter commute distances have an added attraction for jobs paying
0.4 Stiff penalty due to much lower likelihood that employed persons fron
1.1 Slight credit given for larger (above-average) percentage of populatic

Area Name	Employed Persons	Percent of Population Age 20-40	Percent of Population with Bachelors or Higher	Employed Persons Age 20-40 O and without Bachelors	Interim Share	Travel Distance to PP (mi)	% of Avg. Travel Dist	Factored Population	Proposed Project Share	Calibrated Model Share for CVG	Model Predicted Difference in Share due to new project location	StreetLight Inc. Estimated Share for CVG	Distance-Adjusted StreetLight Estimate for Proposed Project
Lathrop city	9,800	30%	19%	2,381	2%	16.00	63%	4,316	3.42%	3.06%	0.36%	5%	5.4%
Lodi city	29,500	27%	21%	6,292	6%	40.00	158%	3,987	3.16%	2.71%	0.44%	2%	2.4%
Manteca city	38,300	27%	17%	8,583	8%	18.00	71%	13,826	10.94%	9.82%	1.12%	12%	13.1%
Ripon city	7,700	23%	22%	1,381	1%	18.00	71%	2,023	1.60%	1.06%	0.54%	2%	2.5%
Stockton city	125,600	29%	19%	29,503	27%	25.00	99%	26,322	20.83%	23.83%	-3.00%	23%	20.0%
Tracy city	44,700	27%	22%	9,414	9%	7.00	28%	35,449	28.05%	33.57%	-5.52%	31%	25.5%
Ceres city	20,200	30%	11%	5,393	5%	29.00	114%	5,185	4.10%	2.88%	1.22%	3%	4.2%
Modesto city	91,200	28%	19%	20,684	19%	24.00	95%	19,222	15.21%	12.49%	2.72%	11%	13.7%
Oakdale city	10,100	24%	20%	1,939	2%	39.00	154%	1,260	1.00%	0.82%	0.17%	0%	0.2%
Patterson city	9,900	28%	14%	2,384	2%	22.00	87%	2,417	1.91%	1.52%	0.39%	3%	3.4%
Riverbank city	10,400	32%	14%	2,862	3%	34.00	134%	2,134	1.69%	1.19%	0.50%	0%	0.5%
Turlock city	32,400	29%	25%	7,047	6%	38.00	150%	4,700	3.72%	2.65%	1.06%	2%	3.1%
Pleasanton city	38,500	21%	66%	2,749	2%	34.00	134%	1,066	0.84%	0.92%	-0.07%		
Livermore city	47,300	25%	45%	6,504	6%	26.00	103%	3,297	2.61%	2.50%	0.11%	6.0%	6.0%
Dublin city	33,000	30%	68%	3,168	3%	36.00	142%	1,160	0.92%	0.98%	-0.06%		
	548,600		151607	110,286	100%	2795247		126,363	100%	100%	0%	100%	100%
		WEIGHTED AVG	28%	WEIGHTED AVG	WEIGHTE	25.3		Note 1			Note 2	Note 3	

Conclusions:
1. The proposed project location results in a slight decrease in average commute distance versus CVG (25.3 vs. 26.2 miles), which is a 3.4% decrease.
2. relative to CVG, proposed project location results in the followng shifts in employee residence locations:
 - Tracy share decreases from 31% to 26% due to increased commute distance (and intervening opportunities)
 - Modesto share increases from 11% to 14% due to decreased commute distance.

Note 1: Applies the variables above (on a city-specific level) to the employed persons age 20-40 with
Note 2: Changes above or below 0.5% are highlighted in orange or green
Note 3: These totals were extrapolated from the StreetLight Data sum of 98% to 100%.

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Appendix B: Existing and Existing Plus Project Vehicle Queuing Calculations

SimTraffic Existing Conditions
GoldenSta AM Peak Hour

1: Chrisman Rd & 11th St Performance by movement

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0	0	0	0	0	0	0	0	0.1	0	0.4	0	0	0	0.5
Denied Del/Veh (s)	0	0.1	0	0.3	0	0	0	0	1.4	1.4	3.4	0.1	0.1	0.1	0.8
Total Delay (hr)	0.1	0.4	2.4	0.1	0	3.7	3.8	0	1.6	0.4	1.2	0.1	0.1	0	14.1
Total Del/Veh (s)	**42.7**	**42.2**	**19**	**5.2**	**44.6**	**49.2**	**15.2**	**2.6**	**38.2**	**42.6**	**9**	**29.2**	**28.6**	**2.2**	**20.3**
Stop Delay (hr)	0.1	0.4	1.7	0.1	0	3.2	2	0	1.3	0.3	0.3	0.1	0.1	0	9.6
Stop Del/Veh (s)	40.6	38.7	13.3	4.2	39.6	42.1	8	1.3	29.8	31.1	2.4	26.7	24.1	0.6	13.8
Total Stops	7	31	241	44	4	258	346	12	127	27	69	14	13	1	1194
Stop/Veh	0.88	0.89	0.54	0.57	1	0.95	0.39	0.35	0.83	0.84	0.14	0.78	0.72	0.05	0.48
Travel Dist (mi)	1	4.5	57.8	9.8	0.6	41.9	140.1	5.4	38.9	8	118.7	4.4	4.5	5	440.6
Travel Time (hr)	0.1	0.5	3.6	0.4	0.1	4.9	6.3	0.2	2.7	0.6	4.6	0.3	0.3	0.2	24.8
Avg Speed (mph)	8	8	16	23	9	9	22	31	15	14	28	16	17	31	18
Fuel Used (gal)	0	0.2	1.5	0.2	0	1.5	3.1	0.1	1.1	0.2	2.7	0.1	0.1	0.1	11.1
Fuel Eff. (mpg)	26.4	27.5	38	47.1	29.6	27.1	45.1	57.5	35.4	34.1	44.6	31.4	31.5	39.5	39.7
HC Emissions (g)	0	3	49	18	2	30	92	4	56	8	61	7	4	9	343
CO Emissions (g)	7	63	983	324	27	705	2178	100	1064	173	1837	128	88	159	7837
NOx Emissions (g)	0	6	129	44	3	63	250	10	134	20	178	18	11	24	892
Vehicles Entered	8	34	446	76	4	266	890	34	151	31	477	18	18	21	2474
Vehicles Exited	8	34	447	76	4	267	892	34	152	32	477	18	18	21	2480
Hourly Exit Rate	**8**	**34**	**447**	**76**	**4**	**267**	**892**	**34**	**152**	**32**	**477**	**18**	**18**	**21**	**2480**
Input Volume	7	37	456	74	4	272	891	34	150	30	482	20	19	19	2495
% of Volume	110	91	98	103	100	98	100	99	102	107	99	91	96	112	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Density (ft/veh)															413
Occupancy (veh)	0	1	4	0	0	5	6	0	3	1	4	0	0	0	24

10: Ahern Rd & Lehman Rd/SB I-5 Ramps Performance by movement

Movement	EBL	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBT	All
Denied Delay (hr)	0	0	0	0	0	0	0	0	0	0	0
Denied Del/Veh (s)	0.1	4.1	0.2	0.3	2.4	0	0.1	0	0	0.1	0.4
Total Delay (hr)	0	0	0.2	0	0	0	0	0.1	0	0	0.3
Total Del/Veh (s)	**5.8**	**3.2**	**7**	**6.8**	**5.6**	**0.8**	**1.1**	**1.4**	**0.7**	**0.9**	**2.9**
Stop Delay (hr)	0	0	0.1	0	0	0	0	0	0	0	0.2
Stop Del/Veh (s)	3.9	3.1	4.5	3.8	4.4	0	0.1	0	0	0	1.4
Total Stops	3	13	88	8	29	0	0	0	0	0	141
Stop/Veh	1	1	0.99	1	1.12	0	0	0	0	0	0.33
Travel Dist (mi)	0.5	2.2	21.3	1.8	6.3	0.2	1.4	36.2	1.6	20.5	92
Travel Time (hr)	0	0.1	1	0.1	0.3	0	0	0.7	0	0.4	2.8
Avg Speed (mph)	22	23	21	21	21	40	40	50	41	53	34
Fuel Used (gal)	0	0.1	0.6	0.1	0.2	0	0	1.1	0	0.6	2.7
Fuel Eff. (mpg)	42.6	39.4	37.9	36.4	32.6	33.8	41.5	32.8	44.6	33.5	34.5
HC Emissions (g)	0	3	22	2	28	0	0	34	4	49	144
CO Emissions (g)	6	41	377	38	423	4	22	1126	82	1129	3248
NOx Emissions (g)	1	7	57	6	68	0	2	115	10	135	400
Vehicles Entered	3	13	88	8	26	1	7	175	8	93	422
Vehicles Exited	3	13	88	8	26	1	7	175	8	93	422
Hourly Exit Rate	**3**	**13**	**88**	**8**	**26**	**1**	**7**	**175**	**8**	**93**	**422**
Input Volume	4	12	91	8	24	1	7	176	8	93	424
% of Volume	75	106	97	97	109	100	100	100	97	100	99
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)											3209
Occupancy (veh)	0	0	1	0	0	0	0	1	0	0	3

11: Ahern Rd & NB I-5 Ramps Performance by movement

Movement	WBL	WBT	WBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0	0	0	0	0	0	0	0
Denied Del/Veh (s)	0		0	0.2	0.2	0	0	0.1
Total Delay (hr)	0	0	0	0.1	0	0	0.1	0.2
Total Del/Veh (s)	**5**		**2.8**	**1.7**	**0.5**	**2.2**	**1.2**	**1.3**
Stop Delay (hr)	0	0	0	0	0	0	0	0
Stop Del/Veh (s)	4		2.8	0	0	1.2	0.3	0.2
Total Stops	1	0	8	0	0	5	0	14
Stop/Veh	1		1	0	0	0.28	0	0.03
Travel Dist (mi)	0.3	0	1.5	46.7	25.1	3.6	36.8	114
Travel Time (hr)	0	0	0.1	0.9	0.5	0.1	0.9	2.6
Avg Speed (mph)	27	27	23	51	47	36	40	45
Fuel Used (gal)	0	0	0.1	1.3	0.6	0.1	1.7	3.8
Fuel Eff. (mpg)	25	12.1	19.3	35.1	42.7	33.6	21.5	29.8
HC Emissions (g)	0	0	10	28	39	17	82	176
CO Emissions (g)	13	3	198	1143	969	338	2544	5209
NOx Emissions (g)	1	0	27	103	106	42	237	515

Vehicles Entered	1	0	7	179	97	17	178	479
Vehicles Exited	1	0	7	180	97	18	178	481
Hourly Exit Rate	**1**	**0**	**7**	**180**	**97**	**18**	**178**	**481**
Input Volume	2	0	7	182	97	23	176	487
% of Volume	50	0	100	99	100	77	101	99
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0
Density (ft/veh)								2203
Occupancy (veh)	0	0	0	1	1	0	1	3

13: Ahern Rd & Durham Ferry Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR	All
Denied Delay (hr)	0	0	0	0	0	0	0	0	0	0	0	0
Denied Del/Veh (s)		0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2
Total Delay (hr)	0	0.1	0	0	0.1	0.1	0	0.7	0.2	0.2	0	1.6
Total Del/Veh (s)		**10**	**3.1**	**7.2**	**8.2**	**4.4**	**6.5**	**14.5**	**7.4**	**13.4**	**5.7**	**10**
Stop Delay (hr)	0	0.1	0	0	0.1	0.1	0	0.2	0.1	0.1	0	0.7
Stop Del/Veh (s)		4.1	2.7	5.4	5.1	4.3	3.2	4.5	4	3.7	3.3	4.3
Total Stops	0	46	4	3	51	98	6	173	119	65	4	569
Stop/Veh		1	1	1	1	1	1	0.99	0.99	1	1	1
Travel Dist (mi)	0.1	8.2	0.6	0.5	7.7	14.8	1.2	35.3	19.5	10.6	0.7	99.3
Travel Time (hr)	0	0.3	0	0	0.4	0.8	0	1.3	0.8	0.4	0	4.2
Avg Speed (mph)	24	27	28	18	18	19	29	27	26	25	26	24
Fuel Used (gal)	0	0.2	0	0	0.2	0.4	0	1	0.5	0.3	0	2.7
Fuel Eff. (mpg)	30.1	46.8	35.4	40.3	36.4	37.5	36.7	36.3	35.6	37.9	32.5	37.2
HC Emissions (g)	1	5	3	0	8	1	0	45	8	23	3	97
CO Emissions (g)	14	132	52	2	139	79	28	1329	481	511	58	2825
NOx Emissions (g)	2	14	8	0	19	7	1	118	25	57	7	259
Vehicles Entered	0	46	4	3	51	97	6	173	119	64	4	567
Vehicles Exited	0	46	4	3	51	98	6	173	119	65	4	569
Hourly Exit Rate	**0**	**46**	**4**	**3**	**51**	**98**	**6**	**173**	**119**	**65**	**4**	**569**
Input Volume	1	43	2	4	51	99	7	168	117	66	2	560
% of Volume	0	107	200	71	100	99	83	103	102	98	200	102
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)												875
Occupancy (veh)	0	0	0	0	0	1	0	1	1	0	0	4

14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp Performance by movement

Movement	WBL	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0	0.1	0	0	0	0	0.1
Denied Del/Veh (s)	0.4	4	0	0	0.2	0.2	0.9
Total Delay (hr)	0	0.1	0	0.1	0.1	0	0.2
Total Del/Veh (s)	**4.7**	**3**	**1.6**	**1.5**	**2.5**	**0.2**	**1.9**
Stop Delay (hr)	0	0	0	0	0	0	0
Stop Del/Veh (s)	2.8	1.6	0.6	0.1	0	0	0.4
Total Stops	7	35	2	0	0	0	44
Stop/Veh	1	0.42	0.2	0	0	0	0.11
Travel Dist (mi)	1.1	13.7	0.7	9.9	7.6	5.3	38.3
Travel Time (hr)	0	0.6	0	0.3	0.2	0.2	1.3
Avg Speed (mph)	28	28	24	37	38	30	32
Fuel Used (gal)	0	0.3	0	0.5	0.2	0.1	1.2
Fuel Eff. (mpg)	43	43.1	51.3	20.8	32.3	45	32.3
HC Emissions (g)	1	46	0	26	74	6	152
CO Emissions (g)	23	824	7	769	1529	189	3341
NOx Emissions (g)	2	113	0	73	179	14	382
Vehicles Entered	7	84	10	143	92	65	401
Vehicles Exited	7	84	10	142	93	64	400
Hourly Exit Rate	**7**	**84**	**10**	**142**	**93**	**64**	**400**
Input Volume	7	84	12	147	92	64	406
% of Volume	97	100	85	97	101	100	98
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							2099
Occupancy (veh)	0	0	0	0	0	0	1

15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp Performance by movement

Movement	EBL	EBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0	0	0	0	0	0	0
Denied Del/Veh (s)	0.1	0.1	0	0	0	0	0
Total Delay (hr)	0	0	0.2	0	0.1	0	0.3
Total Del/Veh (s)	**5.3**	**1.3**	**3.8**	**2.4**	**3.8**	**2.6**	**3.6**
Stop Delay (hr)	0	0	0	0	0	0	0.1
Stop Del/Veh (s)	4.3	1.5	0.2	0.2	1.9	0.4	0.8
Total Stops	14	5	6	0	20	1	46
Stop/Veh	1	1	0.04	0	0.32	0.03	0.17
Travel Dist (mi)	2.3	0.8	13.5	0.7	4.3	2.6	24.1

Travel Time (hr)	0.1	0	0.6	0	0.2	0.1	1
Avg Speed (mph)	27	31	23	20	20	31	24
Fuel Used (gal)	0.1	0	0.8	0	0.1	0.1	1.1
Fuel Eff. (mpg)	41.2	46.4	17.2	28.8	55.8	22.3	22.4
HC Emissions (g)	7	0	40	0	17	15	80
CO Emissions (g)	127	6	1172	14	278	354	1950
NOx Emissions (g)	18	1	113	1	39	38	209
Vehicles Entered	14	5	150	8	63	38	278
Vehicles Exited	14	5	149	8	63	38	277
Hourly Exit Rate	**14**	**5**	**149**	**8**	**63**	**38**	**277**
Input Volume	15	4	154	8	65	35	281
% of Volume	93	118	97	103	97	108	99
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							1742
Occupancy (veh)	0	0	1	0	0	0	1

16: S Chrisman Road & I-580 WB Off Ramp Performance by movement

Movement	WBR	NBT	SBT	All
Denied Delay (hr)	0.1	0	0	0.1
Denied Del/Veh (s)	3.9	0	0	2.4
Total Delay (hr)	0	0	0	0.1
Total Del/Veh (s)	**1.4**	**0.6**	**1.2**	**1.2**
Stop Delay (hr)	0	0	0	0
Stop Del/Veh (s)	0	0	0	0
Total Stops	0	0	0	0
Stop/Veh	0	0	0	0
Travel Dist (mi)	21.2	3.3	3.6	28.1
Travel Time (hr)	0.7	0.1	0.1	0.9
Avg Speed (mph)	35	51	41	37
Fuel Used (gal)	0.4	0.1	0.2	0.7
Fuel Eff. (mpg)	47.9	41.6	21.8	40.9
HC Emissions (g)	37	1	21	59
CO Emissions (g)	751	38	513	1301
NOx Emissions (g)	98	4	54	156
Vehicles Entered	115	33	41	189
Vehicles Exited	114	33	41	188
Hourly Exit Rate	**114**	**33**	**41**	**188**
Input Volume	118	34	39	191
% of Volume	97	96	106	98
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0
Density (ft/veh)				3985
Occupancy (veh)	1	0	0	1

17: S Chrisman Road & I-580 EB On Ramp Performance by movement

Movement	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0	0	0	0	0
Denied Del/Veh (s)	0.1	0.1	0	0	0.1
Total Delay (hr)	0	0	0	0	0
Total Del/Veh (s)	**0.3**	**1.8**	**0.7**	**0.7**	**0.6**
Stop Delay (hr)	0	0	0	0	0
Stop Del/Veh (s)	0	0	0.1	0	0
Total Stops	0	0	1	0	1
Stop/Veh	0	0	0.05	0	0.01
Travel Dist (mi)	6.7	0.6	1.9	2	11.2
Travel Time (hr)	0.1	0	0.1	0	0.2
Avg Speed (mph)	55	38	31	50	47
Fuel Used (gal)	0.2	0	0	0.1	0.3
Fuel Eff. (mpg)	37.1	78.9	54.1	29.3	38.5
HC Emissions (g)	1	0	5	6	13
CO Emissions (g)	91	2	103	144	341
NOx Emissions (g)	10	0	14	15	39
Vehicles Entered	33	3	20	21	77
Vehicles Exited	33	3	20	21	77
Hourly Exit Rate	**33**	**3**	**20**	**21**	**77**
Input Volume	34	3	20	20	77
% of Volume	96	92	99	108	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					
Occupancy (veh)	0	0	0	0	0

18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp Performance by movement

Movement	EBL	EBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0	0	0	0.1	0	0	0.1
Denied Del/Veh (s)	0	0	0.4	3.9	0.1	0	0.7

Total Delay (hr)	0	0.1	0	0	0	0.1	0.1
Total Del/Veh (s)	**4.9**	**4.6**	**0.4**	**0.4**	**2.1**	**1.9**	**1.6**
Stop Delay (hr)	0	0.1	0	0	0	0	0.1
Stop Del/Veh (s)	2.9	3.7	0	0	0.7	1.4	1.1
Total Stops	2	50	0	0	0	0	52
Stop/Veh	1	1	0	0	0	0	0.16
Travel Dist (mi)	0.2	4.7	16.7	8.3	0.5	15.9	46.3
Travel Time (hr)	0	0.3	0.4	0.3	0	0.7	1.7
Avg Speed (mph)	20	18	44	36	26	22	29
Fuel Used (gal)	0	0.1	0.7	0.2	0	1.1	2.1
Fuel Eff. (mpg)	50.5	46.4	24.6	42.3	29.3	13.9	21.6
HC Emissions (g)	0	26	226	75	1	267	595
CO Emissions (g)	0	367	4027	1304	24	4458	10180
NOx Emissions (g)	0	58	599	187	3	721	1567
Vehicles Entered	2	50	106	53	4	116	331
Vehicles Exited	2	50	106	52	4	116	330
Hourly Exit Rate	**2**	**50**	**106**	**52**	**4**	**116**	**330**
Input Volume	3	49	110	52	5	112	331
% of Volume	67	102	96	100	80	103	100
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							2532
Occupancy (veh)	0	0	0	0	0	1	2

19: S Bird Rd & SR 132 WB Off On Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0	0	0	0	0	0	0
Denied Del/Veh (s)	0	0	0	0	0.1	0.1	0
Total Delay (hr)	0	0.1	0	0	0	0	0.2
Total Del/Veh (s)	5.1	4.3	1.8	0.4	1	0.1	2.5
Stop Delay (hr)	0	0.1	0	0	0	0	0.1
Stop Del/Veh (s)	3.7	3.2	0.3	0	0	0	1.4
Total Stops	3	93	6	0	0	0	102
Stop/Veh	1	1	0.07	0	0	0	0.43
Travel Dist (mi)	0.2	5.6	11.6	3.3	3	0.9	24.6
Travel Time (hr)	0	0.4	0.4	0.1	0.1	0	0.9
Avg Speed (mph)	15	15	31	43	41	34	26
Fuel Used (gal)	0	0.1	0.3	0.1	0.1	0	0.7
Fuel Eff. (mpg)	43.7	49.7	36.9	24.3	34.7	54.2	36.6
HC Emissions (g)	0	31	91	38	25	0	185
CO Emissions (g)	0	429	1534	681	453	9	3106
NOx Emissions (g)	0	59	237	100	64	1	461
Vehicles Entered	3	93	84	24	26	8	238
Vehicles Exited	3	93	84	24	26	8	238
Hourly Exit Rate	**3**	**93**	**84**	**24**	**26**	**8**	**238**
Input Volume	3	91	89	24	26	9	242
% of Volume	100	102	95	98	99	89	98
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							2811
Occupancy (veh)	0	0	0	0	0	0	1

22: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.5	0.5
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	4.1	4.1
Travel Time (hr)	0.1	0.1
Avg Speed (mph)	54	54
Fuel Used (gal)	0.1	0.1
Fuel Eff. (mpg)	35.4	35.4
HC Emissions (g)	7	7
CO Emissions (g)	182	182
NOx Emissions (g)	20	20
Vehicles Entered	19	19
Vehicles Exited	19	19
Hourly Exit Rate	19	19
Input Volume	18	18
% of Volume	104	104
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		

Occupancy (veh)	0	0

24: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.4	0.4
Total Del/Veh (s)	1.2	1.2
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	179.3	179.3
Travel Time (hr)	6.2	6.2
Avg Speed (mph)	29	29
Fuel Used (gal)	4.6	4.6
Fuel Eff. (mpg)	38.7	38.7
HC Emissions (g)	144	144
CO Emissions (g)	2634	2634
NOx Emissions (g)	388	388
Vehicles Entered	1050	1050
Vehicles Exited	1054	1054
Hourly Exit Rate	1054	1054
Input Volume	1059	1059
% of Volume	100	100
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	6	6

25: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	0.7	0.7
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	120	120
Travel Time (hr)	2.4	2.4
Avg Speed (mph)	50	50
Fuel Used (gal)	4	4
Fuel Eff. (mpg)	29.8	29.8
HC Emissions (g)	215	215
CO Emissions (g)	6166	6166
NOx Emissions (g)	620	620
Vehicles Entered	941	941
Vehicles Exited	942	942
Hourly Exit Rate	942	942
Input Volume	941	941
% of Volume	100	100
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	2	2

26: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.8	0.8
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.1	0.1
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	4.3	4.3
Travel Time (hr)	0.1	0.1
Avg Speed (mph)	31	31
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	17.2	17.2
HC Emissions (g)	25	25
CO Emissions (g)	530	530
NOx Emissions (g)	68	68
Vehicles Entered	23	23

Vehicles Exited	23	23
Hourly Exit Rate	23	23
Input Volume	24	24
% of Volume	98	98
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

27: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	1.7	1.7
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.4	0.4
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	26.5	26.5
Travel Time (hr)	0.9	0.9
Avg Speed (mph)	31	31
Fuel Used (gal)	1	1
Fuel Eff. (mpg)	27.2	27.2
HC Emissions (g)	32	32
CO Emissions (g)	881	881
NOx Emissions (g)	97	97
Vehicles Entered	102	102
Vehicles Exited	102	102
Hourly Exit Rate	102	102
Input Volume	102	102
% of Volume	100	100
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

28: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.3	0.3
Total Del/Veh (s)	**3.1**	**3.1**
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.2	0.2
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	95.2	95.2
Travel Time (hr)	2.9	2.9
Avg Speed (mph)	33	33
Fuel Used (gal)	4.3	4.3
Fuel Eff. (mpg)	22.4	22.4
HC Emissions (g)	220	220
CO Emissions (g)	5700	5700
NOx Emissions (g)	653	653
Vehicles Entered	357	357
Vehicles Exited	354	354
Hourly Exit Rate	354	354
Input Volume	364	364
% of Volume	97	97
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	3	3

29: 11th St Performance by movement

Movement	EBT	WBT	All
Denied Delay (hr)	0	0	0
Denied Del/Veh (s)	0.1	0	0
Total Delay (hr)	0.1	1.3	1.4
Total Del/Veh (s)	0.5	4.3	3
Stop Delay (hr)	0	0	0
Stop Del/Veh (s)	0	0.1	0.1
Total Stops	0	1	1
Stop/Veh	0	0	0
Travel Dist (mi)	88.5	147.1	235.6
Travel Time (hr)	2	4.7	6.8

Avg Speed (mph)	44	31	35
Fuel Used (gal)	2.2	5.5	7.8
Fuel Eff. (mpg)	39.4	26.5	30.3
HC Emissions (g)	101	201	303
CO Emissions (g)	2373	6073	8445
NOx Emissions (g)	315	606	920
Vehicles Entered	543	1069	1612
Vehicles Exited	543	1070	1613
Hourly Exit Rate	543	1070	1613
Input Volume	553	1062	1616
% of Volume	98	101	100
Denied Entry Before	0	0	0
Denied Entry After	0	0	0
Density (ft/veh)			585
Occupancy (veh)	2	5	7

30: 11th St Performance by movement

Movement	EBT	WBT	All
Denied Delay (hr)	0	0.1	0.1
Denied Del/Veh (s)	0	0.3	0.2
Total Delay (hr)	1.2	0.4	1.6
Total Del/Veh (s)	4.8	1.1	2.7
Stop Delay (hr)	0	0	0
Stop Del/Veh (s)	0.1	0	0.1
Total Stops	8	0	8
Stop/Veh	0.01	0	0
Travel Dist (mi)	147.7	141.9	289.6
Travel Time (hr)	4.6	3	7.6
Avg Speed (mph)	32	49	39
Fuel Used (gal)	8.8	4.2	13.1
Fuel Eff. (mpg)	16.7	33.6	22.2
HC Emissions (g)	303	183	486
CO Emissions (g)	12184	5879	18063
NOx Emissions (g)	897	522	1419
Vehicles Entered	933	1187	2120
Vehicles Exited	931	1187	2118
Hourly Exit Rate	931	1187	2118
Input Volume	949	1193	2142
% of Volume	98	99	99
Denied Entry Before	0	0	0
Denied Entry After	0	0	0
Density (ft/veh)			515
Occupancy (veh)	5	3	7

69: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.3	0.3
Total Del/Veh (s)	4.1	4.1
Stop Delay (hr)	0.2	0.2
Stop Del/Veh (s)	2.9	2.9
Total Stops	51	51
Stop/Veh	0.22	0.22
Travel Dist (mi)	20.5	20.5
Travel Time (hr)	0.8	0.8
Avg Speed (mph)	25	25
Fuel Used (gal)	1.3	1.3
Fuel Eff. (mpg)	16	16
HC Emissions (g)	109	109
CO Emissions (g)	2492	2492
NOx Emissions (g)	293	293
Vehicles Entered	226	226
Vehicles Exited	226	226
Hourly Exit Rate	226	226
Input Volume	231	231
% of Volume	98	98
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

72: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.1	0.1

Total Del/Veh (s)	1.2	1.2
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.2	0.2
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	46.5	46.5
Travel Time (hr)	1	1
Avg Speed (mph)	47	47
Fuel Used (gal)	1.6	1.6
Fuel Eff. (mpg)	29.6	29.6
HC Emissions (g)	103	103
CO Emissions (g)	2417	2417
NOx Emissions (g)	303	303
Vehicles Entered	201	201
Vehicles Exited	201	201
Hourly Exit Rate	201	201
Input Volume	200	200
% of Volume	100	100
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

73: External Performance by approach

Approach	SE	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.6	0.6
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	48.3	48.3
Travel Time (hr)	0.9	0.9
Avg Speed (mph)	53	53
Fuel Used (gal)	1.3	1.3
Fuel Eff. (mpg)	38.3	38.3
HC Emissions (g)	95	95
CO Emissions (g)	2177	2177
NOx Emissions (g)	269	269
Vehicles Entered	177	177
Vehicles Exited	177	177
Hourly Exit Rate	177	177
Input Volume	176	176
% of Volume	101	101
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

75: External Performance by approach

Approach	SW	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	1.5	1.5
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.3	0.3
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	2.6	2.6
Travel Time (hr)	0.1	0.1
Avg Speed (mph)	27	27
Fuel Used (gal)	0.1	0.1
Fuel Eff. (mpg)	25.8	25.8
HC Emissions (g)	4	4
CO Emissions (g)	94	94
NOx Emissions (g)	12	12
Vehicles Entered	14	14
Vehicles Exited	14	14
Hourly Exit Rate	14	14
Input Volume	15	15
% of Volume	92	92
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

76: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.1	0.1
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	1.9	1.9
Travel Time (hr)	0.1	0.1
Avg Speed (mph)	24	24
Fuel Used (gal)	0.1	0.1
Fuel Eff. (mpg)	30.7	30.7
HC Emissions (g)	6	6
CO Emissions (g)	96	96
NOx Emissions (g)	15	15
Vehicles Entered	8	8
Vehicles Exited	8	8
Hourly Exit Rate	8	8
Input Volume	8	8
% of Volume	97	97
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

78: NB I-5 Ramps Performance by movement

Movement	EBL	EBT	SBR	All
Denied Delay (hr)	0	0	0	0
Denied Del/Veh (s)	0	0	0.1	0
Total Delay (hr)	0	0	0	0
Total Del/Veh (s)	1.4	0.4	0.9	1.4
Stop Delay (hr)	0	0	0	0
Stop Del/Veh (s)	0.1	0.1	0	0.1
Total Stops	0	0	0	0
Stop/Veh	0	0	0	0
Travel Dist (mi)	23	0.2	2.5	25.6
Travel Time (hr)	0.8	0	0.1	0.9
Avg Speed (mph)	30	25	24	29
Fuel Used (gal)	0.9	0	0.1	1
Fuel Eff. (mpg)	24.8	14.8	38.1	25.5
HC Emissions (g)	55	3	7	65
CO Emissions (g)	1509	52	111	1671
NOx Emissions (g)	152	8	19	179
Vehicles Entered	113	1	9	123
Vehicles Exited	113	2	9	124
Hourly Exit Rate	113	2	9	124
Input Volume	120	1	9	130
% of Volume	94	267	97	96
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0
Density (ft/veh)				3149
Occupancy (veh)	1	0	0	1

79: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.2	0.2
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	9.7	9.7
Travel Time (hr)	0.3	0.3
Avg Speed (mph)	30	30
Fuel Used (gal)	0.6	0.6
Fuel Eff. (mpg)	15.7	15.7
HC Emissions (g)	25	25
CO Emissions (g)	892	892
NOx Emissions (g)	73	73
Vehicles Entered	74	74
Vehicles Exited	74	74

Hourly Exit Rate	74	74
Input Volume	76	76
% of Volume	97	97
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

80: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.5	0.5
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	31.4	31.4
Travel Time (hr)	0.9	0.9
Avg Speed (mph)	37	37
Fuel Used (gal)	1.4	1.4
Fuel Eff. (mpg)	22.8	22.8
HC Emissions (g)	94	94
CO Emissions (g)	2403	2403
NOx Emissions (g)	266	266
Vehicles Entered	113	113
Vehicles Exited	113	113
Hourly Exit Rate	113	113
Input Volume	120	120
% of Volume	94	94
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

81: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	2.8	2.8
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.7	0.7
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	11.7	11.7
Travel Time (hr)	0.4	0.4
Avg Speed (mph)	32	32
Fuel Used (gal)	0.6	0.6
Fuel Eff. (mpg)	18.3	18.3
HC Emissions (g)	31	31
CO Emissions (g)	912	912
NOx Emissions (g)	90	90
Vehicles Entered	61	61
Vehicles Exited	60	60
Hourly Exit Rate	60	60
Input Volume	60	60
% of Volume	100	100
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

82: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	1.4	1.4
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.5	0.5
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	28.4	28.4
Travel Time (hr)	1.3	1.3
Avg Speed (mph)	23	23

Fuel Used (gal)	1	1
Fuel Eff. (mpg)	28.7	28.7
HC Emissions (g)	15	15
CO Emissions (g)	468	468
NOx Emissions (g)	50	50
Vehicles Entered	166	166
Vehicles Exited	166	166
Hourly Exit Rate	166	166
Input Volume	160	160
% of Volume	104	104
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

84: External Performance by approach

Approach	NW	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.4	0.4
Total Del/Veh (s)	5.2	5.2
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.6	0.6
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	51.4	51.4
Travel Time (hr)	1.6	1.6
Avg Speed (mph)	32	32
Fuel Used (gal)	3.3	3.3
Fuel Eff. (mpg)	15.5	15.5
HC Emissions (g)	107	107
CO Emissions (g)	4566	4566
NOx Emissions (g)	317	317
Vehicles Entered	271	271
Vehicles Exited	272	272
Hourly Exit Rate	272	272
Input Volume	268	268
% of Volume	101	101
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	2	2

85: External Performance by approach

Approach	SE	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	8.1	8.1
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.7	0.7
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	16.5	16.5
Travel Time (hr)	0.5	0.5
Avg Speed (mph)	35	35
Fuel Used (gal)	1	1
Fuel Eff. (mpg)	16.6	16.6
HC Emissions (g)	78	78
CO Emissions (g)	1977	1977
NOx Emissions (g)	217	217
Vehicles Entered	71	71
Vehicles Exited	71	71
Hourly Exit Rate	71	71
Input Volume	72	72
% of Volume	98	98
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

103: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	1.7	1.7

Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.5	0.5
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	14.1	14.1
Travel Time (hr)	0.5	0.5
Avg Speed (mph)	29	29
Fuel Used (gal)	0.9	0.9
Fuel Eff. (mpg)	14.8	14.8
HC Emissions (g)	162	162
CO Emissions (g)	2949	2949
NOx Emissions (g)	441	441
Vehicles Entered	71	71
Vehicles Exited	71	71
Hourly Exit Rate	71	71
Input Volume	73	73
% of Volume	97	97
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

111: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.2	0.2
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	3.5	3.5
Travel Time (hr)	0.1	0.1
Avg Speed (mph)	43	43
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	23.2	23.2
HC Emissions (g)	36	36
CO Emissions (g)	667	667
NOx Emissions (g)	97	97
Vehicles Entered	27	27
Vehicles Exited	27	27
Hourly Exit Rate	27	27
Input Volume	27	27
% of Volume	99	99
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

112: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	1.4	1.4
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.6	0.6
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	27.4	27.4
Travel Time (hr)	0.9	0.9
Avg Speed (mph)	31	31
Fuel Used (gal)	1.5	1.5
Fuel Eff. (mpg)	18	18
HC Emissions (g)	450	450
CO Emissions (g)	7863	7863
NOx Emissions (g)	1195	1195
Vehicles Entered	166	166
Vehicles Exited	166	166
Hourly Exit Rate	166	166
Input Volume	161	161
% of Volume	103	103
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

115: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.1	0.1
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	9	9
Travel Time (hr)	0.4	0.4
Avg Speed (mph)	23	23
Fuel Used (gal)	0.6	0.6
Fuel Eff. (mpg)	15.6	15.6
HC Emissions (g)	134	134
CO Emissions (g)	2169	2169
NOx Emissions (g)	366	366
Vehicles Entered	56	56
Vehicles Exited	56	56
Hourly Exit Rate	56	56
Input Volume	57	57
% of Volume	98	98
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

116: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.1	0.1
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	4.6	4.6
Travel Time (hr)	0.2	0.2
Avg Speed (mph)	25	25
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	24.4	24.4
HC Emissions (g)	42	42
CO Emissions (g)	636	636
NOx Emissions (g)	105	105
Vehicles Entered	93	93
Vehicles Exited	93	93
Hourly Exit Rate	93	93
Input Volume	98	98
% of Volume	95	95
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

118: Bend Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0.2	0.2
Total Delay (hr)	0	0
Total Del/Veh (s)	0.1	0.1
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	6	6
Travel Time (hr)	0.2	0.2
Avg Speed (mph)	30	30
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	26.9	26.9
HC Emissions (g)	50	50
CO Emissions (g)	761	761
NOx Emissions (g)	137	137
Vehicles Entered	52	52
Vehicles Exited	52	52
Hourly Exit Rate	52	52

Input Volume	52	52
% of Volume	100	100
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

120: Bend Performance by approach

Approach	EB	WB	All
Denied Delay (hr)	0	0	0
Denied Del/Veh (s)	0.2	0	0.1
Total Delay (hr)	0	0	0
Total Del/Veh (s)	0.2	0.4	0.3
Stop Delay (hr)	0	0	0
Stop Del/Veh (s)	0	0.1	0.1
Total Stops	0	0	0
Stop/Veh	0	0	0
Travel Dist (mi)	3.7	6.2	9.9
Travel Time (hr)	0.2	0.3	0.5
Avg Speed (mph)	25	19	21
Fuel Used (gal)	0.1	0.4	0.6
Fuel Eff. (mpg)	25.2	15	17.6
HC Emissions (g)	35	101	136
CO Emissions (g)	537	1627	2163
NOx Emissions (g)	87	276	363
Vehicles Entered	95	93	188
Vehicles Exited	95	93	188
Hourly Exit Rate	95	93	188
Input Volume	94	98	192
% of Volume	101	95	98
Denied Entry Before	0	0	0
Denied Entry After	0	0	0
Density (ft/veh)			
Occupancy (veh)	0	0	0

Total Network Performance

Denied Delay (hr)	1.6
Denied Del/Veh (s)	1.3
Total Delay (hr)	42.7
Total Del/Veh (s)	34.7
Stop Delay (hr)	27.6
Stop Del/Veh (s)	22.5
Total Stops	3094
Stop/Veh	0.7
Travel Dist (mi)	2245.5
Travel Time (hr)	99.8
Avg Speed (mph)	23
Fuel Used (gal)	84.2
Fuel Eff. (mpg)	26.7
HC Emissions (g)	5070
CO Emissions (g)	120010
NOx Emissions (g)	13908
Vehicles Entered	4354
Vehicles Exited	4353
Hourly Exit Rate	4353
Input Volume	13937
% of Volume	31
Denied Entry Before	0
Denied Entry After	0
Density (ft/veh)	601
Occupancy (veh)	98

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	
Directions Served	UL	T	T	R	UL	T	T	R	LT	R	LTR	
Maximum Queue (ft)	132	258	243	137	394	307	297	59	525	170	120	
Average Queue (ft)	42	130	105	44	205	149	133	10	178	61	27	
95th Queue (ft)	97	219	204	106	351	263	245	39	422	195	79	
Link Distance (ft)		670	670			792	792		1345		1299	
Upstream Blk Time (%)												

Queuing Penalty (veh)												
Storage Bay Dist (ft)	170				320	640			260		50	
Storage Blk Time (%)	0	3					0		39			
Queuing Penalty (veh)	0	1					0		190			

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	
Directions Served	LT	R	LT	R	UL	
Maximum Queue (ft)	53	77	136	86	8	
Average Queue (ft)	4	14	56	36	0	
95th Queue (ft)	27	52	114	96	4	
Link Distance (ft)	896		1280			
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25		25	200	
Storage Blk Time (%)	0	1	10	3		
Queuing Penalty (veh)	0	0	2	3		

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB	
Directions Served	L	R	TR	L	
Maximum Queue (ft)	17	85	10	85	
Average Queue (ft)	1	11	1	9	
95th Queue (ft)	9	52	9	49	
Link Distance (ft)	1028		1368		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		25		180	
Storage Blk Time (%)	0	1			
Queuing Penalty (veh)	0	0			

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB	
Directions Served	LTR	LTR	LTR	LTR	
Maximum Queue (ft)	78	117	131	126	
Average Queue (ft)	15	33	57	57	
95th Queue (ft)	49	80	111	107	
Link Distance (ft)	919	783	1068	860	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB	
Directions Served	LT	R	LT	TR	
Maximum Queue (ft)	116	89	28	6	
Average Queue (ft)	13	48	2	0	
95th Queue (ft)	74	114	15	7	
Link Distance (ft)	868		310	431	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		45			
Storage Blk Time (%)	0	1			
Queuing Penalty (veh)	0	0			

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB	
Directions Served	LTR	TR	LT	
Maximum Queue (ft)	84	10	156	
Average Queue (ft)	17	1	35	
95th Queue (ft)	59	6	114	
Link Distance (ft)	865	426	310	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement
Directions Served
Maximum Queue (ft)

Average Queue (ft)						
95th Queue (ft)						
Link Distance (ft)						
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	31
Average Queue (ft)	2
95th Queue (ft)	18
Link Distance (ft)	466
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	SB	
Directions Served	LT	R	R	L	
Maximum Queue (ft)	27	168	3	7	
Average Queue (ft)	2	72	0	0	
95th Queue (ft)	16	143	4	5	
Link Distance (ft)	444	444			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			600	215	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	NB	SB	
Directions Served	L	R	L	TR	
Maximum Queue (ft)	31	173	116	6	
Average Queue (ft)	3	98	15	0	
95th Queue (ft)	17	158	72	7	
Link Distance (ft)	265	265		606	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			295		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 29: 11th St

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 30: 11th St

Movement	EB	EB
Directions Served	T	T
Maximum Queue (ft)	22	117
Average Queue (ft)	1	5
95th Queue (ft)	24	80
Link Distance (ft)	792	792
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Chrisman Road & Logistics Center Driveway

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 38: Chrisman Road & University Driveway

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 78: NB I-5 Ramps

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 12

1: Chrisman Rd & 11th St Performance by movement

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0	0	0	0	0	0.2	0.2	0	0	0	0.5	0	0	0	0.9
Denied Del/Veh (s)	0.1	0.1	0	0.1	0	2.3	0.9	0	1.3	1.3	3.3	0.2	0.2	0.2	1.2
Total Delay (hr)	0.3	0.6	5	0.3	0.1	9.3	2.8	0	1.5	0.3	1.1	0.4	0.2	0.1	21.8
Total Del/Veh (s)	**45.9**	**47.8**	**21.8**	**6.9**	**124.9**	**104.7**	**16.4**	**2.5**	**43.3**	**45**	**7.6**	**34.5**	**35.2**	**6.1**	**28.80**
Stop Delay (hr)	0.3	0.5	3.3	0.2	0.1	8.4	1.7	0	1.2	0.2	0.3	0.4	0.2	0	16.8
Stop Del/Veh (s)	41.2	42.7	14.5	5	113	94.5	10	1.5	36.1	34.6	1.9	31.6	30.7	4	22.1
Total Stops	20	39	453	68	3	412	258	10	103	20	52	36	15	5	1494
Stop/Veh	0.91	0.93	0.54	0.5	1.5	1.28	0.43	0.38	0.85	0.8	0.1	0.8	0.79	0.14	0.55
Travel Dist (mi)	2.9	5.5	109.7	18.1	0.4	49.3	94	4.1	30.7	6.2	122.7	11	4.6	8.3	467.6
Travel Time (hr)	0.4	0.7	7.5	0.9	0.1	10.9	4.6	0.1	2.3	0.5	4.7	0.8	0.3	0.3	34.1
Avg Speed (mph)	8	8	15	21	5	5	21	32	14	14	29	14	14	27	14
Fuel Used (gal)	0.1	0.2	2.9	0.4	0	3.1	2.5	0.1	0.9	0.2	2.7	0.4	0.2	0.2	13.9
Fuel Eff. (mpg)	25.3	24.5	37.8	47.6	16.6	15.9	37	52.4	33.5	33.1	45.7	29.3	30.6	39.8	33.7
HC Emissions (g)	0	1	59	15	1	24	98	2	50	5	54	12	1	1	325
CO Emissions (g)	23	46	1236	353	22	665	2429	63	922	111	1680	242	39	68	7898
NOx Emissions (g)	2	3	157	37	2	52	264	7	119	13	165	32	3	5	860
Vehicles Entered	22	41	828	136	2	316	604	26	120	24	493	44	19	35	2710
Vehicles Exited	22	41	825	135	2	311	601	26	119	25	493	44	19	35	2698
Hourly Exit Rate	**22**	**41**	**825**	**135**	**2**	**311**	**601**	**26**	**119**	**25**	**493**	**44**	**19**	**35**	**2698**
Input Volume	24	39	822	132	3	315	589	25	123	25	489	43	18	34	2681
% of Volume	93	104	100	102	67	99	102	105	97	101	101	102	107	103	101
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	1	1	0	0	0	0	0	0	0	2
Density (ft/veh)															302
Occupancy (veh)	0	1	8	1	0	11	4	0	2	0	4	1	0	0	33

10: Ahern Rd & Lehman Rd/SB I-5 Ramps Performance by movement

Movement	EBL	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0	0	0	0	0	0	0	0	0	0	0.1
Denied Del/Veh (s)		4.2	0.2	0.2	2.4	0	0	0.1	3.5	0.3	0.5
Total Delay (hr)	0	0	0.4	0	0	0	0	0	0	0.2	0.6
Total Del/Veh (s)		**5.2**	**10.7**	**9.4**	**6.2**	**1.5**	**0.9**	**0.3**	**1.2**	**1.7**	**3.7**
Stop Delay (hr)	0	0	0.3	0	0	0	0	0	0	0	0.4
Stop Del/Veh (s)		5.1	8.4	6.6	5.1	1	0	0	0.4	0	2.1
Total Stops	0	18	132	6	12	1	0	0	2	0	171
Stop/Veh		1	0.99	1	1	0.33	0	0	0.12	0	0.27
Travel Dist (mi)	0.1	2.9	31.8	1.4	2.8	0.6	22.3	0.9	3.4	72.1	138.2
Travel Time (hr)	0	0.2	1.7	0.1	0.1	0	0.5	0	0.1	1.5	4.2
Avg Speed (mph)	22	21	19	19	20	39	49	41	40	49	34
Fuel Used (gal)	0	0.1	0.9	0	0.1	0	0.7	0	0.1	2.1	4
Fuel Eff. (mpg)	45.9	41.3	35.1	38.2	31	45.8	31.6	51.3	38.4	34.9	34.6
HC Emissions (g)	0	0	52	0	15	0	21	3	18	82	191
CO Emissions (g)	0	7	827	5	223	8	747	62	350	2315	4542
NOx Emissions (g)	0	1	128	1	35	1	69	8	43	255	540
Vehicles Entered	0	17	131	6	11	3	111	5	16	327	627
Vehicles Exited	0	18	131	6	11	3	111	5	16	327	628
Hourly Exit Rate	**0**	**18**	**131**	**6**	**11**	**3**	**111**	**5**	**16**	**327**	**628**
Input Volume	1	18	135	6	10	3	112	4	17	323	630
% of Volume	0	100	97	96	107	100	99	118	94	101	100
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)											2128
Occupancy (veh)	0	0	2	0	0	0	0	0	0	1	4

11: Ahern Rd & NB I-5 Ramps Performance by movement

Movement	WBL	WBT	WBR	NBT	NBR	SBU	SBL	SBT	All
Denied Delay (hr)	0	0	0	0	0	0	0	0	0
Denied Del/Veh (s)	0	0	0.5	0.2	0.2	0	0	0	0.1
Total Delay (hr)	0	0	0	0	0	0	0	0.2	0.3
Total Del/Veh (s)	**5.2**	**0.1**	**1.8**	**1.3**	**0.5**	**0.3**	**2.1**	**1.7**	**1.5**
Stop Delay (hr)	0	0	0	0	0	0	0	0	0.1
Stop Del/Veh (s)	4.5	0	2	0	0	0	0.6	0.3	0.3
Total Stops	5	0	9	0	0	0	4	0	18
Stop/Veh	1	0	1	0	0	0	0.15	0	0.03
Travel Dist (mi)	0.9	0.2	1.7	26.8	20.9	0.1	5.6	93.8	150
Travel Time (hr)	0	0	0.1	0.5	0.5	0	0.2	2.2	3.5
Avg Speed (mph)	24	19	26	51	46	41	37	42	43
Fuel Used (gal)	0	0	0.1	0.7	0.5	0	0.1	3.8	5.3
Fuel Eff. (mpg)	22.5	12.4	22.6	35.9	41.2	37.9	38.8	24.9	28.3
HC Emissions (g)	0	4	3	11	50	0	11	168	247
CO Emissions (g)	36	69	94	493	1078	1	242	4915	6929
NOx Emissions (g)	2	12	8	50	131	0	28	511	742
Vehicles Entered	5	2	9	104	80	1	27	454	682
Vehicles Exited	5	2	9	103	80	1	27	455	682
Hourly Exit Rate	**5**	**2**	**9**	**103**	**80**	**1**	**27**	**455**	**682**

Input Volume	5	1	9	104	75	1	28	453	676
% of Volume	95	200	97	99	106	100	96	100	101
Denied Entry Before	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0
Density (ft/veh)									1610
Occupancy (veh)	0	0	0	1	0	0	0	2	3

13: Ahern Rd & Durham Ferry Rd Performance by movement

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Delay (hr)	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1
Denied Del/Veh (s)	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.5	0.5	0.5	0.4
Total Delay (hr)	0	0.4	0.1	0.1	0.1	0.1	0	0.3	0	0.5	3	0	4.6
Total Del/Veh (s)	**7.9**	**13.7**	**6.2**	**9.3**	**9**	**4**	**7.3**	**12.6**	**3.7**	**21.5**	**27.7**	**24.7**	**19.3**
Stop Delay (hr)	0	0.2	0.1	0	0	0.1	0	0.1	0	0.3	1.8	0	2.7
Stop Del/Veh (s)	5.6	6.7	5.4	7.8	6.4	4.4	5.3	4.4	2.3	15.4	16	20.4	11.4
Total Stops	6	99	52	22	27	60	6	99	4	76	389	7	847
Stop/Veh	1	0.99	0.98	1	1	1	1	0.99	1	1	0.99	1	0.99
Travel Dist (mi)	1	17.7	9.3	3.3	4.1	9.1	1.2	20.2	0.7	12.5	64.1	1.2	144.4
Travel Time (hr)	0	0.8	0.4	0.2	0.2	0.5	0	0.7	0	0.8	4.3	0.1	8.1
Avg Speed (mph)	24	23	25	17	18	19	29	28	32	16	15	14	18
Fuel Used (gal)	0	0.5	0.3	0.1	0.1	0.2	0	0.5	0	0.4	1.9	0	4.1
Fuel Eff. (mpg)	37.2	36.5	35.3	34.8	36.8	38.6	39.2	40.9	31.5	33.7	33.8	30.7	35.5
HC Emissions (g)	0	7	2	3	3	1	0	30	4	5	50	3	108
CO Emissions (g)	18	361	172	47	49	35	18	745	73	246	1555	60	3380
NOx Emissions (g)	1	24	9	7	7	4	1	77	9	14	120	7	279
Vehicles Entered	6	99	52	22	27	60	6	99	4	76	390	7	848
Vehicles Exited	6	100	52	22	27	60	6	99	3	76	390	7	848
Hourly Exit Rate	**6**	**100**	**52**	**22**	**27**	**60**	**6**	**99**	**3**	**76**	**390**	**7**	**848**
Input Volume	5	101	49	24	26	62	5	102	2	78	384	5	843
% of Volume	114	99	106	92	103	97	114	97	150	98	101	133	101
Denied Entry Before	0	0	0	0	0	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0	0	0	0	0	0
Density (ft/veh)													454
Occupancy (veh)	0	1	0	0	0	0	0	1	0	1	4	0	8

14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp Performance by movement

Movement	WBL	WBT	WBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0	0	0	0	0	0	0	0
Denied Del/Veh (s)	0.2	0.2	4.2	0	0	0.2	0.2	0.4
Total Delay (hr)	0	0	0	0	0	0.1	0	0.1
Total Del/Veh (s)	**5**	**6.5**	**0.8**	**1.2**	**1**	**1.4**	**0**	**1.2**
Stop Delay (hr)	0	0	0	0	0	0	0	0
Stop Del/Veh (s)	3.6	2.5	0.3	0.4	0.3	0	0	0.2
Total Stops	6	2	8	1	0	0	0	17
Stop/Veh	1	1	0.3	0.12	0	0	0	0.04
Travel Dist (mi)	1.1	0.2	4.5	0.5	11.6	14.7	1.2	33.8
Travel Time (hr)	0	0	0.2	0	0.4	0.3	0	1
Avg Speed (mph)	28	27	31	25	29	43	32	34
Fuel Used (gal)	0	0	0.1	0	0.8	0.6	0	1.6
Fuel Eff. (mpg)	42	56.2	50.2	47.2	13.9	24	41.3	21
HC Emissions (g)	1	0	10	0	33	46	0	90
CO Emissions (g)	15	1	173	9	1218	1441	29	2886
NOx Emissions (g)	2	0	25	1	93	118	1	240
Vehicles Entered	6	2	27	8	170	178	14	405
Vehicles Exited	6	2	27	8	170	178	14	405
Hourly Exit Rate	**6**	**2**	**27**	**8**	**170**	**178**	**14**	**405**
Input Volume	9	2	27	10	167	180	13	408
% of Volume	65	100	100	78	102	99	110	99
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0
Density (ft/veh)								2544
Occupancy (veh)	0	0	0	0	0	0	0	1

15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp Performance by movement

Movement	EBL	EBT	EBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0	0	0	0	0	0	0	0
Denied Del/Veh (s)	0.2	0.1	0.2	0	0	0	0	0.1
Total Delay (hr)	0.2	0	0	0.1	0	0	0	0.4
Total Del/Veh (s)	**5.9**	**10.8**	**4.1**	**3**	**2**	**1.3**	**1.5**	**3.1**
Stop Delay (hr)	0.1	0	0	0	0	0	0	0.1
Stop Del/Veh (s)	3.6	4.4	3	0.1	0.3	0.3	0	1.2
Total Stops	103	5	20	2	1	9	0	140
Stop/Veh	1	1	1	0.02	0.08	0.12	0	0.34
Travel Dist (mi)	16.9	0.8	3.4	7.2	1.1	5.2	7.6	42
Travel Time (hr)	0.7	0	0.1	0.3	0.1	0.2	0.2	1.6
Avg Speed (mph)	26	24	27	24	22	25	39	27
Fuel Used (gal)	0.4	0	0.1	0.4	0	0.1	0.3	1.3
Fuel Eff. (mpg)	39.1	39.2	37.7	18	33.7	65.8	26.8	31.5
HC Emissions (g)	13	2	4	34	1	4	25	82
CO Emissions (g)	394	39	99	764	29	72	676	2073

NOx Emissions (g)	37	5	11	93	3	9	65	222
Vehicles Entered	102	5	20	85	12	76	113	413
Vehicles Exited	103	5	20	84	12	76	112	412
Hourly Exit Rate	**103**	**5**	**20**	**84**	**12**	**76**	**112**	**412**
Input Volume	102	4	19	82	13	81	111	413
% of Volume	101	125	107	102	94	94	101	100
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0
Density (ft/veh)								1146
Occupancy (veh)	1	0	0	0	0	0	0	2

16: S Chrisman Road & I-580 WB Off Ramp Performance by movement

Movement	WBL	WBR	NBT	SBT	All
Denied Delay (hr)	0	0.1	0	0	0.1
Denied Del/Veh (s)	0.3	4.1	0	0	1.1
Total Delay (hr)	0	0	0	0	0.1
Total Del/Veh (s)	**3**	**1.1**	**0.3**	**0.9**	**0.9**
Stop Delay (hr)	0	0	0	0	0
Stop Del/Veh (s)	2.4	0	0	0.1	0.1
Total Stops	2	0	0	0	2
Stop/Veh	1	0	0	0	0.01
Travel Dist (mi)	0.4	10.8	3	11.7	25.8
Travel Time (hr)	0	0.4	0.1	0.3	0.7
Avg Speed (mph)	32	35	52	40	39
Fuel Used (gal)	0	0.2	0.1	0.5	0.8
Fuel Eff. (mpg)	48	47	36.2	23.1	31.3
HC Emissions (g)	0	34	5	41	79
CO Emissions (g)	2	600	112	1084	1798
NOx Emissions (g)	0	88	14	108	210
Vehicles Entered	2	58	32	131	223
Vehicles Exited	2	58	32	131	223
Hourly Exit Rate	**2**	**58**	**32**	**131**	**223**
Input Volume	2	54	32	128	216
% of Volume	100	107	99	102	103
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					4524
Occupancy (veh)	0	0	0	0	1

17: S Chrisman Road & I-580 EB On Ramp Performance by movement

Movement	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0	0	0	0	0
Denied Del/Veh (s)	0.1	0.2	0	0	0
Total Delay (hr)	0	0	0	0	0
Total Del/Veh (s)	**0.2**	**1.9**	**0.9**	**1.3**	**0.9**
Stop Delay (hr)	0	0	0	0	0
Stop Del/Veh (s)	0	0	0.1	0	0
Total Stops	0	0	2	0	2
Stop/Veh	0	0	0.02	0	0.01
Travel Dist (mi)	6.1	0.2	9.4	3.6	19.3
Travel Time (hr)	0.1	0	0.3	0.1	0.5
Avg Speed (mph)	54	38	30	43	38
Fuel Used (gal)	0.2	0	0.2	0.1	0.5
Fuel Eff. (mpg)	34.8	90.4	57.5	29	41.5
HC Emissions (g)	12	0	10	9	31
CO Emissions (g)	273	0	211	234	719
NOx Emissions (g)	36	0	25	25	85
Vehicles Entered	30	1	96	38	165
Vehicles Exited	30	1	96	38	165
Hourly Exit Rate	**30**	**1**	**96**	**38**	**165**
Input Volume	31	1	96	36	164
% of Volume	96	100	100	107	101
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					3091
Occupancy (veh)	0	0	0	0	1

18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp Performance by movement

Movement	EBL	EBT	EBR	NBT	NBR	SBL	SBT	All
Denied Delay (hr)	0	0	0	0	0	0	0	0
Denied Del/Veh (s)	0	0	0	0.2	4.1	0.3	0	0.9
Total Delay (hr)	0.1	0	0	0.1	0	0	0	0.3
Total Del/Veh (s)	**6**	**5.8**	**5.9**	**6.4**	**6**	**7.6**	**7.4**	**6.2**
Stop Delay (hr)	0	0	0	0	0	0	0	0.1
Stop Del/Veh (s)	2.7	2.6	2.6	2.8	2.6	2.9	2.8	2.7
Total Stops	40	8	18	35	29	8	10	148
Stop/Veh	1	1	1	1	1	1	1	1
Travel Dist (mi)	3.8	0.7	1.7	5.5	4.5	1.1	1.3	18.7
Travel Time (hr)	0.2	0	0.1	0.3	0.2	0.1	0.1	0.9
Avg Speed (mph)	19	20	20	22	22	20	20	21

Fuel Used (gal)	0.1	0	0	0.1	0.1	0	0	0.5
Fuel Eff. (mpg)	50.9	49.2	52.6	38.6	37.1	28.1	28.7	39.6
HC Emissions (g)	0	2	6	20	17	0	0	45
CO Emissions (g)	9	26	81	301	251	20	24	712
NOx Emissions (g)	1	4	13	51	41	1	1	113
Vehicles Entered	40	8	18	35	28	8	10	147
Vehicles Exited	40	8	18	35	29	8	10	148
Hourly Exit Rate	40	8	18	35	29	8	10	148
Input Volume	41	7	17	35	25	8	9	143
% of Volume	97	110	106	100	115	97	108	103
Denied Entry Before	0	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0	0
Density (ft/veh)								4579
Occupancy (veh)	0	0	0	0	0	0	0	1

19: S Bird Rd & SR 132 WB Off On Ramps Performance by movement

Movement	EBL	EBR	NBL	NBT	SBT	SBR	All
Denied Delay (hr)	0	0	0	0	0	0	0
Denied Del/Veh (s)	0	0	0.2	0	0.1	0.1	0.1
Total Delay (hr)	0	0	0.1	0.1	0	0	0.2
Total Del/Veh (s)	**6.4**	**6.3**	**10.3**	**8.3**	**5.9**	**6.4**	**8.4**
Stop Delay (hr)	0	0	0	0	0	0	0.1
Stop Del/Veh (s)	3	2.8	3.5	2.8	2.7	2.9	3
Total Stops	3	4	24	51	12	2	96
Stop/Veh	1	1	0.96	0.96	1	1	0.98
Travel Dist (mi)	0.2	0.3	3.3	7.1	1.4	0.3	12.6
Travel Time (hr)	0	0	0.2	0.4	0.1	0	0.7
Avg Speed (mph)	17	17	18	20	21	21	19
Fuel Used (gal)	0	0	0.2	0.3	0	0	0.5
Fuel Eff. (mpg)	57.6	57.5	20.8	25	48.2	46	25.8
HC Emissions (g)	0	0	24	14	0	0	39
CO Emissions (g)	2	0	413	314	3	1	734
NOx Emissions (g)	0	0	65	41	0	0	106
Vehicles Entered	3	4	24	52	12	2	97
Vehicles Exited	3	4	25	52	12	2	98
Hourly Exit Rate	**3**	**4**	**25**	**52**	**12**	**2**	**98**
Input Volume	4	3	24	53	14	3	101
% of Volume	71	133	103	99	87	67	97
Denied Entry Before	0	0	0	0	0	0	0
Denied Entry After	0	0	0	0	0	0	0
Density (ft/veh)							4079
Occupancy (veh)	0	0	0	0	0	0	1

22: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.6	0.6
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	7.2	7.2
Travel Time (hr)	0.1	0.1
Avg Speed (mph)	52	52
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	33.2	33.2
HC Emissions (g)	15	15
CO Emissions (g)	361	361
NOx Emissions (g)	42	42
Vehicles Entered	34	34
Vehicles Exited	34	34
Hourly Exit Rate	34	34
Input Volume	33	33
% of Volume	102	102
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

24: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.5	0.5
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0

Stop/Veh	0	0
Travel Dist (mi)	127.6	127.6
Travel Time (hr)	4.4	4.4
Avg Speed (mph)	29	29
Fuel Used (gal)	3.1	3.1
Fuel Eff. (mpg)	40.7	40.7
HC Emissions (g)	92	92
CO Emissions (g)	1526	1526
NOx Emissions (g)	251	251
Vehicles Entered	749	749
Vehicles Exited	748	748
Hourly Exit Rate	748	748
Input Volume	758	758
% of Volume	99	99
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	4	4

25: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.3	0.3
Total Del/Veh (s)	0.9	0.9
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	169.7	169.7
Travel Time (hr)	3.5	3.5
Avg Speed (mph)	49	49
Fuel Used (gal)	5.9	5.9
Fuel Eff. (mpg)	28.8	28.8
HC Emissions (g)	311	311
CO Emissions (g)	8986	8986
NOx Emissions (g)	899	899
Vehicles Entered	1332	1332
Vehicles Exited	1331	1331
Hourly Exit Rate	1331	1331
Input Volume	1343	1343
% of Volume	99	99
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	3	3

26: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.3	0.3
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	17.9	17.9
Travel Time (hr)	0.5	0.5
Avg Speed (mph)	33	33
Fuel Used (gal)	0.9	0.9
Fuel Eff. (mpg)	19.2	19.2
HC Emissions (g)	47	47
CO Emissions (g)	1374	1374
NOx Emissions (g)	137	137
Vehicles Entered	98	98
Vehicles Exited	98	98
Hourly Exit Rate	98	98
Input Volume	97	97
% of Volume	101	101
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

27: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0

Total Del/Veh (s)	1.4	1.4
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.3	0.3
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	22.6	22.6
Travel Time (hr)	0.7	0.7
Avg Speed (mph)	30	30
Fuel Used (gal)	0.8	0.8
Fuel Eff. (mpg)	28.1	28.1
HC Emissions (g)	22	22
CO Emissions (g)	629	629
NOx Emissions (g)	68	68
Vehicles Entered	86	86
Vehicles Exited	88	88
Hourly Exit Rate	88	88
Input Volume	89	89
% of Volume	99	99
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

28: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.3	0.3
Total Del/Veh (s)	2.5	2.5
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.2	0.2
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	120.2	120.2
Travel Time (hr)	3.6	3.6
Avg Speed (mph)	33	33
Fuel Used (gal)	5.2	5.2
Fuel Eff. (mpg)	23	23
HC Emissions (g)	169	169
CO Emissions (g)	5419	5419
NOx Emissions (g)	543	543
Vehicles Entered	448	448
Vehicles Exited	450	450
Hourly Exit Rate	450	450
Input Volume	465	465
% of Volume	97	97
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	4	4

29: 11th St Performance by movement

Movement	EBT	WBT	All
Denied Delay (hr)	0.1	0	0.1
Denied Del/Veh (s)	0.2	0	0.1
Total Delay (hr)	0.2	0.7	0.9
Total Del/Veh (s)	**0.6**	**3.3**	**1.7**
Stop Delay (hr)	0	0	0
Stop Del/Veh (s)	0	0.1	0.1
Total Stops	0	1	1
Stop/Veh	0	0	0
Travel Dist (mi)	164.6	105.5	270.2
Travel Time (hr)	3.9	3.3	7.2
Avg Speed (mph)	43	32	38
Fuel Used (gal)	3.8	4	7.8
Fuel Eff. (mpg)	43.1	26.5	34.6
HC Emissions (g)	172	157	329
CO Emissions (g)	3750	4797	8548
NOx Emissions (g)	536	461	996
Vehicles Entered	1011	771	1782
Vehicles Exited	1012	770	1782
Hourly Exit Rate	1012	770	1782
Input Volume	1003	764	1767
% of Volume	101	101	101
Denied Entry Before	0	0	0
Denied Entry After	0	0	0
Density (ft/veh)			551
Occupancy (veh)	4	3	7

30: 11th St Performance by movement

Movement	EBT	WBT	All
Denied Delay (hr)	0	0.1	0.1
Denied Del/Veh (s)	0	0.3	0.1
Total Delay (hr)	2.6	0.6	3.2
Total Del/Veh (s)	6.8	2.4	5
Stop Delay (hr)	0.1	0.2	0.3
Stop Del/Veh (s)	0.2	0.9	0.5
Total Stops	49	24	73
Stop/Veh	0.04	0.03	0.03
Travel Dist (mi)	216.4	112	328.4
Travel Time (hr)	7.4	2.8	10.1
Avg Speed (mph)	29	42	33
Fuel Used (gal)	12.6	3.5	16.1
Fuel Eff. (mpg)	17.1	32	20.4
HC Emissions (g)	365	152	517
CO Emissions (g)	15173	4858	20031
NOx Emissions (g)	1131	432	1563
Vehicles Entered	1384	936	2320
Vehicles Exited	1386	937	2323
Hourly Exit Rate	1386	937	2323
Input Volume	1378	920	2298
% of Volume	101	102	101
Denied Entry Before	0	0	0
Denied Entry After	0	0	0
Density (ft/veh)			384
Occupancy (veh)	7	3	10

69: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	1.7	1.7
Stop Delay (hr)	0.1	0.1
Stop Del/Veh (s)	1	1
Total Stops	20	20
Stop/Veh	0.1	0.1
Travel Dist (mi)	17.6	17.6
Travel Time (hr)	0.5	0.5
Avg Speed (mph)	36	36
Fuel Used (gal)	0.9	0.9
Fuel Eff. (mpg)	18.5	18.5
HC Emissions (g)	57	57
CO Emissions (g)	1656	1656
NOx Emissions (g)	158	158
Vehicles Entered	193	193
Vehicles Exited	193	193
Hourly Exit Rate	193	193
Input Volume	191	191
% of Volume	101	101
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

72: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.7	0.7
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.1	0.1
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	27.1	27.1
Travel Time (hr)	0.6	0.6
Avg Speed (mph)	48	48
Fuel Used (gal)	0.8	0.8
Fuel Eff. (mpg)	31.9	31.9
HC Emissions (g)	60	60
CO Emissions (g)	1311	1311
NOx Emissions (g)	177	177
Vehicles Entered	117	117
Vehicles Exited	117	117
Hourly Exit Rate	117	117
Input Volume	118	118
% of Volume	99	99
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		

Occupancy (veh)	1	1

73: External Performance by approach

Approach	SE	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	0.9	0.9
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	123.6	123.6
Travel Time (hr)	2.4	2.4
Avg Speed (mph)	51	51
Fuel Used (gal)	3.3	3.3
Fuel Eff. (mpg)	37.5	37.5
HC Emissions (g)	197	197
CO Emissions (g)	4542	4542
NOx Emissions (g)	588	588
Vehicles Entered	453	453
Vehicles Exited	454	454
Hourly Exit Rate	454	454
Input Volume	452	452
% of Volume	100	100
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	2	2

75: External Performance by approach

Approach	SW	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	1.3	1.3
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.3	0.3
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	1.5	1.5
Travel Time (hr)	0.1	0.1
Avg Speed (mph)	27	27
Fuel Used (gal)	0.1	0.1
Fuel Eff. (mpg)	29.9	29.9
HC Emissions (g)	0	0
CO Emissions (g)	24	24
NOx Emissions (g)	2	2
Vehicles Entered	8	8
Vehicles Exited	8	8
Hourly Exit Rate	8	8
Input Volume	9	9
% of Volume	86	86
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

76: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.3	0.3
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.1	0.1
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	5.1	5.1
Travel Time (hr)	0.2	0.2
Avg Speed (mph)	23	23
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	27.4	27.4
HC Emissions (g)	24	24
CO Emissions (g)	377	377
NOx Emissions (g)	62	62
Vehicles Entered	20	20
Vehicles Exited	20	20
Hourly Exit Rate	20	20
Input Volume	21	21

% of Volume	94	94
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

78: NB I-5 Ramps Performance by movement

Movement	EBL	EBT	SBR	All
Denied Delay (hr)	0	0	0	0
Denied Del/Veh (s)	0	0	0.1	0
Total Delay (hr)	0	0	0	0
Total Del/Veh (s)	1.2	0.2	0.8	1.1
Stop Delay (hr)	0	0	0	0
Stop Del/Veh (s)	0	0.1	0	0
Total Stops	0	0	0	0
Stop/Veh	0	0	0	0
Travel Dist (mi)	21.4	0.6	3.7	25.7
Travel Time (hr)	0.7	0	0.2	0.9
Avg Speed (mph)	30	25	23	29
Fuel Used (gal)	0.8	0	0.1	1
Fuel Eff. (mpg)	25.6	13.9	39.2	26.5
HC Emissions (g)	45	11	6	62
CO Emissions (g)	1301	184	93	1578
NOx Emissions (g)	126	29	15	170
Vehicles Entered	108	5	14	127
Vehicles Exited	108	5	14	127
Hourly Exit Rate	108	5	14	127
Input Volume	103	5	14	122
% of Volume	105	100	102	104
Denied Entry Before	0	0	0	0
Denied Entry After	0	0	0	0
Density (ft/veh)				3035
Occupancy (veh)	1	0	0	1

79: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.4	0.4
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.1	0.1
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	3.1	3.1
Travel Time (hr)	0.1	0.1
Avg Speed (mph)	31	31
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	16.3	16.3
HC Emissions (g)	3	3
CO Emissions (g)	212	212
NOx Emissions (g)	11	11
Vehicles Entered	24	24
Vehicles Exited	24	24
Hourly Exit Rate	24	24
Input Volume	25	25
% of Volume	96	96
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

80: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.3	0.3
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	30	30
Travel Time (hr)	0.8	0.8
Avg Speed (mph)	36	36
Fuel Used (gal)	1.2	1.2
Fuel Eff. (mpg)	24.4	24.4
HC Emissions (g)	75	75
CO Emissions (g)	1951	1951
NOx Emissions (g)	217	217

Vehicles Entered	108	108
Vehicles Exited	108	108
Hourly Exit Rate	108	108
Input Volume	103	103
% of Volume	105	105
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

81: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	1.9	1.9
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.7	0.7
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	7.7	7.7
Travel Time (hr)	0.2	0.2
Avg Speed (mph)	32	32
Fuel Used (gal)	0.4	0.4
Fuel Eff. (mpg)	19.2	19.2
HC Emissions (g)	16	16
CO Emissions (g)	525	525
NOx Emissions (g)	48	48
Vehicles Entered	40	40
Vehicles Exited	40	40
Hourly Exit Rate	40	40
Input Volume	37	37
% of Volume	109	109
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

82: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	1.5	1.5
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.6	0.6
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	30.3	30.3
Travel Time (hr)	1.4	1.4
Avg Speed (mph)	22	22
Fuel Used (gal)	1	1
Fuel Eff. (mpg)	28.9	28.9
HC Emissions (g)	17	17
CO Emissions (g)	461	461
NOx Emissions (g)	55	55
Vehicles Entered	179	179
Vehicles Exited	178	178
Hourly Exit Rate	178	178
Input Volume	180	180
% of Volume	99	99
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

84: External Performance by approach

Approach	NW	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.2	0.2
Total Del/Veh (s)	4.8	4.8
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.6	0.6
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	31	31
Travel Time (hr)	1	1
Avg Speed (mph)	32	32
Fuel Used (gal)	2	2

Fuel Eff. (mpg)	15.6	15.6
HC Emissions (g)	73	73
CO Emissions (g)	2855	2855
NOx Emissions (g)	213	213
Vehicles Entered	164	164
Vehicles Exited	164	164
Hourly Exit Rate	164	164
Input Volume	169	169
% of Volume	97	97
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

85: External Performance by approach

Approach	SE	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.8	0.8
Total Del/Veh (s)	6.4	6.4
Stop Delay (hr)	0.1	0.1
Stop Del/Veh (s)	0.6	0.6
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	106.7	106.7
Travel Time (hr)	3	3
Avg Speed (mph)	36	36
Fuel Used (gal)	6.2	6.2
Fuel Eff. (mpg)	17.2	17.2
HC Emissions (g)	193	193
CO Emissions (g)	8149	8149
NOx Emissions (g)	584	584
Vehicles Entered	464	464
Vehicles Exited	464	464
Hourly Exit Rate	464	464
Input Volume	458	458
% of Volume	101	101
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	3	3

103: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.8	0.8
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.1	0.1
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	18.4	18.4
Travel Time (hr)	0.5	0.5
Avg Speed (mph)	34	34
Fuel Used (gal)	0.9	0.9
Fuel Eff. (mpg)	19.5	19.5
HC Emissions (g)	50	50
CO Emissions (g)	1395	1395
NOx Emissions (g)	145	145
Vehicles Entered	93	93
Vehicles Exited	93	93
Hourly Exit Rate	93	93
Input Volume	98	98
% of Volume	95	95
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	1	1

111: External Performance by approach

Approach	NB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	2.8	2.8
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.4	0.4
Total Stops	0	0
Stop/Veh	0	0

Travel Dist (mi)	7.1	7.1
Travel Time (hr)	0.3	0.3
Avg Speed (mph)	25	25
Fuel Used (gal)	0.3	0.3
Fuel Eff. (mpg)	22	22
HC Emissions (g)	19	19
CO Emissions (g)	395	395
NOx Emissions (g)	55	55
Vehicles Entered	54	54
Vehicles Exited	54	54
Hourly Exit Rate	54	54
Input Volume	56	56
% of Volume	96	96
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

112: External Performance by approach

Approach	SB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	4.7	4.7
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.9	0.9
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	4.5	4.5
Travel Time (hr)	0.2	0.2
Avg Speed (mph)	24	24
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	19.9	19.9
HC Emissions (g)	32	32
CO Emissions (g)	549	549
NOx Emissions (g)	89	89
Vehicles Entered	28	28
Vehicles Exited	27	27
Hourly Exit Rate	27	27
Input Volume	26	26
% of Volume	103	103
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

115: External Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0.1	0.1
Total Del/Veh (s)	4.4	4.4
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0.9	0.9
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	7.3	7.3
Travel Time (hr)	0.3	0.3
Avg Speed (mph)	24	24
Fuel Used (gal)	0.4	0.4
Fuel Eff. (mpg)	19.8	19.8
HC Emissions (g)	49	49
CO Emissions (g)	830	830
NOx Emissions (g)	134	134
Vehicles Entered	44	44
Vehicles Exited	45	45
Hourly Exit Rate	45	45
Input Volume	41	41
% of Volume	110	110
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

116: External Performance by approach

Approach	WB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0	0
Total Delay (hr)	0	0
Total Del/Veh (s)	0.2	0.2

Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	1.3	1.3
Travel Time (hr)	0	0
Avg Speed (mph)	28	28
Fuel Used (gal)	0.1	0.1
Fuel Eff. (mpg)	24.4	24.4
HC Emissions (g)	8	8
CO Emissions (g)	131	131
NOx Emissions (g)	22	22
Vehicles Entered	27	27
Vehicles Exited	27	27
Hourly Exit Rate	27	27
Input Volume	27	27
% of Volume	99	99
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

118: Bend Performance by approach

Approach	EB	All
Denied Delay (hr)	0	0
Denied Del/Veh (s)	0.2	0.2
Total Delay (hr)	0	0
Total Del/Veh (s)	0.1	0.1
Stop Delay (hr)	0	0
Stop Del/Veh (s)	0	0
Total Stops	0	0
Stop/Veh	0	0
Travel Dist (mi)	7.6	7.6
Travel Time (hr)	0.3	0.3
Avg Speed (mph)	30	30
Fuel Used (gal)	0.2	0.2
Fuel Eff. (mpg)	37.6	37.6
HC Emissions (g)	16	16
CO Emissions (g)	251	251
NOx Emissions (g)	45	45
Vehicles Entered	67	67
Vehicles Exited	66	66
Hourly Exit Rate	66	66
Input Volume	66	66
% of Volume	101	101
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	0	0

120: Bend Performance by approach

Approach	EB	WB	All
Denied Delay (hr)	0	0	0
Denied Del/Veh (s)	0.1	0	0
Total Delay (hr)	0	0	0
Total Del/Veh (s)	0.1	4.4	3.4
Stop Delay (hr)	0	0	0
Stop Del/Veh (s)	0	0.9	0.7
Total Stops	0	0	0
Stop/Veh	0	0	0
Travel Dist (mi)	0.3	1.8	2.1
Travel Time (hr)	0	0.1	0.1
Avg Speed (mph)	29	19	20
Fuel Used (gal)	0	0.1	0.1
Fuel Eff. (mpg)	26.2	13.8	14.8
HC Emissions (g)	0	20	20
CO Emissions (g)	12	348	360
NOx Emissions (g)	1	55	56
Vehicles Entered	8	27	35
Vehicles Exited	8	27	35
Hourly Exit Rate	8	27	35
Input Volume	7	27	34
% of Volume	110	99	101
Denied Entry Before	0	0	0
Denied Entry After	0	0	0
Density (ft/veh)			
Occupancy (veh)	0	0	0

Total Network Performance

Denied Delay (hr)	6.5
Denied Del/Veh (s)	4.7
Total Delay (hr)	66.8
Total Del/Veh (s)	48
Stop Delay (hr)	48.6
Stop Del/Veh (s)	34.9
Total Stops	3970
Stop/Veh	0.79
Travel Dist (mi)	2557.1
Travel Time (hr)	135
Avg Speed (mph)	20
Fuel Used (gal)	101.2
Fuel Eff. (mpg)	25.3
HC Emissions (g)	3800
CO Emissions (g)	107757
NOx Emissions (g)	10816
Vehicles Entered	4911
Vehicles Exited	4885
Hourly Exit Rate	4885
Input Volume	15360
% of Volume	32
Denied Entry Before	0
Denied Entry After	11
Density (ft/veh)	459
Occupancy (veh)	129

Fehr & Pee 10/29/2024

Queuing ar Existing Conditions

Golden Sta PM Peak Hour

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	
Directions Served	UL	T	T	R	UL	T	T	R	LT	R	LTR	
Maximum Queue (ft)	193	374	344	166	549	467	404	53	512	170	154	
Average Queue (ft)	58	197	172	52	343	189	154	8	148	44	48	
95th Queue (ft)	138	311	284	120	630	520	441	32	366	166	118	
Link Distance (ft)		670	670			792	792		1345		1299	
Upstream Blk Time (%)						2	0					
Queuing Penalty (veh)						10	0					
Storage Bay Dist (ft)	170			320	640			260		50		
Storage Blk Time (%)	0	11	0		6	1	0		38			
Queuing Penalty (veh)	0	7	0		17	2	0		184			

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	SB	
Directions Served	LT	R	LT	R	UL	L	
Maximum Queue (ft)	18	38	206	86	14	49	
Average Queue (ft)	1	14	80	20	1	2	
95th Queue (ft)	8	40	158	75	6	21	
Link Distance (ft)	896		1280				
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		25		25	200	230	
Storage Blk Time (%)	0	2	22	1			
Queuing Penalty (veh)	0	0	2	1			

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB	
Directions Served	L	R	TR	UL	
Maximum Queue (ft)	24	49	2	61	
Average Queue (ft)	3	8	0	5	
95th Queue (ft)	17	33	2	32	
Link Distance (ft)	1028		1368		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		25		180	
Storage Blk Time (%)	1	0			
Queuing Penalty (veh)	0	0			

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB	
Directions Served	LTR	LTR	LTR	LTR	
Maximum Queue (ft)	78	98	124	401	
Average Queue (ft)	28	26	48	151	
95th Queue (ft)	65	66	102	340	
Link Distance (ft)	919	783	1068	860	
Upstream Blk Time (%)				0	

Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	
Directions Served	LT	R	LT	
Maximum Queue (ft)	40	85	21	
Average Queue (ft)	6	19	1	
95th Queue (ft)	25	75	12	
Link Distance (ft)	868		310	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB	
Directions Served	LTR	TR	LT	
Maximum Queue (ft)	109	2	83	
Average Queue (ft)	44	0	10	
95th Queue (ft)	89	2	44	
Link Distance (ft)	865	426	310	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	WB
Directions Served	L
Maximum Queue (ft)	15
Average Queue (ft)	1
95th Queue (ft)	9
Link Distance (ft)	1007
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	48
Average Queue (ft)	2
95th Queue (ft)	20
Link Distance (ft)	466
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB	SB	
Directions Served	LT	R	T	R	L	T	
Maximum Queue (ft)	87	96	90	80	33	33	
Average Queue (ft)	33	31	40	34	7	9	
95th Queue (ft)	73	94	97	89	29	32	
Link Distance (ft)	444	444	820			681	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)				600	215		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	NB	NB	SB	
Directions Served	L	R	L	T	TR	
Maximum Queue (ft)	53	31	89	93	35	
Average Queue (ft)	4	4	35	37	13	
95th Queue (ft)	27	19	97	83	39	
Link Distance (ft)	265	265		681	606	

Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		295
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 29: 11th St

Movement				
Directions Served				
Maximum Queue (ft)				
Average Queue (ft)				
95th Queue (ft)				
Link Distance (ft)				
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 30: 11th St

Movement	EB	EB	WB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	513	521	90	43
Average Queue (ft)	23	29	16	10
95th Queue (ft)	224	245	149	104
Link Distance (ft)	792	792	628	628
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 33: Chrisman Road & Logistics Center Driveway

Movement				
Directions Served				
Maximum Queue (ft)				
Average Queue (ft)				
95th Queue (ft)				
Link Distance (ft)				
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 38: Chrisman Road & University Driveway

Movement				
Directions Served				
Maximum Queue (ft)				
Average Queue (ft)				
95th Queue (ft)				
Link Distance (ft)				
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 78: NB I-5 Ramps

Movement				
Directions Served				
Maximum Queue (ft)				
Average Queue (ft)				
95th Queue (ft)				
Link Distance (ft)				
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary
Network wide Queuing Penalty: 179

HC Emissions (g)	7227
CO Emissions (g)	166747
NOx Emissions (g)	19250
Vehicles Entered	6425
Vehicles Exited	6428
Hourly Exit Rate	6428
Input Volume	18536
% of Volume	35
Denied Entry Before	0
Denied Entry After	1
Density (ft/veh)	640
Occupancy (veh)	120

Queuing and Blocking Report
Existing+Phase1 Conditions 11/27/2024

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	LT	LTR
Maximum Queue (ft)	118	209	190	111	502	413	383	53	375	190	110
Average Queue (ft)	43	122	98	37	257	169	151	12	137	41	28
95th Queue (ft)	94	190	174	81	489	369	315	39	286	169	76
Link Distance (ft)		670	670			792	792		1345		1299
Upstream Blk Time (%)											
0	0										
Queuing Penalty (veh)											
0	0										
Storage Bay Dist (ft)	170			320	640			260		70	
Storage Blk Time (%)		2			1	0	1		31		
Queuing Penalty (veh)		1			6	0	0		153		

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB
NB					
Directions Served	LT	R	LT	R	UL

TR					
Maximum Queue (ft)	44	65	112	74	8
1					
Average Queue (ft)	4	19	49	30	0
0					
95th Queue (ft)	23	54	90	79	5
2					
Link Distance (ft)	896		1280		
1034					
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		25		25	200
Storage Blk Time (%)	0	2	12	2	
Queuing Penalty (veh)	0	0	3	2	

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	19	61	2	62
Average Queue (ft)	1	9	0	7
95th Queue (ft)	10	41	2	36
Link Distance (ft)	1028		1368	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	0	1		
Queuing Penalty (veh)	0	0		

Intersection: 12: S Chrisman Road & Durham Ferry Road

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (ft)	70	32
Average Queue (ft)	34	3
95th Queue (ft)	59	17
Link Distance (ft)	1990	926
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	52	90	106	110
Average Queue (ft)	12	33	48	46
95th Queue (ft)	35	67	87	84
Link Distance (ft)	919	783	1068	860
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB
Directions Served	LT	R	LT
Maximum Queue (ft)	782	95	35
Average Queue (ft)	415	89	4
95th Queue (ft)	966	115	21
Link Distance (ft)	868		310
Upstream Blk Time (%)	15		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)		45	
Storage Blk Time (%)	1	65	
Queuing Penalty (veh)	3	5	

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	117	11	171
Average Queue (ft)	45	0	54
95th Queue (ft)	90	6	123
Link Distance (ft)	865	426	310
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	9
Average Queue (ft)	0
95th Queue (ft)	6
Link Distance (ft)	426
Upstream Blk Time (%)	
Queuing Penalty (veh)	

Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	26
Average Queue (ft)	1
95th Queue (ft)	12
Link Distance (ft)	457
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	SB
Directions Served	LT	R	L
Maximum Queue (ft)	26	128	23
Average Queue (ft)	3	52	1
95th Queue (ft)	17	110	10
Link Distance (ft)	444	444	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			215
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	NB
Directions Served	L	R	L
Maximum Queue (ft)	31	126	89
Average Queue (ft)	2	69	9
95th Queue (ft)	14	108	49
Link Distance (ft)	265	265	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			295
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 29: 11th St

Movement	WB
Directions Served	T

Maximum Queue (ft)	52	
Average Queue (ft)	2	
95th Queue (ft)	57	
Link Distance (ft)	670	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 30: Chrisman Road & University Dwy

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	26	35
Average Queue (ft)	10	4
95th Queue (ft)	28	23
Link Distance (ft)	400	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 37: Chrisman Road & B St

Movement	WB	WB	NB	NB	SB	SB
Directions Served	L	R	T	R	L	T
Maximum Queue (ft)	221	109	40	126	92	86
Average Queue (ft)	99	28	9	59	21	28
95th Queue (ft)	180	74	34	104	74	69
Link Distance (ft)	562		898			3192
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		150		250	150	
Storage Blk Time (%)	2				0	
Queuing Penalty (veh)	1				0	

Intersection: 38: 11th St

Movement	EB	EB	EB	WB
Directions Served	T	T	R	T
Maximum Queue (ft)	170	200	66	18
Average Queue (ft)	6	12	2	1
95th Queue (ft)	112	162	74	17
Link Distance (ft)	792	792	792	628
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 78: NB I-5 Ramps

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 176

% of Volume	97	106	104
Denied Entry Before	0	0	0
Denied Entry After	0	0	0
Density (ft/veh)			
Occupancy (veh)	0	0	0

Total Network Performance

Denied Delay (hr)	2.1
Denied Del/Veh (s)	1.0
Total Delay (hr)	40.7
Total Del/Veh (s)	20.1
Stop Delay (hr)	23.9
Stop Del/Veh (s)	11.8
Total Stops	3778
Stop/Veh	0.52
Travel Dist (mi)	3472.9
Travel Time (hr)	131.2
Avg Speed (mph)	27
Fuel Used (gal)	123.6
Fuel Eff. (mpg)	28.1
HC Emissions (g)	5063
CO Emissions (g)	142781
NOx Emissions (g)	14270
Vehicles Entered	7179
Vehicles Exited	7187
Hourly Exit Rate	7187
Input Volume	20633
% of Volume	35
Denied Entry Before	0
Denied Entry After	1
Density (ft/veh)	592
Occupancy (veh)	129

Queuing and Blocking Report
Existing+Phase1 Conditions 11/27/2024

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	UL	T	T	R	L	T	T	R	LT	R	LTR
Maximum Queue (ft)	214	312	294	135	561	461	400	42	396	190	139

Average Queue (ft)						53	186	164	48	349		
186	155	6	127	36	45							
95th Queue (ft)						125	280	267	99	619		
515	447	27	288	157	109							
Link Distance (ft)							670	670				
792	792		1345		1299							
Upstream Blk Time (%)												
2	0											
Queuing Penalty (veh)												
10	0											
Storage Bay Dist (ft)						170			320	640		
	260		70									
Storage Blk Time (%)							10	0		6		
0	0		28	0								
Queuing Penalty (veh)							6	0		17		
1	0		145	0								

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	LT	R	UL	L
Maximum Queue (ft)	25	44	148	75	14	41
Average Queue (ft)	1	19	64	21	1	2
95th Queue (ft)	11	46	118	69	7	18
Link Distance (ft)	896		1280			
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25		25	200	230
Storage Blk Time (%)	0	3	22	1		
Queuing Penalty (veh)	0	0	2	2		

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	UL
Maximum Queue (ft)	24	38	10	57
Average Queue (ft)	4	6	0	6
95th Queue (ft)	17	26	7	29
Link Distance (ft)	1028		1368	

Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	1	0		
Queuing Penalty (veh)	0	0		

Intersection: 12: S Chrisman Road & Durham Ferry Road

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	67	6	85
Average Queue (ft)	30	0	16
95th Queue (ft)	53	4	49
Link Distance (ft)	1990	638	926
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	76	75	96	325
Average Queue (ft)	27	26	40	118
95th Queue (ft)	59	57	77	251
Link Distance (ft)	919	783	1068	860
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	149	94	52	2
Average Queue (ft)	20	47	5	0
95th Queue (ft)	91	102	30	2
Link Distance (ft)	868		310	431
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	0	10		
Queuing Penalty (veh)	0	1		

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	210	4	141
Average Queue (ft)	76	0	44
95th Queue (ft)	153	3	100
Link Distance (ft)	865	426	310
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	WB	SB
Directions Served	L	LT
Maximum Queue (ft)	6	29
Average Queue (ft)	0	1
95th Queue (ft)	3	14
Link Distance (ft)	1015	426
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	31
Average Queue (ft)	2
95th Queue (ft)	16
Link Distance (ft)	457
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	SB
Directions Served	LT	R	L
Maximum Queue (ft)	73	74	16
Average Queue (ft)	30	24	0
95th Queue (ft)	61	72	7
Link Distance (ft)	444	444	
Upstream Blk Time (%)			
Queuing Penalty (veh)			

Storage Bay Dist (ft)			215		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	NB		
Directions Served	L	R	L		
Maximum Queue (ft)	47	31	18		
Average Queue (ft)	3	4	1		
95th Queue (ft)	23	20	11		
Link Distance (ft)	265	265			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			295		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 29: 11th St

Movement					
Directions Served					
Maximum Queue (ft)					
Average Queue (ft)					
95th Queue (ft)					
Link Distance (ft)					
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 30: Chrisman Road & University Dwy

Movement	EB	NB			
Directions Served	LR	L			
Maximum Queue (ft)	34	26			
Average Queue (ft)	20	2			
95th Queue (ft)	36	14			
Link Distance (ft)	400				
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		150			
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 37: Chrisman Road & B St

Movement	WB	WB	NB	NB	SB
SB					

Directions Served	L	R	T	R	L
T					
Maximum Queue (ft)	243	138	39	110	78
77					
Average Queue (ft)	128	34	6	48	17
27					
95th Queue (ft)	212	85	26	89	63
65					
Link Distance (ft)	562		898		
3192					
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		150		250	150
Storage Blk Time (%)	4				
Queuing Penalty (veh)	5				

Intersection: 38: 11th St

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	R	T	T
Maximum Queue (ft)	134	482	66	74	59
Average Queue (ft)	7	33	2	14	9
95th Queue (ft)	114	262	74	117	86
Link Distance (ft)	792	792	792	628	628
Upstream Blk Time (%)		0	0		
Queuing Penalty (veh)		0	0		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 78: NB I-5 Ramps

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 190

Occupancy (veh) 297

Fehr & Peers 11/13/2024

Queuing and Blocking Report Existing Plus Project
GoldenState International Logistics Center AM Peak Hour

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	R	LT	R	LTR
Maximum Queue (ft)	146	256	222	198	700	876	441	71	1084	170	145
Average Queue (ft)	46	143	110	77	699	812	176	12	408	104	33
95th Queue (ft)	106	231	197	155	701	850	378	48	911	239	97
Link Distance (ft)		670	670			792	792		1345		1299
Upstream Blk Time (%)						65	0		0		
Queuing Penalty (veh)						474	0		0		
Storage Bay Dist (ft)	170			320	640		260		50		
Storage Blk Time (%)	0	4			88	0	1		49		
Queuing Penalty (veh)	0	2			390	2	0		305		

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	LT	R	UL	TR
Maximum Queue (ft)	65	83	235	86	19	1
Average Queue (ft)	6	33	94	57	1	0
95th Queue (ft)	34	64	179	101	9	1
Link Distance (ft)	896		1280			1154
Upstream Blk Time (%)						
Queuing Penalty (veh)						

Storage Bay Dist (ft)		25		25	200
Storage Blk Time (%)	0	6	27	9	
Queuing Penalty (veh)	0	0	25	20	

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	28	86	12	96
Average Queue (ft)	2	14	0	22
95th Queue (ft)	15	59	5	66
Link Distance (ft)	1028		1368	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	0	1		0
Queuing Penalty (veh)	0	0		0

Intersection: 12: Chrisman Road & Durham Ferry Road

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	411	560	164	781
Average Queue (ft)	220	208	22	314
95th Queue (ft)	397	407	85	655
Link Distance (ft)	1984	2606		926
Upstream Blk Time (%)				1
Queuing Penalty (veh)				0
Storage Bay Dist (ft)			150	
Storage Blk Time (%)				15
Queuing Penalty (veh)				3

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	107	184	144	149
Average Queue (ft)	27	67	60	62
95th Queue (ft)	72	143	117	122
Link Distance (ft)	919	783	1068	860
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	939	95	292	502
Average Queue (ft)	924	95	43	441
95th Queue (ft)	961	96	192	687
Link Distance (ft)	868		310	431
Upstream Blk Time (%)	100		4	34
Queuing Penalty (veh)	0		38	0
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	5	66		
Queuing Penalty (veh)	81	5		

Intersection: 15: Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	932	262	345
Average Queue (ft)	883	38	297
95th Queue (ft)	918	209	400
Link Distance (ft)	865	426	310
Upstream Blk Time (%)	100	3	15
Queuing Penalty (veh)	0	10	100
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	L	R	T	LT
Maximum Queue (ft)	156	73	18	76
Average Queue (ft)	30	8	2	7
95th Queue (ft)	302	64	19	44
Link Distance (ft)	1015		457	426
Upstream Blk Time (%)	2			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)		70		
Storage Blk Time (%)		1		
Queuing Penalty (veh)		0		

Intersection: 17: Chrisman Road & I-580 EB On Ramp

Movement	NB	SB
Directions Served	TR	LT
Maximum Queue (ft)	2	62
Average Queue (ft)	0	5
95th Queue (ft)	2	35
Link Distance (ft)	1051	457

Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB
Directions Served	LT	R	T	R	L
Maximum Queue (ft)	36	166	23	47	214
Average Queue (ft)	3	74	1	2	76
95th Queue (ft)	18	142	14	24	166
Link Distance (ft)	444	444	820		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				600	215
Storage Blk Time (%)					0
Queuing Penalty (veh)					0

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	SB
Directions Served	L	R	T	L	TR
Maximum Queue (ft)	390	312	271	258	71
Average Queue (ft)	371	114	266	98	7
95th Queue (ft)	411	245	289	195	38
Link Distance (ft)	266	266	200		
1136					
Upstream Blk Time (%)	94	1	87		
Queuing Penalty (veh)	0	0	0		
Storage Bay Dist (ft)				295	
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 78: NB I-5 Ramps

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 97: 11th St

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	R	T	T
Maximum Queue (ft)	62	224	66	699	645
Average Queue (ft)	2	10	2	677	480
95th Queue (ft)	59	122	74	752	833
Link Distance (ft)	792	792	792	628	628
Upstream Blk Time (%)			0	92	0
Queuing Penalty (veh)			0	0	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 122: 11th St

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 1455

NOx Emissions (g)	44	44
Vehicles Entered	165	165
Vehicles Exited	165	165
Hourly Exit Rate	165	165
Input Volume	170	170
% of Volume	97	97
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	2	2

Total Network Performance

Denied Delay (hr)	33.9
Denied Del/Veh (s)	15.7
Total Delay (hr)	185.2
Total Del/Veh (s)	81.5
Stop Delay (hr)	95.5
Stop Del/Veh (s)	42.0
Total Stops	13856
Stop/Veh	1.69
Travel Dist (mi)	11534.7
Travel Time (hr)	523.7
Avg Speed (mph)	24
Fuel Used (gal)	401.0
Fuel Eff. (mpg)	28.8
HC Emissions (g)	24988
CO Emissions (g)	497410
NOx Emissions (g)	68956
Vehicles Entered	7725
Vehicles Exited	7693
Hourly Exit Rate	7693
Input Volume	51526
% of Volume	15
Denied Entry Before	6
Denied Entry After	53
Density (ft/veh)	387
Occupancy (veh)	490

Intersection: 1: Chrisman Road

Movement	NB	NB	NB	SB	SB
Directions Served	T	T	T	T	T

Maximum Queue (ft)	51	64	30	9	22
Average Queue (ft)	2	3	1	0	1
95th Queue (ft)	25	33	25	8	11
Link Distance (ft)	287	287	287	1044	
1044					
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: S Chrisman Road/Chrisman Road & Durham Ferry Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	R	T	T	R	L	T	T	
Maximum Queue (ft)	203	69	173	185	92	47	210	182	
Average Queue (ft)	100	17	60	76	31	15	97	76	
95th Queue (ft)	172	46	134	148	72	42	177	152	
Link Distance (ft)		1960	2578	2578			914	914	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	250				250	150			
Storage Blk Time (%)	0					1			
Queuing Penalty (veh)	0					0			

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	WB	WB	NB	NB	SB	SB	SB	SB	
Directions Served	LT	R	R	R	L	T	T	T	T	R	
Maximum Queue (ft)	50	357	387	322	56	320	326	670	645	574	443
Average Queue (ft)	6	239	262	189	7	158	182	321	299	142	128
95th Queue (ft)	30	338	360	293	35	300	327	620	590	383	302
Link Distance (ft)		9685				293	293	808	808	808	

Upstream Blk Time (%)									
1	1	0	1	1					
Queuing Penalty (veh)									
4	7	1	2	2					
Storage Bay Dist (ft)					400		1000	1000	100
				400					
Storage Blk Time (%)						0			
16			2	0					
Queuing Penalty (veh)						0			
2			8	0					

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	EB	NB	SB	SB	
Directions Served	L	L	TR	TR	L	T	
Maximum Queue (ft)	508	548	90	529	324	340	307
Average Queue (ft)	276	316	8	251	278	276	152
95th Queue (ft)	471	518	126	449	363	362	317
Link Distance (ft)			1615	402	293	293	293
Upstream Blk Time (%)				3	23	23	4
Queuing Penalty (veh)				9	61	59	11
Storage Bay Dist (ft)	1000	1000					
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	L	R	T	LT
Maximum Queue (ft)	15	98	12	106
Average Queue (ft)	1	6	0	8
95th Queue (ft)	16	52	6	59
Link Distance (ft)	1014		457	402
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		70		
Storage Blk Time (%)		0		
Queuing Penalty (veh)		0		

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	127
Average Queue (ft)	8
95th Queue (ft)	56
Link Distance (ft)	457
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB
Directions Served	LT	R	T	R	L
Maximum Queue (ft)	29	165	42	34	250
Average Queue (ft)	2	73	2	2	102
95th Queue (ft)	15	142	19	20	217
Link Distance (ft)	444	444	820		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				600	215
Storage Blk Time (%)					1
Queuing Penalty (veh)					1

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB
Directions Served	L	R	T	L	T
Maximum Queue (ft)	391	298	537	358	366
Average Queue (ft)	266	115	85	194	39
95th Queue (ft)	411	241	346	347	230

520					
Link Distance (ft)	270	270	2302		681
620					
Upstream Blk Time (%)	15	0			0
0					
Queuing Penalty (veh)	0	0			0
0					
Storage Bay Dist (ft)				295	
Storage Blk Time (%)				6	
Queuing Penalty (veh)				2	

Intersection: 22: S Bird Rd & C St/W Vernalis Rd

Movement	EB	NB
Directions Served	LTR	L
Maximum Queue (ft)	174	125
Average Queue (ft)	91	22
95th Queue (ft)	148	80
Link Distance (ft)	410	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		150
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 30: Chrisman Road & University Dwy

Movement	EB	NB	NB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	56	113	10	2	24
Average Queue (ft)	19	48	0	0	2
95th Queue (ft)	44	90	9	3	14
Link Distance (ft)	2336		499	2578	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		250			250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 31: Chrisman Road & University Main Driveway

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	91	92	263	137	165	314	332	174

Average Queue (ft)						37	34	134	24	39
154	165	37								
95th Queue (ft)						72	71	223	94	113
268	283	107								
Link Distance (ft)							2231		883	883
499	499									
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)						250		400		
	250									
Storage Blk Time (%)										
1										
Queuing Penalty (veh)										
2										

Intersection: 32: Chrisman Road & PG Central Dwy

Movement	EB	WB
Directions Served	R	R
Maximum Queue (ft)	148	25
Average Queue (ft)	45	5
95th Queue (ft)	112	19
Link Distance (ft)	1980	1878
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Chrisman Road & A St

Movement						EB	EB	EB	EB	WB
WB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB
SB										
Directions Served						L	L	T	R	L
T	R	L	L	T	T	R	L	L	T	T
R										
Maximum Queue (ft)						109	158	73	248	210
63	125	258	305	362	352	233	107	167	299	319
223										
Average Queue (ft)						30	56	9	92	73
9	34	121	145	143	147	34	40	72	148	159
54										
95th Queue (ft)						80	125	40	192	176
43	88	223	249	282	288	111	87	131	266	276
132										
Link Distance (ft)								2010		
1928			359	359					1077	

1077
Upstream Blk Time (%)
0 0 0 0

Queuing Penalty (veh)
0 1 1 0

Storage Bay Dist (ft) 250 250 250 250 250
250 250 250 250 250 250 250 250
250
Storage Blk Time (%) 0 1
0 1 1 1 1 1
0
Queuing Penalty (veh) 0 0
1 4 4 1 1 2
0

Intersection: 34: Chrisman Road & PG Central Dwy 2

Movement	EB	WB	NB	NB	SB
Directions Served	R	R	T	T	T
Maximum Queue (ft)	38	45	11	3	23
Average Queue (ft)	12	12	0	0	1
95th Queue (ft)	37	34	8	3	19
Link Distance (ft)	2126	1836	633	633	359

359
Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 35: Chrisman Road & East Area Industrial Dwy

Movement	WB	WB	NB	NB	NB
Directions Served	L	R	T	T	R
Maximum Queue (ft)	195	106	425	417	228

SB SB SB
L T T
161 205 236

Average Queue (ft)					63	30	181	149	44	
67	52	79								
95th Queue (ft)					150	79	360	321	143	
127	149	191								
Link Distance (ft)					1690	1690	534	534		
	633	633								
Upstream Blk Time (%)								0		
Queuing Penalty (veh)								0		
Storage Bay Dist (ft)									150	
250										
Storage Blk Time (%)								5	0	
	0									
Queuing Penalty (veh)								6	0	
	0									

Intersection: 36: Chrisman Road & PG East Dwy

Movement	WB	NB	NB	SB	SB
Directions Served	R	T	T	T	T
Maximum Queue (ft)	71	31	40	11	20
Average Queue (ft)	13	1	2	0	1
95th Queue (ft)	43	18	24	11	11
Link Distance (ft)	1729	458	458	534	534
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 37: Chrisman Road & B St

Movement					EB	EB	EB	WB	WB	
WB	NB	NB	NB	NB	SB	SB	SB	SB	SB	
Directions Served					L	T	R	L	T	
R	L	L	T	T	R	L	L	T	T	R
Maximum Queue (ft)					218	94	461	249	223	
121	400	440	555	566	474	99	202	429	468	293
Average Queue (ft)					84	14	196	100	19	
29	208	201	216	221	88	31	55	218	241	57
95th Queue (ft)					179	60	375	207	115	
80	348	340	430	442	284	74	137	372	399	179
Link Distance (ft)						2238	2238			
1906			1044	1044	1044			458	458	
Upstream Blk Time (%)										
							0	0		
Queuing Penalty (veh)										
							1	2		

Storage Bay Dist (ft)						300			150	
150	750	750				250	250			250
Storage Blk Time (%)						0			8	0
0							0	5	8	
Queuing Penalty (veh)						0			3	0
0							0	5	6	

Intersection: 38: Chrisman Road & Gateway Center Dwy

Movement						WB	WB	WB	NB	NB
NB	NB	SB	SB	SB	SB	SB				
Directions Served						L	L	R	T	T
T	R	L	L	T	T	T				
Maximum Queue (ft)						364	426	380	340	342
338	243	211	212	240	246	294				
Average Queue (ft)						130	210	157	277	266
228	107	113	110	87	75	119				
95th Queue (ft)						289	359	298	329	342
329	243	196	184	204	187	251				
Link Distance (ft)							1730	1730	243	243
243			287	287	287					
Upstream Blk Time (%)									16	11
4	0		0	0	0					
Queuing Penalty (veh)									116	80
28	0		0	0	1					
Storage Bay Dist (ft)						350				
	150	300	300							
Storage Blk Time (%)						0	1			
12	1		0							
Queuing Penalty (veh)						0	2			
26	4		0							

Intersection: 39: Gateway Center Dwy 2 & Chrisman Road

Movement						WB	NB	NB	NB	NB
SB	SB	SB								
Directions Served						R	T	T	T	R
T	T	T								
Maximum Queue (ft)						177	330	338	272	22
6	18	41								
Average Queue (ft)						53	117	77	41	1
0	1	1								
95th Queue (ft)						134	271	212	162	25
4	15	33								
Link Distance (ft)						1764	808	808	808	
243	243	243								
Upstream Blk Time (%)								0		
	0									
Queuing Penalty (veh)								0		
	1									

Storage Bay Dist (ft)		150
Storage Blk Time (%)	1	
Queuing Penalty (veh)	1	

Network Summary
Network wide Queuing Penalty: 471

Total Del/Veh (s)	100.0
Stop Delay (hr)	213.4
Stop Del/Veh (s)	75.4
Total Stops	7748
Stop/Veh	0.76
Travel Dist (mi)	5186.2
Travel Time (hr)	1620.9
Avg Speed (mph)	12
Fuel Used (gal)	508.8
Fuel Eff. (mpg)	10.2
HC Emissions (g)	12619
CO Emissions (g)	268954
NOx Emissions (g)	23891
Vehicles Entered	9828
Vehicles Exited	9757
Hourly Exit Rate	9757
Input Volume	33206
% of Volume	29
Denied Entry Before	194
Denied Entry After	2253
Density (ft/veh)	149
Occupancy (veh)	417

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Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	UL	T	T	R	L	T	T	R	LT	R	LTR
Maximum Queue (ft)	251	417	386	307	700	852	713	67	1282	170	153
Average Queue (ft)	67	226	200	78	698	800	168	8	885	133	42
95th Queue (ft)	164	348	318	180	725	889	473	39	1756	247	106
Link Distance (ft)		670	670			792	792		1345		1299
Upstream Blk Time (%)						65	0		20		
Queuing Penalty (veh)						344	0		0		
Storage Bay Dist (ft)	170			320	640		260			50	
Storage Blk Time (%)	0	16	1	0	91						

0	0	57	0					
Queuing Penalty (veh)				0	10	1	0	262
1	0	438	1					

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB
SB					
Directions Served	LT	R	LT	R	UL
L					
Maximum Queue (ft)	96	72	309	86	22
50					
Average Queue (ft)	9	45	118	46	1
4					
95th Queue (ft)	54	71	233	95	9
27					
Link Distance (ft)	896		1280		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		25		25	200
230					
Storage Blk Time (%)	0	26	42	5	
Queuing Penalty (veh)	0	0	26	10	

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	UL
Maximum Queue (ft)	24	52	14	90
Average Queue (ft)	4	7	1	30
95th Queue (ft)	18	33	12	68
Link Distance (ft)	1028		1368	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	1	0		
Queuing Penalty (veh)	0	0		

Intersection: 12: Chrisman Road & Durham Ferry Road

Movement	WB	NB	SB	SB
Directions Served	LR	TR	L	T
Maximum Queue (ft)	488	2677	224	366
Average Queue (ft)	302	2314	101	129
95th Queue (ft)	544	3240	187	289

Link Distance (ft)	1984	2606		926
Upstream Blk Time (%)		32		
Queuing Penalty (veh)		0		
Storage Bay Dist (ft)			150	
Storage Blk Time (%)			7	3
Queuing Penalty (veh)			40	3

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	193	134	148	758
Average Queue (ft)	64	50	59	378
95th Queue (ft)	149	104	119	815
Link Distance (ft)	919	783	1068	860
Upstream Blk Time (%)				6
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	939	95	318	475
Average Queue (ft)	920	78	152	176
95th Queue (ft)	967	137	395	542
Link Distance (ft)	868		310	431
Upstream Blk Time (%)	100		36	10
Queuing Penalty (veh)	0		222	0
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	27	48		
Queuing Penalty (veh)	251	5		

Intersection: 15: Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	932	497	318
Average Queue (ft)	883	182	164
95th Queue (ft)	922	560	362
Link Distance (ft)	865	426	310
Upstream Blk Time (%)	100	30	5
Queuing Penalty (veh)	0	58	54
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	L	R	T	LT
Maximum Queue (ft)	681	137	214	50
Average Queue (ft)	247	46	52	3
95th Queue (ft)	927	168	243	26
Link Distance (ft)	1015		457	426
Upstream Blk Time (%)	17		3	
Queuing Penalty (veh)	0		1	
Storage Bay Dist (ft)		70		
Storage Blk Time (%)		5		
Queuing Penalty (veh)		0		

Intersection: 17: Chrisman Road & I-580 EB On Ramp

Movement	NB	SB
Directions Served	TR	LT
Maximum Queue (ft)	17	70
Average Queue (ft)	2	5
95th Queue (ft)	20	33
Link Distance (ft)	1051	457
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	SB	SB
Directions Served	LT	R	T	L	T
Maximum Queue (ft)	137	93	10	215	27
Average Queue (ft)	50	35	0	62	0
95th Queue (ft)	114	100	8	150	0
Link Distance (ft)	444	444	820		681
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				215	
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB
SB					
Directions Served	L	R	T	L	T
TR					
Maximum Queue (ft)	390	32	271	107	5
108					
Average Queue (ft)	363	3	228	28	0

28					
95th Queue (ft)	466	19	367	89	5
79					
Link Distance (ft)	266	266	200		681
1136					
Upstream Blk Time (%)	89		80		
Queuing Penalty (veh)	0		0		
Storage Bay Dist (ft)				295	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 78: NB I-5 Ramps

Movement					
Directions Served					
Maximum Queue (ft)					
Average Queue (ft)					
95th Queue (ft)					
Link Distance (ft)					
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 97: 11th St

Movement	EB	EB	EB	WB	WB
Directions Served	T	T	R	T	T
Maximum Queue (ft)	767	785	546	699	634
Average Queue (ft)	97	155	27	630	388
95th Queue (ft)	494	625	265	845	818
Link Distance (ft)	792	792	792	628	628
Upstream Blk Time (%)	0	0	0	83	0
Queuing Penalty (veh)	0	1	1	0	0
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 122: 11th St

Movement					
Directions Served					
Maximum Queue (ft)					
Average Queue (ft)					

95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 1729

Stop/Veh	1.74
Travel Dist (mi)	10209.2
Travel Time (hr)	442.7
Avg Speed (mph)	24
Fuel Used (gal)	348.4
Fuel Eff. (mpg)	29.3
HC Emissions (g)	14577
CO Emissions (g)	337893
NOx Emissions (g)	42136
Vehicles Entered	6972
Vehicles Exited	6975
Hourly Exit Rate	6975
Input Volume	49748
% of Volume	14
Denied Entry Before	0
Denied Entry After	13
Density (ft/veh)	442
Occupancy (veh)	428

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Intersection: 1: Chrisman Road

Movement	NB	NB	SB	SB
Directions Served	T	T	T	T
Maximum Queue (ft)	20	9	3	26
Average Queue (ft)	1	0	0	1
95th Queue (ft)	18	11	3	15
Link Distance (ft)	287	287	1044	1044
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 12: S Chrisman Road/Chrisman Road & Durham Ferry Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (ft)	207	104	266	248	123	188	203	135
Average Queue (ft)	103	16	99	107	44	73	59	34
95th Queue (ft)	180	60	204	200	91			

142 149 98
Link Distance (ft) 1960 2578 2578
914 914
Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft) 250 250
150
Storage Blk Time (%) 0 0 0
2 1
Queuing Penalty (veh) 0 0 0
5 0

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement WB WB WB WB NB
NB NB SB SB SB SB
Directions Served LT R R R L
T T T T T R
Maximum Queue (ft) 54 259 273 193 125
318 336 420 413 308 224
Average Queue (ft) 10 122 140 86 10
165 183 199 208 93 85
95th Queue (ft) 36 207 230 160 62
327 334 365 371 218 175
Link Distance (ft) 9685
293 293 808 808 808
Upstream Blk Time (%)
3 2
Queuing Penalty (veh)
8 7
Storage Bay Dist (ft) 400 1000 1000 100
400
Storage Blk Time (%) 0
27 0
Queuing Penalty (veh) 0
3 0

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement EB EB EB NB SB
SB SB
Directions Served L L TR TR L
L T
Maximum Queue (ft) 373 389 67 384 312
318 204
Average Queue (ft) 172 206 9 163 150
156 50
95th Queue (ft) 312 334 35 311 291

289 145
Link Distance (ft) 1615 402 293
293 293
Upstream Blk Time (%) 0 1
1 0
Queuing Penalty (veh) 1 4
5 0
Storage Bay Dist (ft) 1000 1000

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	WB	NB	SB
Directions Served	L	T	LT
Maximum Queue (ft)	9	2	128
Average Queue (ft)	1	0	9
95th Queue (ft)	4	3	59
Link Distance (ft)	1014	457	402
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	67
Average Queue (ft)	5
95th Queue (ft)	32
Link Distance (ft)	457
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB
SB					
Directions Served	LT	R	T	R	L
T					
Maximum Queue (ft)	118	96	6	24	274
125					

Average Queue (ft)	44	33	0	1	107
6					
95th Queue (ft)	95	97	6	12	245
84					
Link Distance (ft)	444	444	820		
681					
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				600	215
Storage Blk Time (%)					1
Queuing Penalty (veh)					0

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB
SB					
Directions Served	L	R	T	L	T
TR					
Maximum Queue (ft)	377	31	140	158	74
411					
Average Queue (ft)	214	3	18	49	10
247					
95th Queue (ft)	369	18	117	130	44
383					
Link Distance (ft)	270	270	2302		681
620					
Upstream Blk Time (%)	9				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)				295	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 22: S Bird Rd & C St/W Vernalis Rd

Movement	EB	NB	SB
Directions Served	LTR	L	LTR
Maximum Queue (ft)	481	92	3
Average Queue (ft)	385	9	0
95th Queue (ft)	602	47	3
Link Distance (ft)	410		362

Upstream Blk Time (%)			58						
Queuing Penalty (veh)			0						
Storage Bay Dist (ft)				150					
Storage Blk Time (%)				0					
Queuing Penalty (veh)				0					

Intersection: 30: Chrisman Road & University Dwy

Movement	EB	NB	SB
Directions Served	R	L	R
Maximum Queue (ft)	78	55	4
Average Queue (ft)	36	19	0
95th Queue (ft)	64	47	3
Link Distance (ft)	2336		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		250	250
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 31: Chrisman Road & University Main Driveway

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	169	166	137	213	213	243	266	52
Average Queue (ft)	83	77	61	79	97	113	122	21
95th Queue (ft)	139	137	108	164	180	194	216	49
Link Distance (ft)		2231		883	883	499	499	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250		400					250
Storage Blk Time (%)		0						0
Queuing Penalty (veh)		0						0

Intersection: 32: Chrisman Road & PG Central Dwy

Movement	EB	WB
Directions Served	R	R
Maximum Queue (ft)	27	28

Average Queue (ft)	7	7
95th Queue (ft)	25	25
Link Distance (ft)	1980	1878
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Chrisman Road & A St

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	T	R	L	T	R	L	L	T	T	R	L	L	T	R	T
Maximum Queue (ft)	151	173	102	274	163	81	118	247	269	251	244	114	95	124	310	318	168
Average Queue (ft)	60	77	9	120	61	8	45	106	132	109	111	30	22	53	137	148	38
95th Queue (ft)	118	136	56	228	130	42	91	211	226	208	207	81	64	98	240	253	107
Link Distance (ft)			2010			1928			359	359					1077		1077
Upstream Blk Time (%)																	
Queuing Penalty (veh)																	
Storage Bay Dist (ft)	250	250	250			250	250	250				250	250	250			250
Storage Blk Time (%)		0		1		0	1	0	0						1	1	0
Queuing Penalty (veh)		1		3		1	1	0	0						1	1	0

Intersection: 34: Chrisman Road & PG Central Dwy 2

Movement	EB	WB	SB
Directions Served	R	R	T
Maximum Queue (ft)	76	49	2

Average Queue (ft)				33	19	0			
95th Queue (ft)				62	40	2			
Link Distance (ft)				2126	1836	359			
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)									
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 35: Chrisman Road & East Area Industrial Dwy

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (ft)	144	90	305	296	127	106	181	220
Average Queue (ft)	52	28	110	94	23	45	47	82
95th Queue (ft)	118	70	230	201	77	86	125	178
Link Distance (ft)	1690	1690	534	534			633	633
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)					150	250		
Storage Blk Time (%)				1	0		0	
Queuing Penalty (veh)				1	0		0	

Intersection: 36: Chrisman Road & PG East Dwy

Movement	WB	NB	SB	SB
Directions Served	R	T	T	T
Maximum Queue (ft)	55	7	16	52
Average Queue (ft)	22	0	1	4
95th Queue (ft)	45	8	11	46
Link Distance (ft)	1729	458	534	534
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 37: Chrisman Road & B St

Movement	EB	EB	EB	WB	WB
WB NB NB NB NB NB	SB	SB	SB	SB	SB
Directions Served	L	T	R	L	T
R L L T T R	L	L	T	T	R
Maximum Queue (ft)	337	652	957	222	140
97 285 252 280 286 143	75	211	439	490	290
Average Queue (ft)	112	113	519	98	17
37 138 137 132 133 46	17	48	219	256	40
95th Queue (ft)	254	605	965	188	76
82 241 220 247 244 106	53	131	383	420	156
Link Distance (ft)		2238	2238		
1906 1044 1044 1044				458	458
Upstream Blk Time (%)					
			0	1	
Queuing Penalty (veh)					
			2	6	
Storage Bay Dist (ft)	300			150	
150 750 750	250	250			250
Storage Blk Time (%)	2			4	0
0			5	9	
Queuing Penalty (veh)	0			4	0
0			3	5	

Intersection: 38: Chrisman Road & Gateway Center Dwy

Movement	WB	WB	WB	NB	NB
NB NB SB SB SB SB	SB				
Directions Served	L	L	R	T	T
T R L L T T	T				
Maximum Queue (ft)	148	205	145	312	290
247 164 133 148 208 213	251				
Average Queue (ft)	34	94	52	192	164
127 50 59 77 79 90	123				
95th Queue (ft)	94	164	111	300	265
229 116 113 126 164 175	223				
Link Distance (ft)		1730	1730	243	243
243 287 287 287					
Upstream Blk Time (%)				3	1
0 0 0 0 0					
Queuing Penalty (veh)				14	6
1 0 0 0 0					
Storage Bay Dist (ft)	350				
150 300 300					
Storage Blk Time (%)					
2 0 0					
Queuing Penalty (veh)					
3 0 0					

Intersection: 39: Gateway Center Dwy 2 & Chrisman Road

Movement	WB	NB	NB	NB
Directions Served	R	T	T	T
Maximum Queue (ft)	88	100	50	18
Average Queue (ft)	33	10	3	1
95th Queue (ft)	73	55	29	11
Link Distance (ft)	1764	808	808	808
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary
Network wide Queuing Penalty: 87

Appendix C: Cumulative Vehicle Queuing Calculations

Fehr & Pee 4/18/2023

Queuing ar Cumulative No Project

Pacific Gat AM Peak Hour

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB	
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T	T	R	L	L	T	T	R	
Maximum Queue (ft)	97	198	326	329	189	220	226	327	354	295	319	266	333	342	340	731	165	176	129	
Average Queue (ft)	30	62	170	181	51	113	131	194	195	110	148	92	100	175	253	327	71	68	49	
95th Queue (ft)	75	132	276	291	133	190	203	295	300	206	276	196	216	302	370	623	135	142	99	
Link Distance (ft)			632	632				5224	5224			5207	5207			3793	3793	3793		
Upstream Blk Time (%)																				
Queuing Penalty (veh)																				
Storage Bay Dist (ft)	200	200			320	640	640			260	250			250	250				250	
Storage Blk Time (%)			5	0	0				2	0	3	0	0	3	10	18				
Queuing Penalty (veh)			5	0	0				11	1	3	0	0	4	28	49				

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	NB	SB
Directions Served	LT	R	LT	R	UL	TR	L
Maximum Queue (ft)	87	86	205	86	14	6	16
Average Queue (ft)	14	20	73	40	1	0	1
95th Queue (ft)	53	63	153	102	7	3	8
Link Distance (ft)	896		1280			1034	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		25		25	200		230
Storage Blk Time (%)	2	2	18	5			
Queuing Penalty (veh)	0	0	5	6			

Intersection: 11: Ahern Rd & SB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	24	85	42	124
Average Queue (ft)	4	14	2	28
95th Queue (ft)	18	60	22	93
Link Distance (ft)	1028		1368	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	1	1		0
Queuing Penalty (veh)	0	0		0

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	92	153	989	171
Average Queue (ft)	28	48	472	75
95th Queue (ft)	75	107	999	141
Link Distance (ft)	919	783	1068	860
Upstream Blk Time (%)			6	
Queuing Penalty (veh)			0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB
Directions Served	LT	R	LT
Maximum Queue (ft)	176	92	39
Average Queue (ft)	21	50	4
95th Queue (ft)	96	116	22
Link Distance (ft)	868		310
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		45	
Storage Blk Time (%)	0	1	
Queuing Penalty (veh)	0	0	

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	86	40	181
Average Queue (ft)	22	1	43
95th Queue (ft)	66	16	127
Link Distance (ft)	865	426	310
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	WB
Directions Served	L
Maximum Queue (ft)	20
Average Queue (ft)	2
95th Queue (ft)	13
Link Distance (ft)	1007

Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	77
Average Queue (ft)	6
95th Queue (ft)	40
Link Distance (ft)	466
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 29: 11th St

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 78: SB I-5 Ramps & NB I-5 Ramps

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary
Network wide Queuing Penalty: 129

Fuel Used (gal)	0.2	0	0.3	0.1	0.7
Fuel Eff. (mpg)	34.1	85	55.3	30.5	43.9
HC Emissions (g)	11	0	16	8	36
CO Emissions (g)	284	3	353	216	856
NOx Emissions (g)	34	0	41	23	98
Vehicles Entered	39	6	168	40	253
Vehicles Exited	39	6	169	40	254
Hourly Exit Rate	39	6	169	40	254
Input Volume	40	5	165	43	253
% of Volume	98	114	102	94	100
Denied Entry Before	0	0	0	0	0
Denied Entry After	0	0	0	0	0
Density (ft/veh)					1833
Occupancy (veh)	0	0	1	0	1

29: 11th St Performance by movement

Movement
Denied Delay (hr)
Denied Del/Veh (s)
Total Delay (hr)
Total Del/Veh (s)
Stop Delay (hr)
Stop Del/Veh (s)
Total Stops
Stop/Veh
Travel Dist (mi)
Travel Time (hr)
Avg Speed (mph)
Fuel Used (gal)
Fuel Eff. (mpg)
HC Emissions (g)
CO Emissions (g)
NOx Emissions (g)
Vehicles Entered
Vehicles Exited
Hourly Exit Rate
Input Volume
% of Volume
Denied Entry Before
Denied Entry After
Density (ft/veh)
Occupancy (veh)

Total Network Performance

Denied Delay (hr)	66.6
Denied Del/Veh (s)	31.1
Total Delay (hr)	393.7
Total Del/Veh (s)	180.7
Stop Delay (hr)	343.9
Stop Del/Veh (s)	157.8
Total Stops	9604
Stop/Veh	1.22
Travel Dist (mi)	5720.6
Travel Time (hr)	611.8
Avg Speed (mph)	10
Fuel Used (gal)	271.3
Fuel Eff. (mpg)	21.1
HC Emissions (g)	7735
CO Emissions (g)	182555
NOx Emissions (g)	20112
Vehicles Entered	7535
Vehicles Exited	7141
Hourly Exit Rate	7141
Input Volume	18680
% of Volume	38
Denied Entry Before	1
Denied Entry After	159
Density (ft/veh)	135
Occupancy (veh)	545

Fehr & Pee 4/19/2023

Queuing ar Cumulative No Project

Pacific Gat PM Peak Hour

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	EB	B29	B29	WB	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	R	T	T	L	L	T	T	R	L	T	T	R	L	L	T	T	R
Maximum Queue (ft)	246	300	734	743	400	244	260	526	565	535	596	369	340	1346	1417	370	340	1264	382	386	108
Average Queue (ft)	138	245	541	555	124	53	59	345	367	155	169	239	185	773	830	342	321	751	106	108	40
95th Queue (ft)	231	372	810	822	392	231	239	599	627	523	437	406	384	1454	1541	453	384	1343	318	323	87
Link Distance (ft)			632	632		3192	3192			5224	5224			5207	5207			3793	3793	3793	
Upstream Blk Time (%)			13	16																	
Queuing Penalty (veh)			0	0																	
Storage Bay Dist (ft)	200	200			320			640	640			260	250			250	250				250
Storage Blk Time (%)	2	7	51	41	0			1	5	0		10	2	53	52	30	38	60		0	
Queuing Penalty (veh)	8	30	143	33	0			1	6	1		13	9	48	262	109	109	171		0	

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	LT	R	UL	L
Maximum Queue (ft)	52	58	1258	86	19	73
Average Queue (ft)	11	23	908	24	1	8
95th Queue (ft)	40	52	1602	84	9	43
Link Distance (ft)	896		1280			
Upstream Blk Time (%)			28			
Queuing Penalty (veh)			0			
Storage Bay Dist (ft)		25		25	200	230
Storage Blk Time (%)	3	10	86	1		
Queuing Penalty (veh)	1	1	9	4		

Intersection: 11: Ahern Rd & SB I-5 Ramps

Movement	WB	WB	SB

Directions Served	L	R	L
Maximum Queue (ft)	19	51	47
Average Queue (ft)	2	4	4
95th Queue (ft)	12	26	25
Link Distance (ft)	1028		
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		25	180
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	108	112	153	931
Average Queue (ft)	34	34	65	876
95th Queue (ft)	77	81	122	1078
Link Distance (ft)	919	783	1068	860
Upstream Blk Time (%)				85
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB
Directions Served	LT	R	LT
Maximum Queue (ft)	72	86	64
Average Queue (ft)	11	20	5
95th Queue (ft)	40	77	32
Link Distance (ft)	868		310
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		45	
Storage Blk Time (%)	0	0	
Queuing Penalty (veh)	0	0	

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	169	10	110
Average Queue (ft)	67	0	21
95th Queue (ft)	132	8	69
Link Distance (ft)	865	426	310
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	WB
Directions Served	L
Maximum Queue (ft)	20
Average Queue (ft)	3
95th Queue (ft)	13
Link Distance (ft)	1007
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	75
Average Queue (ft)	8
95th Queue (ft)	42
Link Distance (ft)	466
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 29: 11th St

Movement	EB	EB
Directions Served	T	T
Maximum Queue (ft)	1162	1160
Average Queue (ft)	560	524
95th Queue (ft)	1349	1293
Link Distance (ft)	1494	1494
Upstream Blk Time (%)	4	3
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 78: SB I-5 Ramps & NB I-5 Ramps

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 1666

Fehr & Pee 4/19/2023

Total Del/Veh (s)	52.9
Stop Delay (hr)	130.1
Stop Del/Veh (s)	39.8
Total Stops	7800
Stop/Veh	0.66
Travel Dist (mi)	6505.9
Travel Time (hr)	1684.5
Avg Speed (mph)	19
Fuel Used (gal)	557.5
Fuel Eff. (mpg)	11.7
HC Emissions (g)	18842
CO Emissions (g)	386564
NOx Emissions (g)	37941
Vehicles Entered	11456
Vehicles Exited	11453
Hourly Exit Rate	11453
Input Volume	36774
% of Volume	31
Denied Entry Before	276
Denied Entry After	2389
Density (ft/veh)	279
Occupancy (veh)	342

Queuing and Blocking Report Cumulative Plus Project
GoldenState International Logistics Center AM Peak Hour

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	EB	NB	NB	NB	NB	NB
EB	WB	WB	WB	WB	WB	NB	SB	SB	SB	SB
Directions Served						L	L	T	T	T
R	L	L	T	T	R	L	L	T	T	T
L	L	T	T	T	R					
Maximum Queue (ft)						106	149	318	284	199
166	665	701	700	642	282	225	268	144	107	34
368	408	158	113	36	95					
Average Queue (ft)						23	62	172	148	74
64	445	478	327	258	98	74	125	68	38	4
208	245	71	32	3	41					
95th Queue (ft)						73	114	265	239	165
131	805	842	879	707	206	185	222	119	79	20
356	390	121	77	20	77					
Link Distance (ft)								622	622	622
			1266	1266				1329	1329	
1329		1295	1295	1295	1295					
Upstream Blk Time (%)										

		2	0								
Queuing Penalty (veh)											
		15	1								
Storage Bay Dist (ft)						300	300				
320	800	800			260	250	250				
450					250						
Storage Blk Time (%)								1			
	2	8	0	3	0	0	0				
0	1										
Queuing Penalty (veh)								1			
	6	25	1	16	0	0	0				
0	3										

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement				EB	EB	EB	WB	WB
NB	NB	SB	SB					
Directions Served				L	T	R	L	TR
UL	TR	L	TR					
Maximum Queue (ft)				54	32	36	178	185
37	171	30	120					
Average Queue (ft)				5	4	2	62	72
7	75	4	36					
95th Queue (ft)				28	20	20	131	140
27	137	19	92					
Link Distance (ft)					895			
1279		1037		1159				
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)				300		300	300	
200		230						
Storage Blk Time (%)								
	0							
Queuing Penalty (veh)								
	0							

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement				WB	WB	NB	SB	SB
Directions Served				L	R	TR	L	T
Maximum Queue (ft)				26	77	53	125	4
Average Queue (ft)				3	12	4	38	0
95th Queue (ft)				16	52	27	90	4
Link Distance (ft)				1028		1368		
1037								
Upstream Blk Time (%)								

Queuing Penalty (veh)									
Storage Bay Dist (ft)					25		180		
Storage Blk Time (%)			1		1		0		
Queuing Penalty (veh)			0		0		0		

Intersection: 12: Chrisman Road & Durham Ferry Road

Movement			WB	WB	NB	NB	NB	SB	SB	SB
Directions Served			L	R	T	T	R	L	T	T
Maximum Queue (ft)			246	77	160	167	82	68	210	190
Average Queue (ft)			109	16	73	56	25	27	104	74
95th Queue (ft)			191	49	142	127	62	60	173	146
Link Distance (ft)				1960	2606	2606			914	914
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250				250	250		
Storage Blk Time (%)			0						0	
Queuing Penalty (veh)			0						0	

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement			EB	EB	WB	WB	NB	NB	SB	SB
Directions Served			L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)			13	113	24	241	17	276	120	91
Average Queue (ft)			1	23	3	83	2	120	43	18
95th Queue (ft)			8	73	15	178	10	218	98	60
Link Distance (ft)			906	906	772	772		1058	1058	850
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)										

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 14: Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	939	95	296	502
Average Queue (ft)	924	95	57	446
95th Queue (ft)	961	97	224	678
Link Distance (ft)	868		310	431
Upstream Blk Time (%)	100		5	39
Queuing Penalty (veh)	0		50	0
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	5	64		
Queuing Penalty (veh)	79	7		

Intersection: 15: Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	930	331	354
Average Queue (ft)	878	52	300
95th Queue (ft)	912	257	402
Link Distance (ft)	865	426	310
Upstream Blk Time (%)	100	4	19
Queuing Penalty (veh)	0	16	132
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	L	R	T	LT
Maximum Queue (ft)	276	121	53	88
Average Queue (ft)	34	12	5	6
95th Queue (ft)	295	80	56	40
Link Distance (ft)	1015		457	426
Upstream Blk Time (%)	1			
Queuing Penalty (veh)	0			
Storage Bay Dist (ft)		70		
Storage Blk Time (%)		3		
Queuing Penalty (veh)		0		

Intersection: 17: Chrisman Road & I-580 EB On Ramp

Movement	SB

Directions Served	LT
Maximum Queue (ft)	105
Average Queue (ft)	12
95th Queue (ft)	63
Link Distance (ft)	457
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB
Directions Served	LT	R	T	R	L
Maximum Queue (ft)	27	164	41	62	240
Average Queue (ft)	2	73	3	2	96
95th Queue (ft)	16	138	28	26	198
Link Distance (ft)	444	444	820		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				600	215
Storage Blk Time (%)					0
Queuing Penalty (veh)					0

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB
Directions Served	L	R	T	L	T
Maximum Queue (ft)	388	318	249	359	370
Average Queue (ft)	248	113	50	189	50
95th Queue (ft)	397	241	198	347	275
Link Distance (ft)	266	266	200		681

SB
TR
700
326
648
2026

Upstream Blk Time (%)	12	1	4		0
Queuing Penalty (veh)	0	0	0		0
Storage Bay Dist (ft)				295	
Storage Blk Time (%)				7	
Queuing Penalty (veh)				2	

Intersection: 78: NB I-5 Ramps

Movement					
Directions Served					
Maximum Queue (ft)					
Average Queue (ft)					
95th Queue (ft)					
Link Distance (ft)					
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 97: 11th St

Movement	EB	EB	EB	EB	WB	WB
Directions Served	T	T	T	R	T	T
Maximum Queue (ft)	173	310	127	2	204	297
Average Queue (ft)	8	27	15	0	41	41
95th Queue (ft)	122	187	70	2	294	288
Link Distance (ft)	1266	1266	1266	1266	628	628
Upstream Blk Time (%)					2	1
Queuing Penalty (veh)					0	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 122: 11th St

Movement	WB
Directions Served	T
Maximum Queue (ft)	66
Average Queue (ft)	2
95th Queue (ft)	59
Link Distance (ft)	622
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary
Network wide Queuing Penalty: 353

Input Volume	170	170
% of Volume	94	94
Denied Entry Before	0	0
Denied Entry After	0	0
Density (ft/veh)		
Occupancy (veh)	2	2

Total Network Performance

Denied Delay (hr)	28.3
Denied Del/Veh (s)	12.9
Total Delay (hr)	189.0
Total Del/Veh (s)	81.9
Stop Delay (hr)	96.9
Stop Del/Veh (s)	42.0
Total Stops	14064
Stop/Veh	1.69
Travel Dist (mi)	11731.6
Travel Time (hr)	526.3
Avg Speed (mph)	24
Fuel Used (gal)	406.0
Fuel Eff. (mpg)	28.9
HC Emissions (g)	25004
CO Emissions (g)	500235
NOx Emissions (g)	69194
Vehicles Entered	7826
Vehicles Exited	7817
Hourly Exit Rate	7817
Input Volume	52821
% of Volume	15
Denied Entry Before	5
Denied Entry After	44
Density (ft/veh)	380
Occupancy (veh)	498

Intersection: 1: Chrisman Road

Movement	NB	NB	NB
Directions Served	T	T	T
Maximum Queue (ft)	55	99	44
Average Queue (ft)	2	6	2
95th Queue (ft)	29	47	28
Link Distance (ft)	287	287	287

Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 12: S Chrisman Road/Chrisman Road & Durham Ferry Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (ft)	205	76	164	189	101	52	244	215
Average Queue (ft)	103	15	61	76	32	14	102	85
95th Queue (ft)	173	44	133	145	75	41	190	171
Link Distance (ft)		1960	2578	2578			914	914
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250	150		
Storage Blk Time (%)	0					1		
Queuing Penalty (veh)	0					0		

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	WB	WB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	R	R	L	T	T	T	T	R
Maximum Queue (ft)	58	377	391	317	40	310	319	634	619	556	423
Average Queue (ft)	9	238	262	192	6	143	165	307	289	155	138
95th Queue (ft)	38	339	362	295	27	285	305	611	592	408	319
Link Distance (ft)		9685				293	293	808	808	808	
Upstream Blk Time (%)						1	1	0	0	0	
Queuing Penalty (veh)						4	5	1	1	2	
Storage Bay Dist (ft)	400		1000	1000	100						

			400				
Storage Blk Time (%)				0			
17		2	0				
Queuing Penalty (veh)				1			
2		10	1				

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	EB	NB	SB	SB
Directions Served	L	L	TR	TR	L	T
Maximum Queue (ft)	578	634	136	541	332	339
Average Queue (ft)	320	366	7	272	256	254
95th Queue (ft)	557	608	101	486	370	371
Link Distance (ft)			1615	402	293	293
Upstream Blk Time (%)				4	15	14
Queuing Penalty (veh)				14	42	38
Storage Bay Dist (ft)	1000	1000				
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB
Directions Served	L	R	T
Maximum Queue (ft)	65	122	10
Average Queue (ft)	9	13	1
95th Queue (ft)	116	79	7
Link Distance (ft)	1007		466
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		70	
Storage Blk Time (%)		1	
Queuing Penalty (veh)		0	

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	194

Average Queue (ft)	23				
95th Queue (ft)	108				
Link Distance (ft)	466				
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB
Directions Served	LT	R	T	R	L
Maximum Queue (ft)	27	144	26	56	260
Average Queue (ft)	2	71	1	2	100
95th Queue (ft)	15	136	14	24	208
Link Distance (ft)	444	444	820		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				600	215
Storage Blk Time (%)					1
Queuing Penalty (veh)					1

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB
Directions Served	L	R	T	L	T
Maximum Queue (ft)	395	316	576	357	272
Average Queue (ft)	266	117	84	179	34
95th Queue (ft)	416	251	370	330	180
Link Distance (ft)	270	270	2302		681
Upstream Blk Time (%)	15	1			0

SB
TR
531
284
494
620
0

Queuing Penalty (veh)	0	0			0
0					
Storage Bay Dist (ft)				295	
Storage Blk Time (%)				4	
Queuing Penalty (veh)				1	

Intersection: 22: S Bird Rd & C St/W Vernalis Rd

Movement	EB	NB	SB
Directions Served	LTR	L	LTR
Maximum Queue (ft)	190	140	6
Average Queue (ft)	92	26	0
95th Queue (ft)	153	93	3
Link Distance (ft)	410		362
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		150	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 30: Chrisman Road & University Dwy

Movement	EB	NB	NB	SB	SB
Directions Served	R	L	T	T	R
Maximum Queue (ft)	52	120	7	2	26
Average Queue (ft)	20	51	0	0	3
95th Queue (ft)	45	100	6	2	15
Link Distance (ft)	2336		499	2578	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		250			250
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 31: Chrisman Road & University Main Driveway

Movement	EB	EB	NB	NB	NB
SB	SB	SB			
Directions Served	L	R	L	T	T
T	T	R			
Maximum Queue (ft)	95	92	283	128	139
341	359	181			
Average Queue (ft)	37	36	144	23	37
167	180	41			
95th Queue (ft)	75	73	239	81	103
280	308	109			
Link Distance (ft)		2231		883	883

499 499
Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft) 250 400
250
Storage Blk Time (%) 0
2
Queuing Penalty (veh) 0
3

Intersection: 32: Chrisman Road & PG Central Dwy

Movement	EB	WB	SB	SB
Directions Served	R	R	T	T
Maximum Queue (ft)	120	22	2	3
Average Queue (ft)	36	3	0	0
95th Queue (ft)	99	16	2	4
Link Distance (ft)	1980	1878	883	883
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 33: Chrisman Road & A St

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	T	R	L	T	R	L	L	T	T	R	L	T	R	T	R
Maximum Queue (ft)	144	169	80	268	171	82	115	246	295	330	318	110	104	174	327	334	190
Average Queue (ft)	36	59	10	96	59	10	32	114	139	134	134	33	38	67	166	172	57
95th Queue (ft)	96	131	48	203	136	47	84	207	237	260	269	85	84	121	289	301	131
Link Distance (ft)			2010			1928			359	359					1077		1077
Upstream Blk Time (%)								0	0	0							

Queuing Penalty (veh)

			0	1	1						
Storage Bay Dist (ft)						250	250		250	250	
250	250	250				250	250	250			
250											
Storage Blk Time (%)						0	0		1		
	0	0	1	1					2	2	
Queuing Penalty (veh)						0	0		0		
	0	2	3	1					3	3	

Intersection: 34: Chrisman Road & PG Central Dwy 2

Movement	EB	WB	NB	NB
Directions Served	R	R	T	T
Maximum Queue (ft)	44	41	31	2
Average Queue (ft)	12	12	1	0
95th Queue (ft)	38	33	19	2
Link Distance (ft)	2126	1836	633	633
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 35: Chrisman Road & East Area Industrial Dwy

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (ft)	215	96	454	402	227	177	228	235
Average Queue (ft)	68	29	184	149	41	75	58	80
95th Queue (ft)	160	75	374	313	141	149	165	183
Link Distance (ft)	1690	1690	534	534			633	633
Upstream Blk Time (%)			0	0				
Queuing Penalty (veh)			1	0				
Storage Bay Dist (ft)					150	250		
Storage Blk Time (%)				5		0	0	
Queuing Penalty (veh)				6		1	0	

Intersection: 36: Chrisman Road & PG East Dwy

Movement	WB	NB	NB	SB	SB
Directions Served	R	T	T	T	T
Maximum Queue (ft)	66	28	68	28	20
Average Queue (ft)	13	1	3	1	1
95th Queue (ft)	41	19	38	17	11
Link Distance (ft)	1729	458	458	534	534
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)			0		
Queuing Penalty (veh)			0		

Intersection: 37: Chrisman Road & B St

Movement	EB	EB	EB	WB	WB
WB NB NB NB NB NB	SB	SB	SB	SB	SB
Directions Served	L	T	R	L	T
R L L T T R	L	L	T	T	R
Maximum Queue (ft)	224	120	459	237	167
99 400 437 526 542 442	106	258	473	492	326
Average Queue (ft)	85	15	188	95	17
27 205 200 219 215 83	33	60	238	261	64
95th Queue (ft)	180	71	361	202	90
73 350 344 419 420 254	78	163	410	426	214
Link Distance (ft)		2238	2238		
1906 1044 1044 1044				458	458
Upstream Blk Time (%)					
			0	1	
Queuing Penalty (veh)					
			3	4	
Storage Bay Dist (ft)	300			150	
150 750 750	250	250			250
Storage Blk Time (%)	0			7	0
0			7	10	
Queuing Penalty (veh)	0			3	0
0			6	8	

Intersection: 38: Chrisman Road & Gateway Center Dwy

Movement	WB	WB	WB	NB	NB
NB NB SB SB SB SB	SB				
Directions Served	L	L	R	T	T
T R L L T T	T				
Maximum Queue (ft)	351	390	369	337	332
318 243 211 228 258 251	274				
Average Queue (ft)	119	194	153	276	262

220	107	109	114	94	85	125				
95th Queue (ft)						267	330	288	331	346
321	238	195	189	216	202	256				
Link Distance (ft)							1730	1730	243	243
243			287	287	287					
Upstream Blk Time (%)									16	10
3	0		0	0	0	0				
Queuing Penalty (veh)									113	74
24	0		0	0	0	0				
Storage Bay Dist (ft)						350				
	150	300	300							
Storage Blk Time (%)						0	1			
11	1		0	0						
Queuing Penalty (veh)						0	1			
25	4		0	0						

Intersection: 39: Gateway Center Dwy 2 & Chrisman Road

Movement						WB	NB	NB	NB	SB
SB	SB									
Directions Served						R	T	T	T	T
T	T									
Maximum Queue (ft)						130	341	320	221	9
4	23									
Average Queue (ft)						43	106	68	30	0
0	1									
95th Queue (ft)						117	263	207	127	10
5	24									
Link Distance (ft)						1764	808	808	808	243
243	243									
Upstream Blk Time (%)							0			
	0									
Queuing Penalty (veh)							0			
	0									
Storage Bay Dist (ft)										
Storage Blk Time (%)									0	
Queuing Penalty (veh)									0	

Network Summary
Network wide Queuing Penalty: 421

Total Del/Veh (s)	64.4
Stop Delay (hr)	183.6
Stop Del/Veh (s)	48.2
Total Stops	9898
Stop/Veh	0.72
Travel Dist (mi)	7610.2
Travel Time (hr)	1547.1
Avg Speed (mph)	17
Fuel Used (gal)	553.0
Fuel Eff. (mpg)	13.8
HC Emissions (g)	13377
CO Emissions (g)	320050
NOx Emissions (g)	28823
Vehicles Entered	13335
Vehicles Exited	13287
Hourly Exit Rate	13287
Input Volume	41190
% of Volume	32
Denied Entry Before	208
Denied Entry After	2006
Density (ft/veh)	218
Occupancy (veh)	438

Queuing and Blocking Report Cumulative Plus Project
Golden State International Logistics Center PM Peak Hour

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
NB	NB	NB	NB	NB	SB	SB	SB	SB	SB	SB		
Directions Served	L	L	T	T	T	R	L	L	T	T	R	R
Maximum Queue (ft)	247	400	643	650	586	355	400	430	283	267	318	241
294	324	273	231	514	710	394	325	67	57						
Average Queue (ft)	118	298	508	479	423	172	239	276	130	113	144	61
120	216	190	128	340	413	143	101	7	28						
95th Queue (ft)	200	505	738	719	679	446	360	392	230	217	261	175
228	286	258	221	532	783	466	407	36	52						
Link Distance (ft)			622	622	622			1266	1266			
	1329	1329			1329		1295	1295	1295	1295		
Upstream Blk Time (%)			14	9	6							

```
        1       1       0
Queuing Penalty (veh)                                           61      39      24

        0       0       0
Storage Bay Dist (ft)                           300     300
320     800     800                     260     250     250
450                                     250
Storage Blk Time (%)                            0       0       51              32
0                               0       1       0       1       3               0
6       12
Queuing Penalty (veh)                           0       0       143             45
0                               1       1       0       2       2               0
17      34

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement                                        EB      EB      EB      WB      WB
NB      NB      SB      SB
Directions Served                               L       T       R       L       TR
UL      TR      L       TR
Maximum Queue (ft)                              33      34      120     296     171
33      154     107     327
Average Queue (ft)                              5       6       44      147     50
5       50      24      143
95th Queue (ft)                                 24      25      96      258     120
21      112     74      261
Link Distance (ft)                                      895
1279            1037            1159
Upstream Blk Time (%)

Queuing Penalty (veh)

Storage Bay Dist (ft)                           300             300     300
200             230
Storage Blk Time (%)                                                    1
        0               2
Queuing Penalty (veh)                                                   1
        0               0

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement                                        WB      WB      NB      SB
Directions Served                               L       R       TR      L
Maximum Queue (ft)                              30      52      44      127
Average Queue (ft)                              4       8       3       44
95th Queue (ft)                                 20      34      22      94
Link Distance (ft)                              1028            1368
Upstream Blk Time (%)
Queuing Penalty (veh)
```

Storage Bay Dist (ft)					25			180		
Storage Blk Time (%)			3		1			0		
Queuing Penalty (veh)			0		0			0		

Intersection: 12: Chrisman Road & Durham Ferry Road

Movement			WB	WB	NB	NB	NB	SB	SB	SB
Directions Served			L	R	T	T	R	L	T	T
Maximum Queue (ft)			162	50	237	224	108	127	158	111
Average Queue (ft)			70	10	102	93	48	56	59	30
95th Queue (ft)			129	31	187	181	87	102	120	77
Link Distance (ft)				1960	2606	2606			914	914
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)			250				250	250		
Storage Blk Time (%)						0				
Queuing Penalty (veh)						0				

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement			EB	EB	WB	WB	NB	NB	SB	SB
Directions Served			L	TR	L	TR	L	TR	L	TR
Maximum Queue (ft)			17	186	88	143	11	153	94	351
Average Queue (ft)			1	64	15	42	1	55	26	141
95th Queue (ft)			9	141	52	104	6	122	68	277
Link Distance (ft)			906	906	772	772		1058	1058	850
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)										
Storage Blk Time (%)										

Queuing Penalty (veh)

Intersection: 14: Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	939	95	320	502
Average Queue (ft)	917	71	194	184
95th Queue (ft)	967	139	424	559
Link Distance (ft)	868		310	431
Upstream Blk Time (%)	100		40	16
Queuing Penalty (veh)	0		274	0
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	36	41		
Queuing Penalty (veh)	342	6		

Intersection: 15: Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	918	568	325
Average Queue (ft)	881	261	170
95th Queue (ft)	921	683	381
Link Distance (ft)	865	426	310
Upstream Blk Time (%)	100	40	8
Queuing Penalty (veh)	0	100	106
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	L	R	T	LT
Maximum Queue (ft)	1034	179	292	49
Average Queue (ft)	369	56	80	3
95th Queue (ft)	1120	177	302	23
Link Distance (ft)	1015		457	426
Upstream Blk Time (%)	20		5	
Queuing Penalty (veh)	0		2	
Storage Bay Dist (ft)		70		
Storage Blk Time (%)		9		
Queuing Penalty (veh)		0		

Intersection: 17: Chrisman Road & I-580 EB On Ramp

Movement	NB	SB
Directions Served	TR	LT

Maximum Queue (ft)	48	56
Average Queue (ft)	12	5
95th Queue (ft)	119	26
Link Distance (ft)	1051	457
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	SB	SB
Directions Served	LT	R	T	L	T
Maximum Queue (ft)	111	100	2	247	30
Average Queue (ft)	41	33	0	73	1
95th Queue (ft)	85	98	2	183	33
Link Distance (ft)	444	444	820		681
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				215	
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB
SB					
Directions Served	L	R	T	L	T
TR					
Maximum Queue (ft)	375	28	152	165	78
592					
Average Queue (ft)	215	2	13	46	10
232					
95th Queue (ft)	367	15	85	128	49
461					
Link Distance (ft)	266	266	200		681
2026					
Upstream Blk Time (%)	8		0		
Queuing Penalty (veh)	0		0		
Storage Bay Dist (ft)				295	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 78: NB I-5 Ramps

Movement				
Directions Served				
Maximum Queue (ft)				
Average Queue (ft)				
95th Queue (ft)				
Link Distance (ft)				
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 97: 11th St

Movement	EB	EB	EB	EB
Directions Served	T	T	T	R
Maximum Queue (ft)	461	857	893	38
Average Queue (ft)	126	212	214	2
95th Queue (ft)	331	511	512	21
Link Distance (ft)	1266	1266	1266	1266
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 122: 11th St

Movement	EB	EB	EB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	384	326	178	10
Average Queue (ft)	105	75	32	0
95th Queue (ft)	364	300	162	8
Link Distance (ft)	857	857	857	622
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary
Network wide Queuing Penalty: 1203

Queuing and Blocking Report Existing Plus Project
Golden State International Logistics Center PM Peak Hour

Intersection: 1: Chrisman Road

Movement	NB	NB	SB
Directions Served	T	T	T
Maximum Queue (ft)	7	9	17
Average Queue (ft)	0	0	1
95th Queue (ft)	6	8	13
Link Distance (ft)	287	287	1044
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 12: S Chrisman Road/Chrisman Road & Durham Ferry Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (ft)	216	86	272	263	120	161	184	141
Average Queue (ft)	103	16	111	117	45	71	62	35
95th Queue (ft)	180	51	220	215	92	135	145	99
Link Distance (ft)		1960	2578	2578			914	914
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250	150		
Storage Blk Time (%)	0	0		0		1	0	
Queuing Penalty (veh)	0	0		1		5	0	

Intersection: 14: S Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	WB	WB	NB	NB	SB	SB	SB	SB
Directions Served	LT	R	R	R	L	T	T	T	T	R
Maximum Queue (ft)	68	244	274	238	112					

328	334	508	514	329	260					
Average Queue (ft)						10	130	150	93	11
164	185	238	250	110	94					
95th Queue (ft)						40	208	242	180	59
321	336	438	449	248	192					
Link Distance (ft)							9685			
293	293	808	808	808						
Upstream Blk Time (%)										
3	2									
Queuing Penalty (veh)										
9	7									
Storage Bay Dist (ft)						400		1000	1000	100
					400					
Storage Blk Time (%)										0
24				0						
Queuing Penalty (veh)										0
2				1						

Intersection: 15: S Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement						EB	EB	EB	NB	SB
SB	SB									
Directions Served						L	L	TR	TR	L
L	T									
Maximum Queue (ft)						503	548	166	371	312
324	263									
Average Queue (ft)						230	266	18	164	159
169	55									
95th Queue (ft)						470	511	154	294	295
309	169									
Link Distance (ft)								1615	402	293
293	293									
Upstream Blk Time (%)									0	2
2	0									
Queuing Penalty (veh)									0	7
9	1									
Storage Bay Dist (ft)						1000	1000			
Storage Blk Time (%)								0		
Queuing Penalty (veh)								0		

Intersection: 16: S Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB
Directions Served	L	R
Maximum Queue (ft)	18	9
Average Queue (ft)	1	0
95th Queue (ft)	7	7

Link Distance (ft)	1007	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		70
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 17: S Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	120
Average Queue (ft)	14
95th Queue (ft)	67
Link Distance (ft)	466
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB
Directions Served	LT	R	T	R	L
Maximum Queue (ft)	123	93	17	16	280
Average Queue (ft)	40	33	1	1	107
95th Queue (ft)	92	97	11	11	251
Link Distance (ft)	444	444	820		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)				600	215
Storage Blk Time (%)					1
Queuing Penalty (veh)					0

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB
SB					

Directions Served	L	R	T	L	T
TR					
Maximum Queue (ft)	378	28	169	157	71
387					
Average Queue (ft)	222	2	17	48	9
243					
95th Queue (ft)	373	13	101	129	44
358					
Link Distance (ft)	270	270	2302		681
620					
Upstream Blk Time (%)	9				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)				295	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 22: S Bird Rd & C St/W Vernalis Rd

Movement	EB	NB	SB
Directions Served	LTR	L	LTR
Maximum Queue (ft)	481	92	3
Average Queue (ft)	374	8	0
95th Queue (ft)	591	45	3
Link Distance (ft)	410		362
Upstream Blk Time (%)	49		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)		150	
Storage Blk Time (%)		0	
Queuing Penalty (veh)		0	

Intersection: 30: Chrisman Road & University Dwy

Movement	EB	NB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	84	63	2	8
Average Queue (ft)	38	22	0	0
95th Queue (ft)	70	53	2	5
Link Distance (ft)	2336		2578	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		250		250
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 31: Chrisman Road & University Main Driveway

Movement	EB	EB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	T	T	T	R
Maximum Queue (ft)	160	173	115	219	249	288	302	56
Average Queue (ft)	82	82	59	85	109	129	139	21
95th Queue (ft)	136	145	105	175	199	225	242	50
Link Distance (ft)		2231		883	883	499	499	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250		400					250
Storage Blk Time (%)								1
Queuing Penalty (veh)								1

Intersection: 32: Chrisman Road & PG Central Dwy

Movement	EB	WB
Directions Served	R	R
Maximum Queue (ft)	29	30
Average Queue (ft)	6	7
95th Queue (ft)	23	25
Link Distance (ft)	1980	1878
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Chrisman Road & A St

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	T	R	L	T	R	L	L	T	T	R	L	L	T	T	R
Maximum Queue (ft)	148	175	264	301	171	70	118	236	259	278	280	122	101	152	312	332	134
Average Queue (ft)	62	76	19	131	65												

9	47	102	130	127	129	29	25	58	164	181
39										
95th Queue (ft)						121	136	145	257	137
44	95	199	225	241	236	88	69	117	275	293
108										
Link Distance (ft)								2010		
1928			359	359					1077	
1077										
Upstream Blk Time (%)										
			0	0	0	0				
Queuing Penalty (veh)										
			0	1	0	0				
Storage Bay Dist (ft)						250	250		250	250
	250	250	250			250	250	250		
250										
Storage Blk Time (%)							0		2	
		0	0	1	0				1	2
Queuing Penalty (veh)							0		4	
		0	2	2	0				1	2

Intersection: 34: Chrisman Road & PG Central Dwy 2

Movement	EB	WB	SB	SB
Directions Served	R	R	T	TR
Maximum Queue (ft)	73	67	19	10
Average Queue (ft)	34	22	1	0
95th Queue (ft)	62	49	21	7
Link Distance (ft)	2126	1836	359	359
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 35: Chrisman Road & East Area Industrial Dwy

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (ft)	162	108	299	287	172	113	212	232
Average Queue (ft)	55	28	124	111	25	46	63	91
95th Queue (ft)	125	76	254	225	94	89	154	186

| | | |

Queuing Penalty (veh)						0	0		7	
0								6	8	

Intersection: 38: Chrisman Road & Gateway Center Dwy

Movement						WB	WB	WB	NB	NB
NB	NB	SB	SB	SB	SB	SB				
Directions Served						L	L	R	T	T
T	R	L	L	T	T	T				
Maximum Queue (ft)						133	188	138	319	296
261	172	140	149	217	242	281				
Average Queue (ft)						33	91	56	202	176
136	52	59	77	84	97	142				
95th Queue (ft)						87	152	109	312	271
242	119	115	124	173	192	254				
Link Distance (ft)							1730	1730	243	243
243				287	287	287				
Upstream Blk Time (%)									4	1
0	0				0	0				
Queuing Penalty (veh)									20	6
1	0				0	1				
Storage Bay Dist (ft)						350				
	150	300	300							
Storage Blk Time (%)										
3	0									
Queuing Penalty (veh)										
4	0									

Intersection: 39: Gateway Center Dwy 2 & Chrisman Road

Movement						WB	NB	NB	NB	SB	SB
Directions Served						R	T	T	T	T	T
Maximum Queue (ft)						110	109	71	26	3	4
Average Queue (ft)						35	13	4	1	0	0
95th Queue (ft)						78	63	34	16	4	5
Link Distance (ft)						1764	808	808	808	243	243
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)											
Storage Blk Time (%)											

Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 126

Appendix D: “With Improvements” Vehicle Queueing Calculations

Fehr & Pee 11/11/2024

Queuing a Existing Plus Project
GoldenSta AM Peak Hour

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	WB	WB	WB	WB
Directions Served	L	T	T	R	L	T	T	R
Maximum Queue (ft)	145	288	255	193	700	855	445	103
Average Queue (ft)	43	145	113	76	699	809	176	12
95th Queue (ft)	102	240	207	152	699	837	356	59
Link Distance (ft)		670	670			792	792	
Upstream Blk Time (%)						64	0	
Queuing Penalty (veh)						467	0	
Storage Bay Dist (ft)	170			320	640			260
Storage Blk Time (%)	0	4	0	0	88	0	1	
Queuing Penalty (veh)	0	2	0	0	388	1	0	

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB
Directions Served	LT	R	LT	R	UL
Maximum Queue (ft)	67	86	194	86	14
Average Queue (ft)	5	34	88	57	1
95th Queue (ft)	31	66	161	101	9
Link Distance (ft)	896		1280		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		25		25	200
Storage Blk Time (%)	0	6	26	9	
Queuing Penalty (veh)	0	0	25	20	

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	14	85	14	101
Average Queue (ft)	1	12	1	21
95th Queue (ft)	7	54	7	65
Link Distance (ft)	1028		1368	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	0	1		0
Queuing Penalty (veh)	0	0		0

Intersection: 12: Chrisman Road & Durham Ferry Road

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	2052	6	198
Average Queue (ft)	1915	0	22
95th Queue (ft)	2334	8	101
Link Distance (ft)	1990	2607	926
Upstream Blk Time (%)	82		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	101	177	145	166
Average Queue (ft)	27	64	62	60
95th Queue (ft)	73	134	122	123
Link Distance (ft)	919	783	1068	860
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	939	95	302	502
Average Queue (ft)	929	95	41	453
95th Queue (ft)	962	99	177	669
Link Distance (ft)	868		310	431
Upstream Blk Time (%)	100		1	34
Queuing Penalty (veh)	0		8	0
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	7	63		
Queuing Penalty (veh)	116	4		

Intersection: 15: Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	936	176	335

Average Queue (ft)	886	28	301
95th Queue (ft)	925	156	377
Link Distance (ft)	865	426	310
Upstream Blk Time (%)	100	1	15
Queuing Penalty (veh)	0	4	98
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB	
Directions Served	L	R	T	LT	
Maximum Queue (ft)	176	69	26	94	
Average Queue (ft)	16	5	2	6	
95th Queue (ft)	224	49	34	44	
Link Distance (ft)	1015		457	426	
Upstream Blk Time (%)	1				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)		70			
Storage Blk Time (%)		1			
Queuing Penalty (veh)		0			

Intersection: 17: Chrisman Road & I-580 EB On Ramp

Movement	SB
Directions Served	LT
Maximum Queue (ft)	51
Average Queue (ft)	2
95th Queue (ft)	28
Link Distance (ft)	457
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB	SB	
Directions Served	LT	R	T	R	L	T	
Maximum Queue (ft)	32	151	21	48	229	62	
Average Queue (ft)	3	70	1	3	78	2	
95th Queue (ft)	19	135	12	27	171	50	
Link Distance (ft)	444	444	820			681	
Upstream Blk Time (%)							
Queuing Penalty (veh)							

Storage Bay Dist (ft)				600	215	
Storage Blk Time (%)					0	0
Queuing Penalty (veh)					0	0

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB	SB	
Directions Served	L	R	T	L	T	TR	
Maximum Queue (ft)	390	313	271	308	81	73	
Average Queue (ft)	372	112	267	100	3	8	
95th Queue (ft)	409	245	286	218	64	40	
Link Distance (ft)	266	266	200		681	1136	
Upstream Blk Time (%)	93	1	88				
Queuing Penalty (veh)	0	0	0				
Storage Bay Dist (ft)				295			
Storage Blk Time (%)				1	0		
Queuing Penalty (veh)				**0**	**0**		

Intersection: 78: NB I-5 Ramps

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 97: 11th St

Movement	EB	EB	EB	WB	WB	
Directions Served	T	T	R	T	T	
Maximum Queue (ft)	148	367	66	699	639	
Average Queue (ft)	5	20	2	675	476	
95th Queue (ft)	104	200	74	763	827	
Link Distance (ft)	792	792	792	628	628	
Upstream Blk Time (%)		0		91	0	
Queuing Penalty (veh)		0		0	0	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 122: 11th St

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 1448

Fehr & Pee 11/11/2024

Queuing a Existing Plus Project
Golden Sta PM Peak Hour

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	WB	WB	WB	WB
Directions Served	UL	T	T	R	L	T	T	R
Maximum Queue (ft)	233	372	325	190	700	845	691	42
Average Queue (ft)	63	221	193	75	697	794	150	6
95th Queue (ft)	148	331	296	148	729	915	420	29
Link Distance (ft)		670	670			792	792	
Upstream Blk Time (%)						65	0	
Queuing Penalty (veh)						346	0	
Storage Bay Dist (ft)	170			320	640			260
Storage Blk Time (%)	0	16	0		91	0	0	
Queuing Penalty (veh)	0	10	1		261	1	0	

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	SB
Directions Served	LT	R	LT	R	UL	L
Maximum Queue (ft)	74	71	310	86	15	60
Average Queue (ft)	6	45	120	49	1	3
95th Queue (ft)	38	69	239	97	8	25
Link Distance (ft)	896		1280			
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		25		25	200	230
Storage Blk Time (%)	0	26	42	5		
Queuing Penalty (veh)	0	0	26	10		

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	UL
Maximum Queue (ft)	24	47	12	99
Average Queue (ft)	3	6	0	29
95th Queue (ft)	15	29	8	69
Link Distance (ft)	1028		1368	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	1	0		
Queuing Penalty (veh)	0	0		

Intersection: 12: Chrisman Road & Durham Ferry Road

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	2000	56	997
Average Queue (ft)	1846	8	942
95th Queue (ft)	2354	32	1122
Link Distance (ft)	1990	2607	926
Upstream Blk Time (%)	70		78
Queuing Penalty (veh)	0		0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	179	136	130	751
Average Queue (ft)	68	54	53	392
95th Queue (ft)	146	112	106	865
Link Distance (ft)	919	783	1068	860
Upstream Blk Time (%)				11
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 14: Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	934	87	320	414
Average Queue (ft)	910	60	196	136
95th Queue (ft)	960	135	432	478
Link Distance (ft)	868		310	431
Upstream Blk Time (%)	100		51	8
Queuing Penalty (veh)	0		315	0
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	43	36		
Queuing Penalty (veh)	405	4		

Intersection: 15: Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	923	497	292

Average Queue (ft)	881	282	132
95th Queue (ft)	914	688	333
Link Distance (ft)	865	426	310
Upstream Blk Time (%)	100	50	4
Queuing Penalty (veh)	0	96	48
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB	
Directions Served	L	R	T	LT	
Maximum Queue (ft)	905	148	288	27	
Average Queue (ft)	441	71	126	2	
95th Queue (ft)	1231	192	405	18	
Link Distance (ft)	1015		457	426	
Upstream Blk Time (%)	33		11		
Queuing Penalty (veh)	0		3		
Storage Bay Dist (ft)		70			
Storage Blk Time (%)		12			
Queuing Penalty (veh)		0			

Intersection: 17: Chrisman Road & I-580 EB On Ramp

Movement	NB	SB
Directions Served	TR	LT
Maximum Queue (ft)	82	74
Average Queue (ft)	27	6
95th Queue (ft)	191	39
Link Distance (ft)	1051	457
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB	SB	
Directions Served	LT	R	T	R	L	T	
Maximum Queue (ft)	142	91	21	6	231	132	
Average Queue (ft)	47	30	1	0	64	7	
95th Queue (ft)	111	93	12	6	160	89	
Link Distance (ft)	444	444	820			681	
Upstream Blk Time (%)							
Queuing Penalty (veh)							

Storage Bay Dist (ft)				600	215
Storage Blk Time (%)					0
Queuing Penalty (veh)					0

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	SB	
Directions Served	L	R	T	L	TR	
Maximum Queue (ft)	390	30	271	127	106	
Average Queue (ft)	375	3	244	34	30	
95th Queue (ft)	430	19	344	103	82	
Link Distance (ft)	266	266	200		1136	
Upstream Blk Time (%)	96		87			
Queuing Penalty (veh)	0		0			
Storage Bay Dist (ft)				295		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 78: NB I-5 Ramps

Movement					
Directions Served					
Maximum Queue (ft)					
Average Queue (ft)					
95th Queue (ft)					
Link Distance (ft)					
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 97: 11th St

Movement	EB	EB	EB	WB	WB	
Directions Served	T	T	R	T	T	
Maximum Queue (ft)	795	818	615	699	636	
Average Queue (ft)	96	160	25	629	373	
95th Queue (ft)	499	642	253	851	809	
Link Distance (ft)	792	792	792	628	628	
Upstream Blk Time (%)	0	0	0	85	0	
Queuing Penalty (veh)	0	1	1	0	0	
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 122: 11th St

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary
Network wide Queuing Penalty: 1978

Denied Delay (hr)	1343
Denied Del/Veh (s)	349.2
Total Delay (hr)	172.9
Total Del/Veh (s)	52.9
Stop Delay (hr)	130.1
Stop Del/Veh (s)	39.8
Total Stops	7800
Stop/Veh	0.66
Travel Dist (mi)	6505.9
Travel Time (hr)	1684.5
Avg Speed (mph)	19
Fuel Used (gal)	557.5
Fuel Eff. (mpg)	11.7
HC Emissions (g)	18842
CO Emissions (g)	386564
NOx Emissions (g)	37941
Vehicles Entered	11456
Vehicles Exited	11453
Hourly Exit Rate	11453
Input Volume	36774
% of Volume	31
Denied Entry Before	276
Denied Entry After	2389
Density (ft/veh)	279
Occupancy (veh)	342

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	EB	EB	WB	WB	
Directions Served	L	L	T	T	T	R	L	L	
Maximum Queue (ft)	116	148	323	294	217	202	392	439	
Average Queue (ft)	25	65	194	170	93	71	211	251	
95th Queue (ft)	78	119	290	265	195	147	343	385	
Link Distance (ft)			616	616	616				
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	300	300				320	800	800	
Storage Blk Time (%)			1		0	0			
Queuing Penalty (veh)			1		0	0			

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	L	TR	UL	TR	L	TR
Maximum Queue (ft)	70	84	142	196	37	209	34	126
Average Queue (ft)	11	36	52	79	7	81	4	43
95th Queue (ft)	44	64	111	147	27	154	20	99
Link Distance (ft)	896			1279		1028		1159
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		300	300		200		230	
Storage Blk Time (%)						0		
Queuing Penalty (veh)						0		

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	26	86	39	130
Average Queue (ft)	4	13	3	41
95th Queue (ft)	17	53	19	95
Link Distance (ft)	1028		1368	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	1	1		0
Queuing Penalty (veh)	0	0		0

Intersection: 12: Chrisman Road & Durham Ferry Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (ft)	246	77	160	167	82	68	210	190
Average Queue (ft)	109	16	73	56	25	27	104	74
95th Queue (ft)	191	49	142	127	62	60	173	146
Link Distance (ft)		1960	2606	2606			914	914
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250	250		
Storage Blk Time (%)	0						0	
Queuing Penalty (veh)	0						0	

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR

Maximum Queue (ft)	34	156	59	287	62	430	154	154
Average Queue (ft)	2	41	3	117	6	188	63	35
95th Queue (ft)	20	110	33	232	37	364	129	108
Link Distance (ft)		907		772		1058		850
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	50		100		50		150	
Storage Blk Time (%)	0	9		14	0	42	1	0
Queuing Penalty (veh)	0	0		1	1	4	1	0

Intersection: 14: Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	939	95	296	502
Average Queue (ft)	924	95	57	446
95th Queue (ft)	961	97	224	678
Link Distance (ft)	868		310	431
Upstream Blk Time (%)	100		5	39
Queuing Penalty (veh)	0		50	0
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	5	64		
Queuing Penalty (veh)	79	7		

Intersection: 15: Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	930	331	354
Average Queue (ft)	878	52	300
95th Queue (ft)	912	257	402
Link Distance (ft)	865	426	310
Upstream Blk Time (%)	100	4	19
Queuing Penalty (veh)	0	16	132
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	L	R	T	LT
Maximum Queue (ft)	276	121	53	88
Average Queue (ft)	34	12	5	6
95th Queue (ft)	295	80	56	40
Link Distance (ft)	1015		457	426
Upstream Blk Time (%)	1			

Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		70
Storage Blk Time (%)		3
Queuing Penalty (veh)		0

Intersection: 17: Chrisman Road & I-580 EB On Ramp

Movement	SB	
Directions Served	LT	
Maximum Queue (ft)	105	
Average Queue (ft)	12	
95th Queue (ft)	63	
Link Distance (ft)	457	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	NB	SB	SB
Directions Served	LT	R	T	R	L	T
Maximum Queue (ft)	27	164	41	62	240	34
Average Queue (ft)	2	73	3	2	96	1
95th Queue (ft)	16	138	28	26	198	38
Link Distance (ft)	444	444	820			681
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)				600	215	
Storage Blk Time (%)					**0**	
Queuing Penalty (veh)					0	

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB	SB
Directions Served	L	R	T	L	T	TR
Maximum Queue (ft)	388	318	249	359	370	700
Average Queue (ft)	248	113	50	189	50	326
95th Queue (ft)	397	241	198	347	275	648
Link Distance (ft)	266	266	200		681	2026
Upstream Blk Time (%)	12	1	4		0	
Queuing Penalty (veh)	0	0	0		0	
Storage Bay Dist (ft)				295		
Storage Blk Time (%)				**7**		
Queuing Penalty (veh)				2		

Intersection: 78: NB I-5 Ramps

Movement	
Directions Served	
Maximum Queue (ft)	
Average Queue (ft)	
95th Queue (ft)	
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 97: 11th St

Movement	EB	EB	EB	EB	WB	WB
Directions Served	T	T	T	R	T	T
Maximum Queue (ft)	173	310	127	2	204	297
Average Queue (ft)	8	27	15	0	41	41
95th Queue (ft)	122	187	70	2	294	288
Link Distance (ft)	1266	1266	1266	1266	628	628
Upstream Blk Time (%)					2	1
Queuing Penalty (veh)					0	0
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 122: 11th St

Movement	WB
Directions Served	T
Maximum Queue (ft)	66
Average Queue (ft)	2
95th Queue (ft)	59
Link Distance (ft)	622
Upstream Blk Time (%)	0
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary
Network wide Queuing Penalty: 353

Denied Delay (hr)	1109
Denied Del/Veh (s)	260.2
Total Delay (hr)	245.4
Total Del/Veh (s)	64.4
Stop Delay (hr)	183.6
Stop Del/Veh (s)	48.2
Total Stops	9898
Stop/Veh	0.72
Travel Dist (mi)	7610.2
Travel Time (hr)	1547.1
Avg Speed (mph)	17
Fuel Used (gal)	553
Fuel Eff. (mpg)	13.8
HC Emissions (g)	13377
CO Emissions (g)	320050
NOx Emissions (g)	28823
Vehicles Entered	13335
Vehicles Exited	13287
Hourly Exit Rate	13287
Input Volume	41190
% of Volume	32
Denied Entry Before	208
Denied Entry After	2006
Density (ft/veh)	218
Occupancy (veh)	438

Intersection: 1: Chrisman Rd & 11th St

Movement	EB	EB	EB	EB	EB	EB	WB	WB
Directions Served	L	L	T	T	T	R	L	L
Maximum Queue (ft)	221	400	602	574	479	289	357	390
Average Queue (ft)	105	215	389	360	289	89	217	251
95th Queue (ft)	183	423	615	581	507	273	322	360
Link Distance (ft)			616	616	616			
Upstream Blk Time (%)			4	3	3			
Queuing Penalty (veh)			18	12	13			
Storage Bay Dist (ft)	300	300				320	800	800
Storage Blk Time (%)		0	28		9	0		
Queuing Penalty (veh)		0	79		13	0		

Intersection: 10: Ahern Rd & Lehman Rd/SB I-5 Ramps

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	LT	R	L	TR	UL	TR	L	TR
Maximum Queue (ft)	47	141	311	372	32	140	175	406
Average Queue (ft)	8	65	166	74	4	53	32	186
95th Queue (ft)	33	116	281	220	19	110	112	341
Link Distance (ft)	896			1279		1028		1159
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)		300	300		200		230	
Storage Blk Time (%)			2	0		0	0	5
Queuing Penalty (veh)			2	0		0	0	1

Intersection: 11: Ahern Rd & NB I-5 Ramps

Movement	WB	WB	NB	SB
Directions Served	L	R	TR	L
Maximum Queue (ft)	25	49	39	137
Average Queue (ft)	4	9	4	47
95th Queue (ft)	17	36	23	100
Link Distance (ft)	1028		1368	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		25		180
Storage Blk Time (%)	2	1		0
Queuing Penalty (veh)	0	0		0

Intersection: 12: Chrisman Road & Durham Ferry Road

Movement	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	R	T	T	R	L	T	T
Maximum Queue (ft)	162	50	237	224	108	127	158	111
Average Queue (ft)	70	10	102	93	48	56	59	30
95th Queue (ft)	129	31	187	181	87	102	120	77
Link Distance (ft)		1960	2606	2606			914	914
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250				250	250		
Storage Blk Time (%)				0				
Queuing Penalty (veh)				0				

Intersection: 13: Ahern Rd & Durham Ferry Rd

Movement	EB	EB	WB	WB	NB	NB	SB	SB
Directions Served	L	TR	L	TR	L	TR	L	TR

Maximum Queue (ft)	25	245	78	180	35	168	240	846
Average Queue (ft)	2	96	12	69	2	64	77	342
95th Queue (ft)	16	191	43	143	21	136	215	727
Link Distance (ft)		907		772		1058		850
Upstream Blk Time (%)								3
Queuing Penalty (veh)								0
Storage Bay Dist (ft)	50		100		50		150	
Storage Blk Time (%)		24	0	4		14	0	28
Queuing Penalty (veh)		1	0	1		1	0	23

Intersection: 14: Chrisman Road & SR 132 WB On Ramp/SR 132 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	LT	R	LT	TR
Maximum Queue (ft)	939	95	320	502
Average Queue (ft)	917	71	194	184
95th Queue (ft)	967	139	424	559
Link Distance (ft)	868		310	431
Upstream Blk Time (%)	100		40	16
Queuing Penalty (veh)	0		274	0
Storage Bay Dist (ft)		45		
Storage Blk Time (%)	36	41		
Queuing Penalty (veh)	342	6		

Intersection: 15: Chrisman Road & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	NB	SB
Directions Served	LTR	TR	LT
Maximum Queue (ft)	918	568	325
Average Queue (ft)	881	261	170
95th Queue (ft)	921	683	381
Link Distance (ft)	865	426	310
Upstream Blk Time (%)	100	40	8
Queuing Penalty (veh)	0	100	106
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Chrisman Road & I-580 WB Off Ramp

Movement	WB	WB	NB	SB
Directions Served	L	R	T	LT
Maximum Queue (ft)	1034	179	292	49
Average Queue (ft)	369	56	80	3
95th Queue (ft)	1120	177	302	23
Link Distance (ft)	1015		457	426
Upstream Blk Time (%)	20		5	

Queuing Penalty (veh)	0		2			
Storage Bay Dist (ft)		70				
Storage Blk Time (%)		9				
Queuing Penalty (veh)		0				

Intersection: 17: Chrisman Road & I-580 EB On Ramp

Movement	NB	SB
Directions Served	TR	LT
Maximum Queue (ft)	48	56
Average Queue (ft)	12	5
95th Queue (ft)	119	26
Link Distance (ft)	1051	457
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 18: S Bird Rd & SR 132 EB Off Ramp/SR 132 EB On Ramp

Movement	EB	EB	NB	SB	SB	
Directions Served	LT	R	T	L	T	
Maximum Queue (ft)	111	100	2	247	30	
Average Queue (ft)	41	33	0	73	1	
95th Queue (ft)	85	98	2	183	33	
Link Distance (ft)	444	444	820		681	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)				215		
Storage Blk Time (%)				0		
Queuing Penalty (veh)				0		

Intersection: 19: S Bird Rd & SR 132 WB Off On Ramps

Movement	EB	EB	B120	NB	NB	SB	
Directions Served	L	R	T	L	T	TR	
Maximum Queue (ft)	375	28	152	165	78	592	
Average Queue (ft)	215	2	13	46	10	232	
95th Queue (ft)	367	15	85	128	49	461	
Link Distance (ft)	266	266	200		681	2026	
Upstream Blk Time (%)	8		0				
Queuing Penalty (veh)	0		0				
Storage Bay Dist (ft)				295			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 78: NB I-5 Ramps

Movement				
Directions Served				
Maximum Queue (ft)				
Average Queue (ft)				
95th Queue (ft)				
Link Distance (ft)				
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 97: 11th St

Movement	EB	EB	EB	EB
Directions Served	T	T	T	R
Maximum Queue (ft)	461	857	893	38
Average Queue (ft)	126	212	214	2
95th Queue (ft)	331	511	512	21
Link Distance (ft)	1266	1266	1266	1266
Upstream Blk Time (%)	0	0	0	
Queuing Penalty (veh)	0	0	0	
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 122: 11th St

Movement	EB	EB	EB	WB
Directions Served	T	T	T	T
Maximum Queue (ft)	384	326	178	10
Average Queue (ft)	105	75	32	0
95th Queue (ft)	364	300	162	8
Link Distance (ft)	857	857	857	622
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary
Network wide Queuing Penalty: 1203



Appendix P

Pacific Gateway
Urban Decay Study

Prepared for:

Raney Planning & Management, Inc.

Prepared by:

ALH | ECON
ALH Urban & Regional Economics

December 2024

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I. EXECUTIVE SUMMARY

INTRODUCTION

The purpose of this study is to assess the potential for urban decay resulting from development of Pacific Gateway, a planned mixed-use development on 1,576.7 net acres located about one mile south of the City of Tracy in unincorporated San Joaquin County (the "Project"). This study is in support of the CEQA environmental review process for the Project. The overall Pacific Gateway project is expected to include 24,675,000 square feet of industrial development (I-L Zone, comprising warehouse, logistics, fulfillment, and advanced manufacturing uses), 93,000 square feet of business park space (I-P Zone), 88,500 square feet of supportive general commercial space, a 60,000-square-foot hotel, an 11,500-square-foot Veterans of Foreign Wars Hall, and 1,379,150 square feet for a University. The Project's overall anticipated development time frame is up to 30 years, from 2026 to 2056.

Raney Planning & Management, Inc. has been engaged to prepare an Environmental Impact Report ("EIR") for the Project. ALH Urban & Regional Economics ("ALH Economics") is part of the environmental team, responsible for conducting the EIR's urban decay analysis on the Project's industrial and hotel components, to be incorporated into the EIR. Generally speaking, for the purpose of CEQA, urban decay is characterized by physical deterioration to properties or structures that is so prevalent, substantial, and lasting a significant period of time that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community.

This study estimates the extent to which development of the Project's industrial and hotel components may or may not contribute to urban decay pursuant to potential impacts on existing industrial developments and hotels. The key indicator from a CEQA perspective is impacts on the existing physical environment, which in the context of an urban decay analysis includes the commercial real estate base and other germane real estate conditions, as measured against the current baseline. Characteristics of physical deterioration contributing to urban decay include abandoned buildings, boarded doors and windows, parked trucks and long-term unauthorized use of the properties and parking lots, extensive or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees and shrubbery, and uncontrolled weed growth.

This study includes exhibits referenced in the text. These exhibits are located in the Appendix. The study is subject to the accompanying Assumptions and General Limiting Conditions presented at the end of the report.

SUMMARY OF FINDINGS

Key Economic and Market Findings

Highlights of the urban decay analysis for Pacific Gateway (the "Project") are as follows:

Industrial

- San Joaquin County has an extensive transportation network with four major freeways, numerous smaller highways, access to the Port of Stockton, two national rail lines, and a regional airport. The county's relative affordability and lower land and building prices have attracted strong residential growth and promoted industrial development.

- San Joaquin County's employment growth from 1990 to 2020 was greatest in the Transportation, Warehousing, & Utilities sector, with 6.4% compound annual growth. This high rate of growth resulted in the sector comprising the largest non-government industry sector in the county by 2020.
- According to research prepared by The Center for Business and Policy Research, University of Pacific, by 2017 San Joaquin County had the nation's second highest concentration of transportation and warehousing jobs, second only to the logistics hub in Laredo, Texas, on the U.S.-Mexico border.
- As of 2023, Transportation, Warehousing, & Utilities was the largest industry sector in the county, even exceeding Government, with 46,800 jobs, or 16% of the county's employment base.
- San Joaquin County has a large and strong industrial market totaling 138.4 million square feet of space, of which 77%, or 106.4 million square feet, is warehouse space. The industrial market vacancy rate reported by Colliers was 7.8% as of the third quarter of 2024.
- The Project represents a 17.8% increase in the county's overall 138.4-million-square-foot industrial inventory as of the third quarter of 2024.
- The addition of cumulative industrial projects would boost the future supply of new industrial space by 59.5 million square feet, increasing to 84.2 million square feet with the Project. This would increase the existing supply by over 60%. While a substantial increase, projected demand through 2060 in San Joaquin County is even greater at 144.3 million square feet.
- The industrial real estate base in the market area is well maintained and does not exhibit signs of physical deterioration. While the market has industrial buildings that date to the 1980s or earlier, a high percentage of product has been built since 2000. Newer buildings in the market are distinctly different than older buildings and tend to be larger with higher ceilings, more power, and able to accommodate greater loads, which is more in line with current tenant demand.

Business Park

- The Business Park square footage of 93,000 square feet is one of the smallest components of the Project (I-P zoning). It is intended to consist of smaller buildings used for combined office/warehouse uses, including a range of service-related businesses, among other business types.
- User demand for these relatively small tenant spaces is likely to comprise start-up or established businesses with local area ownership or targeted to serve the Project's 24,675,000 square feet of industrial users.
- Such uses are unlikely to be competitive with the light industrial stock in Tracy or beyond, all of which are 7 or more miles distant from the Project. Furthermore, the existing light industrial stock in Tracy, the geographically closest established market, is well-occupied, with a third quarter 2024 4.9% occupancy rate and about 735,000 square feet of inventory. Because of this lack of competitiveness this use is not evaluated in the context of potential urban decay.

Hotel

- The Tracy hotel market is comprised of eight properties totaling 608 rooms. The hotel types range from economy to upper midscale class. Only one property has been completed since 2020, while two others were completed in 2003 and 2006. The rest of the properties were completed between 1987 and 1999.
- Hotel occupancy rate trends over the past nine years (including 2024 through October) indicate an average occupancy rate of 76%.
- The existing competitive hotels in Tracy are in good condition.
- The Project's hotel represents a 16% increase in the market area's hotel rooms inventory.
- There is a substantial projected future supply of hotel space totaling 765 rooms.

- The addition of the cumulative hotel projects could result in projected occupancy rates well below industry standards. It is possible that forecasted hotel demand may exceed that projected, or that the Pacific Gateway project, including the relocated and expanded university, could induce additional hotel demand, all of which could result in higher occupancy rates. Alternatively, hotel developers could postpone construction of new hotels until warranted by market demand. The distance of the Project from competition could also insulate the existing hotel base from negative impacts.

Retail

- There is no existing competitive retail near the Project or its planned retail space.
- The planned Project retail, totaling 88,500 square feet, is not large enough to comprise a substantial shopping center. This is especially the case given that the retail will be located in two areas – The University Center (38,908 square feet) and the Gateway Center (49,592 square feet). Hence, the primary purpose of the University Center retail space will be to provide convenience shopping and dining opportunities for tenants and visitors of the Project, as well as the University students living on campus. The primary purpose of the Gateway Center space will be to capture drive-by traffic to/from the Bay Area via I-580, I-5, Route 132, and Route 99.
- Employees, hotel guests, and students are estimated to more than support the proposed University Center space. There will likely be yet additional demand generated by visitors to Pacific Gateway, nearby residents, and other businesses.
- It is not as easy at this juncture to estimate demand for the Gateway Center retail space. However, the next nearest highway-related retail nodes are approximately 10 miles northwest and 10 miles southeast of Pacific Gateway. This suggests a gap in the market for highway travelers. This distance will limit the potential for negative impacts on these existing nodes, and will heighten demand for Gateway Center retail.
- Thus, the retail spaces are likely to be supportable. There are no identified cumulative retail developments, which will result in focusing demand at the Project's retail spaces.

Industrial Market Impacts

The Project's industrial component totals 24,675,000 square feet of new industrial space. This amount of space comprises a 17.8% addition to the existing 138.4 million square-foot industrial inventory in San Joaquin County. The San Joaquin County economy as a whole is projected to experience demand for industrial space in the near- and long-term future. Projected demand from 2024 to 2040 totals 45.8 million square feet, with an additional 98.5 million square feet of demand projected through 2060. Overall, the Project represents less than one fifth of the county's projected demand for the 2024 to 2060 period.

For the Project's industrial space to potentially have a negative impact on the market, it would need to draw tenants away from existing buildings without the potential for that space to be re-tenanted, thus increasing the vacancy rate to an unhealthy level. There are major factors that suggest these circumstances are unlikely to happen, such as:

1. There is ample projected demand compared to the Project's expected supply. Although in the period leading up to 2040 the Project's anticipated phases represent 27% of projected demand, this ratio falls to 12% over the next 20 years from 2040 to 2060, when Project buildout is estimated.
2. The vacancy rate of 7.8% as reported by Colliers for San Joaquin County indicates the market is relatively healthy. Looking at CoStar statistics for the two-county market area of San Joaquin and

Stanislaus counties is at a 6.4% vacancy rate, well below that experienced during the height of the Great Recession, near 13% in 2009 and 2010. Although net absorption has slowed in relation to construction deliveries since 2021, developers have responded by postponing breaking ground on new buildings.

3. Development of the Project will be driven by market conditions and tenant demand. To the extent that demand for the Project's industrial buildings is less robust than expected, then construction will slow to better align with demand. This may mean that development timing of later phases could be pushed further out into the future.

Because of these factors, the Project is not expected to negatively impact the existing industrial base in the market area.

Hotel Market Impacts

The Project's hotel component totals 60,000 square feet, or 100 rooms, which comprises a 16.0% addition to the existing 608-room Tracy hotel inventory. With projected modest annual demand growth in the hotel market, absent any other new market additions, the Project is not anticipated to impact the existing hotel market. Part of this conclusion is based on its unique location for a hotel, which is over 10 miles distant from the closest existing hotel competitor and proximate to the planned University, creating its own unique node.

Retail Market Impacts

The Project's University Center retail space is estimated to be more than amply supported by internal demand generated by employees, hotel guests, and University students. There are no identified cumulative retail developments. As a result, the internally generated demand will be strongly focused on this University Center retail space, limiting the potential for any urban decay to result from its development. Given its location, the Gateway Center retail space will be oriented to demand external to Pacific Gateway. The next nearest highway-related retail nodes are approximately 10 miles northwest and 10 miles southeast of Pacific Gateway. This suggests a gap in the market for highway travelers needing to stop for a break, restock supplies, get a meal or a snack, etc. This distance will limit the potential for negative impacts on these existing nodes, and will heighten demand for Gateway Center retail. Accordingly, it is unlikely that development of the Gateway Center retail space will cause or contribute to urban decay of like properties.

URBAN DECAY CONCLUSIONS

Industrial

The study findings suggest that existing industrial properties in the Project's competitive industrial market area are not anticipated to experience significant adverse physical impacts related to economic and social changes and/or effects leading to urban decay or deterioration following the addition of the planned Pacific Gateway Project or cumulative projects.

While the potential cumulative supply of industrial space is extensive, the potential supply additions are more than matched by forecasted space demand. ALH Economics believes that urban deterioration or decay would not result from the identified increase in the industrial inventory. ALH Economics therefore concludes that the industrial component of the Project and cumulative projects are not anticipated to cause adverse physical impacts leading to urban decay.

Hotel

The study findings suggest that existing Tracy hotels are not anticipated to experience significant adverse physical impacts related to economic and social changes and/or effects leading to urban decay or deterioration following the addition of the planned Pacific Gateway Project's hotel.

With respect to the potential cumulative supply, there is a substantial potential increase in the number of hotel rooms. However, due to the Project's distance of over 10 miles from the existing hotels, it is quite possible that the Project hotel may not divert demand from all hotels equally and may capture its own customers. Additionally, the analysis conservatively did not quantify a demand boost for the Project hotel based on its location proximate to the University. There is likely to be a steady level of some demand associated with the University, peaking at key times such as student move-in, graduation, and student move-out. Finally, there could be other sources of hotel demand that emerge during the projection period that could boost hotel demand. Alternatively, hotel developers would not be able to attract financing to construct new hotels in a market that appears to have an oversupply. Thus, the developers of the approved hotels might delay commencement of construction until such time as demand warrants new hotel rooms.

Retail

The study findings indicate that the Project's modest amount of retail space, split between two site locations, is likely to be supportable, from primarily internally generated demand supplemented and by external highway-related demand. As there is no competitive retail near the Project, development of the planned retail spaces are not likely to contribute to urban decay of any existing commercial properties.

Summary Conclusion

In conclusion, Pacific Gateway industrial's component, along with the identified cumulative projects, is not anticipated to cause or contribute to urban decay in the Project's market area. For the hotel component, the Project's hotel by itself is not anticipated to cause or contribute to urban decay in the market area. However, with consideration of the identified cumulative supply, it is possible that there could be negative impacts. These impacts are mainly due to the future supply of hotels as opposed to the Project, due to the Project's unique location distant from the existing hotel base and proximity to the planned University. Additionally, it is possible that potential future negative impacts might be offset by higher-than-forecasted demand or curtailed future supply as hotel developers postpone construction until warranted by market conditions. Given the lack of any nearby competitive retail space, development of the Project's modest amount of retail space is not likely to contribute to urban decay of any existing commercial properties.

II. INTRODUCTION

STUDY BACKGROUND

Raney Planning & Management, Inc. has been retained to prepare an Environmental Impact Report for the Pacific Gateway Project ("Project"). To support this effort and comply with the California Environmental Quality Act ("CEQA"), ALH Urban & Regional Economics ("ALH Economics") was asked to analyze the potential for the Project's industrial and hotel components to cause or contribute to urban decay. The initial impetus for urban decay analysis within the context of environmental review stems from the decision by the Fifth District Court of Appeal in *Bakersfield Citizens for Local Control v. The City of Bakersfield,* which was a case pertaining to the environmental review of two planned Walmart stores and other associated retail development in the City of Bakersfield. This court decision suggested that in some circumstances, CEQA may require a lead agency to consider and analyze the potential for the introduction of planned retailers to result in adverse physical impacts on the environment by causing a chain reaction of store closures and long-term vacancies, otherwise referred to as a condition of "urban decay." Consequently, urban decay analyses are often prepared for retail development, or the retail components of large-scale mixed-use projects. Some environmental impact reports also conservatively extend the urban decay analysis to other land uses, including office, hotel, and industrial land uses. Such is the case for this current analysis for Pacific Gateway, which is primarily an industrial development. Although the Project plans include business park and general commercial space, these uses are relatively small and are intended to be supportive of the industrial space, relying on internally generated demand.

For the purpose of this analysis, and to support CEQA's impact threshold requirements,[1] urban decay is defined as extended long-term business vacancies, directly or indirectly resulting in physical deterioration to properties or structures that is so prevalent, substantial, and long lasting that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community. Physical deterioration includes abandoned buildings, boarded doors and windows, parked trucks and long-term unauthorized use of the properties and parking lots, extensive or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees and shrubbery, and uncontrolled weed growth.

This study analyzes the potential impact of the Project's planned industrial and hotel components on the physical environment as represented by the respective real estate bases. The key indicator from a CEQA perspective is impacts on the existing physical environment, which in the context of an urban decay analysis includes existing industrial buildings and other germane real estate conditions, as measured against the current baseline.

PROJECT DESCRIPTION

The proposed Pacific Gateway ("Project") comprises approximately 1,576.7 net acres in unincorporated San Joaquin County. The site is positioned in the southwest portion of the county, located generally north and east of Interstate 580 and State Route 132. The primary access to Pacific Gateway is S. Chrisman Road via SR 132. Secondary access points include MacArthur Drive and Bird Road off of SR 132. The northernmost boundary of the site is approximately one mile south of the City of Tracy's city

[1] CEQA Guidelines Section 15064(e), 15064(f)(6), 15131, and 15182.

limits. The site is relatively level and is currently an active agricultural area, with almond and cherry orchards, plus two agricultural processing and manufacturing facilities.

Exhibit 1 presents the breakdown of the Project's proposed components, mainly comprising industrial space (I-L Zone) totaling 24,675,000 square feet. This space is anticipated to include modern industrial building types, such as logistics facilities, fulfillment centers, and advanced manufacturing buildings, as well as warehouses. The other major land use is a University with 1,379,150 square feet. Supporting both the industrial uses and the University are a business park (93,000 square feet, I-P Zone), general commercial space (88,5000 square feet), and hotel (60,000 square feet or 100 rooms). Finally, there will be an 11,500-square-foot hall for Veterans of Foreign Wars. The Project's overall anticipated development time frame is 30 years, from 2026 to 2056.

STUDY TASKS

ALH Economics engaged in numerous tasks to complete this assignment assessing the prospective urban decay impact of the Project's industrial and hotel components. The general tasks pursued to explore the Project's urban decay implications are as follows:

- Conduct site and field reconnaissance
- Collaborate with local brokers, identify a competitive market area for the Project's industrial component, and assess existing conditions
- Estimate demand for industrial space in the market area
- Research the local hotel market and estimate future demand
- Assess Project impacts
- Identify and assess cumulative project impacts
- Identify urban decay implications of the planned Project's industrial and hotel components and cumulative projects

The findings pertaining to these tasks are reviewed and summarized in this report, with analytical findings presented in the exhibits in the Appendix. Additionally, while the Project's general commercial space was not specifically analyzed under the lens of urban decay due to its distance from competitive retail nodes, ALH Economics prepared a brief analysis of internally generated economic support for the space.

STUDY RESOURCES AND REPORT ORGANIZATION

Study Resources

The urban decay analysis relied upon a number of key resources. These resources are all identified in the sources and notes to the exhibits developed to support the analysis. Representative resources include the following:

- ***Governmental resources***. These sources include the State of California Employment Development Department; State of California Department of Finance; planning department websites for the cities of Tracy and Lathrop; planning department staff for the cities of Patterson and Stockton; and the San Joaquin County Council of Governments.

- ***Third party resources***. These sources include Raney Planning & Management, Inc.; Fehr & Peers; Page Architects; David Babcock + Associates; Ridgeline Property Group; Cushman &

Wakefield; Colliers; CoStar; brokerage firm, real estate investment trust, and developer websites; Loopnet; Woods & Poole, a national resource for demographic estimates and projections; STR, Inc., GoogleMaps, and municode.com.

All of these resources are identified as warranted in the text and/or the series of exhibits found in the Appendix.

Report Organization

This report includes five chapters, as follows:

I. Executive Summary
II. Introduction
III. Industrial Market Characteristics
IV. Market Area Industrial Demand
V. Project and Cumulative Project Impacts - Industrial
VI. Hotel Component Urban Decay Analysis
VII. Project Retail Component Support
VIII. Urban Decay Implications

This report is subject to the appended Assumptions and General Limiting Conditions.

III. INDUSTRIAL MARKET CHARACTERISTICS

COUNTY OVERVIEW

Locational Context

San Joaquin County is located east of the Bay Area's Alameda County in California's Central Valley. The county encompasses almost 920,000 acres, extending from the Delta and the Diablo Range (with its Altamont Pass) in the west to the start of the foothills of the Sierra Nevada in the east. Much of the county is relatively level with rich agricultural lands. Stockton is the county seat and is the largest city. Other major cities are Tracy, Manteca, and Lodi, with smaller incorporated areas including Lathrop, Ripon, and Escalon. Tracy is the westernmost city in San Joaquin County.

San Joaquin County has an extensive transportation network that includes four major freeways: Interstate 5, California's primary north-south freeway; Interstate 580, which connects to the Bay Area; Interstate 205, which connects Interstates 5 and 580; and State Route 99, a secondary north-south freeway connecting to Fresno and Bakersfield. Smaller highways include State Routes 4, 12, 26, 120, and 132. The Port of Stockton is a major inland deep-water port that connects to the Pacific Ocean. There are also two national rail lines, both of which have intermodal facilities, and a regional airport.

Due to its proximity to the Bay Area, San Joaquin County has experienced tremendous residential growth, with residents attracted by its relatively affordable housing stock. The advantage of lower land and building prices has also promoted industrial development throughout the county, expanding upon its historic agricultural-related industrial base.

Economic Base

San Joaquin County. San Joaquin County is a heavily agricultural county, with prime agricultural land historically and currently supporting agriculture and related businesses. Historic information about San Joaquin County's employment base from 1990 through 2023 is presented in Exhibit 2. This information, summarized in Table 1, indicates that County employment totaled 169,400 in 1990, increasing to 288,900 in 2023. This growth reflects a 1.6% compound annual average growth rate (CAGR), meaning year over year the County experienced average growth of 1.6%. Over this 33-year time frame, most of the major industry sectors experienced growth, but three did not: Total Farm; Information; and Financial Activities. The Farm sector declined by a modest -0.3% CAGR, while the Information sector experienced a loss of 1,600 jobs, comprising a -2.7% CAGR between 1990 and 2023. The Financial Activities sector shrank with a nominal -0.5% CAGR, with employment dropping from 9,400 in 1990 to 8,000 in 2023.

Despite San Joaquin County's historic stronghold in the agricultural sector, Total Farm employment declined by 1,500 jobs from 1990 to 2023, while Food Manufacturing lost 2,000 jobs. By 2023, given the rise of employment in other sectors and the drop in Total Farm and Food Manufacturing employment, combined Total Farm and Food Manufacturing employment comprised 7% of the County's employment, down from 14% in 1990. However, even with this relative decline in importance to San Joaquin County's economic base, these agriculture-oriented sectors continue to comprise a significant share of the economy relative to other areas of California.

Table 1
San Joaquin County Employment Trends, 1990-2023

	Employment			Percent of All Employment			CAGR (1)		
Industry Sector	**1990**	**2020**	**2023**	**1990**	**2020**	**2023**	**90-'20**	**20-23**	**90-'23**
All Industry Employment	169,400	257,700	288,900	NA	NA	NA	1.4%	3.9%	1.6%
Industry Sectors (2)									
Total Farm	15,600	14,600	14,100	9.2%	5.7%	4.9%	-0.2%	-1.2%	-0.3%
Goods Producing	34,200	33,200	37,400	20.2%	12.9%	12.9%	-0.1%	4.1%	0.3%
Food Manufacturing (3)	*8,000*	*5,600*	*6,000*	*4.7%*	*2.2%*	2.1%	-1.2%	2.3%	-0.9%
Wholesale Trade	6,700	10,600	12,300	4.0%	4.1%	4.3%	1.5%	5.1%	1.9%
Retail Trade	18,000	24,600	27,200	10.6%	9.5%	9.4%	1.0%	3.4%	1.3%
Transportation, Warehousing, & Utilities	6,100	38,800	46,800	3.6%	15.1%	16.2%	6.4%	6.4%	6.4%
Information	2,700	1,200	1,100	1.6%	0.5%	0.4%	-2.7%	-2.9%	-2.7%
Financial Activities	9,400	7,800	8,000	5.5%	3.0%	2.8%	-0.6%	0.8%	-0.5%
Professional & Business Services	9,300	21,300	23,700	5.5%	8.3%	8.2%	2.8%	3.6%	2.9%
Educational & Health Services	16,900	37,300	42,200	10.0%	14.5%	14.6%	2.7%	4.2%	2.8%
Leisure & Hospitality	11,700	18,500	24,600	6.9%	7.2%	8.5%	1.5%	10.0%	2.3%
Other Services	4,800	6,800	8,200	2.8%	2.6%	2.8%	1.2%	6.4%	1.6%
Government	34,000	43,000	43,400	20.1%	16.7%	15.0%	0.8%	0.3%	0.7%

Sources: Exhibit 2; and ALH Urban & Regional Economics.
(1) CAGR is an acronym for Compound Annual Growth Rate.
(2) Comprises major industry sectors, each of which has numerous sub-sectors. The sub-sectors are not included herein.
(3) This sub-sector is included because it pertains to the historic agricultural orientation of San Joaquin County.

As shown in Table 1, the Transportation, Warehousing, & Utilities sector experienced substantial growth, with jobs increasing nearly eightfold from 6,100 in 1990 to 46,800 in 2023. This represents a 6.4% CAGR. This sector drives demand for industrial space, and in 2023 comprised the county's largest industry sector. As a consequence of this sector's strong growth, employment in the sector increased significantly from 3.6% of all county employment in 1990 to 16.2% in 2023. A few other sectors increased their share of total county employment over this time, but to a much lesser extent. Notable examples include Educational & Health Services increasing from 10.0% to 14.6%, Professional & Business Services, increasing from 5.5% to 8.2%, and Leisure & Hospitality increasing from 6.9% to 8.5%.

State of California Comparison. Table 2 presents employment trends for all of California paralleling the information presented for San Joaquin County in Table 1. As shown in Table 2, Total Farm employment throughout California comprised 2.8% of all statewide employment in 1990, dropping to 2.2% in 2023. Similar to San Joaquin County, Food Manufacturing declined, comprising 1.4% of state employment in 1990 and only 0.9% in 2023. Thus, the combined food-related sectors in San Joaquin County continue to be comparatively stronger sectors, with 7.0% of all employment in 2023 compared to the statewide combined share of 3.2%.

Table 2
State of California Employment Trends, 1990-2023

Industry Sector	Employment			Percent of All Employment			CAGR (1)		
	1990	2020	2023	1990	2020	2023	90-'20	20-23	90-'23
All Industry Employment	12,904,200	16,593,800	18,231,700	NA	NA	NA	0.8%	3.2%	1.1%
Industry Sectors (2)									
Total Farm	363,700	406,800	406,700	2.8%	2.5%	2.2%	0.4%	0.0%	0.3%
Goods Producing	2,650,100	2,144,800	2,267,200	20.5%	12.9%	12.4%	-0.7%	1.9%	-0.5%
Food Manufacturing (3)	174,500	155,200	169,300	1.4%	0.9%	0.9%	-0.4%	2.9%	-0.1%
Wholesale Trade	533,500	645,000	667,300	4.1%	3.9%	3.7%	0.6%	1.1%	0.7%
Retail Trade	1,436,400	1,510,700	1,609,500	11.1%	9.1%	8.8%	0.2%	2.1%	0.3%
Transportation, Warehousing, & Utilities	429,100	735,100	830,200	3.3%	4.4%	4.6%	1.8%	4.1%	2.0%
Information	393,600	540,500	559,000	3.1%	3.3%	3.1%	1.1%	1.1%	1.1%
Financial Activities	822,000	816,400	814,300	6.4%	4.9%	4.5%	0.0%	-0.1%	0.0%
Professional & Business Services	1,515,700	2,603,400	2,775,400	11.7%	15.7%	15.2%	1.8%	2.2%	1.8%
Educational & Health Services	1,163,000	2,738,400	3,100,000	9.0%	16.5%	17.0%	2.9%	4.2%	3.0%
Leisure & Hospitality	1,106,800	1,481,800	2,010,600	8.6%	8.9%	11.0%	1.0%	10.7%	1.8%
Other Services	415,600	477,700	587,900	3.2%	2.9%	3.2%	0.5%	7.2%	1.1%
Government	2,074,800	2,493,300	2,603,700	16.1%	15.0%	14.3%	0.6%	1.5%	0.7%

Sources: Employment Development Department, Labor Market Information, State of California, Industry Employment & Labor Force - by Annual Average, March 2023 Benchmark, July 11, 2024; and ALH Urban & Regional Economics.
(1) CAGR is an acronym for Compound Annual Growth Rate.
(2 (2) Comprises major industry sectors, each of which has numerous sub-sectors. The sub-sectors are not included herein.
(3) This sub-sector is included because it is relevant to the historic agricultural orientation of San Joaquin County.

Other significant sectoral differences between San Joaquin County and the State of California include the state's much lower share of total employment in the Transportation, Warehousing, & Utilities sector (4.6%) and its much higher shares of employment in the Professional & Business Services (15.2%), Educational & Health Services (17.0%), and Leisure & Hospitality (11.0%) sectors.

Overall, employment grew 1.1% on an annual average basis throughout California from 1990-2023. This rate is below San Joaquin County's 1.6% annual average growth rate. Therefore, growth in San Joaquin County over this period outpaced the California state average, demonstrating the comparative strength of San Joaquin County's overall economy, which benefits a project such as Pacific Gateway.

TRANSPORTATION AND WAREHOUSING SECTOR STRENGTH

National and Regional Context

The relative strength of San Joaquin County's Transportation and Warehousing sector is well-researched and identified in an April 2019 paper prepared by The Center for Business and Policy Research, University of Pacific. This paper, titled "Warehousing, E-Commerce, and Evolving Trade Patterns in San Joaquin County" was prepared for The San Joaquin Council of Governments (hereafter referred to as "SJCOG Study"). The SJCOG Study analyzes and identifies many aspects of the goods movement system in San Joaquin County, including the shares of total employment in the sector compared to the shares in other U.S. and Northern California locations.

The SJCOG Study's findings are based on data through 2017. This period is not as current as the data presented above, which reflect employment trends through 2023. Yet even with the SJCOG Study's data reflecting a nominally truncated period, the analysis demonstrates the importance of the Transportation and Warehousing sector to the County's economy.[2] A discussion of San Joaquin County's employment location quotient ("LQ") in this industry sector is one of several important economic indicators presented in the SJCOG Study. The LQ is a standard economic indicator used in the study of regional economics

[2] In this discussion the industry sector reflects only Transportation and Warehousing employment, and not the additional Utilities employment discussed earlier. As will be demonstrated later, Utilities employment comprises a relatively small portion of the larger sector.

to convey the relative strength of a sector, both to the local economy under study as well as across geographic locations. As defined by the U.S. Bureau of Economic Analysis:

> A location quotient (LQ) is an analytical statistic that measures a region's industrial specialization relative to a larger geographic unit (usually the nation). An LQ is computed as an industry's share of a regional total for some economic statistic (earnings, GDP by metropolitan area, employment, etc.) divided by the industry's share of the national total for the same statistic. For example, an LQ of 1.0 in mining means that the region and the nation are equally specialized in mining; while an LQ of 1.8 means that the region has a higher concentration in mining than the nation.[3]

As cited in the SJCOG Study, San Joaquin County's LQ stayed stable at about 1.12 times the national share of employment prior to 1995. After then, the County's relative concentration in transportation and warehousing employment grew dramatically, "reaching 1.71 times the national concentration in 2005, 2.33 times in 2015, and 2.65 times in 2017," the last year reflected in the SJCOG Study.[4] The SJCOG Study proceeds to indicate that the County's strong growth in this sector led to San Joaquin County having the nation's second highest concentration of transportation and warehousing jobs, second only to the logistics hub in Laredo, Texas, on the U.S.-Mexico border. Other metro areas in the top five logistics hubs included Memphis, TN; Houma-Thibodaux, LA; and Chambersburg-Waynesboro, PA. It is important to note that these rankings are based on the share of total employment in the transportation and warehousing sector, and not the absolute number of jobs in the sector.

Given that San Joaquin County's employment in the Transportation, Warehousing, & Utilities sector has grown since 2017, ALH Economics anticipates that the County continues to maintain its national status as a highly concentrated logistics hub. As a point of comparison, based upon the data presented in Tables 1 and 2, and compared to the State of California, San Joaquin County had a LQ in the Transportation, Warehousing, & Utilities sector of 1.08 in 1990 and 3.56 in 2023.[5] For perspective, the County's LQ for Total Farm employment relative to the state was 3.27 in 1990, declining to 2.19 in 2023. This further demonstrates the importance of the Farm sector to San Joaquin County, albeit to a lesser extent at present than the Transportation, Warehousing, & Utilities sector.

The SJCOG Study also presented data on the share of Transportation and Warehousing jobs in San Joaquin County in 2013 and 2017 compared to other Northern California locations. These findings indicated that the County had more than twice the share of jobs in this sector than the next highest locations, which were nearby Merced and Stanislaus counties. Other areas reflected in this analysis included Solano, Sacramento, Napa, Santa Clara, Sonoma, and Monterey counties as well as the San Francisco-Oakland-Hayward Metropolitan Statistical Area. San Joaquin County also experienced the greatest percentage job growth over this period, measured at 53.2%, although it was nearly matched by the percentage growth that occurred in the much smaller hubs of Santa Clara County and Solano County. All other regional locations had less than 30% growth over this time period, with many less than 20%.

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[3] See https://www.bea.gov/help/faq/478.

[4] "Warehousing, E-Commerce, and Evolving Trade Patterns in San Joaquin County," The Center for Business and Policy Research, University of Pacific, April 2019, page 3.

[5] The LQ is calculated by dividing the Table 1 "Percent of All Employment" in the sector for San Joaquin County by the Table 5 "Percent of All Employment" in the sector for the State of California for the cited time period.

County Rise in Prominence and Sectoral Composition

The data presented in Table 3 more fully demonstrate San Joaquin County's growth in just the Transportation and Warehousing sector. This compares to the earlier findings in Table 1 that also included Utilities employment in the sector, which some data sources bundle together with transportation and warehousing. These data show the more incremental stages of sectoral growth by decade from 1990 to 2023. As shown, the biggest period of growth was between 2010 and 2020, when Transportation and Warehousing employment grew from 6.1% to 14.5% total County employment. However, nearly 8,000 jobs were added between 2020 and 2023, for a very strong period of growth.

Table 3
San Joaquin County Transportation and Warehousing Employment Trend, 1990-2023

Employment Characteristic	1990	2000	2010	2020	2023	CAGR (1) 1990-2023
All Industry Employment	169,400	203,900	208,300	257,700	288,900	1.6%
Transportation and Warehousing Employment						
Amount	5,100	10,700	12,700	37,300	45,100	6.8%
Share of All Industry Employment	3.0%	5.2%	6.1%	14.5%	15.6%	NA

Sources: Exhibit 2; and ALH Urban & Regional Economics.
(1) CAGR is an acronym for Compound Annual Growth Rate.

The annual average growth rate in the sector absent the influence of jobs in Utilities was 6.8%. The comparative figure with Utilities presented in Table 1 was 6.4%. This difference highlights the relative stagnancy in the Utility sub-sector, with the growth concentrated in Transportation and Warehousing employment.

COMPETITIVE MARKET AREA

Given the Project's location about one mile from the Tracy city limits, ALH Economics believes that Pacific Gateway will compete mostly with the Tracy industrial market. Tracy is the first city encountered by those travelling east over the Altamont Pass from the Bay Area, and is accessed via two freeways - Interstate 580 and Interstate 205. Thus, this city has a strong locational advantage in San Joaquin County's market. Lathrop, located northeast of Tracy at the intersection of Interstate 5 and State Route 120, is also considered a competitive market, primarily due to its supply of newer, modern, warehouse buildings (there is also some older product in Lathrop as well). Stockton, north of Lathrop with access to both Interstate 5 and State Route 99, is secondarily competitive mainly due to distance and its older industrial base. Finally, brokers interviewed by ALH Economics indicate that Patterson in western Stanislaus County, about 18 miles southeast of the Project, should be considered a secondary competitive location at minimum. This is a very small submarket that functions mainly as a release valve for the more established San Joaquin County market.

SAN JOAQUIN COUNTY INDUSTRIAL MARKET OVERVIEW

San Joaquin County Third Quarter 2024 Statistics

The San Joaquin County Industrial market includes the cities of Tracy, Lathrop, and Stockton, as well as additional smaller cities of Manteca, Lodi, and Ripon, which are not considered competitive.[6] Exhibit 3 presents a snapshot of the overall industrial market and the warehouse market subset as of the third quarter 2024, prepared by Colliers. As shown, warehouse product dominates the market, with 77% of the inventory, or 106.4 million square feet out of the total industrial inventory of 138.4 million square feet. Stockton has the largest inventory of space, comprising 49.8 million square feet of warehouse space and a total industrial base of 64.2 million square feet, or about 46% of the County's market for both warehouse and industrial space. Tracy is the second largest market area, with 30.4 million square feet of warehouse space (28.6% of the County's market) and 35.7 million square feet of total industrial space. Lathrop is the smallest of the three with about 16.5 million square feet of warehouse space and 19.2 million square feet of overall industrial space.[7]

Warehouse space is the dominant product type in Tracy and Lathrop, with over 85% of each city's inventory comprising warehouse space. Stockton, which is an older market area, has a slightly more diverse product base, with warehouse comprising 78% of the market. In terms of new construction, all the product under construction as tracked by Colliers is in the warehouse market subset, totaling about 900,000 square feet in Stockton. Warehouse space also dominates year-to-date net absorption (through third quarter 2024), which measures the net change in occupied square footage.

In terms of rents, Tracy commands a rent premium compared to other San Joaquin County cities, with an average asking rent of $0.76 per square foot per month, triple net for warehouse space; the average asking rent for all industrial space is slightly higher at $0.78 per square foot per month, triple net. Both Lathrop and Stockton have lower average asking rents at $0.73 per square foot per month, triple net for both warehouse space and overall industrial space (except Stockton's rate for all industrial space is one penny lower at $0.72 per square foot per month. The County's average asking rent is $0.74 per square foot per month triple net for warehouse space and overall industrial.

Historic Industrial Market Trends

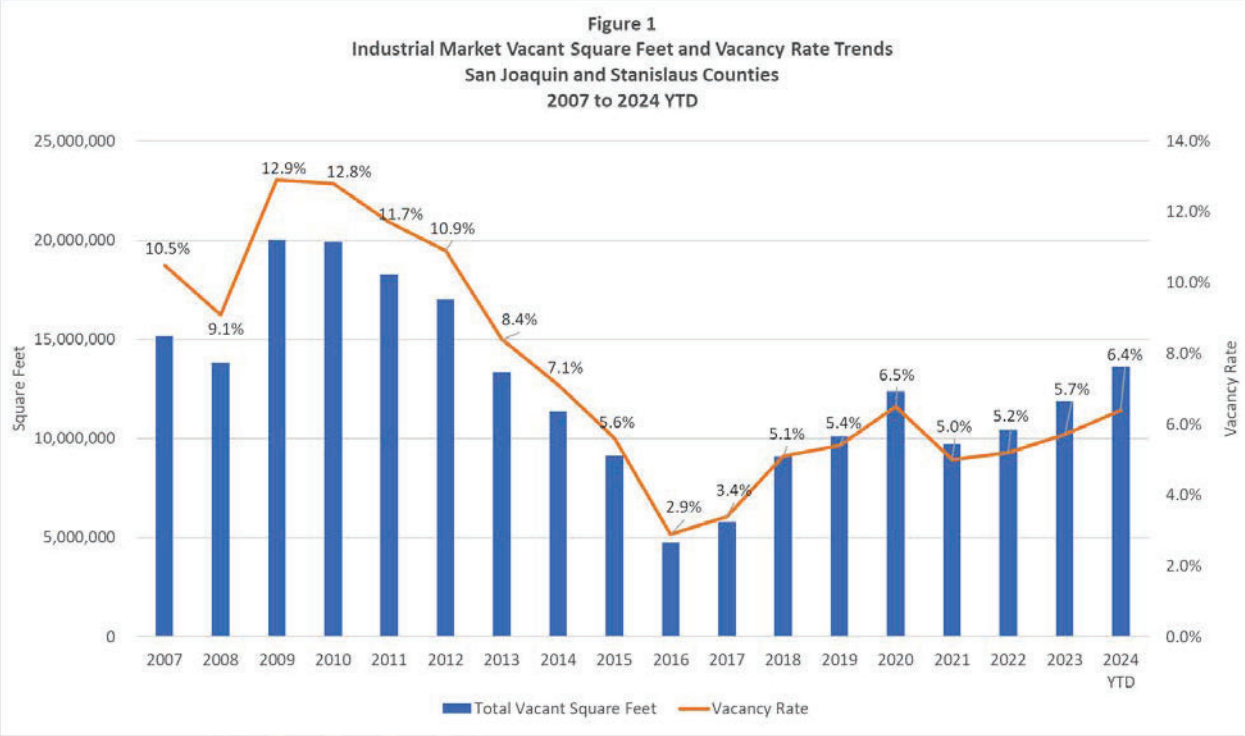
Information provided by CoStar, one of the nation's largest commercial real estate information and analytics providers, reflects industrial market trend data from 2007 through September 2024. The geographic area covered by CoStar includes both San Joaquin and Stanislaus counties. As brokerage data indicate that San Joaquin County comprises about 75% of the two-county building base, this County drives much of the data presented. The space tracked includes all industrial building types, including warehouses.

During the 17.75-year period covered, the industrial inventory grew from 144 million square feet to 211.5 million square feet at the end of September 2024. The amount of vacant space has been as low as 4.7 million square feet in 2016 and as high as 20 million square feet in 2009, during the Great

[6] Some brokerages combine Stanislaus County with San Joaquin County in their statistics; however, over 75% of the region's inventory is in San Joaquin County, with activity driven by close proximity to key trucking routes into the greater Bay Area.

[7] By contrast, Cushman & Wakefield data indicate that the industrial space inventory in Patterson totals about 6.2 million square feet.

Recession. At the end of September 2024, about 13.6 million square feet are vacant, as tracked by CoStar. Figure 1 below presents period trends in vacant square feet and vacancy rates.

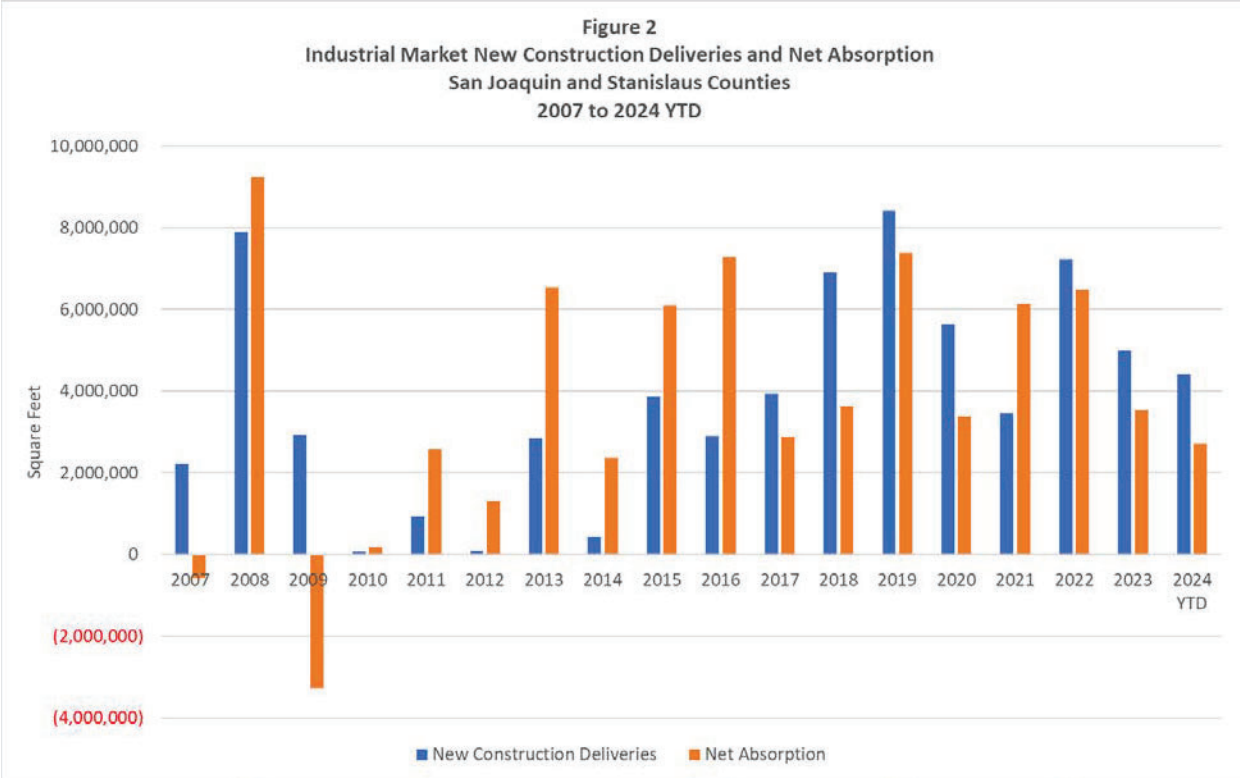


Sources: CoStar; and ALH Urban & Regional Economics.

*Graph not OCR compatible

Vacancy Trends. Figure 1 illustrates the market cycle from just before the Great Recession, the impact of the Great Recession in 2009 and 2010, followed by gradual recovery to a vacancy low in 2016. Since then, there has been strong construction activity that has increased the vacancy rate. The 2024 YTD vacancy rate through September 2024, reported at 6.4%, is lower than the third quarter 2024 vacancy rate reported by Colliers at 7.8%. While higher than the 2016 market low of 2.9%, the vacancy rates in in the 5.0% to 6.5% range since 2021 are nonetheless considered healthy vacancy rates. Over the 17.75 years covered, the two-county vacancy rate has averaged 7.5%.

New Construction. Since 2007, 69.25 million square feet of new industrial space has been completed in San Joaquin and Stanislaus counties, or about 3.9 million square feet per year. This represents nearly one-third of the market inventory. Measuring from Great Recession recovery (i.e., 2014 on), 52.2 million square feet of new industrial space has been completed in the two-county area, for a higher average of 4.9 million square feet per year. The pace of new construction accelerated over the past 5.75 years (2019 to 3rd quarter 2024), with 34.2 million square feet completed – nearly half of the new space since 2007. This averages 5.95 million square feet added per year from 2019 to third quarter 2024. Figure 2 below illustrates annual new construction deliveries and net absorption for the period covered.



Sources: CoStar; and ALH Urban & Regional Economics.

*Graph not OCR compatible

Net Space Absorption. As shown in Figure 2, at the onset of the Great Recession in 2008, the market still absorbed a significant amount of space, i.e., 9.25 million square feet, which exceeded new construction of 7.9 million square feet. However, net absorption was significantly negative in 2009, and just barely positive in 2010. From 2011 through 2014, new building deliveries were minimal, consistent with a recovering economy, so the market could stabilize. New construction deliveries started outpacing net absorption in 2017. In 2020, the COVID-19 pandemic resulted in slower market absorption, which was again dwarfed by new building completions. In 2021, the reopened and rebounding economy resulted in increased net absorption compared to construction completions, followed by another strong year of net absorption in 2022.

Over the past 10.75 years from 2014 through September 2024, net absorption totaled 51.97 million square feet, or 4.8 million square feet per year. Looking at the past 5.75 years, net absorption totaled 29.7 million square feet, or 5.16 million square feet per year. Net absorption thus far for 2024 is off that pace at 2.7 million square feet, reflecting uncertainty due to high interest rates and geopolitical concerns, as well as likely a pause in demand after two very strong years in 2021 and 2022. Typically, the market will respond to less favorable conditions by slowing down future construction activity to allow absorption to catch up with new completions.

Change in Average Building Size. CoStar data also illustrate the change in the industrial building inventory over the years. Table 4 below presents snapshots of the building inventory and new construction deliveries between 2007 and September (YTD) 2024.

Table 4
Industrial Building Inventory Sizes
San Joaquin and Stanislaus Counties
2007 to 2024 YTD (1)

Category Year/Time Period	No. of Buildings	Total Building Size (SF)	Average Size (SF)
Total Inventory Snapshot			
2007	3,476	143,979,840	41,421
2024 YTD	3,786	211,503,178	55,865
New Construction Deliveries			
2007 to 2024 YTD	393	69,249,678	176,208
2014 to 2024 YTD	176	52,233,768	296,783
2019 to 2024 YTD	118	34,189,696	289,743

Sources: CoStar; and ALH Urban & Regional Economics.
(1) YTD reflects through 3rd quarter 2024.

As shown in Table 4, the average building size in the inventory has increased 35% from 41,421 square feet in 2007 to 55,865 square feet as of YTD 2024. This is due to the comparatively larger buildings being constructed since 2007. The average size of new buildings constructed over the past 17.75 years is 176,208 square feet – more than triple the current inventory average building size. However, in looking at construction over the past 10.75 years, since 2014, the average building size of new buildings has increased to 296,783 square feet. This reflects the completion of several buildings in the 1,000,000-square-foot range for tenants such as Amazon, Medline, Michaels, Wayfair, and others.

This increasing building size reflects the evolution of warehouses to include subsets such as logistics and fulfillment centers, driven by the growth in eCommerce. According to an October 2020 report published by the National Association of Office and Industrial Parks (NAIOP), "e-commerce supply chains require more than three times the distribution space required by traditional retail supply chains centered on brick-and-mortar distribution."[8] Not only have warehouse buildings become larger (often exceeding 1,000,000 square feet), ceiling heights (called "clear ceiling heights" or "clear heights") have become higher, and buildings now have more power, more extensive heating/ventilation/air conditioning systems, more loading doors, and reinforced concrete floors able to withstand heavier loads. Additionally, occupants of these facilities often make extensive investments in interior improvements and equipment. Because of these changes, newer industrial buildings are vastly different from product built in the 20th Century, as well as those built in the early 2000s.

Tenants in the Market

Information provided by Cushman & Wakefield regarding tenants in the market for industrial space indicates that 48 tenants requiring up to 18.1 million square feet have made brokerage inquiries in recent months. These inquiries cover a broad geographical area, such as a few indicated as searching the Central Valley, Sacramento, and/or parts of the Bay Area or "looking in Utah, Nevada, California, and Arizona." Thus, the tenant may select a different market, or state, altogether. Additionally, as these requirements pertain to tenants inquiring about the market, they may not necessarily result in actual transactions. For example, despite inquiring about space in the competitive cities, a tenant may choose to remain in its current location. Many times, the actual tenant is undisclosed or confidential.

[8] Weikal, Steve and Scott, James Robert, "The Evolution of the Warehouse: Trends in Technology, Design, Development and Delivery," NAIOP Research Foundation, October 2020, Page 3.

Table 5 summarizes the tenant requirements associated with these inquiries by size category - number of tenants in each category, minimum and maximum size range, and average requirement. If a size requirement bridges two different size categories, the tenant is placed in the category that matches its maximum search parameter.

Table 5
Tenant Requirements in Market - 50,000 Square Feet and Greater
Tenants by Size Category

Size Category	No. of Tenants	Total Space Size Range		Average Requirement	
		Minimum	Maximum	Minimum	Maximum
50,000 to 100,000 SF	8	650,000	1,100,000	81,250	137,500
100,000 to 250,000 SF	24	3,075,000	4,765,000	128,125	198,542
250,000 to 500,000 SF	9	3,050,000	4,625,000	338,889	513,889
500,000 SF to 1.0 MSF	5	3,900,000	4,650,000	780,000	930,000
1.0 MSF and Larger	2	2,950,000	2,950,000	1,475,000	1,475,000
Totals/Averages	**48**	**13,625,000**	**18,090,000**	**283,854**	**376,875**

Sources: Cushman & Wakefield; and ALH Urban & Regional Economics.

Of the 48 tenants inquiring about the market, 7 of their requirements are for spaces 500,000 square feet and larger, and another 9 are in the 250,000- to 500,000-square-foot category. The total for the 500,000 square feet and up categories is 7.6 million square feet (see the maximum size range) – an average of just over 1.0 million square feet per tenant requirement. Most of the tenants are looking for distribution space, while a few are looking for manufacturing space or combined distribution and manufacturing space. These data regarding tenants in the market point to the continued demand for industrial space and the trend towards larger space requirements.

BUSINESS PARK USE CONSIDERATIONS

In addition to the 24,675,000 square feet of industrial space, the Project is also planned to include 93,000 square feet of Business Park space (I-P Zoning). Per the Project Description, the purpose of this space is to provide a business park environment consisting of smaller buildings to be used for combined office/warehouse uses including research and development, light impact manufacturing (such as assembly), HVAC contractors, electricians, plumbing contractors and window installation and other service-related businesses, such as janitorial service and supply vendors. User spaces will typically include limited warehouse area mostly serviced by grade level doors for delivery.[9]

The 93,000 square feet of Business Park space comprises one of the smallest components of the Project. Given that this space will include smaller buildings intended for multiple tenants, each individual tenant space will be relatively small. ALH Economics believes that user demand for these small tenant spaces is likely to comprise start-up or established businesses with local area ownership or targeted to serve the Project's 24,675,000 square feet of industrial users. Such uses are unlikely to be competitive with the light industrial stock in Tracy or beyond, all of which are about 7 or more miles distant from the Project. Furthermore, the existing light industrial stock in Tracy, the geographically closest established market, is well-occupied with a 4.9% vacancy rate and about 735,000 square feet of inventory.[10] Because of this lack of competitiveness, this use is not evaluated in the context of potential urban decay, as vacancy impacts on existing stock are likely to be very limited.

[9] Pacific Gateway Project Description, November 8, 2024.
[10] Colliers San Joaquin County Industrial Market Report for 3Q2024.

IV. MARKET AREA INDUSTRIAL DEMAND

APPROACH TO PROJECTING DEMAND

The degree to which absorption of the Project's industrial buildings will impact the existing competitive market will be dependent upon growth in demand for industrial space in San Joaquin County as well as Patterson in Stanislaus County. This section presents employment projections in relevant employment sectors and assumptions regarding per employee square footage requirements. These estimates are compared with net absorption based on market trends for reasonableness. These estimates provide a context for absorption of the Project as well as additional planned developments addressed later in the cumulative project analysis.

FORECASTED INDUSTRIAL EMPLOYMENT

Forecast Methodology

The earlier San Joaquin County overview and economic base analysis indicated that the Transportation and Warehousing industry sector is most associated with logistics employment and building occupation. Accordingly, ALH Economics developed current year 2024 estimates of employment in this sector, and then forecasted employment out to the year 2060. The year 2060 is four years after the projected 2056 completion of the Project.

These estimates and forecasts were prepared for San Joaquin County and Stanislaus County. For both counties, the base year 2024 estimate was prepared by starting with the State of California Employment Development Department (EDD) year 2020 estimate and then growing it out to 2024. The 2020 estimate for San Joaquin County is presented in Exhibit 2 and the 2020 estimate for Stanislaus County is presented in Exhibit 4.

The 2020 estimates were grown out to baseline 2024 estimates, which in turn were grown out to the year 2060. The future employment per county was estimated using 2020-2030 EDD projections, with the 10-year CAGR extended into the future up to the year 2060 to encompass full Project buildout. This is a study assumption that the 10-year rate will apply equally to the subsequent decades, as EDD does not project beyond the 2030 timeframe.[11]

The Project Description for the Pacific Gateway Project indicates that the majority of the Project will be zoned Limited Industrial, which is intended to provide for warehouse, distribution, fulfillment center, e-commerce, advanced manufacturing, light manufacturing and assembly, and other such industrial

[11] The EDD projection methodology is the same as the U.S. Bureau of Labor Statistics methodology, with projections of industry and occupational employment developed in a series of six interrelated steps, each of which is based on a different procedure or model and assumptions: labor force, aggregate economy, final demand (GDP) by consuming sector and product, industry output, industry employment, and employment and openings by occupation. The results produced by each step are key inputs to following steps, and the sequence may be repeated multiple times to allow feedback and to ensure consistency. Some of the following steps include incorporation of final demand matrices comprising approximately 132 demand categories and 192 commodity groups or rows, as well as input-output accounts. Detail on this approach can be found here: https://www.bls.gov/emp/documentation/projections-methods.htm#occupational_employment.

uses.[12] This description continues to be best exemplified by the Transportation and Warehousing industry sector, especially as the EDD employment projections provide only general estimates and projections for light manufacturing and industrial uses, and thus do not lend themselves to supporting the preparation of detailed industry-specific space demand projections. For these types of activities, the data source provides only very general manufacturing employment projections (e.g., EDD's categories of Durable Goods Manufacturing, Nondurable Goods Manufacturing, and Food Manufacturing). Thus, the more conservative approach is to base the space projections methodology on a narrower sector with the greatest applicability to the Project.

Forecasted Employment

The employment forecasts are summarized in Table 6, which includes the 2020 baseline employment estimate, the CAGR deduced by ALH Economics, and projected employment for the year 2024 and each subsequent year up to 2060 in ten-year intervals. Total forecasted growth between 2024 and 2060 is also presented.

Table 6
Transportation and Warehousing Employment Projections, 2024-2060
San Joaquin and Stanislaus Counties

			Projected Employment					Growth
County	2020 (1)	CAGR (2)	2024	2030	2040	2050	2060	2024-2060
San Joaquin County	37,300	3.04%	42,039	50,300	67,831	91,472	123,352	81,313
Stanislaus County	8,748	2.48%	9,649	11,178	14,283	18,251	23,320	13,671

Sources: Exhibit 5; Exhibit 6; and ALH Urban & Regional Economics.
(1) The 2020 figures are estimates prepared by the State of California Employment Development Department (EDD).
(2) CAGR is an acronym for Compound Annual Growth Rate.

The results in Table 6 indicate that San Joaquin County's Transportation and Warehousing sector is projected to grow by 81,313 to 123,352 new jobs between 2024 and 2060. These figures represent on average a 293% increase over the existing 2024 sectoral employment base.

The projected average rate of growth in Stanislaus County is slightly lower than the average in San Joaquin County. Additionally, Stanislaus County has a much smaller sectoral employment base than San Joaquin County. Stanislaus County's projected 2024 to 2060 growth in Transportation and Warehousing employment is 13,671. While these figures comprise more than a doubling of the existing base, the 2024 employment base in Stanislaus County is 23% of that of San Joaquin County and is projected to decline slightly to 19% by 2060.

Given the long-term nature of the projections, the forecasts are somewhat speculative. However, there are many drivers of demand for jobs in warehousing and logistics, specifically impacting jobs in the transportation and warehousing sector. These drivers include the continuing growth of ecommerce, which was expanding strongly before the COVID-19 pandemic and accelerated during the pandemic, further fueling demand. During the early months of the pandemic, when stay-at-home orders were in effect, many stores were closed and those that were open operated with strict occupancy restrictions. In addition, consumers were apprehensive about being near other people. Thus, on-line shopping boomed in the early part of the pandemic. Even after the economy re-opened, a portion of the increased shift to on-line shopping is considered permanent.

[12] Pacific Gateway Project Description, November 8, 2024.

Another pandemic-driven demand driver for warehouse space is the realization of the fragile nature of "just-in-time delivery" systems. With disrupted supply chains, particularly those that rely on cargo ships, many companies realized they should plan for additional domestic storage of products, parts, and materials. Some people call this new inventory management strategy "just-in-case" inventory management. Finally, yet another pandemic-related demand driver for the overall industrial sector, not just warehousing, is the realization that more manufacturing should be domestic, again due to the aforementioned supply-chain issues. This final demand driver is anticipated to be accentuated as the threat of tariffs on imported products looms. As a result, many companies are seeking to expand domestic manufacturing capacity.

ESTIMATED EMPLOYMENT DENSITY

To convert the forecasted employment growth to space demand, ALH Economics used the employment density factor of 1,650 square feet per employee. This is based on analysis of data collected by Fehr & Peers for warehouse buildings located in San Joaquin County in 2021. This building warehouse survey was a component of other Project-related analysis conducted by Fehr & Peers, pertaining to traffic analysis assumptions and projections. Most of the buildings included in this analysis are located in the Project's market area spanning Stockton, Tracy, and Lathrop, with a few additional properties in other San Joaquin County locations (e.g., Manteca and Lodi).[13] An additional factor included in the analysis is a stabilized building occupancy rate of 93%, based on historic CoStar occupancy rates and market data provided by Cushman & Wakefield.

FORECASTED INDUSTRIAL DEMAND

Pairing the Transportation and Warehousing sector San Joaquin County and Stanislaus County projections with the square feet per employee and occupancy rate assumptions results in estimated long-term demand for industrial space. The demand forecasts are presented in Exhibit 5 for San Joaquin County and Exhibit 6 in Stanislaus County. These exhibits present the employment estimates, incremental demand by time period, and cumulative demand, culminating in total new demand between 2024 and 2060. The demand findings for each county are also summarized in the following tables, with Table 7 presenting summary findings for San Joaquin County and Table 8 presenting summary findings for Stanislaus County.

Table 7
San Joaquin County, 2024-2060
Transportation and Warehousing, Employment Projections & Net New Space Demand

Demand Characteristic	2024-2040	2040-2060	Total
Employment Increase	25,792	55,521	81,313
Projected Demand	45,759,680	98,504,921	144,264,602
Annual Average Demand per Year	2,859,980	4,925,246	3,899,043

Sources: Exhibit 5; and ALH Urban & Regional Economics.

[13] This survey included 27 buildings with both square footage and employment data. The average size of the buildings for which employment data were available was 740,000 square feet. The data were collected by Fehr & Peers for the purpose of preparing a "Local Transportation Analysis for Pacific Gateway," as well as additional warehouse-related analysis.

San Joaquin County

The findings summarized in Table 7 indicate that San Joaquin County's net new space demand for the Transportation and Warehousing sector is projected to total 144.3 million square feet through 2060. Based on the summary presentation depicting two interim time periods, from 2024-2040 and 2040-2060, the average projected net new absorption totals 2.86 million square feet per year from 2024-2040 and 4.9 million square feet per year from 2040-2060.

As previously shown in Exhibit 3, San Joaquin County has an existing inventory of 138.4 million square feet of industrial space in 2024 at a 7.8% vacancy, (i.e., about 127.6 million square feet of occupied space). Thus, if realized and housed in industrial properties, the new demand equates to a 104% increase in San Joaquin County's existing inventory.

Stanislaus County

Patterson, one of the identified competitive industrial market cities, is located in Stanislaus County. This is the only area in Stanislaus County deemed competitive with the Pacific Gateway industrial market. However, according to Cushman & Wakefield, Patterson's industrial real estate base totals only 6.3 million square feet, or only 15% of the total County inventory. Thus, only a portion of the projected Stanislaus County demand for Transportation and Warehousing space, summarized in Table 8, may be relevant to Patterson.

Table 8
Stanislaus County, 2024-2060
Transportation and Warehousing, Employment Projections & Net New Space Demand

Demand Characteristic	2024-2040	2040-2060	Total
Employment Increase	4,634	9,037	13,671
Projected Demand	8,221,274	16,033,535	24,254,809
Annual Average Demand per Year	513,830	801,677	655,535

Sources: Exhibit 6; and ALH Urban & Regional Economics.

As shown in Table 8, Stanislaus County's net new space demand for the Transportation and Warehousing sector is projected to total 24.3 million square feet. For the time period 2024-2040, demand is estimated to average 513,830 square feet per year, increasing to an annual average of 801,677 square feet from 2040-2060. Patterson has an existing inventory of 6.3 million square feet of industrial space. If 15% of the County's industrial stock continues to be located in Patterson, this would suggest average total demand in Patterson from 2024-2060 for 3.6 million square feet (i.e., 24.3 million * 15%), or a 58% increase in the existing inventory. This would correspond to annual average demand of 77,074 square feet from 2024-2040 and 120,252 square feet from 2040-2060. ALH Economics believes the potential exists for Patterson to absorb more than its proportional share of current demand, as this node has the capacity to rise in prominence relative to other, older industrial nodes in Stanislaus County, such as in Modesto.

The combined annual average demand for San Joaquin and Stanislaus counties is 4.0 million square feet for the total period of 2024 to 2060. This annual average demand is within the range of historical net absorption per year in the two-county area as reported by CoStar, which has been 3.8 million square feet annually, on average, for the 17.75 years from 2007 through September 2024. For just the past 10.75 years from 2014 to YTD 2024, annual average absorption is even higher at 4.8 million square

feet. Thus, comparison with historic net absorption indicates that the long-term projections are reasonable.

Limitations of Forecasted Demand

The preceding demand projections are intended to give a general sense of the projected industrial demand in San Joaquin and Stanislaus counties. The figures are not precise estimates, and actual results achieved during the projection period will likely vary from the demand projections. Changes would occur if employment growth varied from the levels deduced from currently available economic data and other relevant information. Key economic data central to the demand projections include the employment growth rates derived from EDD economic forecasts, as well as employment density parameters. ALH Economics does not warrant the accuracy of these growth rates and employment growth could vary from the levels associated with these forecasts, which in turn would alter the demand forecasts. Some of the variations may be material to the conclusions of the analysis. However, the demand projections comprise an indicator useful to the urban decay analysis and generally indicate a likely trend toward future growth and associated industrial demand.

V. PROJECT AND CUMULATIVE PROJECT IMPACTS

PROJECT IMPACT ON EXISTING INDUSTRIAL BASE

The Project's industrial component totals 24,675,000 square feet of new industrial space. This amount of space comprises a 17.8% addition to the existing 138.4 million square feet industrial inventory in San Joaquin County (as of the third quarter of 2024). As just forecasted, the San Joaquin County economy as a whole is projected to experience demand for industrial space in the near- and long-term future. For example, the demand projected from 2024 to 2040 totals 45.8 million square feet. During this period, the Project's Pacific Gateway East development area with 11,124,274 square feet is anticipated to be constructed, along with a portion of the Pacific Gateway Central development area, with 6,856,474 square feet, which is pro-rated at 22%, or 1,523,661 square feet. This Project total of 12,647,935 square feet represents about 28% of the forecast San Joaquin demand from 2024 to 2040.

Considering the longer-term projection, the balance of the Project's Pacific Gateway Central development area (5,332,813 square feet), plus the Pacific Gateway West and Gateway Center development areas (6,168,882 square feet and 525,370 square feet, respectively) are anticipated to be delivered in the 2040 to 2060 period (e.g., by 2056). Projected demand during this time totals 98.5 million square feet, or 4.9 million square feet per year. For this time period from 2040 to 2060, the Project's space represents about 12% of the forecast demand in San Joaquin County. Overall, the Project represents less than one-fifth of the County's demand for the 2024 to 2060 period.

For the Project's industrial space to potentially have a negative impact on the market, it would need to draw tenants away from existing buildings without the potential for that space to be re-tenanted, thus increasing the vacancy rate to an unhealthy level. There are three major factors that suggest these circumstances are unlikely to happen:

1. As described above, there is ample projected demand compared to the Project's expected supply. Although in the period up to 2040 the Project's anticipated phases represent 28% of projected demand, this ratio falls to 12% over the next 20 years from 2040 to 2060, when Project buildout is estimated.

2. The vacancy rate of 7.8% as reported by Colliers for San Joaquin County indicates the market is relatively healthy. Looking at CoStar statistics for the two-county market area of San Joaquin and Stanislaus counties is at a 6.4% vacancy rate, well below that experienced during the height of the Great Recession – nearly 13% in 2009 and 2010. Although net absorption has slowed in relation to construction deliveries since 2021, developers have responded by postponing breaking ground on new buildings.

3. Development of the Project will be driven by market conditions and tenant demand. To the extent that demand for the Project's industrial buildings is less robust than expected, then construction will slow to better align with demand. This may mean that development timing of later phases could be pushed further out into the future.

4. Finally, as previously discussed, warehouse buildings have evolved over the past 10 to 15 years and, as a result, older product is not competitive with modern warehouses. New buildings are often larger and have higher ceiling heights than older buildings. Additionally, modern warehouses often have more power, more extensive heating/ventilation/air conditioning systems, and are built to withstand heavier loads.

Because of these factors, the Project is not expected to negatively impact the existing industrial base in San Joaquin County or in Patterson in Stanislaus County.

CUMULATIVE INDUSTRIAL PROJECTS ANALYSIS

Planned Future Supply of Industrial Space

It is imperative that urban decay analysis for environmental review purposes take into consideration development of cumulative projects in addition to the project under study. To identify potential future projects for the cumulative analysis, ALH Economics prepared a cumulative supply list based on information from San Joaquin County and the cities of Lathrop, Stockton, and Tracy, as well as Patterson in Stanislaus County. The future supply list is presented in Exhibit 7, which includes 35 projects (150,000 square feet or larger) that are under construction, approved, under review, or are future phases of established industrial parks. Table 9 below summarizes the potential future supply by status and location.

Table 9
Industrial Space Future Supply
Summary by Location and Status, November 2024

Development Status	Tracy	Lathrop	Stockton	Uninc. San Joaquin County	Patterson	Total
Under Construction	0	0	1,422,961	0	820,000	2,242,961
Approved	859,238	4,891,376	3,471,726	1,435,855	2,100,820	12,759,015
Under Review	9,826,233	0	10,349,827	5,360,000	0	25,536,060
Future Phases	7,036,891	272,496	0	1,822,117	9,840,411	18,971,915
Totals						
Square Feet	17,722,362	5,163,872	15,244,514	8,617,972	12,761,231	59,509,951
Percent of Total	30%	9%	26%	14%	21%	100%

Sources: Exhibit 7; and ALH Urban & Regional Economics.

As indicated in Table 9, Tracy has the greatest amount of potential future supply at 17.7 million square feet (30% of total), followed by Stockton at 15.2 million square feet (26% of total). Patterson has 12.8 million square feet, followed by Unincorporated San Joaquin County at 8.6 million square feet. Lathrop has the smallest potential future supply, comprising 5.2 million square feet, or 9% of the total. Stockton has the most space currently under construction, while Lathrop has the most space approved. Stockton has the most space under review and Patterson has the most space in the future phases of master-planned industrial parks, closely followed by Tracy.

As shown in Exhibit 7, there are two projects under construction, with a total of 2.2 million square feet of space: a new Walmart fulfillment center totaling 1,422,961 square feet in Stockton and an 820,000-square-foot building in Patterson that is slated to be 50% occupied by its owner, Safavieh, Inc. The likely timing of completion of these projects is in 2025-2026.

The approved projects category totals 12.8 million square feet, about 21% of the total, in 13 buildings/projects. Five of the projects are in Lathrop, including buildings at TriPoint Logistics Center and Lathrop Gateway, as well as the Ashley Furniture distribution center totaling 1.4 million square feet. The remaining areas each have two approved projects. The largest approved project is in Stockton, a three-building development totaling 2.27 million square feet by Arnaiz Development.

There are 15 projects under review totaling 25.5 million square feet, or 43% of the total. Most of these under review projects are in Tracy, including three buildings at the International Park of Commerce, plus two Costco developments. The largest project under review is South Stockton Commerce Center in Stockton with 6.1 million square feet. Another large project under review is in unincorporated San Joaquin County in the Tracy SOI, Prologis is pursuing entitlements for Phase 2 of its International Park of Commerce, with 5.36 million square feet in five buildings.

The future phases of master-planned industrial parks category totals 18.97 million square feet, 84% of which is in two projects: 7.0 million square feet representing future phases at IPC in Tracy; and 8.9 million square feet of future phases at I-5 Trade Center in Patterson. Other future phases include approximately 1.8 million square feet at North Tracy Commerce Center, 272,500 square feet at TriPoint Logistics Center, and the estimated unbuilt balance of 970,800 million square feet at Keystone Pacific Business Park in Patterson.

Limitations of Identified Potential Future Supply

There is an important caveat regarding the potential future supply of industrial space. The market area defined by the competitive cities and surrounding unincorporated areas includes vast swaths of generally level, vacant land. While much of this land is in agricultural use, some of the uses are more productive than others. Some tracts are protected by the Williamson Act and other agricultural easements, but others may not be. With the severe drought conditions in 2020 to 2022, exacerbated by climate change, some agricultural landowners may pursue development instead of continuing to cope with dwindling production and water availability. Therefore, it is possible that other landowners are considering or have started the process of pursuing a change in land use, but have not reached the application stage. Because the development timeframe for Pacific Gateway is likely decades, there is a high probability that other competitive developments that are not currently known may arise in the future.

Cumulative Industrial Projects Impacts Conclusion

Approach. The purpose of an urban decay analysis is not to conduct a market study to determine the degree to which demand for a planned project does or does not exist, but rather to assess what impact the planned project could have on the existing real estate base ***assuming*** it is built. The same applies to analysis under the cumulative projects scenario. Sometimes demand analysis is a component of the urban decay analysis, to assess the degree to which future demand may provide overall market support and thus offset any negative impacts that might be attributable to the project and cumulative projects under study. Such is the case in this analysis, where this section examines the relationship between projected cumulative project supply, including the Project, and the identified industrial demand.

San Joaquin County and Patterson Supply and Demand Projection. As depicted in Table 10, projected demand in San Joquin County plus Patterson totals 47.4 million square feet during the 2024-2040 timeframe, and another 102.5 million square feet during the subsequent 2040-2060 timeframe. These total 149.9 million square feet over the next 36 years. The planned supply among all the projects identified in the industrial market area totals approximately 59.5 million square feet, which is about 40% of the projected demand. Including the Project, the planned future supply totals 84.2 million square feet. Thus, potential supply including the Project represents about 56% of projected demand. An implicit analytical assumption is that all planned projects materialize, which may or may not be the case for every planned future development, especially for projects seeking entitlements.

Table 10
Summary of Industrial Supply and Demand
San Joaquin County and Patterson, 2024-2060

Supply/Demand Characteristic	San Joaquin County			Patterson (1)			Grand Total
	2024-2040	2040-2060	Total	2024-2040	2040-2060	Total	
Period Demand	45,759,680	98,504,921	144,264,602	1,644,255	4,008,384	5,652,639	149,917,240
Planned Supply (2)	21,212,660	25,536,060	46,748,720	2,920,820	9,840,411	12,761,231	59,509,951
Cumulative Remaining Demand/(Excess Supply) (3)	24,547,020	97,515,882	97,515,882	(1,276,565)	(7,108,592)	(7,108,592)	90,407,289

Sources: Table 7; Table 8; Table 9; and ALH Urban & Regional Economics.
(1) Patterson's current inventory is 15% of the total Stanislaus County inventory. Given Patterson's market evolution this analysis assumes Patterson has the potential to capture 20% of demand from 2024-2040, increasing to 25% of demand from 2040-2060. Therefore, the presented period demand figures comprise these percentages of average Stanisclaus County demand (See Table 8) during the cited time periods.
(2) See Table 9 Pipeline Summary. To facilitate the analysis, all identified space under construction and approved, plus future phases of Tracy, Lathrop, and Unincorporated San Joaquin County projects are entered in the first time period, from 2024-2040. For the 2040 to 2060 time period, Planned Supply comprises all under review projects plus all future phases of Patterson projects.
(3) Positive figures comprise remaining demand, while negative figures in parentheses represent excess supply. Any remaining demand or excess supply figures are carried over into the next period to present cumulative demand and supply findings.

As shown in Table 10 above, there is a projected surplus of demand in San Joaquin County, while Patterson has about 7.1 million square feet of potential excess supply. As previously noted, Patterson is a small component of the overall Stanislaus County market, with only a portion of the Stanislaus County forecasted demand directed to properties in Patterson. Currently, Patterson's industrial inventory comprises 15% of the total Stanislaus County inventory. Given the pattern of new development in Patterson, and its emergence as a small logistics node, the ALH Economics analysis summarized in Table 10 assumes Patterson's share of future demand will increase over time. Therefore, the study assumes Patterson will capture 20% of demand during the 2024-2040 timeframe and an even higher 25% during the 2040-2060 timeframe. These assumptions result in estimated Patterson industrial space demand totaling 5.65 million square feet through 2060. The future supply analysis indicated that 12.76 million square feet are currently planned in Patterson, which is greater than all the demand allocated to Patterson to the year 2060.

Table 10 further indicates that the collective grand total of demand in San Joaquin County and Patterson is almost 150 million square feet of demand between 2024 and 2060. This contrasts with a collective grand total planned supply (including the Project) of 84 million square feet. This amount of planned supply would satisfy approximately 56% of the grand total demand if fully absorbed (i.e., 84 million square feet/150 million square feet).

For the planned space in Patterson to be absorbed without any resulting excess supply, three potential occurrences could happen. First, Patterson could divert demand away from other markets, such as the San Joaquin County industrial market. If this happened, then there could be less remaining demand available in San Joaquin County after absorption of the planned supply. Second, Patterson could capture a higher share of Stanislaus County demand than assumed in the analysis. However, as shown in Table 8, 100% of the average estimate of demand through 2060 totals 24.3 million square feet, with 8.2 million square feet to the year 2040 and another 16.0 million square feet thereafter to the year 2060. Hence, unless the third potential occurrence happens, with future demand varying significantly from the forecast, which is possible given the potential changing economic and employment trends, Patterson would need to capture at more than 50% of Stanislaus County's demand for the current planned supply to experience successful absorption.

The land available in Patterson's industrial parks is being marketed as ready to develop; however, these projects will not likely move forward until there is a committed tenant. This land will likely remain vacant until it attracts companies willing to trade a longer distance for lower occupancy costs.

Cumulative Projects Impacts Conclusion. The identified planned supply of industrial space in the competitive cities and surrounding areas have the potential to absorb about 40% of the combined projected demand in San Joaquin County and Patterson in Stanislaus County (i.e., the cumulative projects would take up 40% of demand if fully absorbed). Once building delivery begins, Pacific Gateway with its 24.675 million square feet will compete with much of the planned supply as well as the existing inventory. However, based on the supply and demand projections, there appears to be a favorable market balance indicating that the introduction of Pacific Gateway into the market would not lead to excessive vacancies in the market area. In contrast, it appears that remaining demand would continue to be available for additional planned projects likely to emerge over time, as well as to fill vacancies among the existing market area building inventory.

VI. HOTEL COMPONENT URBAN DECAY ANALYSIS

CONTEXT FOR PACIFIC GATEWAY PLANNED HOTEL

The Pacific Gateway plan includes a 60,000-square-foot, 100-room hotel in the Gateway Center development area. The Pacific Gateway site is distant from most existing commercial development, with the closest hotel competition located about 10.5 miles away in Tracy. Therefore, ALH Economics defined the competitive market for the Pacific Gateway hotel as the City of Tracy. There are eight existing hotels in Tracy, with a total of 608 rooms. The Project's hotel would increase the existing rooms supply by 16%.

ALH Economics conducted an analysis of hotel demand relevant to the Project's planned hotel, which is based upon growing out the existing met demand at Tracy's hotels pursuant to derived growth projections. Because an urban decay analysis must also look at cumulative impacts, there is additional analysis comparing the projected demand for hotel rooms in Tracy to the supply of the Project's hotel and other planned hotels. This study chapter closes with an assessment of the potential impact of the Project and the cumulative hotel supply on existing hotels and hence the existing physical hotel stock.

EXISTING SUPPLY OF TRACY HOTELS

The Tracy hotel supply was identified through internet research and review of a list of hotels maintained by Smith Travel Research (STR), a company that tracks supply and demand data for the hotel industry and provides market share analysis. ALH Economics reviewed a list of hotels in Tracy that participate in Smith Travel Research's trend analysis, which includes operating trends such as rooms, average daily room rate, demand, supply (measured by rooms available per period), and revenue, among other characteristics. ALH Economics then researched room rates for the listed hotels.

The existing Tracy hotels represent three classes of hotel, including economy, midscale, and upper midscale. There are no upscale or upper upscale hotels in the market. Overall, there are 608 rooms distributed among the eight hotels, as shown on Exhibit 9. All of the hotels are located between 10.5 and 12.8 miles from the Project. This is a substantial distance, indicating that the Project hotel will be uniquely situated with no proximate competition. The hotels range in size from 57 rooms at the Best Western Luxury Inn (Midscale Class) to 102 rooms at the Holiday Inn Express & Suites Tracy (Upper Midscale Class). Over half of the inventory are properties constructed before 2000. Only one hotel is relatively new – the 94-room Home2 Suites by Hilton, which was completed in 2021. This property has the highest room rate of the group.

ALH Economics conducted field reconnaissance to examine the physical condition of the existing hotels. All of the existing hotels were found to be in good general repair, with attractive physical conditions and no signs of deterioration or urban decay, such as litter, graffiti, weeds, or rubbish.

HISTORIC AND CURRENT HOTEL PERFORMANCE

STR provided a summary report of the performance of the eight Tracy hotels from 2016 through October 2024. These data are presented in Exhibits 10 and 11. The STR data include a supply estimate, which reflects the summation of the number of rooms available per month times the number of days in the period. This is effectively a measure of the number of room nights available among the competitive supply throughout the year. As of October 2024, there were a total of 18,848 room nights available

among the eight hotels. STR also measures demand, which is based on occupancy reported by the participating hotels. As the data in Exhibit 11 indicate, annual demand has fluctuated over the period covered, with a low during the 2020 pandemic and a high in 2021 as the economy reopened. Demand has been decreasing since 2021. This is illustrated by the market-wide occupancy rate in Exhibit 10, which peaked at 81.9% in 2021, but has since declined to 67.0% in 2023; the average occupancy rate through October 2024 is 69.0%. Over the 2016-2024 period, the average full-year occupancy rate is 75.4%.

The average daily room rate increased from $103.81 in 2016 to $144.92 in 2022. The average daily room rate declined by 5.3% in 2023 to $137.24. Through October 2024, the average daily room rate of $127.87 is about 8.3% lower than that for the same period in 2023. The slide in the average daily room rate is reflective of the decrease in occupancy levels since 2021.

PROJECTED HOTEL DEMAND AND OCCUPANCY

ALH Economics developed a hotel demand projection using the existing supply and performance characteristics as a base, which is then grown out pursuant to projected population and employment growth. Exhibit 12 presents projected population and employment growth in San Joaquin County through 2035 – the Project hotel is projected to be completed in 2032. As shown, the County's population is anticipated to increase at an average annual growth rate of 0.7% between 2024 and 2030, and at an average annual growth rate of 1.1% between 2030 and 2035. The average annual growth rate for County employment is 1.5% over the entire period. These average of the population and employment growth rates is 1.1% between 2024 and 2030 and 1.3% between 2030 and 2035.

Based on the demand projection, and absent any new additions to supply in Tracy, hotel occupancy is projected to increase annually, resulting in high levels relative to industry standards. In general, a hotel occupancy rate of 70% is considered an optimal industry standard occupancy rate. Tracy hotel market occupancy levels are projected to rise to over 75% by 2026 (near the eight-year average), and reaching over 80% by 2032, the year the Project hotel is assumed to be completed. These estimates are summarized in Table 11, which also includes the eight-year market occupancy history.

Table 11. Historic and Projected Tracy Area Hotel Occupancy

Year (1)	Annual Occupancy
2016	79.6%
2017	77.9%
2018	79.6%
2019	75.2%
2020	68.0%
2021	81.9%
2022	74.4%
2023	67.0%
2024	73.8%
2025	74.5%
2026	75.3%
2027	76.2%
2028	77.0%
2029	77.8%
2030	78.6%
2031	79.7%
2032	80.7%

Sources: Exhibit 10 and Exhibit 13.

(1) Figures above the line are historic and figures below the line are projected.

As shown in Table 11, without the addition of new supply, the occupancy rate is assumed to exceed the industry standard optimal occupancy rate. These high occupancy rates are a strong indicator that the market would benefit from the addition of new supply, to avoid periods of total booking for select hotels and thus potential hotel guests seeking lodging in other markets.

PROJECTED IMPACT OF PACIFIC GATEWAY HOTEL

In order to assess the Project's potential market impact, ALH Economics took the future projection of hotel room supply and demand and then examined the occupancy impacts with the addition of just the Project's planned hotel rooms. The Project's 100 rooms are added to the supply in 2033, which is projected to be the first full year of Project operation. The results of this analysis are presented in Exhibit 13, and summarized in Table 12, below.

Table 12. Historic and Projected Tracy Area Hotel Occupancy with Pacific Gateway Hotel

Year (1)		Annual Occupancy
2016		79.6%
2017		77.9%
2018		79.6%
2019		75.2%
2020		68.0%
2021		81.9%
2022		74.4%
2023		67.0%
2024		73.8%
2025		74.5%
2026		75.3%
2027		76.2%
2028		77.0%
2029		77.8%
2030		78.6%
2031		79.7%
2032		80.7%
2033	(2)	70.2%
2034		71.1%
2035		72.1%
2036		73.0%

Sources: Exhibit 10 and Exhibit 13.
(1) Figures above the line are historic and figures below the line are projected.
(2) Assumed first full year of Pacific Gateway Hotel operations.

The resulting supply and demand analysis reflecting the addition of just the Project indicates that absent any other additions to new supply, the competitive market is estimated to achieve annual occupancy of 80.7% prior to the first full year of Project hotel operations. Once the Project hotel enters the market, occupancy is projected to drop, as the supply of rooms outpaces demand. The initial occupancy rate is projected to drop by 13%, or to 70.2%, as the Project hotel is anticipated to increase the existing supply by 16% (from 608 to 708 rooms). This is both a large increase in supply and corresponding decline in occupancy. However, the projected occupancy of 70.2% is nonetheless greater than the optimal industry occupancy rate, as well as what the market experienced in 2023 and 2020. Subsequent to 2033, the occupancy rate is forecasted to modestly improve each year, remaining in the low 70% range. Given these projections, therefore, ALH Economics believes the competitive hotel market would likely manage to continue operations, without the closure of any existing competitive hotels. Accordingly, there is no expectation that the Project's market introduction would cause any existing hotel to experience an occupancy decline so severe as to result in closure and risk the potential for the hotel property to experience physical decline.

As with all projections, the projected hotel demand growth rate is by its nature speculative. It is difficult to predict how demand might increase with the availability of a hotel in a new market location south of Tracy, as well as the future location of the University, which would comprise an additional, unique, source of demand for the hotel. The University will likely generate a steady stream of demand, peaking at key points in time such as initial student move-in, graduation, and end of year move-out. These peaks would generate seasonal peaks in demand, especially at the Project hotel (versus the other more distant hotels). This will be a gradual impact on demand, as the hotel is anticipated to be completed more than a decade before the full buildout of the University.

CUMULATIVE HOTEL IMPACTS

Supply Additions

To conduct a cumulative analysis, ALH Economics researched information about other planned hotel projects in Tracy. The research findings about the planned supply are presented in Exhibit 14. As shown by Exhibit 14, there are eight planned hotel projects totaling 765 rooms. This list includes two hotels under construction, Marriott Hotel (108 rooms) and La Quinta (87 rooms), three approved hotels totaling 303 rooms, and three hotels under review with 267 rooms. Adding the Project's planned hotel rooms into the future supply results in the total addition of 865 hotel rooms to the Tracy market. If built, this number of rooms would result in a 142% increase in the number of competitive hotel rooms in or generally around Tracy.

Projected Hotel Demand and Cumulative Project Impacts

Similar to the analysis for just the Project, ALH Economics prepared a future projection of hotel supply and demand and then examined the occupancy impacts pursuant to the addition of the planned hotel projects. This analysis is presented in Exhibit 15. Also similar to the Project impact analysis, the planned hotels are entered into the hotel rooms inventory the year after expected construction completion, as the following year comprises the first full year of operations. This means the Marriott and La Quinta hotels are anticipated to enter the market inventory in 2026 (first full year of operations). The approved hotels are projected to enter the market in 2028, assuming they commence construction in 2025 and take 18+ months for completion. With respect to the three hotels under review, the timing of completion is speculative, so completion and operation dates are not estimated. As with the Project-only analysis, the Pacific Gateway hotel rooms are also added to the inventory in this analysis, in 2032 (with 2033 expected to be the first full year of operations). Table 13 summarizes the hotel future supply by project, number of rooms, and first full year of occupancy.

Table 13. Summary of Hotel Pipeline, by Project, Number of Rooms, and First Full Year of Occupancy

Project	Planning Status	Number of Net New Rooms	First Full Year of Occupancy (1)							
			2024	2025	2026	2027	2028	2029	2030	After 2030
Marriott Hotel	Under Construction	108			108	108	108	108	108	108
La Quinta	Under Construction	87			87	87	87	87	87	87
Extended Stay America	Approved	124					124	124	124	124
Marriott Courtyard	Approved	101					101	101	101	101
Tru by Hilton	Approved	78					78	78	78	78
Avid Hotel & Candlewood Suites	Under Review	107 (2)								
Hilton Garden Inn	Under Review	70 (2)								
Cambria Hotel and Event Center	Under Review	90 (2)								
Total		765	0	0	195	195	498	498	498	498

Source: Exhibit 14.

(1) The first full year of occupancy is assumed to comprise the year following anticipated completion.

(2) These Under Review hotel projects are too speculative at this time to warrant estimation of completion and operational dates.

Exhibit 15 presents the combination of the projected hotel demand and anticipated new supply additions. The historic and projected occupancy rates with the cumulative supply additions are summarized in Table 14. The results after the 2026 addition of the under construction hotels indicates that hotel occupancy is projected to decline to 57.1%, following a much higher occupancy of 74.5% the year before. The occupancy rate is projected to ratchet up slightly to 57.7%, before the approved hotels are completed, after which the projected occupancy rate drops to 42.3%. Although the occupancy rate experiences modest yearly gains, it declines again to 41.2% in 2033 when the Project's hotel becomes operational. The projected occupancy rate with all of the cumulative supply remains in the low 40% range through 2036.

Table 14. Historic and Projected Tracy Area Hotel Occupancy with Pacific Gateway Hotel and Cumulative Projects

Year (1)	Annual Occupancy
2016	79.6%
2017	77.9%
2018	79.6%
2019	75.2%
2020	68.0%
2021	81.9%
2022	74.4%
2023	67.0%
2024	73.8%
2025	74.5%
2026	57.1%
2027	57.7%
2028	42.3%
2029	42.8%
2030	43.2%
2031	43.8%
2032	44.4%
2033	41.2%
2034	41.8%
2035	42.3%
2036	42.9%

Sources: Exhibit 10 and Exhibit 15.
(1) Figures above the line are historic and figures below the line are projected.

As with all projections, the projected hotel demand growth rate is by its nature speculative. For example, if the annual growth rate is tied to just the projected increase in the County's employment, the market-wide occupancy rate would be higher by about 0.5% in 2026 and 1.3% higher in 2033. It is difficult to predict how demand might increase with the availability of a hotel in a new market location in Tracy, such as the Project's location south of Tracy and near the University, which is anticipated to represent a new source of demand unique to the Project hotel with seasonal spikes in demand, albeit gradually over the University buildout period, which extends beyond the hotel completion date. If the presence of the Project hotel drives demand higher than projected after its completion, then occupancy would be slightly

higher. For example, if market area demand is 10% higher in 2033, than the anticipated occupancy rate would be 45.4%. Nonetheless, occupancy rates would be forecast to be substantially below the industry standard with the anticipated supply additions. In this situation, it is anticipated that hotel developers may delay construction until market conditions warrant new supply additions.

PACIFIC GATEWAY AND CUMULATIVE HOTEL PROJECTS IMPACT CONCLUSION

The preceding Project hotel analysis indicates that negative occupancy impacts on the existing competitive set of hotels could last for several years after completion of the under construction and approved hotels, as well as the Project. This conclusion is based on the assumption that the Project hotel diverts demand from all hotels equally, which may not be likely due to its distance of over 10 miles from the existing hotels. It is quite possible that the competitive set of hotels could adjust their pricing in order to maintain market share. Additionally, the analysis conservatively did not quantify a demand boost for the Project hotel based on its location near the University, which would most likely be generated for just the Project hotel given its proximity to the University, versus any of the other existing or planned hotels. Finally, there could be other sources of hotel demand that emerge during the projection period that could boost hotel demand.

Alternatively, hotel developers would not be able to attract financing to construct new hotels in a market that appears to have an oversupply. Thus, the developers of the approved hotels might delay commencement of construction until such time as demand warrants new hotel rooms. For these reasons, ALH Economics concludes that existing hotels will likely not be negatively impacted by the Project to the point that one or more hotel closures would ensue.

VII. PROJECT RETAIL COMPONENT SUPPORT

INTRODUCTION

The Project includes retail space as a largely ancillary use. There are two areas with planned retail space, including 49,592 square feet in the Gateway Center and 38,908 square feet in the University Center. Together, these amounts total 88,500 square feet. This is not enough square footage to comprise a shopping center with a critical mass, especially since the retail will not be concentrated in one place, but rather distributed across the Project. Accordingly, there will be two primary purposes of the retail square footage. The primary purpose of the University Center retail space will be to provide convenience shopping and dining opportunities for tenants and visitors of the Project, as well as the University students living on campus. The primary purpose of the Gateway Center space will be to capture drive-by traffic to/from the Bay Area via I-580, I-5, Route 132, and Route 99.

UNIVERSITY CENTER RETAIL SUPPORT

Given the primary purpose of the University Center's 38,908 square feet of retail space, the most likely sources of demand include employee spending, hotel guest spending, and student spending. This report section analyzes each of these sources of demand and reflects on the potential for development of the retail space to cause or contribute to urban decay of existing commercial retail properties.

Employee Retail Spending Potential

For employee daytime retail demand estimates, ALH Economics drew upon findings from the International Council of Shopping Centers (ICSC) regarding office worker retail spending during the workday. The office worker spending patterns were adapted to the range of workers anticipated to work at Pacific Gateway based on income proportionality between San Joaquin County's office-based workers and the relevant Project-based employment sectors.

For the purpose of the underlying analysis, ICSC conducts its office worker retail spending survey on a recurring basis, with the most recent survey findings released in early 2012. This survey includes analysis of office worker spending near their work location, including analysis by type of retail good (e.g., restaurants and fast food, groceries, and all other goods and services), as well as spending patterns in urban and suburban areas, including areas with or without ample retail.[14] These spending estimates include retail sales made during the workday, including near the work location as well as some before and after work as well. For this Project analysis, given the location of Pacific Gateway, the figures are benchmarked to suburban locations without ample retail. The resulting estimate is approximately $11,076 per year in office worker daytime spending near the work location in 2024 dollars (see Exhibit 16). This figure rounds up to $11,100 when the main constituent spending categories of restaurants/fast food, groceries, and all other are rounded to the nearest $100.

Since employees at Pacific Gateway will include workers that are not traditional office employees, ALH Economics adjusted the office worker spending estimate on a pro rata basis in accordance with the differential in annual average wages for office workers in San Joaquin County and select other types of workers anticipated at the Project. The relative wages for office workers and select other types of workers in San Joaquin County are derived from United States Bureau of Labor Statistics employment data and

[14] Ample retail locations would include major shopping centers or significant retail nodes near the office location.

payroll for San Joaquin County for 2023 and inflated to 2024 dollars (see Exhibit 17). Pursuant to the pro rata wage adjustments, the estimated daytime spending estimate is $10,200 for Pacific Gateway's industrial workers, $9,400 for University workers, $8,700 for retail workers, and $8,100 for hotel workers (see Exhibit 18). As noted on Exhibit 18, ALH Economics believes some of these estimates are conservative, especially for the industrial workers, as average incomes for these workers may be higher than estimated using countywide economic data.

Total annual employee daytime retail spending is estimated based on the maximum anticipated number of on-site employees by land use. These employee counts are presented in Exhibit 18, and include 14,955 industrial workers, 300 University workers, 94 retail workers, and 60 hotel workers. With these employee counts, and the estimated annual retail spending by type of employee, the annual retail spending generated by all employees totals about $157 million, including $31 million for Restaurants and Fast Food, $23 million for Groceries, and $103 million for All Other. Notably, these are maximum figures, reflecting purchases across several areas, including locations to and from the work location.

Employee Supportable Retail Space

ALH Economics converted the Project employee retail spending estimate to supportable square feet based upon generalized industry standard sales per square foot by type of space. With a vacancy adjustment, the resulting square footage demand estimates by type of good are presented in Exhibit 19. The supportable square feet findings across all employees total approximately 48,400 square feet, of which 17,800 square feet are for Restaurants and Fast Food, 3,500 square feet are for Groceries, or convenience store shopping, and 27,100 square feet are for All Other, which could include yet additional sundries along with other goods.

Pacific Gateway Hotel Guests

Additional retail and restaurant sales are anticipated to be generated by hotel guests of the Project's planned 100-room hotel. Assuming an industry-standard 65% occupancy rate, and 1.5 average guests per room, the Project hotel is estimated to generate 35,590 (rounded) annual average guests (see Exhibit 20). Incorporating a governmental allowance assumption of $74 per guest on food and incidentals, the hotel guests are estimated to generate $2.6 million in food and traveler-related incidental sales. This amount of demand translates into a nominal 4,600 square feet of supportable space for restaurants as well as stores selling incidentals. While this is a small amount of space, it is nonetheless an additional increment of space supportable by the uses planned for Pacific Gateway.

Student Retail Spending Potential

The University students will also generate demand for University Center retail. Currently the buildout student population is estimated to total 5,000, with 1,600 student beds available on the campus. Thus, 1,600 students are assumed to live on-campus and the balance of 3,400 students are assumed to live off-campus. Student budget spending patterns will vary somewhat depending upon student living status. ALH Economics obtained student budget information for the University of the Pacific, a university in nearby Stockton, as an illustrative proxy for the annual spending of the Project's University students. This budget information is presented in Exhibit 21 for all major spending categories except tuition and fees. ALH Economics then paired each budget category with an estimated University Center retail capture rate, as the students will be somewhat of a captive population for their non-educational spending needs. These assumed capture rates range from 0% for several non-retail categories such as rent and transportation, to a range of 10% to 20% for off-campus students for personal items, books & supplies,

and food, and 5% to 33% for on-campus students, for food, books & supplies, and personal items. These capture rates are assigned by student living status and budget category in Exhibit 21.

Exhibit 22 translates the estimated student spending into an estimate of supportable University Center retail space. This is based on the number of students, estimated annual retail spending per student captured at the University retail, and a weighted average retail sales per square foot estimate and retail vacancy rate. The weighted average retail sales per square foot figure was derived from the earlier employee spending estimates in Exhibit 19. The results of this analysis suggest the University's student may have the potential to support 18,320 square feet of University Center retail space.

University Center Retail Space Conclusion

The internally generated retail demand estimates from employee, hotel guest, and University student spending suggest the potential to annually support over 70,000 square feet of retail space. This is well in excess of the 38,908 square feet of retail planned for the University Center, strongly suggesting that the retail space is likely to be supportable. There are no identified cumulative retail developments either, which will result in focusing demand at the Project's retail space and limiting the potential for any urban decay to result from development of the University Center retail space.

GATEWAY CENTER RETAIL SUPPORT

The Gateway Center's 49,592 square feet of retail space will be oriented to demand external to Pacific Gateway. This is attributable to its accessibility to drive-by traffic to/from the Bay Area via I-580, I-5, Route 132, and Route 99. Compared to the University Center retail, it is not as easy at this juncture to estimate demand for the Gateway Center retail space given a lack of specificity of the composition of the retail tenants. However, the next nearest highway-related retail nodes are approximately 10 miles northwest and 10 miles southeast of Pacific Gateway. This suggests a gap in the market for highway travelers needing to stop for a break, restock supplies, get a meal or a snack, etc. This distance will limit the potential for negative impacts on these existing nodes, and will heighten demand for Gateway Center retail. Accordingly, it is unlikely that development of the Gateway Center retail space will cause or contribute to urban decay of like properties.

VIII. URBAN DECAY IMPLICATIONS

STUDY DEFINITION OF URBAN DECAY AND CONTRIBUTING CAUSES

Definition of Urban Decay

For the purpose of this analysis, and in accordance with CEQA, urban decay is defined as extended long-term business vacancies, directly or indirectly resulting in physical deterioration to properties or structures that is so prevalent, substantial, and lasting a significant period of time that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community. Physical deterioration includes abandoned buildings, boarded doors and windows, parked trucks and long-term unauthorized use of the properties and parking lots, extensive or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees and shrubbery, and uncontrolled weed growth. Typically, pursuant to the Fifth District Court of Appeal in decision in *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1204, urban decay analyses are primarily prepared for retail development, or the retail components of large-scale mixed-use projects. Over time, some environmental impact reports also conservatively extend the urban decay analysis to other land uses, including hotel, office, life science, and industrial land uses. Such is the case for this current analysis of Pacific Gateway, which primarily comprises industrial space; the Project's hotel is also included in this analysis. Although the project also includes a university and small business park and commercial land components, these uses are not part of the study. Due to the location of Pacific Gateway, with very little existing nearby development and its very small commercial component, the commercial space is primarily expected to serve the Project's internal demand, with potential for some external demand.

Contributing Causes of Urban Decay

Before considering how Pacific Gateway might affect the market and environs, it is useful to focus on what constitutes the *environmental* impact known as urban decay. In *Bakersfield Citizens for Local Control v. City of Bakersfield*, the court described the phenomenon as "a chain reaction of store closures and long-term vacancies, ultimately destroying existing neighborhoods and leaving decaying shells in their wake." The court also discussed prior case law that addressed the potential for large retail projects to cause "physical deterioration of [a] downtown area" or "a general deterioration of [a] downtown area." (Id. at pp. 1206, 1207). The emphasis on retail is pursuant to the focus of the case, which was prospective retail development. When looking at the phenomenon of urban decay, it is also helpful to note economic impacts that do not constitute urban decay. For example, a vacant building is not urban decay, even if the building were to be vacant over a relatively long time. Similarly, in the context of retail development, even a number of empty storefronts would not constitute urban decay. Based on the above description regarding urban decay, therefore, ALH Economics' analysis examined whether there was sufficient market demand to support the Project's planned industrial space and hotel without affecting existing industrial buildings and hotels so severely such as to lead to a downward spiral toward decay of the existing physical environment.

REGULATORY CONTROLS

Owners of industrial properties are generally financially motivated to maintain property in a manner appropriate to retain existing tenants and attract new tenants. This appears to generally be the case in the market area where the competitive industrial properties are located, as evidenced by the overall positive prevailing physical condition of the market area's existing large-scale industrial vacancies. The

same is the general case with the identified competitive hotels in Tracy. If property owners lag, however, and property maintenance begins to show signs of deferred maintenance or other disrepair, San Joaquin County, as the core portion of the market area, has regulatory controls that can be implemented to avoid the onset of deterioration or decay. This is also the case for the market area cities with the largest amount of existing inventory, as well as competitive hotels, i.e., the cities of Stockton, Tracy, and Lathrop. Some of the key associated regulations by jurisdiction follow.

San Joaquin County Select Regulations

The San Joaquin County Code of Ordinances includes many regulations designed to maintain the physical condition of properties in the Unincorporated County areas. These regulations, therefore, will further serve to keep urban decay conditions at bay. The sections of the Code most applicable to urban decay characteristics include ones addressing graffiti, weeds and rubbish, illegal dumping, and nuisance abatement.

The portion of the Code that directly pertains to graffiti includes **Title 6 – General Welfare, Division 3. – Public Order, Chapter 6. Graffiti Abatement**. [15] This section addresses graffiti vandalism on public and privately-owned structures and real property. The County's many findings about graffiti (see **6-3600 – Findings**) include finding that it degrades the community, causes an increase in crime, and is inconsistent with the County's property maintenance goals and aesthetic standards. Accordingly, graffiti is subject to abatement and punishment per the Code. Of most relevance to conditions of urban decay, the Code requires removal of graffiti no longer than ten days after notification by the County (see **6-3604 – Removal of Graffiti**). In **6-3605 – Right of County To Remove** the County Code has provisions for the use of public funds to abate the graffiti if it is viewable from a public or quasi-public place. There are additional provisions for the County to recover the funds spent on graffiti abatement if the graffiti was caused or committed by a minor (see **6-3610 – Recovery of County Funds**), or from the property owner (see **6-3616 – Abatement Procedures**).

Title 4 – Public Safety, Division 1 – Fire Prevention, Chapter 6 – Abatement of Hazardous Weeds and Rubbish of the County Code addresses the abatement of hazardous weeds and rubbish that constitute a public nuisance and fire hazard, with rubbish including items such as printed material, cardboard boxes, and combustible refuse (among others). The Fire Warden has jurisdiction over these concerns, which includes directing County abatement of the conditions if not satisfied by the property owner (see **4-1055 – Abatement**), among other provisions.

In **Title 8 Building Regulations, Division 5 – Housing and Nuisance Abatement Code, Chapter 7 – Securement of Unsafe Condition, 8-5600 – Findings for Securing Unsafe Conditions**, the County Code identifies that unsecured conditions that are unsafe are considered a public nuisance, and will require securement. Sample conditions cited in the Code include unsecured openings, including unboarded windows and doorways, and other conditions deemed hazardous by the County Health Officer or authorized representative. **Section 8-5601 – Unlawful Not To Secure After Notice** then identifies it is unlawful for the unsafe condition to not be secured, generally within a ten-day timeframe of notification (**Section 8-5605 – Securing Unsafe Condition After Ten Day Notice**). The Code further stipulates that the owner of record shall be responsible for all costs associated with securing the unsafe condition (see **8-5608 – Liability For Cost Of Securement**).

[15] See https://library.municode.com/ca/san_joaquin_county/codes/code_of_ordinances for all references to the Ordinance Code of San Joaquin County.

As this limited review of the County's Code of Ordinances indicates, there are existing regulations in place that are designed to address numerous property conditions that could comprise precursors to urban decay. Thus, enforcement of these regulations could shore up market-driven activities designed to maintain existing properties and keep urban decay and deterioration at bay in San Joaquin County's Unincorporated areas.

Cities of Stockton, Tracy, and Lathrop Select Regulations

The following are representative regulations in Stockton, Tracy, and Lathrop, which are the three market area cities that include existing large-scale vacancies.

City of Stockton. The City of Stockton has many components of the City's Municipal Code that are designed to ward off the types of conditions that lead to urban deterioration or decay. For example, **Title 8 Health and Safety, Chapter 8.24 Graffiti**, **8.24.040 Graffiti prohibited**, states that it is unlawful for any person to apply graffiti on any public or privately owned property, structure, or surface within the City.[16] Then, if such graffiti occurs and is reported to the City, **Title 16 Development Code, Division 3. Site Planning and General Development Regulations, Chapter 16.32 General Performance Standards** includes **section 16.32.060 Graffiti**, which indicates that all graffiti should be removed within 48 hours after notification by the City of Stockton. Yet additional portions of the City's Municipal Code (**8.24.060 Right of City to remove**) has provisions for the City to abate the graffiti if it not attended to by a responsible person within 48 hours of city notification.

Additional provisions in the Health and Safety portion of the Stockton Municipal Code pertain to the destruction and removal of weeds, rubbish, refuse and dirt. This section, **8.08.040 Notice to destroy weeds and rubbish**, indicates that such items on private property comprise a public nuisance, which must be abated without delay or the City of Stockton will take charge with the associated cost of destruction or removal assessed upon the relevant lots and land as a lien until such time as it is paid.

In Stockton's Municipal Code, unsecured buildings are also deemed a public nuisance, and dangerous to the health and safety of the city's inhabitants. In **Title 15 Buildings and Construction, Chapter 15.28 Abatement of Dangerous Buildings Code, 15.28.060 Existence of unsecured buildings – a public nuisance**, this includes unoccupied structures with free entry through unsecured openings, broken and unboarded windows and doorways. If notified of such a public nuisance by the City, **15.28.070 Unlawful not to secure after notice** stipulates that it must be secured within 10 days, after which time the City may do the work, paid for by the building owner, agent, lessee, or other person. (**15.28.110 Securing by City after ten-day period**).

Perhaps of greatest relevance to concerns about urban decay, is the portion of Stockton's Municipal Code that addresses abandoned and vacant property. Specifically, **Title 15 Buildings and Construction, Chapter 15.32 Maintenance, Security and Rehabilitation of Abandoned and Vacant Property** addresses neglected, vacant, and abandoned properties that can be a source of blight, especially when not maintained and managed in a manner that ensures they do not become a liability to the surrounding community. In **15.32.020 Definitions** the City of Stockton defines evidence of vacancy as conditions such as overgrown and/or dead vegetation; accumulation of newspapers, circulars, flyers, etc.; accumulation of trash, junk and/or debris; and, for residential properties, the absence of window coverings and furnishings or personal items consistent with residential habitation, etc. The city further lays out maintenance requirements for properties in **15.32.040 Maintenance**

[16] See https://library.qcode.us/lib/stockton_ca/pub/municipal_code/search for all references to the City of Stockton Municipal Code.

requirements, including maintaining the property free of graffiti by removal or painting over with paint that matches the color of the structure exterior; keeping the property free of junk, debris, etc.; and rehabilitating a boarded up building for occupancy within 180 days of being boarded, among others. The City's Code further requires the property owner to inspect the abandoned or vacant property on a monthly basis to ensure the property is in compliance with the city's requirements (**15.32.060 Inspection**). The City of Stockton's concerns about abandoned and vacant buildings are emphasized per **15.32.100 Violation – Penalty**, which establishes that violations of this Chapter of the Municipal Code are subject to prosecution and administrative enforcement.

As the above review indicates, the City of Stockton, similar to San Joaquin County, has existing regulations designed to address numerous property conditions that could comprise precursors to urban decay. Thus, enforcement of these regulations could additionally shore up market-driven activities designed to maintain existing properties and ward off urban decay and deterioration if such conditions begin to be observed among Stockton's larger scale industrial properties.

City of Tracy. The City of Tracy also has many components of the City's Municipal Code that are designed to ward off the types of conditions that lead to urban deterioration or decay. One such component is the City's Chapter on Graffiti Control, i.e., **Chapter 3.48 – Graffiti Control**. As stated in the Code, "The purpose of this chapter is to provide a program and enforcement tools, in addition to those already provided by state law, for removal of graffiti from walls and structures on both public and private property and to prevent and control the further spread of graffiti in the City."[17] The provisions of this Chapter include making it unlawful for property owners or others in control of any property to allow graffiti to be placed or remain on a permanent structure, for anyone to apply graffiti, or for anyone to aid, abet, or encourage another to produce graffiti. Such graffiti visible from public property, public right-of-way, or private property open to the public is to be declared a public nuisance, and may be abated through the authorization of City funds, whereas private property owners are required to remove graffiti at their own expense within 10 days of City removal notification. If this private property removal does not occur within the required timeframe the City has the authorization to arrange for the abatement and bill the property owner or place a special assessment against the parcel if not paid within 30 days of invoicing.

The City of Tracy Municipal Code also has numerous provisions prohibiting the accumulation of rubbish and refuse. These include **Section 4.12.265 – Accumulation of rubbish and refuse prohibited**, **Section 5.04.010 – Throwing rubbish on streets unlawful**, and **4.12.260 – Weeds, Rubbish, refuse, and flammable materials public nuisances**. In the case of accumulated rubbish and refuse, the Code requires that the accumulation should not remain on a lot for longer than seven (7) days, with several City methods of enforcement, such as the issuance of infractions or administrative citations.

In **Chapter 9.60 – Boarding of Buildings With Unsecured Openings**, the City of Tracy's Municipal Code declares that vacant buildings with unsecured windows and doors or other openings (e.g., broken or missing) are a public nuisance and contribute to blight within the City, as they can be a nuisance to children, harbor rats, increase fire risk, and depress surrounding property values. The city actually requires such openings to be temporarily boarded up, after receipt of a boarding permit that specifies the number and location of the openings to be boarded. These permits are to be issued for no more than six months, unless renewed upon request and for good cause. The city sets standards for this temporary boarding, including specifying the type of plywood, and also requires that the plywood be

[17] See https://library.municode.com/ca/tracy/codes/code_of_ordinances?nodeId=TIT3PUSA_for all references to the City of Tracy Municipal Code.
CH3.48GRCO_3.48.030GRPR, Section 3.48.010.

painted a dark gray or similar earth color or a color compatible with the subject building's exterior. Thus, while evidence of boarded up doors and windows can be an indicator of urban decay, implementation of the City of Tracy's standards converts these signifiers instead to signs of compliance with City regulations, intended, however, to be temporary pending repair, rather than more long-term and thus more likely to be construed as indicators of urban decay.

City of Lathrop. The City of Lathrop's Municipal Code is less extensive than the Codes referenced for the other market area cities, with fewer sections or less well-developed sections addressing some of the topics most associated with concerns about urban decay. This is likely attributable to the Lathrop's incorporation as recently as 1989, compared to 1850 for Stockton and 1910 for Tracy. However, similar to the cities of Stockton and Tracy, the City of Lathrop also has graffiti controls addressed in the Municipal Code, including sections on the prohibition of graffiti **(9.12.040 Graffiti prohibited** and the removal of graffiti within 48 hours of notice by the city (**9.12.050 Removal of graffiti)**.[18] These sections are included in **Title 9 Public Peace and Welfare, Chapter 9.12 Graffiti**. Similar to the other municipalities, the city also has the right to remove the graffiti if the responsible party does not comply with the removal requirements (**9.12.060 Right of city to remove**). In addition, penalties are in place for the act of graffiti vandalism (**9.12.070 Penalty provisions – Administrative citations**).

Further, the City of Lathrop Municipal Code has a section that addresses nuisances on nonresidential property (**Title 8 Health and Safety, Chapter 8.24 Property Nuisances and Dust Control, 8.24.050 Unlawful nonresidential property nuisances**), making it unlawful to maintain a nonresidential property with certain conditions visible from the public street for an unreasonable period of time, including the following (among others): accumulation of dirt, litter, or debris; overgrown vegetation; graffiti; vehicle parts or other abandoned personal property; and broken or discarded furnishings. Violations of these provisions are subject to enforcement and penalty, pursuant to **Title 1 General Provisions, Chapter 1.12 Administrative Enforcement Procedures**.

In contrast to the other jurisdictions reviewed above, Lathrop does not appear to have controls in place associated with vacant or abandoned nonresidential property, other than vehicles or nonconforming structures or sites, although such controls do exist for residential property. Nor are there provisions in the Lathrop Municipal Code regulating procedures for boarding up properties with unsecured openings.

Regulatory Summary and Implications

During the study fieldwork conducted in November and December 2024, there were very few signs of litter, weeds, or rubbish associated with existing industrial properties with the potential to be competitive with Pacific Gateway. There were no visible signs of graffiti associated with the relevant industrial stock, and only a few buildings exhibited signs of structural disrepair, of a very minor nature.

Instead, vacant industrial properties were reasonably well-maintained with no significant signs of decay or deterioration. Thus, ALH Economics concludes that existing measures to maintain private commercial property in good condition in San Joaquin County and the cities of Stockton, Tracy, and Lathrop are effective and would serve to preclude the potential for urban decay and deterioration in the event any existing market area industrial properties experience prolonged vacancy following the operations of the Project and any cumulative projects.

[18] See https://library.qcode.us/lib/lathrop_ca/pub/municipal_code/search for all references to the City of Lathrop Municipal Code.

Similarly, inspection of the existing hotels in Tracy indicated that the properties were in good general repair, with attractive physical conditions and no signs of deterioration or urban decay, such as litter, graffiti, weeds, or rubbish. There is no nearby retail space that warranted physical examination for the purpose of assessing regulatory effectiveness to maintain commercial retail properties in good physical condition.

PACIFIC GATEWAY URBAN DECAY DETERMINATION

In developing a conclusion regarding the potential for urban decay, ALH Economics relied on the definition presented earlier in this chapter, which focused on determining whether or not economic and social changes and/or effects resulting from development of the Project as well as other cumulative projects would cause significant adverse physical impacts and result in urban decay.

Industrial

During Project-related field reconnaissance conducted in November and December 2024, ALH Economics found there were no visible signs of litter, graffiti, or rubbish associated with broader market areas. ALH Economics conducted more detailed field reconnaissance of 15 buildings that have been partially or completely vacant for over 14 months.[19] These buildings are presented in Exhibit 8. Eight of the buildings are relatively new, completed in 2021 or later, while the rest ranged in age from 6 to 44 years. Most spaces have been available for about 18 months to 24 months, but two buildings have been available for over 3 years and another one for over 6 years. As indicated in Exhibit 8, all buildings appear to be physically sound and in good to excellent condition.

The conditions of these areas indicate that existing regulatory measures to maintain private industrial properties are effective, and would serve to help preclude the potential for urban decay and deterioration following development of the Project's industrial space and the cumulative projects.

The analysis presented earlier found that it is unlikely for the Project alone or in combination with cumulative industrial projects to cause existing competitive properties in the market area to become vacant. First, the market is at a favorable vacancy rate (less than 10%). Additionally, as noted in the industrial analysis section, there is ample forecasted industrial space demand through 2060 to accommodate the Project and the identified cumulative projects. Finally, developers are anticipated to pace their projects to meet demand. For these reasons, ALH Economics believes that urban deterioration or decay would not result from the identified increase in the industrial inventory. ALH Economics therefore concludes that the industrial component of the Project and cumulative projects are not anticipated to cause adverse physical impacts leading to urban decay.

Based upon the preceding findings, ALH Economics concludes that development of the industrial space at Pacific Gateway and the identified cumulative projects are not anticipated to cause or contribute to urban decay, e.g., the physical deterioration of other properties resulting from economic impacts.

Hotel

Project-related field reconnaissance of the existing hotels indicated that the properties are well-maintained. While three of the hotels were built after 2000, five of them were constructed before 2000,

[19] The threshold for the amount of vacant space was 100,000 square feet. Additionally, 14 months was selected as a threshold as Cushman & Wakefield indicated that developers use a metric of up to 14 months of vacancy in their underwriting.

with one property dating to 1987. As with the industrial product, it appears that the City of Tracy's existing regulatory measures to maintain private hospitality properties are effective, and would serve to help preclude the potential for urban decay and deterioration following development of the Project's hotel and the cumulative projects.

The analysis presented earlier found that it is unlikely for the Project to cause existing competitive properties in the market area to become vacant. When considering the Project in combination with cumulative hotels, occupancy rates are projected to decline to levels below industry thresholds for a healthy market. However, factors such as the Project's distance from existing hotels, proximity to the planned University, potential additional demand, or curtailed supply, could reduce the impacts of the cumulative supply on the existing competitive hotel market.

Retail

The internally generated retail demand estimates from employee, hotel guest, and student spending suggest the potential to annually support over 70,000 square feet of retail space. This is well in excess of the 38,908 square feet of retail planned for the University Center, strongly suggesting that the retail space is likely to be supportable. As there are no identified cumulative retail developments, the identified demand will be focused at the Project's retail space and the potential for any urban decay to result will be limited.

The Gateway Center's 49,592 square feet of retail space will be oriented to demand external to Pacific Gateway. Given a lack of specificity of the composition of the retail tenants it is comparatively not as easy at this juncture to estimate demand for the Gateway Center. However, there is a 10-mile gap between the next nearest highway-related retail nodes. This suggests a market gap for highway travelers. This distance will limit the potential for negative impacts on these existing nodes, and will heighten demand for Gateway Center retail. Accordingly, it is unlikely that development of the Gateway Center retail space will cause or contribute to urban decay of like properties.

Overall Conclusion

In conclusion, Pacific Gateway industrial's component, along with the identified cumulative projects, is not anticipated to cause or contribute to urban decay in the Project's market area. For the hotel component, the Project's hotel by itself is not anticipated to cause or contribute to urban decay in the market area. However, with consideration of the identified cumulative supply, it is possible that there could be negative impacts. These impacts are mainly due to the future supply of hotels as opposed to the Project, due to the Project's unique location distant from the existing hotel base and proximity to the planned University. Additionally, it is possible that potential future negative impacts might be offset by higher-than-forecasted demand or curtailed future supply as hotel developers postpone construction until warranted by market conditions. Finally, as there is no competitive retail near the Project, development of the planned retail space is not likely to contribute to urban decay of any existing commercial properties.

ASSUMPTIONS AND GENERAL LIMITING CONDITIONS

ALH Urban & Regional Economics has made extensive efforts to confirm the accuracy and timeliness of the information contained in this study. Such information was compiled from a variety of sources, including interviews with government officials, review of City and County documents, and other third parties deemed to be reliable. Although ALH Urban & Regional Economics believes all information in this study is correct, it does not warrant the accuracy of such information and assumes no responsibility for inaccuracies in the information by third parties. We have no responsibility to update this report for events and circumstances occurring after the date of this report. Further, no guarantee is made as to the possible effect on development of present or future federal, state, or local legislation, including any regarding environmental or ecological matters.

The accompanying projections and analyses are based on estimates and assumptions developed in connection with the study. In turn, these assumptions, and their relation to the projections, were developed using currently available economic data and other relevant information. It is the nature of forecasting, however, that some assumptions may not materialize, and unanticipated events and circumstances may occur. Therefore, actual results achieved during the projection period will likely vary from the projections, and some of the variations may be material to the conclusions of the analysis.

Contractual obligations do not include access to or ownership transfer of any electronic data processing files, programs or models completed directly for or as by-products of this research effort, unless explicitly so agreed as part of the contract.

APPENDIX: EXHIBITS 1-20

Exhibit 1
Pacific Gateway
Project Description

Land Use	Total Square Feet	Net Acres	Years of Construction (1)
Industrial and Commercial Land Uses			
Limited Industrial			
Pacific Gateway East	11,124,274		13
Pacific Gateway Central	6,856,474		9
Pacific Gateway West	6,168,882		9
Gateway Center	525,370		4
Sub-total	24,675,000	1,129.5	30
Business Park	93,000	4.3	6
General Commercial (2)			
Retail (Gateway Center)	49,592		6
Retail (University Center)	38,908		8
Sub-total	88,500	11.5	6-8
Hotel (Gateway Center)	60,000	incl. above	2
Sub-total	24,916,500	1,145.3	2-30
Other Land Uses			
VFW Hall (University Center)	11,500	2.9	2
University (University Center)			
Services	986,950		20
Expansion	115,000		2
Housing	277,200		22
Sub-total	1,379,150	74.4	22
Parks/Facilities/Roads	N/App.	354.2	30
Sub-total	1,390,650	431.5	2-30
Total Development	**26,307,150**	**1,576.7**	**2-30**

Sources: Pacific Gateway Project Description, November 8, 2024; Raney Planning & Management, Inc.; Page Architects; David Babcock + Associates; Ridgeline Property Group; and ALH Urban & Regional Economics.

(1) The entire development horizon is anticipated to total 30 years. Some of the construction periods will occur in a linear fashion while others will overlap. Hence, the number of years should not be added together, but rather considered individually by land use, recognizing the entire development timeline is assumed to total 30 years.

Exhibit 2
Stockton Lodi MSA (San Joaquin County)
Industry Employment & Labor Force - by Annual Average
1990 - 2023
March 2023 Benchmark (1)

Industry	1990	1995	2000	2005	2010	2015	2020	2023
Civilian Labor Force	227,000	240,300	258,700	283,600	312,100	314,400	334,800	346,800
Civilian Employment	204,500	210,800	240,900	261,400	259,300	286,300	296,300	325,100
Civilian Unemployment	22,400	29,500	17,800	22,300	52,800	28,100	38,400	21,600
Civilian Unemployment Rate	9.9%	12.3%	6.9%	7.9%	16.9%	8.9%	11.5%	6.2%
Total, All Industries	169,400	176,800	203,900	224,600	208,300	234,900	257,700	288,900
Total Farm	15,600	15,100	16,700	15,200	15,800	16,700	14,600	14,100
Goods Producing (2)	34,200	29,700	36,800	38,300	25,900	29,700	33,200	37,400
Food Manufacturing (3)	8,000	6,800	7,100	5,700	6,600	6,400	5,600	6,000
Trade, Transportation & Utilities	30,800	36,700	41,600	48,700	47,100	57,000	74,000	86,300
Wholesale Trade	6,700	6,100	6,300	8,800	9,600	10,700	10,600	12,300
Retail Trade	18,000	20,700	23,600	26,900	23,700	26,000	24,600	27,200
Transportation, Warehousing, & Utilities	6,100	9,900	11,700	13,000	13,800	20,300	38,800	46,800
Transportation & Warehousing	5,100	9,200	10,700	11,800	12,700	19,100	37,300	45,100
Truck Transportation	3,400	4,400	5,500	4,900	5,200	7,000	7,400	8,700
Warehousing & Storage	400	3,100	3,500	4,500	6,100	9,400	23,800	28,500
Information	2,700	2,600	3,000	2,600	2,100	1,900	1,200	1,100
Financial Activities (including Finance & Insurance)	9,400	8,200	8,500	9,800	7,700	7,400	7,800	8,000
Professional & Business Services	9,300	12,000	16,900	18,100	15,400	19,400	21,300	23,700
Educational & Health Services	16,900	20,200	23,000	29,000	33,500	36,500	37,300	42,200
Leisure & Hospitality	11,700	13,300	14,400	17,100	16,000	19,600	18,500	24,600
Other Services	4,800	5,300	5,900	6,400	6,500	7,200	6,800	8,200
Government	34,000	33,700	37,000	39,600	38,200	39,600	43,000	43,400
Transportation & Warehousing								
Employment Figures	5,100	9,200	10,700	11,800	12,700	19,100	37,300	45,100
Percent of All Employment	3.0%	5.2%	5.2%	5.3%	6.1%	8.1%	14.5%	15.6%

Sources: Employment Development Department, Labor Market Information, Stockton Lodi MSA (San Joaquin County), Industry Employment & Labor Force - by Annual Average, March 2023 Benchmark, July 11, 2024; and ALH Urban & Regional Economics.

(1) While benchmarked to March 2023, the 2023 figures comprise full year estimates.
(2) Includes Mining, Logging, Construction, and Manufacturing.
(3) This sub-sector is included because it pertains to the historic agricultural orientation of San Joaquin County.

Exhibit 3
Warehouse and Overall Industrial Markets Snapshot
Select Cities and San Joaquin County
Third Quarter 2024

	Warehouse Market Subset (1)					Overall Industrial Market (2)				
Location (3)	Inventory (SF)	Vacancy Rate	YTD Net Absorption (SF)	Under Construction (SF)	Average Asking Rent (NNN)	Inventory (SF)	Vacancy Rate	YTD Net Absorption (SF)	Under Construction (SF)	Average Asking Rent (NNN)
Tracy	30,413,347	5.8%	363,809	0	$0.76	35,735,557	5.9%	211,188	0	$0.78
Lathrop	16,516,928	7.7%	238,105	0	$0.73	19,175,385	6.6%	235,105	0	$0.73
Stockton	49,775,209	12.0%	2,016,064	900,000	$0.73	64,180,470	12.3%	1,993,608	900,000	$0.72
Sub-total	96,705,484	9.3%	2,617,978	900,000	N/App.	119,091,412	9.5%	2,439,901	900,000	N/App.
San Joaquin County	106,362,545	8.6%	2,921,001	900,000	$0.74	138,374,664	7.8%	2,712,081	900,000	$0.74
Market Subset Ratios										
City Location to Overall County										
Tracy	28.6%		12.5%	0.0%		25.8%		7.8%	0.0%	
Lathrop	15.5%		8.2%	0.0%		13.9%		8.7%	0.0%	
Stockton	46.8%		69.0%	100.0%		46.4%		73.5%	100.0%	
Total of County	90.9%		89.6%	100.0%		86.1%		90.0%	100.0%	
Warehouse Market Subset to Overall Industrial Market										
Tracy	85%		172%	N/App.						
Lathrop	86%		101%	N/App.						
Stockton	78%		101%	100%						
San Joaquin County	77%		108%	100%						

Sources: San Joaquin County Industrial 24Q3, Colliers; and ALH Urban & Regional Economics.

(1) Warehouse is a general term that includes warehouse, distribution, logistics, and fulfillment buildings.
(2) The Overall Industrial Market includes other industrial uses such as Light Industrial, R&D/Flex, Manufacturing, and Special Purpose buildings, as well as the Warehouse subset.
(3) The cities of Tracy, Lathrop, and Stockton are the three most relevant cities in San Joaquin County for the purposes of the market analysis. Other San Joaquin County cities included in the Colliers report are Manteca, Lodi, and Ripon, all of which are smaller than the reported cities.

Exhibit 4
Modesto MSA (Stanislaus County)
Industry Employment & Labor Force - by Annual Average
1990 - 2023
March 2023 Benchmark (1)

Industry	1990	1995	2000	2005	2010	2015	2020	2023
Civilian Labor Force	180,300	192,300	207,600	226,700	243,800	241,000	242,000	244,900
Civilian Employment	159,000	162,700	191,600	207,600	201,700	218,000	215,500	229,200
Civilian Unemployment	21,300	29,600	16,000	19,000	42,200	23,000	26,500	15,800
Civilian Unemployment Rate	11.8%	15.4%	7.7%	8.4%	17.3%	9.5%	11.0%	6.4%
Total, All Industries	133,100	138,800	161,200	175,800	163,800	181,000	187,700	202,200
Total Farm	14,600	13,700	15,700	13,800	12,900	14,600	14,500	12,700
Goods Producing (2)	30,900	28,600	32,400	36,000	26,600	29,800	31,100	35,100
Trade, Transportation & Utilities	25,200	25,400	29,300	33,700	31,600	35,800	36,800	39,000
Wholesale Trade	4,200	4,100	5,400	6,300	5,900	5,800	5,900	5,400
Retail Trade	17,200	17,500	20,100	22,300	19,500	22,400	21,900	22,800
Transportation, Warehousing & Utilities	3,900	3,900	3,800	5,200	6,200	7,500	9,000	10,800
Information	1,800	1,800	2,000	2,500	1,200	900	800	800
Financial Activities (including Finance & Insurance)	5,200	5,000	5,100	6,200	5,500	5,200	5,100	4,900
Professional & Business Services	9,700	10,800	17,400	14,900	12,500	14,200	15,100	14,600
Educational & Health Services	12,000	14,800	17,700	22,400	27,800	30,900	34,600	37,100
Leisure & Hospitality	9,600	11,000	12,100	14,800	14,600	17,800	15,800	20,900
Other Services	4,200	5,000	5,700	6,100	5,100	5,300	5,100	6,100
Government	19,900	22,600	23,900	25,600	26,200	26,700	28,800	31,200
Transportation, Warehousing & Utilities								
Employment Figures	3,900	3,900	3,800	5,200	6,200	7,500	9,000	10,800
Percent of All Employment	2.9%	2.8%	2.4%	3.0%	3.8%	4.1%	4.8%	5.3%

Sources: Employment Development Department, Labor Market Information, Modesto MSA (Stanislaus County), Industry Employment & Labor Force - by Annual Average, March 2023 Benchmark, July 11, 2024; and ALH Urban & Regional Economics.

(1) While benchmarked to March 2023, the 2023 figures comprise full year estimates.
(2) Includes Mining, Logging, Construction, and Manufacturing.

Exhibit 5
Transportation and Warehousing Industry Sector
Employment Projections and Space Demand
2020-2060
San Joaquin County

Demand Characteristic	CAGR (1)	2020 (2)	2024	2030	2040	2050	2060
CA EDD Projection (3)	3.04%	37,300	42,039	50,300	67,831	91,472	123,352

	2024-2030	2030-2040	2040-2050	2050-2060	Total
Employment Increase (3)	8,261	17,531	23,641	31,880	81,313
Occupied Space Demand (4)	13,630,631	28,925,871	39,007,274	52,602,303	134,166,080
Projected Demand Inclusive of 7% Vacancy Factor (5)	14,656,593	31,103,087	41,943,306	56,561,616	144,264,602
Cumulative Space Demand (6)	13,630,631	42,556,503	81,563,777	134,166,080	134,166,080

Sources: State of California, Employment Development Department, Labor Market Information Division, Industry Employment & Labor Force - by annual Average, March 2023 Benchmark, Stockton Lodi MSA (San Joaquin County), July 11, 2024; Employment Development Department, State of California, 2020-2030 Industry Employment Projections, Stockton-Lodi Metropolitan Statistical Area (San Joaquin County); CoStar; Fehr & Peers, "Local Transportation Analysis for Pacific Gateway," September 2023 and supporting data; and ALH Urban & Regional Economics.

(1) CAGR is an acronym for Compound Annual Growth Rate.
(2) For analytic purposes the projections are benchmarked to the State of California, Employment Development Department 2020 annual average estimated industry sector employment for Transportation and Warehousing in San Joaquin County. See Exhibit 2.
(3) This CAGR is based on projections prepared by the Employment Development Department (EDD), State of California, for the Transportation and Warehousing industry sector for 2020 to 2030. The CAGR was estimated by ALH Urban & Regional Economics based on analysis of the EDD projection.
(4) The Occupied Space Demand assumes a square feet per employee estimate of 1,650. This square feet per employee figure is based on data collected by Fehr & Peers for warehouse buildings located in San Joaquin County in 2021. This building warehouse survey was a component of other Project-related analysis conducted by Fehr & Peers, pertaining to traffic analysis assumptions and projections. Most of the buildings included in this analysis are located in the Project's market area spanning Stockton, Tracy, and Lathrop, with a few additional properties in other San Joaquin County locations (e.g., Manteca and Lodi).This survey included 27 buildings with both square footage and employment data. The average size of the buildings for which employment data were available was 740,000 square feet.The data were collected by Fehr & Peers for the purpose of preparing a "Local Transportation Analysis for Pacific Gateway," as well as additional warehouse-related analysis.
(5) Based on CoStar long-term trend data, the historic vacancy rate for San Joaquin and Stanislaus counties has been in the 7.0% range. ALH Urban & Regional Economics rounded this to 7.0% for simplicity purposes.
(6) Comprises the cumulative demand, where the figures for each future time period include the incremental figures for the current period and all prior periods.

Exhibit 6
Transportation and Warehousing Industry Sector
Employment Projections and Space Demand
2020-2060
Stanislaus County (Including Patterson)

Demand Characteristic	CAGR (1)	2020 (2)	2024	2030	2040	2050	2060
CA EDD Projection (3)	2.48%	8,748	9,649	11,178	14,283	18,251	23,320

	2024-2030	2030-2040	2040-2050	2050-2060	Total
Employment Increase (3)	1,529	3,105	3,968	5,070	13,671
Occupied Space Demand (4)	2,522,535	5,123,250	6,546,375	8,364,813	22,556,972
Projected Demand Inclusive of 7% Vacancy Factor (5)	2,712,403	5,508,871	7,039,113	8,994,422	24,254,809
Cumulative Space Demand (6)	2,522,535	7,645,785	14,192,160	22,556,972	22,556,972

Sources: State of California, Employment Development Department, Labor Market Information Division, Industry Employment & Labor Force - by annual Average, March 2023 Benchmark, Modesto MSA (Stanislaus County), July 11, 2024; Employment Development Department, State of California, 2020-2030 Industry Employment Projections, Modesto Metropolitan Statistical Area (Stanislaus County); Woods & Poole, Trends and Projections, Stanislaus, CA (County, 06099), 1969-2060; CoStar; Fehr & Peers, "Local Transportation Analysis for Pacific Gateway," September 2023 and supporting data; and ALH Urban & Regional Economics.

(1) CAGR is an acronym for Compound Annual Growth Rate.
(2) For analytic purposes the projections are benchmarked to the State of California, Employment Development Department, 2020 annual average estimated industry sector employment for Transportation, Warehousing, and Utilities for Stanislaus County. See Exhibit 4. The industry sector figure is nominally reduced by 2.83% to exclude the Utilities portion of the employment. This 2.83% figure was identified based on analysis of Woods & Poole estimates for 2020, where the Woods & Poole data provide more industrial segmentation than EDD.
(3) This CAGR is based on projections prepared by the Employment Development Department (EDD), State of California, for the Transportation, Warehousing, and Utilities industry sector for 2020 to 2030. The CAGR was estimated by ALH Urban & Regional Economics based on analysis of the EDD projection.
(4) The Occupied Space Demand assumes a square feet per employee estimate of 1,650. This square feet per employee figure is based on data collected by Fehr & Peers for warehouse buildings located in San Joaquin County in 2021. This building warehouse survey was a component of other Project-related analysis conducted by Fehr & Peers, pertaining to traffic analysis assumptions and projections. Most of the buildings included in this analysis are located in the Project's market area spanning Stockton, Tracy, and Lathrop, with a few additional properties in other San Joaquin County locations (e.g., Manteca and Lodi).This survey included 27 buildings with both square footage and employment data. The average size of the buildings for which employment data were available was 740,000 square feet.The data were collected by Fehr & Peers for the purpose of preparing a "Local Transportation Analysis for Pacific Gateway," as well as additional warehouse-related analysis.
(5) Based on CoStar long-term trend data, the historic vacancy rate for San Joaquin and Stanislaus counties has been in the 7.0% range. ALH Urban & Regional Economics rounded this to 7.0% for simplicity purposes.
(6) Comprises the cumulative demand, where the figures for each future time period include the incremental figures for the current period and all prior periods.

Exhibit 7
Industrial Space Future Supply
Larger (150,000 SF+) Buildings
Tracy, Lathrop, Stockton, and Southern San Joaquin County; and Patterson
Compiled November 2024

Status and Jurisdiction	Size (SF)	Address/Location	Developer	Industrial Park Name / Comments
Under Construction				
Stockton	1,422,961	5150 E. Mariposa Road	Walmart	Next generation fulfillment center; size is approved by City; completion 2026
Patterson	820,000	722 Haggerty Drive	Safavieh Inc.	Part of Keystone Pacific Business Park; owner/user will occupy 400,000 SF
Subtotal	**2,242,961**			
Approved				
Lathrop	1,400,000	14101 S. Manthey Road	Hodgdon Group Realty	Ashley Furniture distribution center with retail outlet and office
Lathrop	1,249,842	Highway 120/Yosemite Ave	Crow Holdings, Inc.	TriPoint Logistics Center Building 2
Lathrop	1,197,188	Highway 120/Yosemite Ave	Phelan Development Co.	Lathrop Gateway Business Park Buildings 5 to 10 (Phase III)
Lathrop	594,346	Highway 120/Yosemite Ave	Crow Holdings, Inc.	TriPoint Logistics Center 4 and 8
Lathrop	450,000	1101 D'Arcy Parkway	Richland Developers	Lathrop Crossroads Industrial; option for 3 buildings totaling 386,000 SF
Tracy	524,081	5390 Promontory Pkwy	Prologis LP	IPC Building 28 (Cordes Ranch)
Tracy	335,157	1651 E, Grant Line Road	Seefried Industrial Properties	Seefried LI Building (NEI)
Stockton	2,270,000	501 E. French Camp Road	Arnaiz Development	Three speculative warehouse buildings
Stockton	1,201,726	5298 E. Mariposa Road	IDI Logistics	Site is marketed as Newcastle 9
SJ County	765,880	Arch Airport Road	Catellus	AirPark599 - four future buildings in 6-building park totaling 3,345,756 SF
SJ County	669,975	14800 W. Schulte Road	LBA Logistics	LBA Logistics Center III; 3 buildings Tracy SOI; former biomass facility
Patterson	900,820	Keystone Pacific Boulevard	Caligrows	3 campus cannabis cultivation, storage, and distribution facility
Patterson	1,200,000	2553 Sperry Avenue	Buzz Oates	Patterson Logistic Center - 1 to 3 building build-to-suit, 82 acres
Subtotal	**12,759,015**			

Continued on the next page

Exhibit 7, continued
Industrial Space Future Supply
Larger (150,000 SF+) Buildings
Tracy, Lathrop, Stockton, and Southern San Joaquin County; and Patterson
Compiled November 2024

Status and Jurisdiction	Size (SF)	Address/Location	Developer	Industrial Park Name / Comments
Under Review				
Tracy	1,812,279	16000 W. Schulte Road	Hom	Costco annexation; 2 industrial buildings
Tracy	1,811,259	6103, 6301, 6599 Grant Line Road	Tracy Land Partners Holdco	Tracy Alliance/Tracy Northeast Business Park
Tracy	1,690,000	29592 S. Corral Hollow Rd	Sandhu/Takar/Ridgeline	Tracy Hills Commerce Center
Tracy	1,319,092	5070 Promontory Pkwy	Prologis LP	IPC Building 18 (Cordes Ranch)
Tracy	1,300,256	Hopkins Road/Bud Lyons Way	Prologis LP	IPC Building 20 (Cordes Ranch)
Tracy	718,165	3601 Pescadero	Ridge Tracy Land Partners	Paradise Pointe Business Park
Tracy	557,488	26301 S. Hansen Road	Costco Wholesale Corp.	Costco Cold Distribution Center
Tracy	246,470	Paradise Road/Grant Line Road	Prologis LP/HPA, Inc.	NEI Building 21
Tracy	217,466	16286 W. Schulte Road	Pombo/PDC Sacramento	Schulte Warehouse/Annexation
Tracy	153,758	6050 Promontory Pkwy	Prologis LP	IPC Building 13 (Cordes Ranch)
Stockton	6,091,551	S. Airport Way/Stockton Airport	Lazeres Companies	Per Draft EIR, 298 acres at estimated 0.47 FAR (maximum development)
Stockton	3,202,910	5700 E. Mariposa Road	Greenlaw	Mariposa Industrial Park, Phases I (1,423,520 SF) and II (1,779,390 SF)
Stockton	871,200	9011 S. Airport Way	Van Groningen	Seeking annexation and zoning of 50 acres; size estimated at 0.4 FAR
Stockton	184,166	6505 S. McKinley Avenue	GoIndustrial	Single industrial building
SJ County	5,360,000	W. Schulte Road/Pavillion Pkwy	Prologis LP	International Park of Commerce Phase 2; five industrial buildings
Subtotal	**25,536,060**			
Future Phases of Master-Planned Industrial Parks Not Included in Government Major Projects Lists				
Tracy	7,036,891	Not Available	Prologis LP	IPC Future Phases, 13 buildings
Lathrop	272,496	Highway 120/Yosemite Ave	Crow Holdings, Inc.	TriPoint Logistics Center Buildings 9 and 10
SJ County	1,822,117	Holly Drive/Sugar Road	Phelan Development Co.	North Tracy Commerce Center, balance of Phase II plus Phase III
Patterson	8,869,574	Rogers Road/Avenue A	New Ownership & LBA	I-5 Trade Center - 11 buildings on 571 ac.; LBA Logistics - 56.5 ac & 1,006,834 SF
Patterson	970,837	Keystone Pacific Boulevard	Keystone Corporation	Estimated balance of Keystone Pacific Business Park
Subtotal	**18,971,915**			
Total Space	**59,509,951**			

Sources: City of Tracy New Construction Industrial & Commercial Development Pipeline Report, Status as of September 2024; City of Lathrop Commercial- Industrial Development Pipeline Report Status As of July 30, 2024; City of Stockton Community Development Department; San Joaquin County Planning Department; City of Patterson Planning Department; Colliers; Cushman & Wakefield; developer websites; and ALH Urban & Regional Economics.

Exhibit 8
Industrial Buildings With 100,000 SF+ Vacant for 14 Months or More
Tracy, Lathrop, Stockton, and Southern San Joaquin County; and Patterson
Compiled October-November 2024

Address City	Year Built	Date Available	Building Size (SF)	Available Space (SF)	Project Name	Physical Condition/Inspection Comments (1)
1269 E. Grant Line Road Tracy	2023	12/1/2022	606,343	606,343	Tracy 205 Logistics Center	Building appears physically sound and in good condition (neighboring building has a plywood-covered window panel)
6868 Arch Road Stockton	2018	9/1/2018	506,844	506,844	Arch Logistics Center	Building appears physically sound and in good condition
6389 Hopkins Road Tracy	2016	6/1/2023	403,560	403,560	International Park of Commerce	Building appears physically sound and in good condition
18700 Business Park Court Lathrop	2023	4/1/2023	390,443	390,443	Lathrop Gateway Business Park	Building appears physically sound and in good condition
18755 Business Park Court Lathrop	2021	5/3/2023	609,349	306,349	Lathrop Gateway Business Park	Building appears physically sound and in good condition
5070 Yosemite Avenue Lathrop	2021	8/1/2021	266,309	266,309	Tri Point Logistics Center	Building appears physically sound and in good condition
2216 S Sinclair Ave Stockton	2022	10/1/2022	265,496	265,496	Duck Creek Business Park	All the buildings in this business park appear physically sound and in good condition
8527 S Airport Way Stockton	2023	12/1/2022	223,262	223,262	Tidewater Industrial	Building appears physically sound and in good condition
8497 S. Airport Way Stockton	2023	12/1/2022	171,900	171,900	Tidewater Industrial	Building appears physically sound and in good condition
1150 E. Arbor Avenue Tracy	2017	8/1/2022	795,000	152,000	Northeast Industrial Area	Building appears physically sound and in good condition
11900 S Harlan Road - Bldg. B Lathrop	2005	12/1/2022	262,400	131,200	California Logistics Centre	Building appears physically sound and in good condition
4810 Fite Court Stockton	2023	7/1/2021	122,146	122,146	Arch Road Business Park	Building appears physically sound and in good condition
1605-1625 Tillie Lewis Dr Stockton	1980	7/1/2022	180,000	120,000	Stockton Industrial Park	Building appears physically sound and in good condition, some minor exterior staining
1780 Industrial Dr Stockton	2008	6/27/2023	111,160	111,160	Massie Industrial Park	Building appears physically sound and in good condition
17600 Shideler Parkway Lathrop	2002	11/10/2022	322,560	100,800	Lathrop Industrial Park	Building appears physically sound and in good condition
Totals			**5,236,772**	**3,877,812**		

Sources: Cushman & Wakefield; and ALH Urban & Regional Economics.

(1) Physically observed in November or December 2024.

Exhibit 9
Existing Hotel Market Area Competitive Supply (1)
November 2024

Hotel Name	Hotel Type (2)	Miles from Pacific Gateway Project Site (3)	Address	City	Average Room Rate (4)	Open Date (5)	Affiliation Date (5)(6)	Room Count (5)
Best Western Luxury Inn	Midscale Class	10.5	811 W Clover Rd	Tracy	$113	Dec 1993	Dec 1993	57
Microtel Inn & Suites by Wyndham Tracy	Economy Class	10.5	861 W Clover Rd	Tracy	$112 (6)	Aug 2006	Aug 2006	69
Home2 Suites by Hilton Tracy	Upper Midscale Class	10.9	2025 W Grant Line Rd	Tracy	$195 (7)	Mar 2021	Mar 2021	94
Holiday Inn Express & Suites Tracy	Upper Midscale Class	11.0	3751 N. Tracy Blvd	Tracy	$146	Aug 1999	Aug 1999	102
Quality Inn Tracy I-205	Midscale Class	11.0	3511 N Tracy Blvd	Tracy	$89	Jun 1987	Jan 2024	59
Extended Stay America Stockton - Tracy	Midscale Class	12.7	2526 Pavilion Pkwy	Tracy	$95 (6)	Jun 2003	Jun 2003	101
Hampton Inn Tracy	Upper Midscale Class	12.8	2400 Naglee Rd	Tracy	$144	Apr 1999	Apr 1999	62
Fairfield Inn Tracy	Upper Midscale Class	12.8	2410 Naglee Road	Tracy	$129	Jul 1999	Jul 1999	64
						Grand Total:		**608**

Sources: STR, Inc., Hotel Trend Report, Tracy, CA Selected Properties, January 2016 Through October 2024; Hotel websites; Google Maps; and ALH Urban & Regional Economics.

(1) The competitive hotel market area is defined as the City of Tracy. This inventory includes Economy Class, Midscale Class, and Upper Midscale Class hotels in operation in October 2024. STR, Inc., which is the source of the information, also categorizes hotels as Upscale Class, but there are no hotels in the Tracy market classified as such.
(2) Hotel classifications per STR, Inc.
(3) The site location assumed for distance mapping purpose is the approximate intersection of State Route 132 (CA-132) and S. Chrisman Road.
(4) Room rate per hotel/motel for a single room with a king-sized bed for 2 adults, free cancellation, lowest price available with no special pricing applied and no special features, such as mini fridge (if extra cost applies), except as noted. Internet-based room queries, approximately 1 week prior to reservation date. Free cancellation 1 day prior to stay. Wednesday rates, cited on
(5) Data provided by STR, Inc.
(6) Affiliation date reflects the date the identified hotel became affiliated with the named hotel flag.
(7) Only Queen beds available.
(8) Rooms with King beds are King Suites.

Exhibit 10
Historic Hotel Market Performance Indicators (1)
Select Competitive Tracy Hotels
2016 - October 2024

Occupancy (%)

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total Year	Oct YTD
2016	70.1	77.9	74.7	81.5	83.6	87.6	81.2	86.1	84.1	86.1	80.0	62.5	79.6	81.3
2017	62.1	69.9	77.2	73.8	86.3	87.6	82.6	86.1	87.0	82.3	73.2	66.7	77.9	79.5
2018	67.6	78.2	80.1	82.5	82.2	86.1	84.4	86.3	87.2	85.2	71.3	64.6	79.6	82.0
2019	65.0	68.2	78.3	77.0	80.7	82.9	77.5	76.8	76.1	79.5	74.3	65.5	75.2	76.3
2020	69.4	75.1	58.1	50.4	57.2	65.9	72.6	83.6	81.7	79.6	65.8	57.1	68.0	69.3
2021	76.4	81.7	78.1	75.3	84.8	92.1	86.6	84.3	85.7	86.0	78.4	72.2	81.9	83.2
2022	67.5	72.9	78.9	84.8	80.7	81.8	77.9	77.5	74.0	75.4	66.9	54.9	74.4	77.1
2023	57.0	62.4	65.1	61.0	67.4	73.5	68.0	72.3	72.0	75.6	68.5	61.6	67.0	67.5
2024	56.4	66.1	67.6	71.6	70.1	75.1	73.7	71.3	67.5	70.1				69.0
Avg	65.4	72.2	73.1	73.1	76.9	81.3	78.2	80.2	79.1	79.7	72.2	63.1	75.4	76.0

ADR ($) (2)

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total Year	Oct YTD
2016	97.00	100.93	97.21	98.90	101.65	107.33	104.21	108.68	107.18	109.67	107.83	102.36	103.81	103.54
2017	95.88	98.99	100.96	102.29	109.75	110.20	109.40	116.21	112.36	110.06	106.61	98.00	106.54	107.26
2018	100.39	106.93	109.20	118.42	116.70	120.45	119.22	119.33	118.06	119.19	114.44	105.89	114.53	115.24
2019	110.66	112.29	117.75	113.79	116.89	118.35	118.04	119.97	126.85	132.26	128.07	114.94	119.40	118.96
2020	117.12	120.17	111.45	92.59	92.16	99.59	102.55	109.18	118.26	106.94	104.41	100.40	107.04	107.85
2021	102.14	108.84	116.08	120.41	124.42	129.01	134.71	137.95	141.97	146.73	141.59	137.74	129.45	127.53
2022	128.96	137.93	139.54	140.41	142.67	149.89	147.80	151.86	151.05	151.37	151.58	144.93	144.92	144.35
2023	139.36	146.13	145.91	137.50	140.63	136.16	136.57	136.00	137.41	140.17	130.32	121.04	137.24	139.43
2024	128.04	121.86	122.94	126.64	134.91	126.09	128.76	131.37	129.84	127.32				127.87
Avg	113.51	117.40	118.56	118.43	121.27	123.04	123.31	126.12	127.38	127.84	124.15	116.81	121.17	121.99

RevPAR ($) (3)

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total Year	Oct YTD
2016	68.01	78.66	72.62	80.56	84.93	94.07	84.66	93.57	90.15	94.48	86.25	63.93	82.63	84.18
2017	59.52	69.23	77.97	75.45	94.67	96.54	90.40	100.02	97.71	90.62	78.07	65.38	83.04	85.33
2018	67.81	83.60	87.44	97.69	95.94	103.65	100.64	102.97	102.90	101.54	81.60	68.40	91.19	94.46
2019	71.93	76.61	92.25	87.62	94.31	98.06	91.52	92.15	96.49	105.15	95.13	75.29	89.77	90.72
2020	81.26	90.25	64.79	46.67	52.69	65.61	74.45	91.24	96.58	85.13	68.67	57.36	72.79	74.77
2021	78.07	88.92	90.67	90.65	105.55	118.78	116.67	116.31	121.67	126.14	111.01	99.43	105.97	106.14
2022	87.05	100.50	110.06	119.04	115.09	122.65	115.18	117.68	111.75	114.12	101.35	79.60	107.83	111.35
2023	79.47	91.13	94.98	83.82	94.77	100.09	92.88	98.27	98.93	106.02	89.23	74.51	92.00	94.06
2024	72.22	80.56	83.14	90.68	94.55	94.74	94.93	93.63	87.62	89.23				88.18
Avg	74.25	84.75	86.64	86.57	93.25	100.08	96.39	101.09	100.77	101.94	89.66	73.73	91.32	92.67

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Exhibit 11
Historic Hotel Market Performance Indicators (1)
Select Competitive Tracy Hotels
2016 - October 2024

Supply (4)

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total Year	Oct YTD
2016	15,996	14,448	15,996	15,480	15,996	15,480	15,996	15,934	15,420	15,934	15,420	15,934	188,034	156,680
2017	15,934	14,392	15,934	15,420	15,934	15,420	15,934	15,934	15,420	15,934	15,420	15,934	187,610	156,256
2018	15,934	14,392	15,934	15,420	15,934	15,420	15,934	15,934	15,420	15,934	15,420	15,934	187,610	156,256
2019	15,934	14,392	15,934	15,420	15,934	15,420	15,934	15,934	15,420	15,934	15,420	15,934	187,610	156,256
2020	15,934	14,392	15,934	15,420	15,934	15,420	15,934	15,934	15,420	15,934	15,420	15,934	187,610	156,256
2021	15,934	14,392	18,848	18,240	18,848	18,240	18,848	18,848	18,240	18,848	18,240	18,848	216,374	179,286
2022	18,848	17,024	18,848	18,240	18,848	18,240	18,848	18,848	18,240	18,848	18,240	18,848	221,920	184,832
2023	18,848	17,024	18,848	18,240	18,848	18,240	18,848	18,848	18,240	18,848	18,240	18,848	221,920	184,832
2024	18,848	17,024	18,848	18,240	18,848	18,240	18,848	18,848	18,240	18,848				184,832
Avg	16,912	15,276	17,236	16,680	17,236	16,680	17,236	17,229	16,673	17,229	16,478	17,027	199,836	168,387

Demand (5)

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total Year	Oct YTD
2016	11,215	11,261	11,950	12,610	13,365	13,567	12,995	13,720	12,970	13,727	12,334	9,952	149,666	127,380
2017	9,891	10,065	12,306	11,374	13,745	13,509	13,167	13,715	13,409	13,119	11,292	10,631	146,223	124,300
2018	10,764	11,252	12,759	12,721	13,099	13,270	13,450	13,750	13,440	13,574	10,995	10,292	149,366	128,079
2019	10,358	9,819	12,483	11,874	12,856	12,777	12,354	12,239	11,730	12,668	11,454	10,437	141,049	119,158
2020	11,056	10,809	9,263	7,773	9,110	10,159	11,568	13,315	12,593	12,684	10,142	9,103	127,575	108,330
2021	12,179	11,757	14,723	13,732	15,989	16,793	16,324	15,892	15,632	16,204	14,301	13,605	177,131	149,225
2022	12,722	12,404	14,865	15,464	15,204	14,925	14,688	14,606	13,494	14,209	12,196	10,352	165,129	142,581
2023	10,748	10,616	12,269	11,119	12,701	13,408	12,818	13,619	13,132	14,256	12,488	11,602	148,776	124,686
2024	10,631	11,255	12,746	13,060	13,209	13,705	13,896	13,433	12,309	13,209				127,453
Avg	11,063	11,026	12,596	12,192	13,253	13,568	13,473	13,810	13,190	13,739	11,900	10,747	150,614	127,910

Revenue ($) - in Millions

Year	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	Total Year	Oct YTD
2016	1,087,860	1,136,537	1,161,609	1,247,138	1,358,546	1,456,207	1,354,176	1,491,022	1,390,111	1,505,391	1,329,952	1,018,652	15,537,201	13,188,597
2017	948,388	996,372	1,242,428	1,163,466	1,508,541	1,488,714	1,440,428	1,593,779	1,506,657	1,443,911	1,203,849	1,041,813	15,578,346	13,332,684
2018	1,080,553	1,203,136	1,393,245	1,506,381	1,528,630	1,598,357	1,603,551	1,640,768	1,586,717	1,617,893	1,258,234	1,089,809	17,107,274	14,759,231
2019	1,146,192	1,102,572	1,469,846	1,351,131	1,502,792	1,512,159	1,458,325	1,468,309	1,487,949	1,675,499	1,466,940	1,199,652	16,841,366	14,174,774
2020	1,294,854	1,298,938	1,032,405	719,674	839,545	1,011,718	1,186,352	1,453,788	1,489,308	1,356,426	1,058,954	913,917	13,655,879	11,683,008
2021	1,243,931	1,279,668	1,708,989	1,653,469	1,989,327	2,166,467	2,199,002	2,192,291	2,219,332	2,377,577	2,024,881	1,873,967	22,928,901	19,030,053
2022	1,640,674	1,710,908	2,074,332	2,171,318	2,169,133	2,237,101	2,170,823	2,218,020	2,038,240	2,150,874	1,848,633	1,500,356	23,930,412	20,581,423
2023	1,497,822	1,551,336	1,790,167	1,528,831	1,786,173	1,825,581	1,750,596	1,852,220	1,804,425	1,998,327	1,627,492	1,404,351	20,417,321	17,385,478
2024	1,361,143	1,371,481	1,567,031	1,653,980	1,782,082	1,728,064	1,789,218	1,764,735	1,598,257	1,681,737				16,297,728
Avg	1,255,713	1,294,550	1,493,339	1,443,932	1,607,197	1,669,374	1,661,386	1,741,659	1,680,111	1,756,404	1,477,367	1,255,315	18,249,588	15,603,664

Sources: STR, Ind., Hotel Trend Report, Tracy, CA Selected Properties, January 2016 Through October 2024; and ALH Urban & Regional Economics.

(1) Data pertain only to hotels that participate in the STR, Inc. survey, and only the hotels noted in Exhibit 9. This includes 6 hotels with 608 rooms as of October 2024.

(2) ADR is an abbreviation for "average daily room rate."

(3) RevPAR is an abbreviaion for "revenue per available room." This metric is used in the hospitality industry to measure hotel performance. The measurement is calculated by multiplying a hotel's average daily room rate (ADR) by its occupancy rate. RevPAR is also calculated by dividing a hotel's total room revenue by the total number of available rooms in the period being measured.

(4) Supply measures the room nights available across all survey hotels per cited time period.

(5) Demand measures room nights of demand across all survey hotels per cited time period.

Exhibit 12
San Joaquin County
Population and Employment Projections
2024 - 2035

	Year			Average Annual Growth Rate	
Demographic Group	**2024**	**2030**	**2035**	**2024-2030**	**2030-2035**
San Joaquin County Population	787,365	818,999	866,575	0.7%	1.1%
San Joaquin County Employment	289,532 (1)	316,400	340,685 (1)	1.5%	1.5%
Average (1)				1.1%	1.3%

Sources: State of California Department of Finance, P-2 : County Population Projections (2020-2070), P-2A Total Population for California and Counties, Report P-2A: Total Estimated and Projected Population for California and Counties: July 1, 2020 to 2070, downloaded December 5, 2024; Employment Development Department, State of California, 2020-2030 Industry Employment Projections, Stockton-Lodi Metropolitan Statistical Area (San Joaquin County); and ALH Urban & Regional Economics.

(1) Projected based on trend data for 2020 and 2030. The 2020 estimate is 272,900.
(2) Straight average of the two growth rates for illustrative purposes.

Exhibit 13
Tracy Area Existing and Projected Hotel Demand (1)
For Identified Competitive Hotels
Including Pacific Gateway Hotel
2024 - 2036

Year	Existing Base of Rooms (2)	New Supply Added (3)	Total Rooms Supply	Annual Supply (4)	Demand per Annual Growth Growth Rate (5)	Occupancy per Annual Growth Rate in Demand (6)
2024	608	0	608	221,920	163,679	73.8%
2025	608	0	608	221,920	165,437	74.5%
2026	608	0	608	221,920	167,214	75.3%
2027	608	0	608	221,920	169,011	76.2%
2028	608	0	608	221,920	170,827	77.0%
2029	608	0	608	221,920	172,662	77.8%
2030	608	0	608	221,920	174,517	78.6%
2031	608	0	608	221,920	176,808	79.7%
2032	608	0	608	221,920	179,129	80.7%
2033	608	100 (7)	708	258,420	181,481	70.2%
2034	608	0	708	258,420	183,864	71.1%
2035	608	0	708	258,420	186,278	72.1%
2036	608	0	708	258,420	188,723	73.0%

Sources: STR, Inc., Hotel Trend Report, Tracy, CA Selected Properties, January 2016 Through October 2024; and ALH Urban & Regional Economics.

(1) Includes existing competitive hotels listed in Exhibit 9.
(2) See Exhibit 9 for the existing hotel room count.
(3) New Supply Added reflects the assumed first full year of new hotel operations.
(4) Comprises number of rooms multiplied by 365 days in a year.
(5) Forecasted based on the average annual growth trend in population and employment in San Joaquin County from 2024 to 2030 and 2030 to 2035 as shown in Exhibit 12. The rate of 1.1% is applied for the 2024 - 2030 time period and the rate of 1.3% is applied for the 2030-2036 period. For analytic purposes, this average growth trend is considered a proxy for growth in hotel rooms demand.
(6) Annual occupancy comprises annual demand divided by annual supply. Note the existing 2024 baseline occupancy rate is consistent with the recent market trend from 2021 - 2023 as reported in Exhibit 10.
(7) Reflects the addition of the Pacific Gateway Hotel Rooms. The number of hotel rooms totals 100. The hotel is assumed to open in 2032, so the following year is anticipated to be the first full year of operations.

Exhibit 14
Future Supply Hotels
Tracy, California
Compiled November 2024

Development Status and Project Name	Number of Rooms	Size (SF)	Market Assumptions (1) Year Open	First Full Year of Operations	Address/Location	Developer or Applicant	Comments
Under Construction							
Marriott Hotel	108	58,800	2025	2026	3550 N. MacAurthur Drive	Kabul/Iyer	Site is 2.69 acres
La Quinta	87	48,845	2025	2026	565 Clover Road	Skyline Hospitality/Sidhu	Site is 1.91 acres
	195						
Approved							
Extended Stay America	124	54,902	2027	2028	N. Side Joe Pombo Pkwy, North of Grant Line Road	Tracy Orchard Plaza LP/Quoi	Site is 3.91 acres; four-story building
Marriott Courtyard	101	60,074	2027	2028	International Parkway/I-205	Robert Tuttle Architects	Site is 3.37 acres; located in Cordes Ranch
Tru by Hilton	78	40,190	2027	2028	2605 N. Corral Hollow Road	Hemkunt Group LLP/Kotecha	Site is 1.96 acres; four-story building
	303						
Under Review							
Avid Hotel & Candlewood Suites	107	110,512		Speculative	3095 N. Corral Hollow Road	Manteca Hospitality Inc./Iyer	Two hotels on one 3.17-acre site
and Hilton Garden Inn	70			Speculative			
Cambria Hotel and Event Center	90	N/Av.		Speculative	747 W. Larch Road	Grewal	Site is 1.77 acres
	267						
Total Rooms	**765**						

Sources: City of Tracy New Construction Industrial & Commercial Development Pipeline Report, Status as of September 2024; and ALH Urban & Regional Economics.

(1) These are assumptions developed by ALH Urban & Regional Economics.

Exhibit 15
Tracy Area Existing and Projected Hotel Demand (1)
For Identified Competitive Hotels
Including Pacific Gateway Hotel
2024 - 2036

Year	Existing Base of Rooms (2)	New Supply Added (3)	Total Rooms Supply	Annual Supply (4)	Demand per Annual Growth Growth Rate (5)	Occupancy per Annual Growth Rate in Demand (6)
2024	608		608	221,920	163,679	73.8%
2025	608		608	221,920	165,437	74.5%
2026	608	195 (7)	803	293,095	167,214	57.1%
2027	608		803	293,095	169,011	57.7%
2028	608	303 (8)	1,106	403,690	170,827	42.3%
2029	608		1,106	403,690	172,662	42.8%
2030	608		1,106	403,690	174,517	43.2%
2031	608		1,106	403,690	176,808	43.8%
2032	608		1,106	403,690	179,129	44.4%
2033	608 (6)	100 (9)	1,206	440,190	181,481	41.2%
2034	608		1,206	440,190	183,864	41.8%
2035	608		1,206	440,190	186,278	42.3%
2036	608		1,206	440,190	188,723	42.9%

Sources: STR, Inc., Hotel Trend Report, Merced, CA Selected Properties, January 2013 Through December 2021; and ALH Urban & Regional Economics.

(1) Includes existing competitive hotels listed in Exhibit 9.
(2) See Exhibit 9 for the existing hotel room count.
(3) New Supply Added reflects the assumed first full year of new hotel operations.
(4) Comprises number of room multiplied by 365 days in a year.
(5) See Exhibit 13 for the annual demand estimates.
(6) Annual occupancy comprises annual demand divided by annual supply. Note the existing 2024 baseline occupancy rate is consistent with the recent market trend from 2021 - 2023 as reported in Exhibit 10.
(7) This count corresponds with the Under Construction hotels identified in Exhibit 14.
(8) This count corresponds with the Approved hotels identified in Exhibit 14.
(9) Reflects the addition of the Pacific Gateway Hotel Rooms. The number of hotel rooms totals 100. The hotel is assumed to open in 2032, so the following year is anticipated to be the first full year of operations.

Exhibit 16
Average Annual Estimated Daytime Retail Spending
Office Workers in Suburban Locations
In 2024 Dollars (1)

Category of Spending (2)	Weekly Spending: Suburban Locations	Weekly Spending: Suburban Ample Locations (3)	Percent Distribution	Annual Spending: Suburban Locations	Annual Spending: Suburban Ample Locations (3)
Full-Service Restaurants and Fast Food	$41.95	$73.36	19.7%	$2,182	$3,815
Goods and Services					
Groceries	$31.37	$54.86	14.7%	$1,631	$2,852
All Other (4)	$139.67	$244.23	65.6%	$7,263	$12,700
Total	$212.99	$372.44	100.0%	$11,076	$19,367
Taxable (5)					
Total	$191.03	$334.05	NA	$9,934	$17,370
Percent	90%	90%	NA	90%	90%

Sources: International Council of Shopping Centers "Office-Worker Retail Spending in a Digital Age"; United States Bureau of Labor Statistics, CPI for Urban West; and ALH Urban & Regional Economics.

(1) The data were reported for 2011. ALH Urban & Regional Economics inflated the figures to mid-2024 (e.g., July 2024) by using the Urban West CPI Index, with adjustments from October 2011 to July 2024, resulting in a 1.45% (rounded) adjustment.
(2) Excludes spending on transportation and online purchases.
(3) Reflects an increase in spending by office workers in location with more ample retail, restaurant, and services offerings in the vicinity of the office building, such as major shopping centers. This adjustment is based upon analysis reflected in the cited International Council of Shopping Centers source document. In suburban locations the increment was approximately 75% more.
(4) All other includes a range of retail purchases, such as personal care shops, office supplies, department stores, drug stores, electronics, jewelry stores, entertainment, clothing, and other goods.
(5) Sales for Groceries have been adjusted to account for non-taxable sales; only 30.0% of all food store sales are estimated to be taxable.

Exhibit 17
Annual Average Salaries for Select Industries, Private Employers
San Joaquin County
2023
In 2024 Dollars (Mid-year)

Industry Code (1)	Industry Code Description (2)	Number of Employees	Total Annual Wages	Avg. Salary (2023)	Avg. Salary (2024) (3)
Select Industrial					
1021	Trade, transportation, and utilities	85,866	$4,993,444,308	$58,154	$59,641
493	Warehousing and storage	28,841	$1,776,478,167	$61,596	$63,171
484	Truck transportation	8,565	$558,273,011	$65,181	$66,848
	Combined - Total	**123,272**	**$7,328,195,486**	**$59,447**	**$60,968**
Office-Using Sectors					
1022	Information	1,099	$81,046,552	$73,746	$75,632
1023	Financial activities	7,871	$560,496,267	$71,210	$73,032
1024	Professional and business services	22,740	$1,349,629,642	$59,350	$60,868
52	Finance and insurance	4,153	$336,792,460	$81,096	$83,170
53	Real estate and rental and leasing	3,718	$223,703,807	$60,168	$61,707
	Combined - Total	**39,581**	**$2,551,668,728**	**$64,467**	**$66,116**
Other Sectors					
61	Educational services	4,301	$185,272,426	$43,077	$44,178
44-45	Retail trade	27,082	$1,111,577,043	$41,045	$42,095
1026	Leisure and hospitality	24,527	$651,335,283	$26,556	$27,235

Sources: United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), San Joaquin County 2023; U.S. Department of Labor, Consumer Price Index, West Urban through July 2024; and ALH Urban & Regional Economics.

(1) Industry Code comprises a QCEW Code.
(2) Not all sectors are represented. Only sectors generally relevant to the bulk of anticipated industrial employment at Pacific Gateway.
(3) Inflated to Mid-2024 based upon CPI for July 2023 and July 2024. The inflation factor is 1.02558.

Exhibit 18
Pacific Gateway
Daytime Retail Demand Generated by Project Employees
In 2024 Dollars

Parameter and Spending Category	Employee Annual Earnings and Retail Spending (1)					
	Office-Using Sectors	Industrial Workers (1)	University Workers	Retail Workers	Hotel Workers	Total All Workers
Average Earnings						
Annual Average Earnings (2)	$66,000	$61,000	$44,000	$42,095	$27,235	NA
Wage Benchmarked to Office Salary (3)	100%	92%	67%	64%	41%	NA
Average Annual Spending (4)						
Restaurants/Fast Food	$2,200	$2,000	$1,800	$1,700	$1,600	NA
Groceries	$1,600	$1,500	$1,400	$1,300	$1,200	NA
All Other	$7,300	$6,700	$6,200	$5,700	$5,300	NA
Total Spending	$11,100	$10,200	$9,400	$8,700	$8,100	NA
Maximum Number of Employees	NA	14,955 (5)	300 (6)	94 (7)	60 (8)	15,409
Aggregate Demand						
Restaurants/Fast Food	NA	$29,909,091	$540,000	$159,800	$96,000	$30,704,891
Groceries	NA	$22,431,818	$420,000	$122,200	$72,000	$23,046,018
All Other	NA	$100,195,455	$1,860,000	$535,800	$318,000	$102,909,255
Total Spending	NA	$152,536,364	$2,820,000	$817,800	$486,000	$156,660,164

Sources: United States Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW), San Joaquin County 2023; Pacific Gateway Project Description, November 8, 2024; and ALH Urban & Regional Economics.

(1) Employment at Pacific Gateway is anticipated to comprise a majority of workers in several sectors, primarily a range of industrial sectors, but also including Unversity, retail, and hotel workers. The purpose of this analysis is to benchmark the non-office workers earnings to the office workers wages, as annual spending is based on office worker spending assumptions.
(2) See Exhibit 17. Figures rounded to the nearest $1,000. Some of these income estimates are likely to be conservative relative to Pacific Gateway's ultimate tenants, as they are derived from generalized information.
(3) Earnings are benchmarked relative to office earnings, since workers are assumed to make retail purchases in a pattern similar to office workers, but in proportion to their earnings relative to office worker earnings.
(4) See Exhibit 16. As noted in Exhibit 16, spending estimates vary depending upon the retail characterization of the surrounding area, i.e., ample or not-ample. For this analysis, given the nature of the location of Pacific Gateway, the figures are benchmarked to suburban locations without ample retail. Figures are rounded to the nearest $100.
(5) This employment estimate is based upon the estimated maximum capacity of Pacific Gateway's industrial space as identified in Exhibit 1 (not taking into account potential vacancy) and an average employment density figure of 1,650, from the industrial demand estimates.
(6) Employment estimate for the University provided by Pacific Gateway Project Description, November 8, 2024.
(7) This employment estimate is based upon the estimated maximum capacity of Pacific Gateway's retail space as identified in Exhibit 1 (not taking into account potential vacancy) and an average employment density figure of 500, a standard retail employment density assumption.
(8) This employment estimate is based upon the estimated employment of Pacific Gateway's hotel space as identified in Exhibit 1 and an average employment density figure of 1,000, a standard mid-range hotel employment density assumption.

Exhibit 19
Pacific Gateway Employees Supportable Daytime Retail Demand
In 2024 Dollars

Type of Retail	Annual Total Employee Daytime Spending (1)	Assumed Pacific Gateway Capture Rate (2)	Sales per Sq. Ft. (3)	Supportable Sq. Ft. Total (4)	Supportable Sq. Ft. Vacancy Adjusted (5)
Restaurants	$30,704,891	33.0%	$600	16,888	17,800
Grocery	$23,046,018	10.0%	$700	3,292	3,500
All Other	$102,909,255	10.0%	$400	25,727	27,100
Total	$156,660,164			45,907	48,400

Sources: "California Retail Analytics: Expanding Retailers and Retail Stores Sales Estimate," page 4, HdL ECONSolutions, 2019; emarketer.com (2018 retail sales per square foot); and ALH Urban & Regional Economics.

(1) See Exhibit 18.
(2) These capture rates are ALH Urban & Regional Economics assumptions, reflecting anticipated on-site retail capture rates of daytime industrial worker spending by type of retail. As noted previously, the "All Other" category includes a wide range of goods, many of which are likely not supportable at the site because of the low area density and store sales requirements. In similar fashion, the site is not suitable for the development of a grocery store, but some grocery type merchandise is sold at convenience stores, which are reflected in this category's assumed capture rate.
(3) These estimates reflect industry standard assumptions, based upon ALH Urban & Regional Economics examination of industry publications, such as national averages reported in the HdL ECON Solutions publication "Expanding Retailers and Retail Stores Sales Estimate". Additional considerations include historic data reported by emarketer.com
(4) Reflects the "Annual Total Employee Daytime Spending" multiplied by "Assumed Pacific Gateway Capture Rate", divided by "Sales per Sq. Ft."
(5) Includes a 5% vacancy allowance for all categories of retail space. Figures are rounded to the nearest 100.

Exhibit 20
Pacific Gateway
Estimated Hotel Guest Retail Spending
2024 Dollars

Hotel and Guest Characteristic	Value
Number of Rooms (1)	100
Estimated Average Occupancy (2)	65%
Room Nights/Year	23,725
Average Number Guests/Room (3)	1.5
Average Annual Number of Guests	35,588
Average Guest Spending on Food and Incidentals/Day (4)	$74
Annual Guest Spending on Food and Incidentals	$2,633,475
Sales per Square Foot (5)	$600
Retail vacancy rate (6)	5%
Supportable Square Feet (7)	4,600

Sources: U.S. General Services Administration, 2023 Per Diem Rates for San Mateo/Foster City/Belmont; and ALH Urban & Regional Economics.

(1) See Exhibit 13.
(2) Industry standard minimum occupancy rate.
(3) Hotel guest assumption prepared by ALH Urban & Regional Economics.
(4) This figure is the daily U.S. General Services Administration allowance for Meals and Incidental Expense (ME&IE) rate for 2024 for San Joaquin County.
(5) See Exhibit 19.
(6) Industry standard retail vacancy assumption.
(7) Includes a 5% retail vacancy allowance. Figure is rounded to the nearest 100.

Exhibit 21
Pacific Gateway University Center Retail
Illustrative Annual Spending per University Student (1)
2024 Dollars

	Budget Categories (Excluding Tuition and Fees)						
Student Living Status	**Rent**	**Food**	**Books & Supplies**	**Personal**	**Transportation**	**Indirect Costs (2)**	**Total**
Off-Campus							
Budget	$9,740	$7,450	$1,062	$2,700	$1,500	$22,452	$44,904
Project Capture Rate (3)	0%	20%	10%	10%	0%	0%	
On-Campus							
Budget	$9,740	$7,450	$1,062	$2,700	$1,500	$5,262	$27,714
Project Capture Rate (3)	0%	5%	10%	33%	0%	0%	

Sources: University of the Pacific, Cost of Attendance Breakdown, https://www.pacific.edu/financial-aid/cost-of-attendance/undergraduate-students ; and ALH Urban & Regional Economics.

(1) The student budget for University of the Pacific in Stockton was selected for illustrative purposes to identify prospective student spending patterns for students of the proposed University at Pacific Gateway.
(2) As identified by University of the Pacific, indirect costs are additional educational expenses a student should expect to incur.
(3) These capture rates for Pacific Gateway's University Center retail space were developed by ALH Urban & Regional Economics. Due to proximity, the capture rates are higher for students living on-campus, as they will likely have less mobility and shopping opportunities than students living off-campus.

Exhibit 22
Pacific Gateway University Center Retail
Estimated Student Supportable University Center Retail Space
2024 Dollars

Student Living Status	Number of Students (1)	Annual Student Project Retail Spending (2)	Total Annual Spending	Supportable Square Feet (3)
Off Campus	3,400	$1,900	$6,460,000	13,600
On Campus	1,600	$1,400	$2,240,000	4,720
Total	**5,000**		**$8,700,000**	**18,320**

Sources: Ridgeline Property Group; and ALH Urban & Regional Economics.

(1) Prospective student counts provided by Ridgeline Property Group.
(2) These annual estimates are derived from the budget and capture rate estimates in Exhibit 21.
(3) Reflects the Total Annual Spending column divided by a weighted average retail sales per square foot figure, adjusted by a vacancy allowance of 5%. Figures are rounded to the nearst 10. The weighted average retail sales per square foot figure is $500, derived from Exhibit 19, and rounded to the nearest $10.

Appendix Q

City of Tracy						
Name	**Application #**	**Zoning**	**Acres**	**# of Units**	**Location**	**Developer/Builder**
APPROVED AND UNDER CONSTRUCTION						
Ellis Phase 2	TSM16-0003	ESP	106	356	Ellis Town Drive	Surland/Woodside Homes
Ellis Phase 3	TSM18-0005	ESP	74	308	4260 Lammers Road	The Surland Companies
Tracy Hills Phase 1A (includes revisions to 7C)	TSM13-0005 TSM20-0001	THSP	367	1203	Tracy Hills Drive west of Corral Hollow	Lennar, Shea, Meritage
Tracy Hills Phase 1B	TSM18-0006 TSM18-0007 SPA19-0002 GPA19-0001	THSP	161	434	Tracy Hills Drive west of Phase 1A	Lennar
Tracy Hills KT Project (Hillview)	GPA19-0003 SPA19-0004 SPA20-0008 TSM20-0002	THSP	36	214	Tracy Hills Drive east of Corral Hollow	Lennar
Tracy Village	TSM17-0003 A/P13-0002 GPA13-0005 SPA18-0001	N/A	135	594	SEC Valpico Road and Corral Hollow Road	Toll Brothers
Tracy Hills Phase 2	GPA21-0001 SPA21-0003 TSM20-0003	THSP	493	1,517	Tracy Hills south of I-580	Integral Communities
Totals			**1,372**	**4,626**		
APPROVED AND NOT YET UNDER CONSTRUCTION						
Rocking Horse	TSM15-0001	PUD	59.1	226	Lammers Road north of Schulte Road	Concentric Development Group
Avenues	TSM21-0001	ESP	95.83	480	12650 West Valpico Road	Surland
Ellis RE Lots/Limited Use Area	TSM21-0002	ESP	41.87	9	Southeast area of Ellis SP	Surland
Totals			**196.8**	**715**		
UNDER CITY REVIEW (NOT YET APPROVED)						
Rocking Horse (version 2)	TSM19-0006 ZA21-0002 R21-0001	PUD	59.1	226	Lammers Road north of Schulte Road	Concentric Development Group
Retail Center and Apartments (The Station)	GPA21-0003 SPA21-0005 R21-0003	Industrial	28.71	220	NEC South Tracy Boulevard and Gandy Dancer Drive	JTT Enterprises LP
Tracy Hills Phase 5	SPA21-0007 GPA21-0005 TSM22-0002	THSP	284	1390	Lammers Road between the Delta Mendota Canal and California Aqueduct	Integral Communities
Tracy Hills Phase 1C	TSM22-0001	THSP	121	293	Lammers Road southeast of California Aqueduct	Lennar
Tracy Pavilion	D22-0028	N/A	129.7	751	Lammers Road, north of Grant Line	MLC Holdings, Inc.
Westside Ranch	TSM22-0005	PUD	71.6	415	SEC 11th Street and Lammers Road	South Parcel Investors, LLC
Tracy Hills Apartments	D23-0004 CUP23-0001	TH-Mixed Use Business Park	14.6	375	Tracy Hills Specific Plan, Phase 1A 253-380-050	Tracy BPS, LLC/MCE Partners
Totals			**708.71**	**3670**		

Exhibit
Industrial Space Future Supply
Larger (200,000 SF+) Buildings
Tracy, Southern San Joaquin County, Stockton

Status and Jurisdiction	Size (SF)	Address/Location	Developer	Industrial Park Name / Comments
Under Construction				
TBD	0			
Subtotal	**0**			
Recently Completed				
SJ County	1,400,000	Arch Airport Road	Catellus	Completed 2Q224. Owned by Target. Will not occupy. Leasing pending to 3PL.
Subtotal	**1,400,000**			
Approved				
SJ County	1,135,602	Arch Road and Newcastle Road	First Industrial Realty Trust	72.8-acre site (marketed for sale)
Tracy	97,901	Holly Drive Building H	Phelan Development Co.	North Tracy Commerce Center, Building H, breaking ground December 2024
SJ County	669,975	14800 W. Schulte Road	LBA Logistics	LBA Logistics Center III; 3 buildings Tracy SOI; former biomass facility
SJ County	765,880	Arch Airport Road	Catellus	AirPark599 - four future buildings in 6-building park totaling 3,345,756 SF
Subtotal	**2,669,358**			
Under Review				
Tracy	1,812,279	16000 W. Schulte Road	Hom	Costco annexation; 2 industrial buildings
Tracy	1,690,000	29592 S. Corral Hollow Rd	Ridgeline Property Group	Tracy Hills Commerce Center
Tracy	1,574,180	6599 W. Grant Line Road	Tracy Alliance Group	Tracy Alliance; 4 industrial buildings (annexation)
Tracy	1,319,092	5070 Promontory Pkwy	Prologis LP	IPC Building 18 (Cordes Ranch)
Tracy	718,165	3601 Pescadero	Ridge Tracy Land Partners	Paradise Pointe Business Park
Tracy	524,081	5390 Promontory Pkwy	Prologis LP	IPC Building 28 (Cordes Ranch)
Tracy	335,157	1651 E, Grant Line Road	Seefried Industrial Properties	Seefried LI Building (NEI)
Tracy	217,466	16286 W. Schulte Road	Pombo/PDC Sacramento	Schulte Warehouse/Annexation
Stockton	1,779,390	Mariposa Road	Greenlaw	Mariposa Industrial Park Phase II (107.48 Acres)
SJ County	5,360,000	W. Schulte Road/Pavillion Pkwy	Prologis LP	International Park of Commerce Phase 2; five industrial buildings
Subtotal	**15,329,810**			
Future Phases of Master-Planned Industrial Parks Not Included in Government Major Projects Lists				
Tracy	9,323,811	Not Available	Prologis LP	IPC Future Phases, 13 buildings
Lathrop	1,197,188	Yosemite Ave & McKinley Ave	Phelan Development Co.	Lathrop Gateway Phase III
Stockton	1,423,520	Mariposa Road	Greenlaw	Mariposa Industrial Park Phase I (69.56 Acres)
SJ County	1,724,216	Holly Drive/Sugar Road	Phelan Development Co.	North Tracy Commerce Center, balance of Phase II plus Phase III.
Subtotal	**13,668,735**			
Total Space	**33,067,903**			

Sources: City of Tracy New Construction Industrial & Commercial Development Pipeline Report; City of Lathrop Commercial- Industrial Development Pipeline Report Status; City of Stockton Community Development Department; San Joaquin County Planning Department; City of Patterson Planning Department; Colliers; Cushman & Wakefield; developer websites; and ALH Urban & Regional Economics.

Name	Application #	Zoning	Acres	S.F.	Location	Developer/Builder	Specific Plan
City of Tracy							
Approved and Under Construction							
Cordes Ranch - West Parkway Village (Gas Station, convenience store, car wash)	D21-001	CRSP	1.16	10,152	International Pkwy/I-205	Jim Rubnitz	Cordes Ranch SP
Approved and Not Yet Under Construction							
West Parkway Village Multi-Tenant Building	D19-0029	CRSP	1.96	10,465	Cordes Ranch	R&B Delta II, LLC	Cordes Ranch SP
Marriot Courtyard - Cordes Ranch (101 rooms)	D20-0024	CRSP	2	62,000	International Pkwy/I-205	Robert F. Tuttle Architects	Cordes Ranch SP
RNG Fueling Station/Parking Lot	CUP21-0007; D21-0023	NEI	5		2200 N. Chrisman Rd.	L&C Eagle Properties	NE Industrial SP
Promontory Station - Cordes Ranch	D21-0013	CRSP	10.3	30,330	815 International Pkwy	Prologis	Cordes Ranch SP
Under City Review							
Westside Specific Plan	SPN19-0001	N/A		24,821	SWC Lammers Rd/11th St.	Chandi Enterprises	Westside SP
Tru by Hilton (78 Rooms)	D22-0018	PUD	1.7	39,275	2605 W. Grant Line Road	Hemkunt Group LLC	N/A
Avid Hotel (107 Rooms) & Candlewood Suites Hilton Garden (70 Rooms)	D22-0021; SPA23-001	PUD	3.17	110,512	3095 N Corral Hollow Road	Manteca Hospitality	
No Cumulative Retail Projects for SJ County				287,555			

Desktop Review

Prior to conducting the field survey, Bargas conducted an initial review of literature and data sources to characterize the biological conditions and to compile records of sensitive biological resources that could potentially occur in the Biological Study Area (Study Area). The methods used for this analysis are described below.

Biological Setting

The biological setting includes terrain, hydrology, soils, land uses, and other features that support or inhibit biological resources in an area. To better understand the biological setting of the Project, the following resources were reviewed in detail:

- US Fish and Wildlife Service's *National Wetlands Inventory* to determine if surface waters and wetlands have been mapped on or adjacent to the Study Area.
- US Geological Survey's *National Hydrography Dataset* to determine if hydrological features have been mapped on or adjacent to the Study Area.
- San Francisco Estuary Institute (SFEI) *California Aquatic Resources Inventory* (CARI), 2024, to determine if hydrological features have been mapped on or adjacent to the Study Area.
- US Department of Agriculture National Resource Conservation Service *Web Soil Survey* to map and describe soil(s) within the Study Area.
- Google Earth Pro (2025) aerial map images of the Study Area, including historical aerial images.

Special-Status Species & Habitats

It is important to create a well-defined list of habitats and species that could reasonably be expected to occur on the Project site in order to analyze potential Project effects on biological resources effectively. The following describes how the list of potentially-occurring special-status biological resources was assembled.

Data Sources

Species and habitat occurrences were queried from the following resources:

- The San Joaquin County's *Multi-Species Habitat Conservation and Open Space Plan* (SJMSCP 2000) for a list of species covered under the Plan, or "SJMSCP Covered Species". Covered species were considered for their potential to occur within the Project site based on Preserve (habitat) types within the Central Zone, the Central/Southwest Transition Zone, and the Southwest Zone. The SJMSCP Covered Species reasonably expected to occur were primarily associated with the Row and Field Crop/Riparian Preserve habitats of the Central Zone (not including those associated only with the Stanislaus, San Joaquin, or Mokelumne Rivers).
- US Fish and Wildlife Service *Information for Planning and Consultation* portal (IPaC, 2025) for a list of federally listed species and designated critical habitat recommended for impact analysis consideration, based on an upload of the Study Area limits.
- California Department of Fish and Wildlife *California Natural Diversity Database* (CNDDB, 2025) for special-status species records and sensitive habitats/vegetation within the Regional Area.
- California Native Plant Society *Inventory of Rare and Endangered Plants* (CNPS, 2025) for a list of special-status plant species occurrences within the USGS 7.5-minute quadrangles that overlap the Regional Area.

Special-Status Designations Considered

A variety of agencies and respected non-profit organizations assess the conservation status of plant and wildlife species; however, not all are applicable to this report. The following special-status designations were considered when determining special-status species to be discussed in this report:

- **Federal Status:** Species listed as Endangered (FE) or Threatened (FT), as well as species Proposed as Endangered (FPE), Proposed as Threatened (FPT), Proposed for Delisting (FPD), and Candidates (FC) for listing under the Federal Endangered Species Act (FESA).
- **California Status:** Species listed as Endangered (CE) or Threatened (CT), as well as species that are Candidates for Endangered (CCE) status, Threatened (CCT) status, or Delisting (CCD) under the California Endangered Species Act. Also considered are species listed as Fully Protected (FP) and Species of Special Concern (SSC).
- **CNPS Status:** All California Rare Plant Ranks (CRPR) maintained by the CNPS *Inventory of Rare and Endangered Plants*.

Occurrence Potential

Based on the desktop review, field surveys, and habitat analyses, Bargas generated a list of special-status species for evaluation and assessed the potential for each special-status species likelihood of occurrence on-site. Biological conditions (e.g., vegetation communities, habitats, disturbances, etc.) on-site as well as the habitat and life cycle requirements of special-status species identified for the potential to occur analysis were considered. "Recent" occurrences are defined as observed within the past 30 years. Based on these considerations, each species was assigned a level of potential to occur, using the following categories:

- **Present:** Species was detected during biological surveys conducted for the Project by Bargas.
- **High**: Species with recorded occurrence(s) within or near the Study Area and suitable habitat (e.g., appropriate elevation, hydrology, soils, cover, habitat type, food resources, and etc.) exists in the Study Area; however, the species was not observed during biological surveys for the Project.
- **Moderate:** Species with no known recorded occurrence(s) within or near the Study Area and the species was not observed during biological surveys for the Project. However, habitat within the Study Area is suitable to support the species.
- **Not Expected:** Species with no known recorded occurrence(s) within or near the Study Area. No suitable habitat present on-site; or habitat is within the Project, but habitat on-site is substantially disturbed, fragmented, or is small in extent such that is very unlikely to support the species.
- **Presumed Absent:** There are no records of the species occurring within or near the Study Area, the Study Area is not within the known geographic range for the species, and/or suitable habitat (e.g., soil, vegetation, elevational range, etc.) was not found during the field surveys conducted for the Project. This species is detectable year-round and would have been detected during surveys, but was not, or focused surveys were conducted for the species and the species was not detected.

The potential for bird species were further distinguished into those that may: 1) nest within or near the Study Area; 2) forage within or near the Study Area; and/or 3) occur on or near the Study Area only as transients during migratory flights or other dispersal events.

Field Surveys

Bargas Biologist Anthony Hartman performed a reconnaissance-level biological survey on September 28 and October 2, 2023. Weather was typical for the season with temperatures ranging from 66 °Fahrenheit (°F) to 75 °F, partly cloudy skies, and no substantial wind or precipitation on either day. On January 21, 2025, Bargas Biologist Corey Clapp conducted another reconnaissance-level field survey for biological resources to survey additional areas of the Project site that were not previously surveyed in 2023. The biological resources mapping was also updated and refined as appropriate. The weather was typical for the season with the temperature ranging from 54°F to 61°F and mostly clear skies with a light breeze.

These field surveys primarily consisted of walking meandering transects throughout the publicly accessible road rights-of-way (ROW) within the Project site. Other areas, outside of the ROW, were surveyed visually through the windshield/windows of the surveyor vehicle. Binoculars were used to assist in the survey as applicable. The Project site was evaluated for the presence of habitat components that could support special-status wildlife and plant species identified during the Literature and Database Review described above. Habitats that were determined to be potential habitat for a special-status species were further assessed for suitability.

The biologists conducted vegetation mapping, classifying vegetation communities and land cover types generally following the Manual of California Vegetation (MCV): Second Edition (CNPS 2022a), where applicable. The MCV provides standard classifications based on community composition and structure, with further definitions based on dominant species cover. Additionally, identified vegetation communities were also classified as outlined in Section 2.2.1 of the SJMSCP. The biological surveys conducted were comprehensive but do not equate to protocol–level surveys or focused surveys defined by the U.S. Fish and Wildlife Service (USFWS), U.S. Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), CNPS, Regional Water Quality Control Board (RWQCB), or other local resource protection agencies. To assist with the classification of observed aquatic resources, California Aquatic Resources Inventory (CARI) GIS database was used. Throughout the surveys, plant and animal species detected on site were recorded **(Appendix A)**.

One relatively small portion of the Project site, located in the southwest corner (i.e., a segment of South MacArthur Drive and two unnamed dirt roads), was not included within the field surveys. Biological resources mapping of this area was completed using aerial imagery as well as comparing other mapped areas of the Project that were surveyed in the field.

Seasonal and temporal factors may have influenced species detection during the surveys. The surveys were conducted in September and January and may have missed potentially occurring migrant bird/insect species or plant species outside of their blooming period. In addition, the surveys were performed during the day and were limited to diurnal wildlife species. The surveys performed were not protocol-level focused surveys. Dates, times, personnel, and weather conditions for the surveys are summarized in **Table 1** below.

Table 1. Survey Summary Table

Date	Biologist	Time	Start Conditions			End Conditions		
			Temperature	Clouds	Wind	Temperature	Clouds	Wind
9/28/2023	Anthony Hartman	0930 - 1530	66° Fahrenheit (F)	Partly cloudy	Calm	77°F	Partly cloudy	Calm
10/02/2023	Anthony Hartman	1100 – 1230	73°F	Partly cloudy	Calm	75°F	Partly cloudy	Calm
1/22/2025	Corey Clapp	1100-1515	52°F	Clear skies	Calm	65°F	Clear skies	Calm

Results

This section discusses what is known about biological resources in the Study Area based on information from the field surveys, 288 CNDDB records, 8 CNPS records, 14 IPaC records, and 1 critical habitat for Delta Smelt determination in the Regional Area.

Existing Conditions and Land Use

When viewing the Project site and surrounding Regional Area in its entirety on aerial photography, the primary land use of the region is agriculture. Natural habitats are present, consisting of interspersed annual grasslands. The Delta Mendota canal and the Edmund G. Brown California Aqueduct transect the Regional Area. There are no substantial terrain features present in the Regional Area and elevations within the Project site range from approximately 50 to 325 feet above mean sea level (AMSL).

Soils

Nine soil types are mapped within the Project site (NRCS 2025), as summarized in **Table 2** below with the types, parent material, drainage class, and hydric rating. A map showing soils on-site is provided as (**Figure 3**).

Table 2. Soil Series within the Project Site

Soil Series	Map Unit Number	Map Unit Symbol	Parent Material	Drainage Class	Hydric Rating
Capay clay, 0 to 1 percent slopes, MLRA 17	118	2xc8q	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
Capay-Urban land complex, 0 percent slopes, MLRA 17	122	2y0dy	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
El Solyo clay loam, 0 to 2 percent slopes	156	Hhss	Alluvium derived from sedimentary rock	Well drained	No
Pits, gravel	214	N/A	N/A	N/A	No
Stomar clay loam, 0 to 2 percent slopes	252	Hhww	Alluvium derived from sedimentary rock	Well drained	No
Vernalis clay loam, 0 to 2 percent slopes	268	hhxd	Alluvium derived from mixed rock sources	Well drained	No
Willows clay, partially drained, 0 to 2 percent slopes	274	hhxl	Alluvium derived from mixed sources	Poorly drained	Yes
Zacharias clay loam, 0 to 2 percent slopes	281	hhxt	Alluvium derived from mixed rock sources	Well drained	No
Zacharias gravelly clay loam, 0 to 2 percent slopes	282	hhxv	Alluvium derived from mixed rock sources	Well drained	No



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

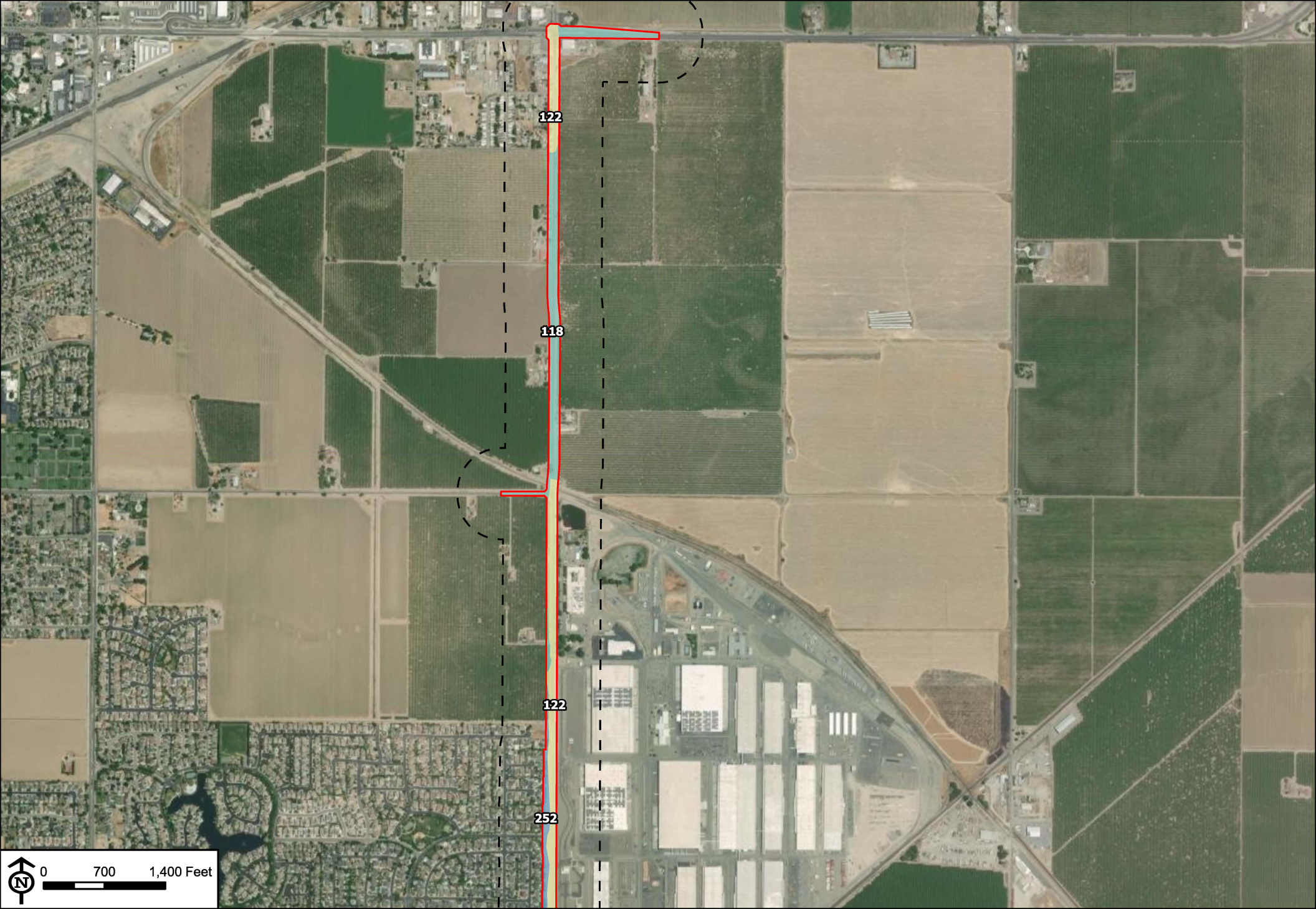
BARGAS Environmental Consulting

- Project Site
- Study Area
- 118 - Capay clay, 0 to 1 percent slopes, MLRA 17
- 122 - Capay-Urban land complex, 0 percent slopes, MLRA 17
- 156 - El Solyo clay loam, 0 to 2 percent slopes
- 214 - Pits, grave
- 252 - Stomar clay loam, 0 to 2 percent slopes
- 268- Vernalis clay loam, 0 to 2 percent slopes
- 274 - Willows clay, partially drained, 0 to 2 percent slopes
- 281 - Zacharias clay loam, 0 to 2 percent slope
- 282 - Zacharias gravelly clay loam, 0 to 2 percent slopes
- W - Water

Figure 3 Soils Map

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



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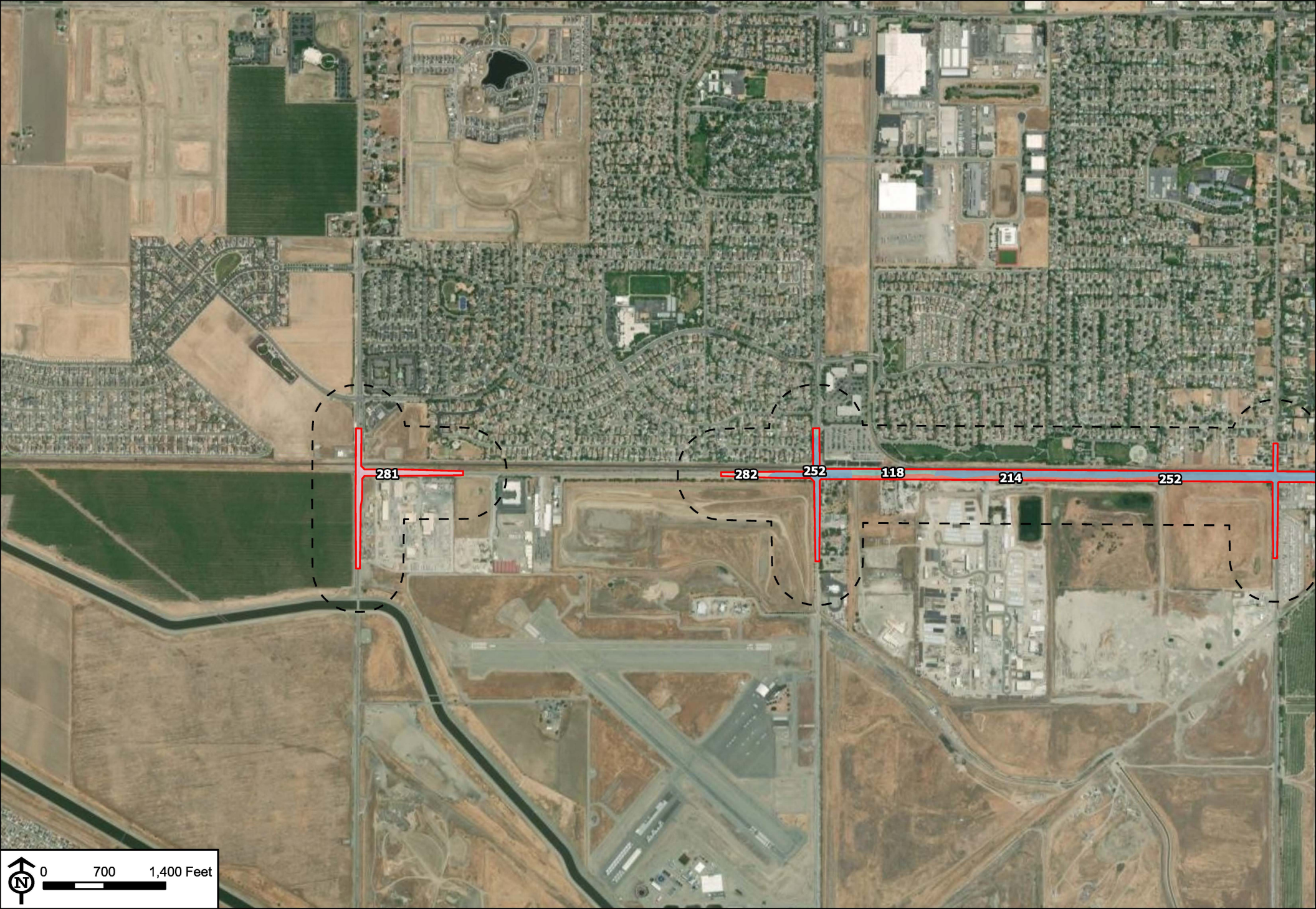

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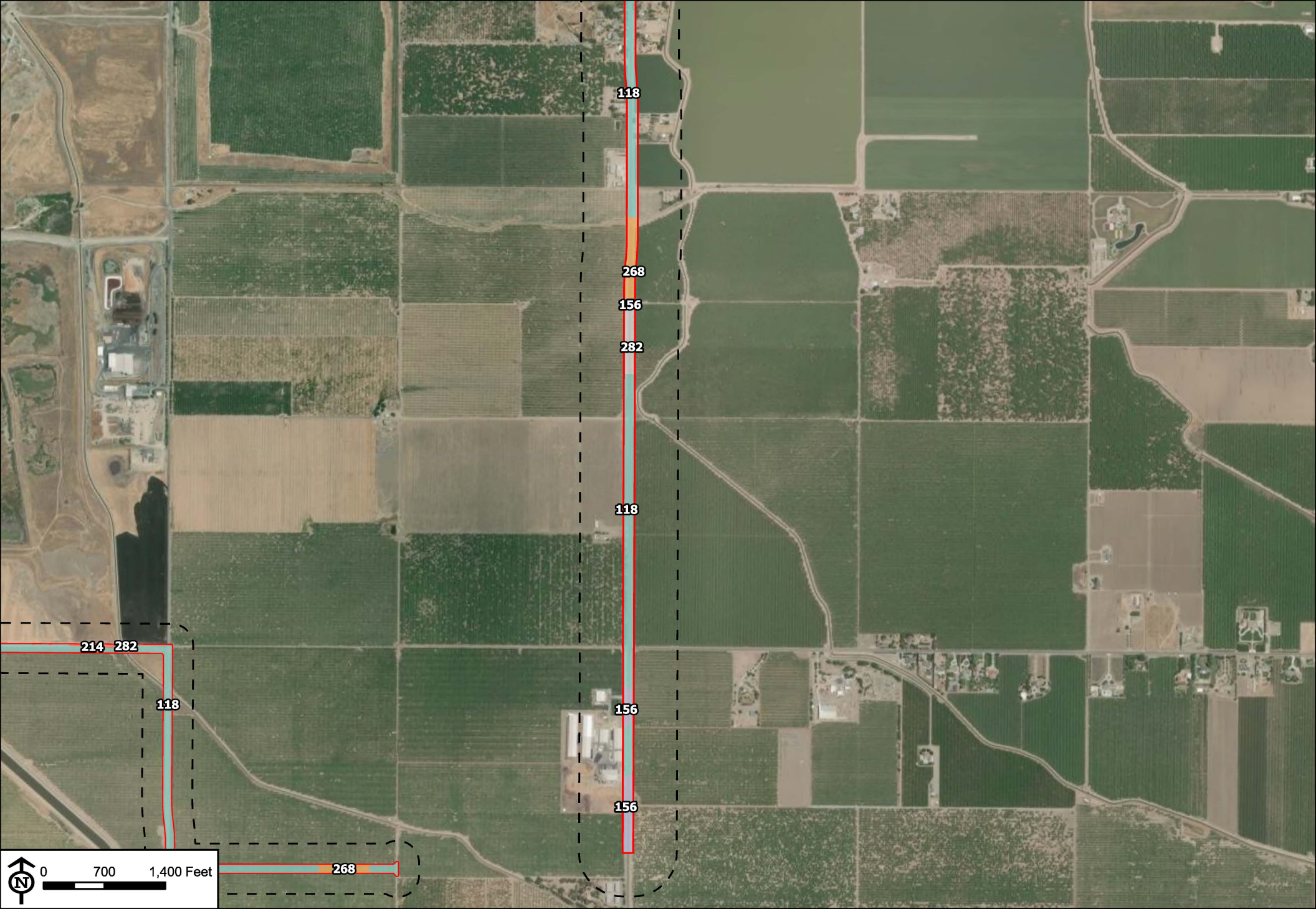

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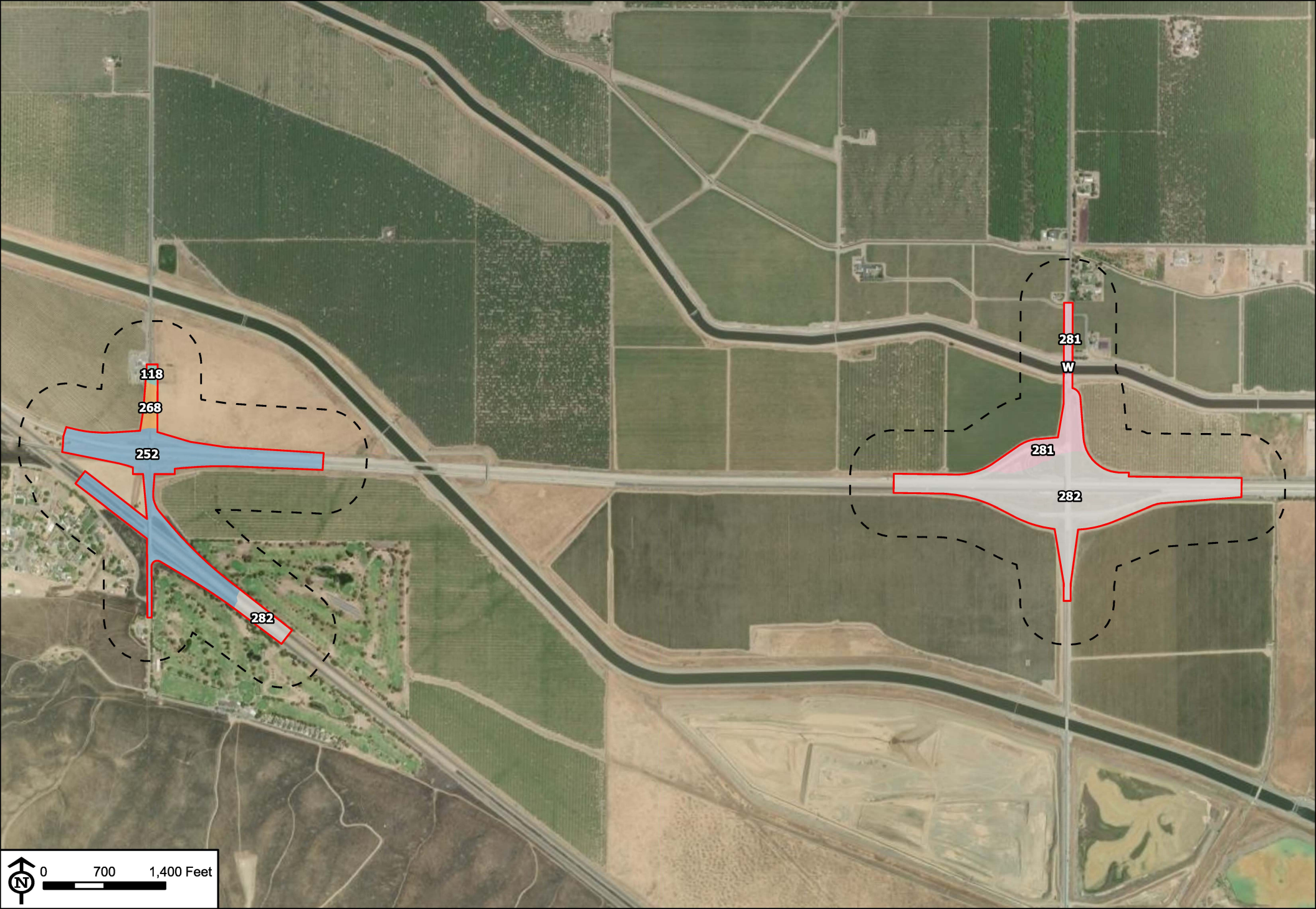

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Figure 3 Soils Map

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22

Vegetation Communities and Land Cover Types

The Project site was found to support six vegetation communities and land cover types as classified by CNPS MCV alliance definitions. These include Deciduous Orchards, Wild Oats and Annual Brome Grassland, Disturbed/Developed, Cultivated/Landscaped, Wetlands, and Canal. Considering these classifications, a crosswalk to vegetation communities described by SJMSCP was completed, correlating to: Orchards and Vineyards (C2), Valley Grasslands (G), Scraped/Paved Areas (U2), Cultivated/Landscaped (U3), and Freshwater Emergent Wetlands (W7), respectively. The Delta-Mendota Canal, the Lateral Five East Canal, and an unnamed concrete-lined canal bisect the Project site and are classified as Canal (W9) by the SJMSCP (**Figure 4**).

Disturbed/Developed

The majority of the Project site is comprised of disturbed roadside areas, paved and unpaved roads, as well as developed retail, residential, industrial, and agriculture lots. This landcover type is classified as "Scraped/Paved Areas (U2)" in the SJMSCP. The main paved roads within the Project site include South Chrisman Road, West Linne Road, and South Macarthur Drive along with various intersections and Western Pacific Railroad. These areas are mapped as the Disturbed/Developed.

Cultivated/Landscaped

In residential areas along South Chrisman Road and West Linne Road, typical residential landscaping such as sod grass and ornamental trees were observed. Additional plantings along manufacturer lots included species such as oleander (*Nerium oleander*), and Toyon (*Heteromeles arbutifolia*). This landcover type is classified as "Golf Courses/Cultivated Parks (U3)" in the SJMSCP. These communities are mapped as Cultivated/Landscaped and appear to be maintained by regular trimming.

Deciduous Orchards

The areas surrounding the Project site primarily used for agriculture are mapped as Deciduous Orchards. This landcover type is classified as "Orchards and Vineyards (C2)" in the SJMSCP. The primary crops grown within this vegetation community consist of almonds (*Prunus dulcis*) and peaches (*Prunus persica).* The orchards have been developed for weed control resulting in limited plant growth. Some areas have been treated with a layer of straw for an additional level of weed suppression. Non-orchard agricultural fields were observed on-site, on either side of South Chrisman Road, that are included within the Orchard classification as well.

Annual Grassland

An open, non-cultivated, roadside field immediately north of Highway 132 near the intersection of South Chrisman Road is comprised of the Valley Grassland vegetation community and is consistent with the *Avena* spp. - *Bromus* spp. Herbaceous Semi-Natural Alliance (wild oats and annual brome grasslands; CNPS 2025). This vegetation community is classified as "Valley Grassland (G)" in the SJMSCP. This community is also found in two areas west of South Chrisman Road where the Project site overlaps open fields. Vegetation consists of non-native annual grasses.

Wetlands

The Project site also contains freshwater emergent wetlands, located where Corral Hollow Creek bisects South Chrisman Road, and at the Vernalis Road and South Bird Road intersection. This vegetation community is classified as "Freshwater Emergent Wetlands (W7)" in the SJMSCP. These features, mapped as Wetlands, lacked vegetation and showed signs of heavy anthropogenic disturbance.

Canal

Open water in the form of the Delta Mendota Canal, the Lateral Five East Canal, and an unnamed concrete-lined canal were found on the Project site and mapped accordingly as Canals. The Delta Mendota Canal was observed to be inundated and flowing, predominantly lacking vegetation cover.

Sensitive Vegetation Communities

CDFW identifies sensitive communities according to rarity, trends, and other ecological threats and assigns natural vegetation communities a global (G) and state (S) sensitivity rank (CNPS 2022b). Surveys across the Project site found the site does not contain vegetation community alliances identified by CDFW and CNPS as a sensitive natural community (CNPS 2022b). Additionally, no sensitive vegetation communities were mapped by the CNDDB within the Project site.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

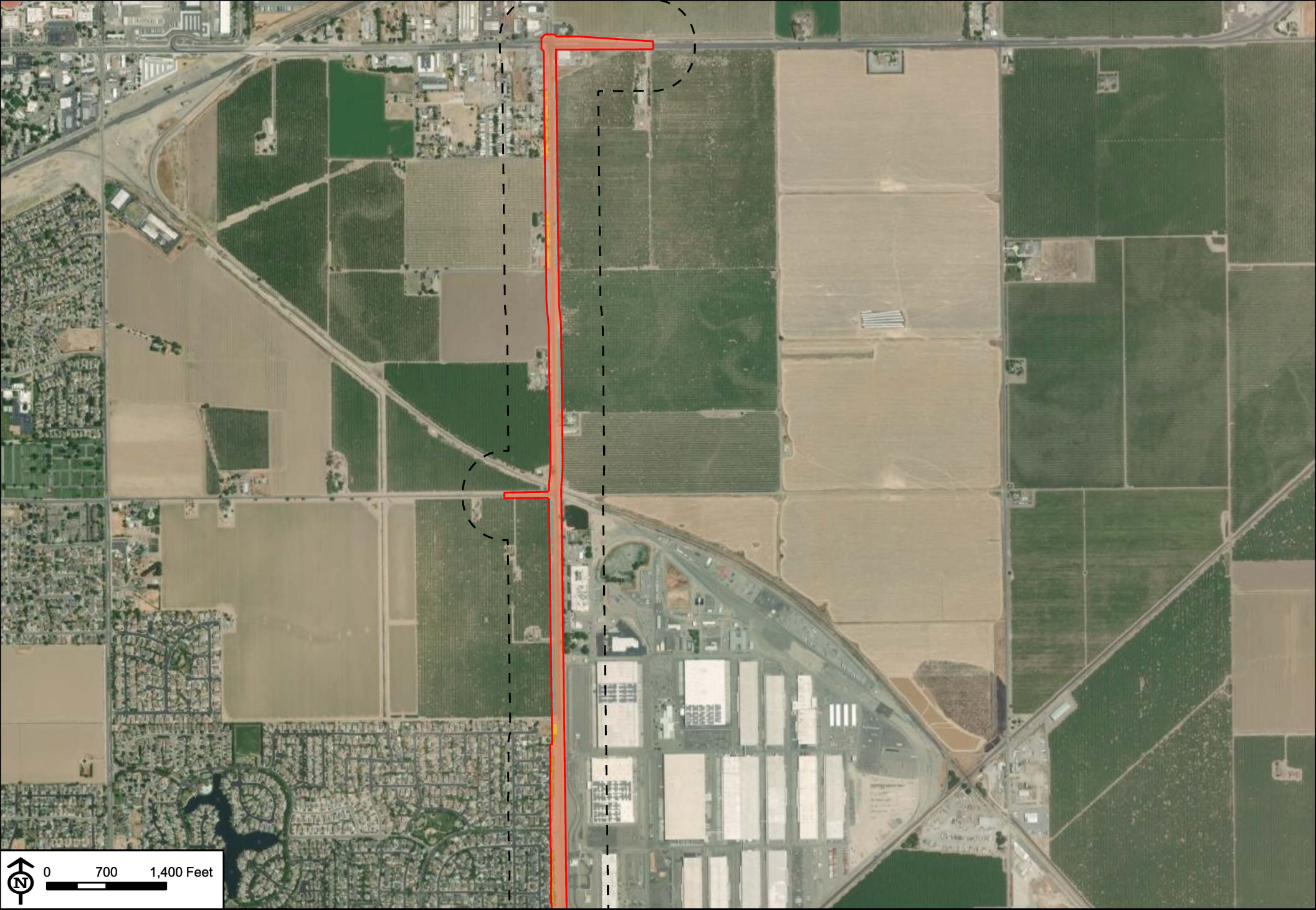
Vegetation Communities and Landcover Types

Canal (W9)
Cultivated/Landscaped (U3)
Deciduous Orchard (C2)
Disturbed/Developed (U2)
Wetland (W7)
Wild Oat and Annual Brome Grassland (G)

Figure 4 Vegetation and Land Cover

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



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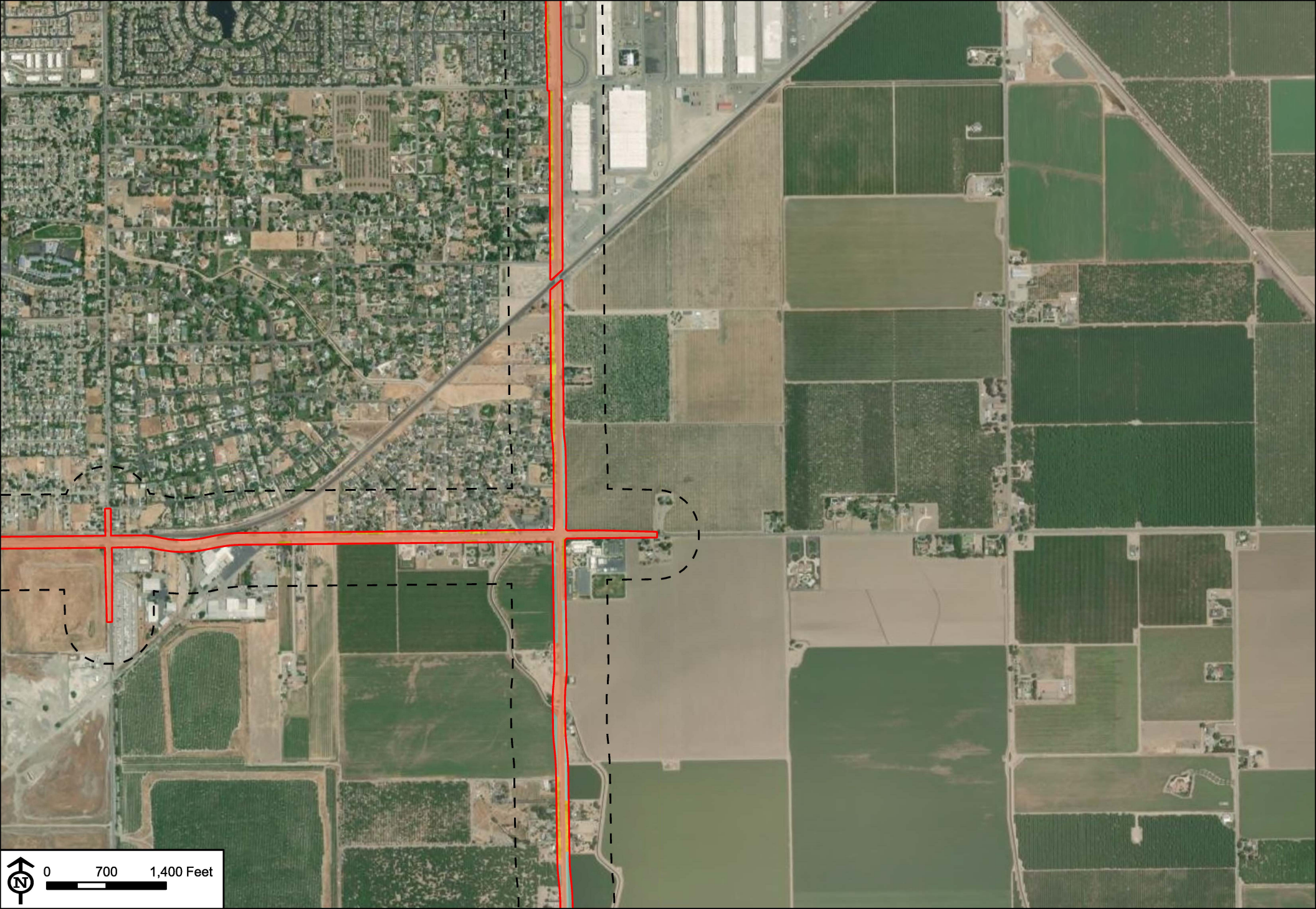

Figure 4 Vegetation and Land Cover

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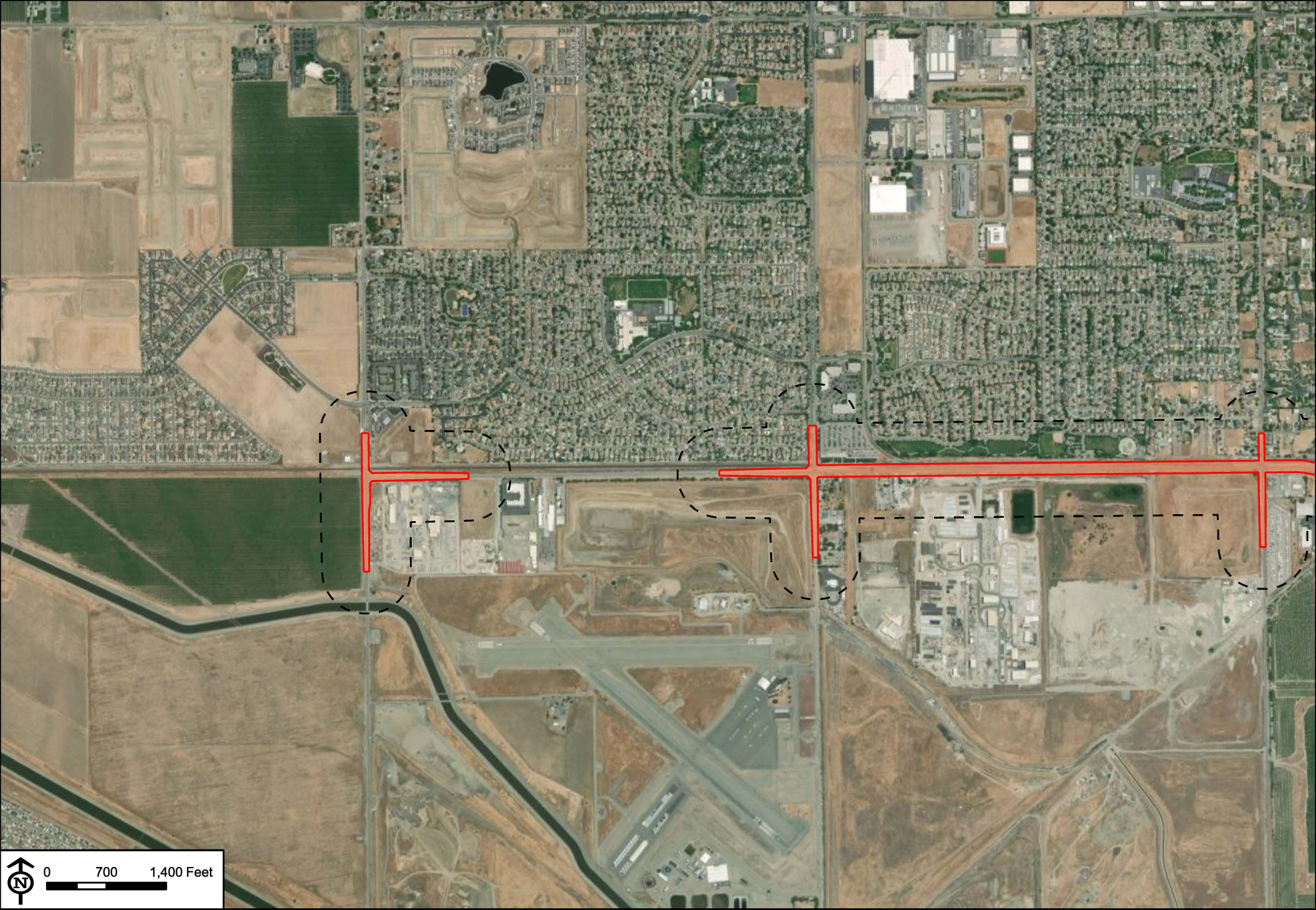

Figure 4 Vegetation and Land Cover

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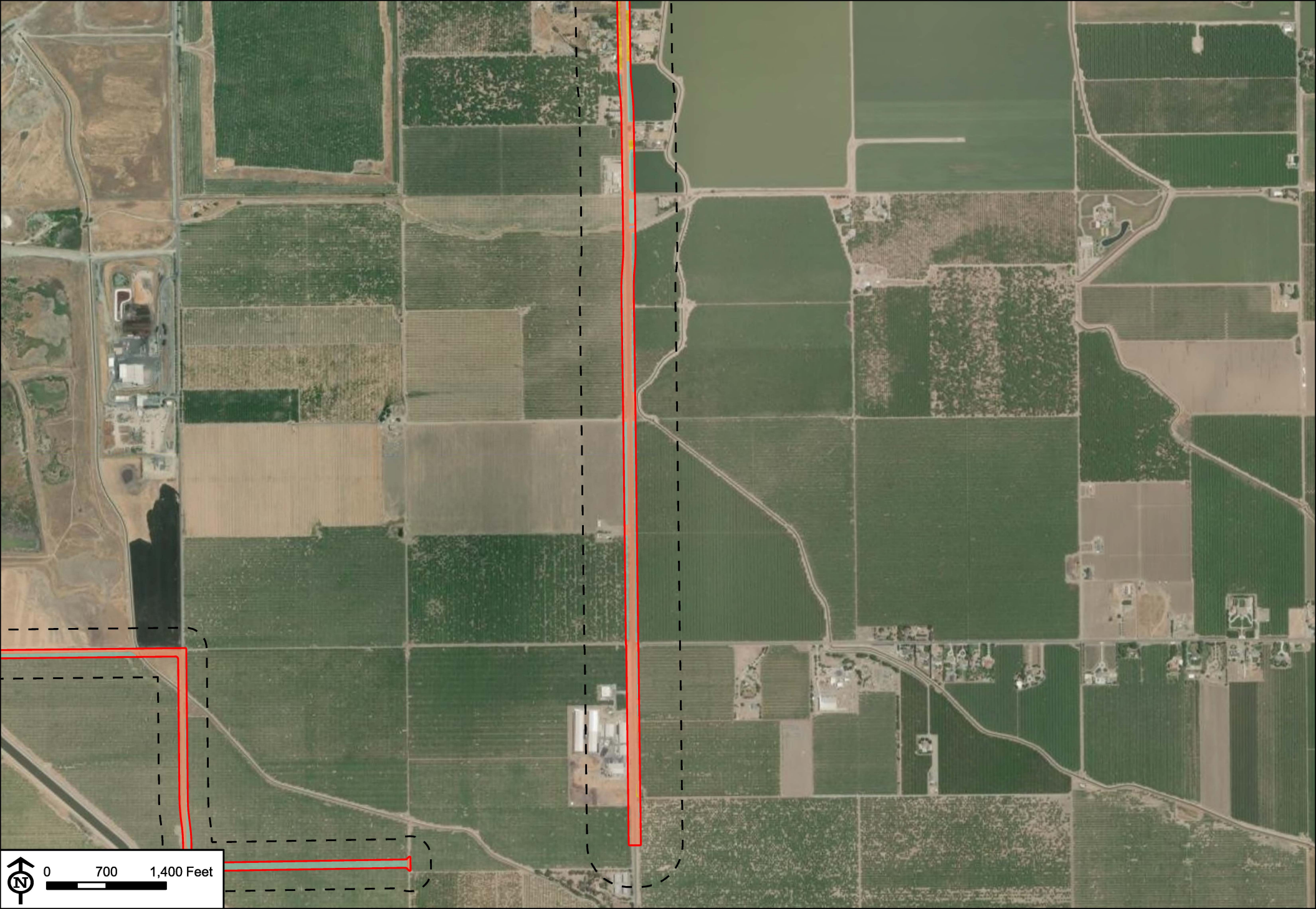


Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

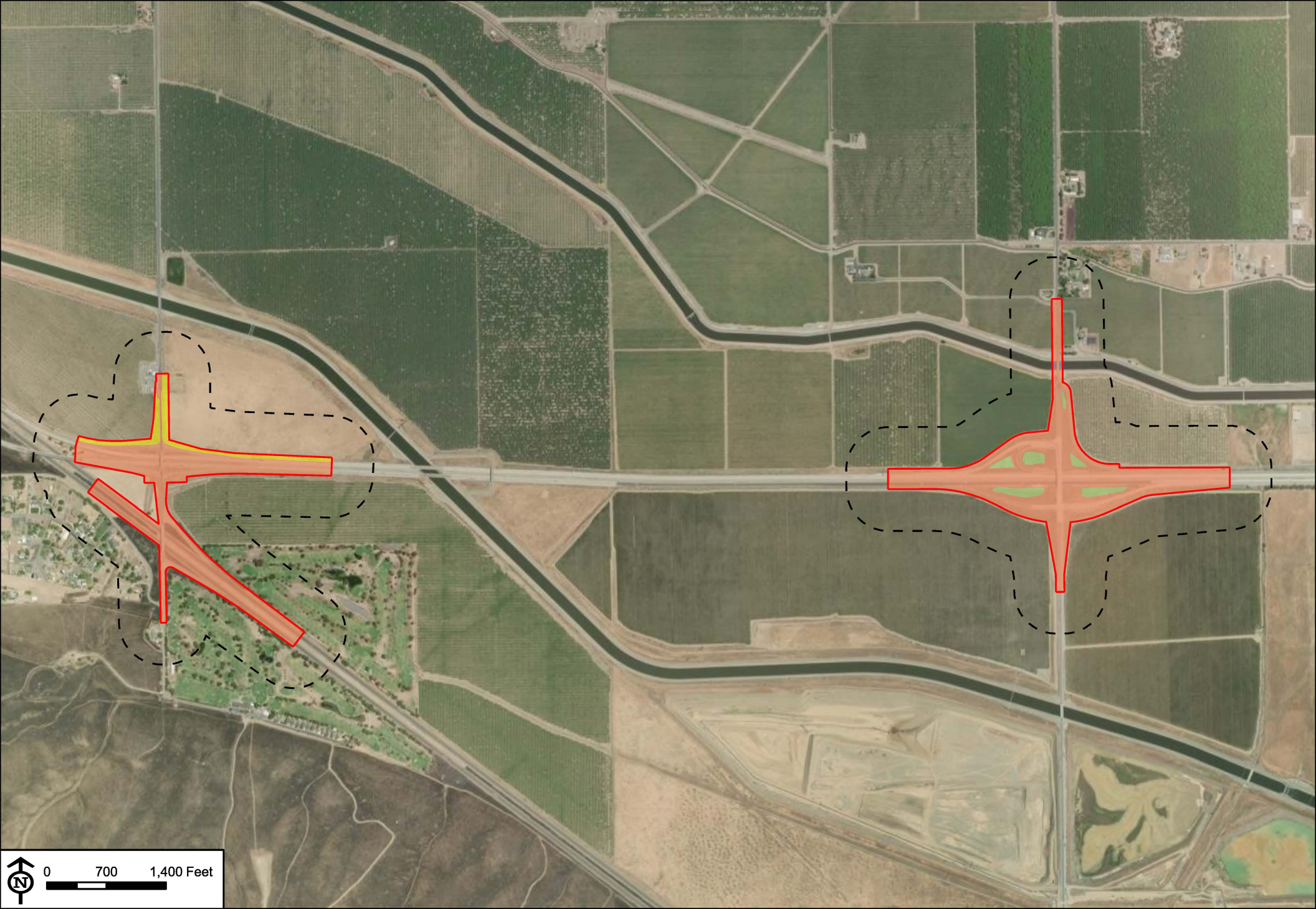
Vegetation Communities and Landcover Types

Canal (W9)
Cultivated/Landscaped (U3)
Deciduous Orchard (C2)
Disturbed/Developed (U2)
Wetland (W7)
Wild Oat and Annual Brome Grassland (G)

Figure 4 Vegetation and Land Cover

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

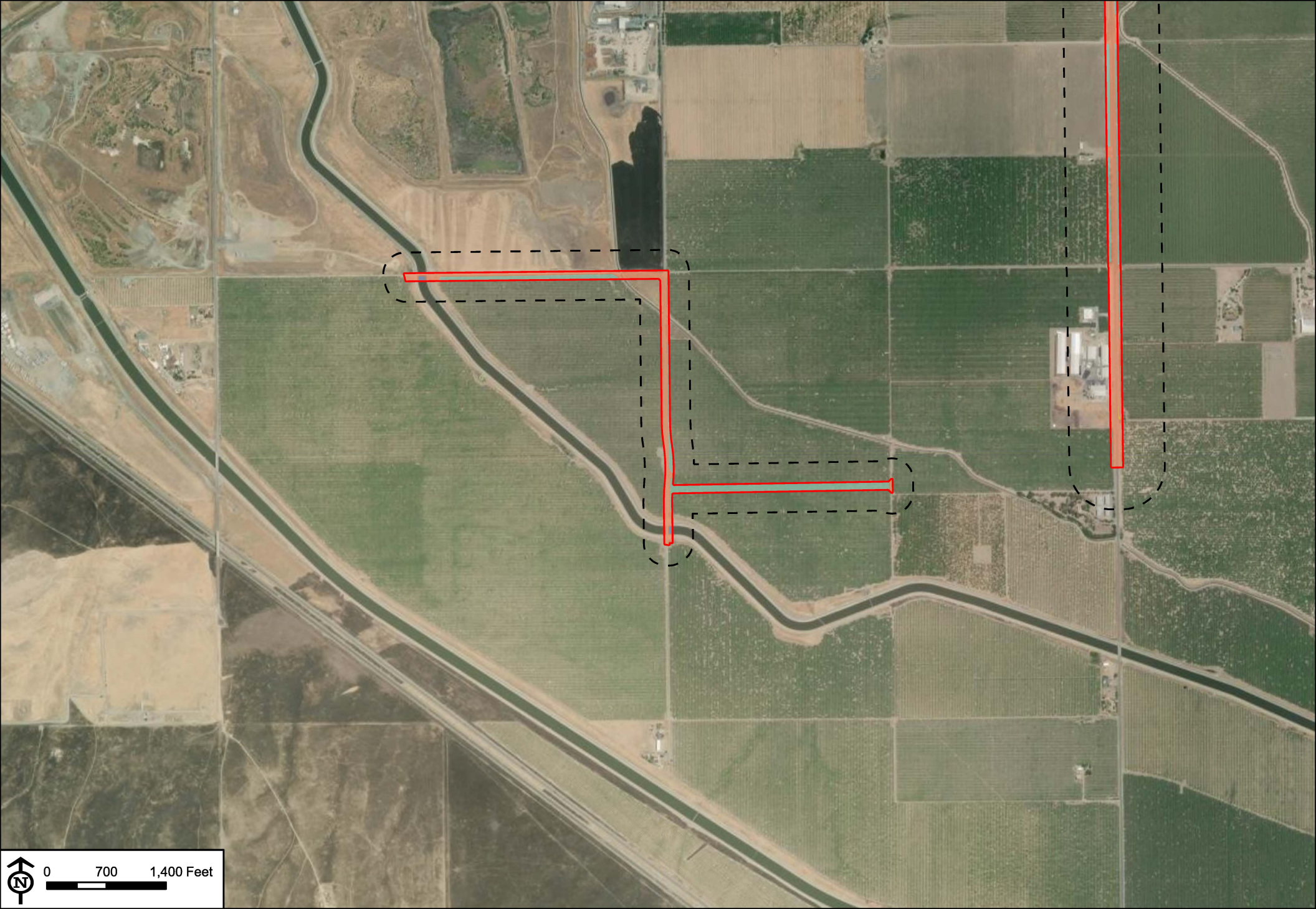
Vegetation Communities and Landcover Types

Canal (W9)
Cultivated/Landscaped (U3)
Deciduous Orchard (C2)
Disturbed/Developed (U2)
Wetland (W7)
Wild Oat and Annual Brome Grassland (G)

Figure 4 Vegetation and Land Cover

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Figure 4 Vegetation and Land Cover

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22

Aquatic Resources

Aquatic features were observed on-site and consisted of concrete-lined canals, Corral Hollow Creek, a biological swale, wetlands, and roadside ditches. These features have been broadly classified as Canals, Wetlands, and Roadside Ditches (**Figure 5**). Multiple segments of concrete-lined canals intersect the Project site along South Chrisman Road, West Linne Road, South Bird Road, South MacArthur Drive, and an unnamed, unpaved farm road. These segments are components of the Delta-Mendota Canal, the Lateral Five East Canal, and an unnamed concrete-lined canal. Additionally, although the proposed Project does not currently include roadwork at/over the California Aqueduct, South Chrisman Road bridge widening over the California Aqueduct is expected, which would be completed at a later date; thus, the California Aqueduct is also discussed in this report.

Corral Hollow Creek also intersects the Project site at South Chrisman Road and is classified as a Canal for mapping purposes in this report. Corral Hollow creek, a freshwater tributary of the San Joaquin River, as well as the Delta Mendota Canal and the California Aqueduct are identified by the USACE Sacramento District as a Traditionally Navigable Water (TNW); thus, they are potentially subject to regulation within Section 10 of the Rivers and Harbors Act under the jurisdiction of USACE. Waters subject to Section 10 of the Rivers and Harbors Act are also considered waters of the U.S. subject to regulation by USACE under Section 404 of the Clean Water Act (CWA). Based on a review of aerial imagery and CARI, the Lateral Five East Canal and the unnamed concrete-lined canal were not presumed to have a hydrologic connection to any TNWs; as a result, these features are not subject to regulation by USACE under Section 404 of the CWA. Further, the Delta-Mendota Canal, the California Aqueduct, the Lateral Five East Canal, Corral Hollow Creek, and the unnamed concrete-lined canal may also be considered waters of the State, regulated by the Central Valley Regional Water Quality Control Board (CVRWQCB). Additionally, because these features contain a bed and bank, they would be subject to potential regulation by CDFW under Section 1600 of CDFW California Fish and Game Code (CFGC).

Other aquatic resources found on-site consist of freshwater emergent wetlands. Although a formal jurisdictional delineation was not performed for these areas, due to the conditions observed on-site, it was assumed that these wetlands had similar soils, hydrology, and vegetation to Water Basin 2 (WO2), which was determined to be a potential water of the State due to the presence of hydric soils and hydrology within the basin during a jurisdictional delineation performed by Bargas in 2023 for the Pacific Gateway Specific Plan Project (Bargas 2023). Thus, for purposes of this report these freshwater emergent wetlands found at the Project site were considered to be wetland waters of the State. Located alongside Highway 132, these substantially disturbed emergent wetlands serve as roadside detention basins, which are isolated (i.e., not connected) to other aquatic features and serve to collect stormwater runoff from the adjacent roadways. Trash and other debris were observed on-site within and around these basins. Given their isolated position in the landscape and the similarity to other aquatic features, such as Water Basin 2 (WO2), that met wetland criteria, these areas are considered potentially jurisdictional by the CVRWQCB per the Porter-Cologne Water Quality Act (Bargas 2023). Because these features do not contain a bed or bank, they would not be subject to potential regulation under Section 1600 of the CFGC by CDFW.

In addition to the wetlands features found on-site, eight roadside ditch features were also identified during the surveys. Four roadside ditches are interspersed on the east and west sides of South Chrisman Road, and one roadside ditch runs along the south side of West Linne Road, east of the South Tracy Boulevard intersection. Another roadside ditch on-site flows between the northwest- and southeast-bound West 11th Street, passing through three culverts and under Kasson Road. Where Chrisman Road intersects Vernalis Road and Interstate 580, there are two additional roadside drainages, connected by culverts. Additionally, a swale feature was observed on the east side of Chrisman Road, south of the intersection with West Linne Road, in the Jefferson School parking lot. This swale was also classified as roadside ditch for mapping purposes. All roadside ditches observed on-site as well as the swale feature were considered isolated; due to the lack of hydrologic surface connectivity to nearby or downstream aquatic features, such as the canal/creeks or wetlands features discussed above. Therefore, these features are potentially subject to CVRWQCB jurisdiction only per the Porter-

Cologne Water Quality Act. Because these ditch features do contain a bed and bank, they would be subject to potential CDFW jurisdiction and regulation under Section 1600 of the CFGC.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

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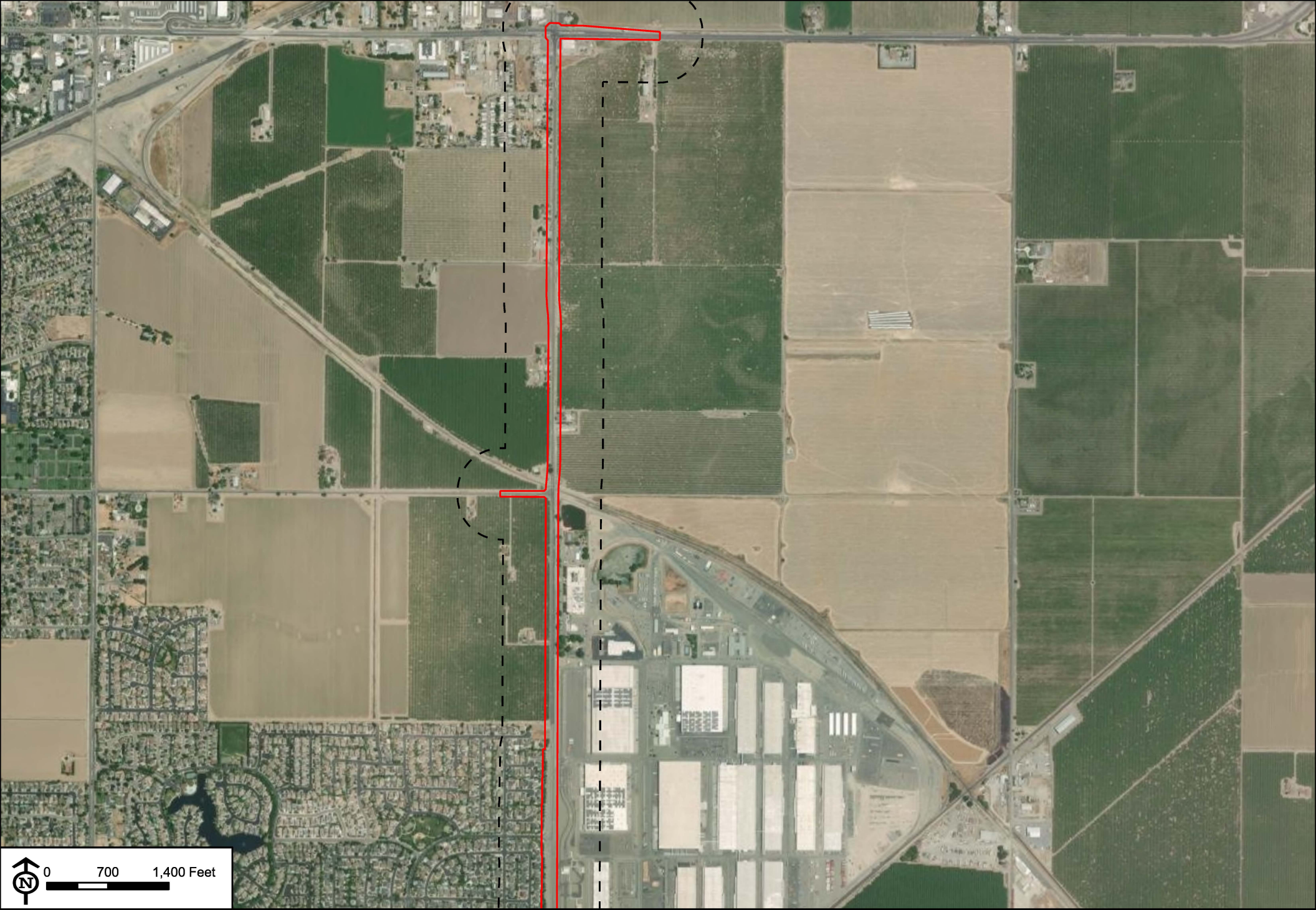
Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

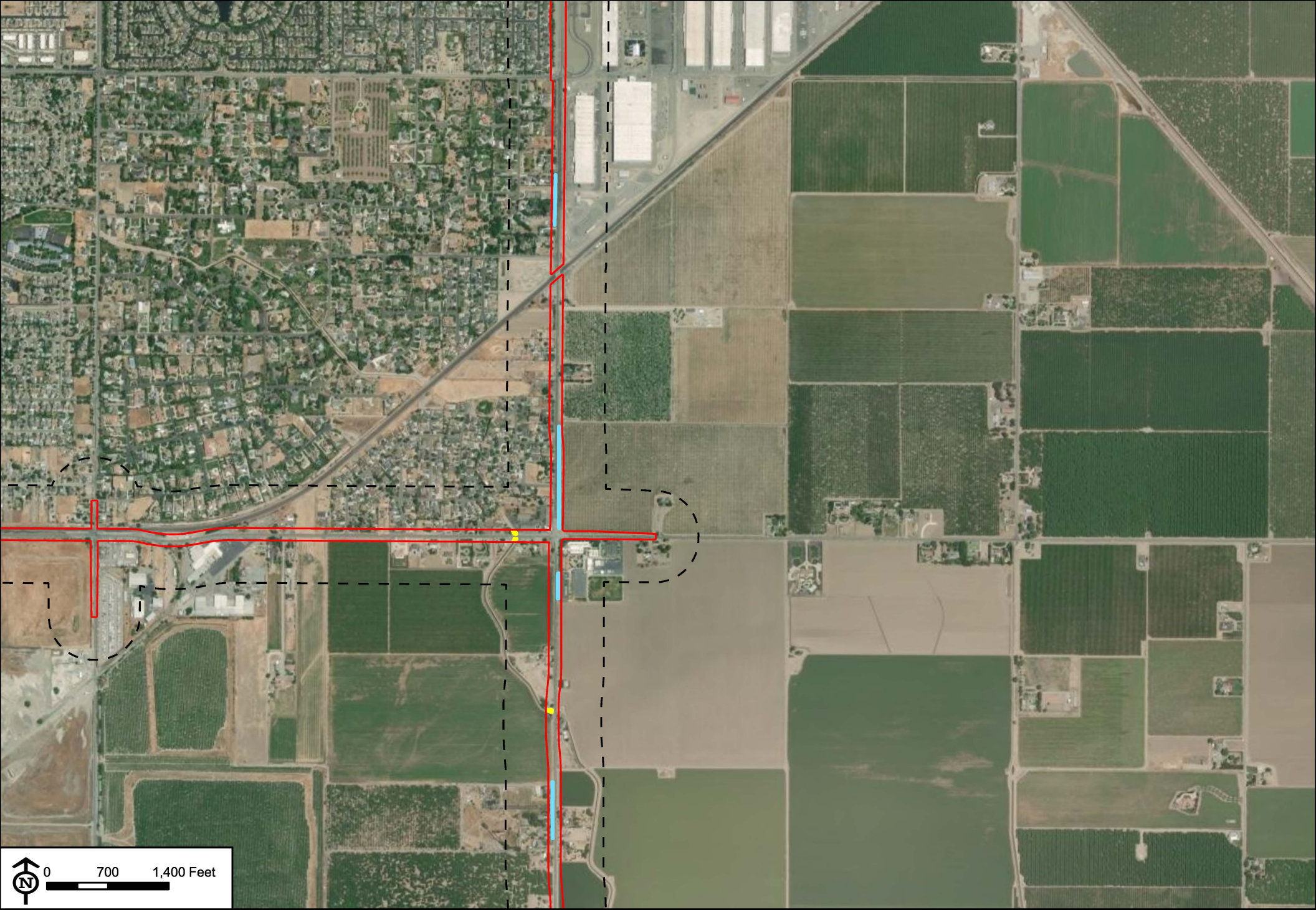
Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

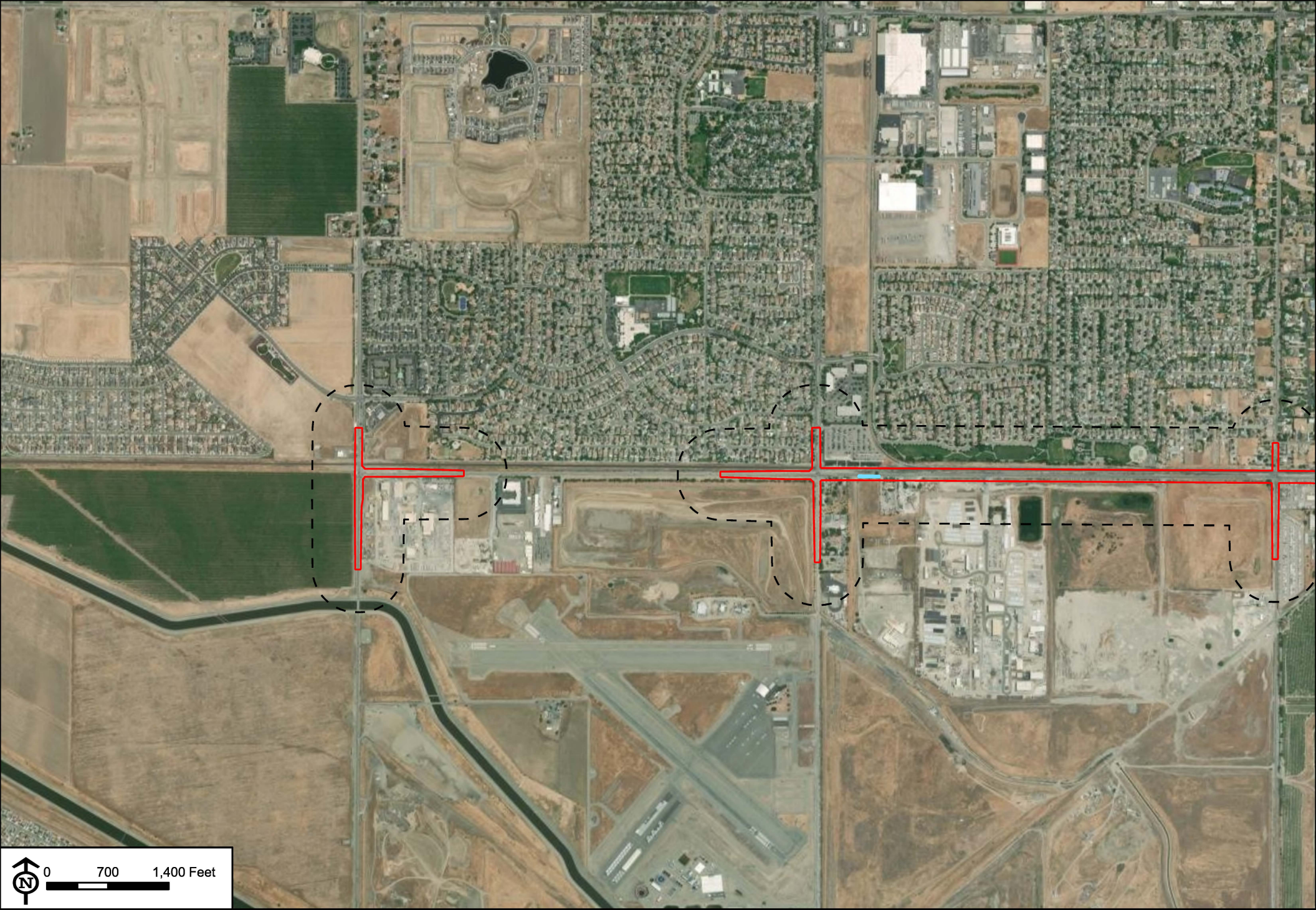
Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

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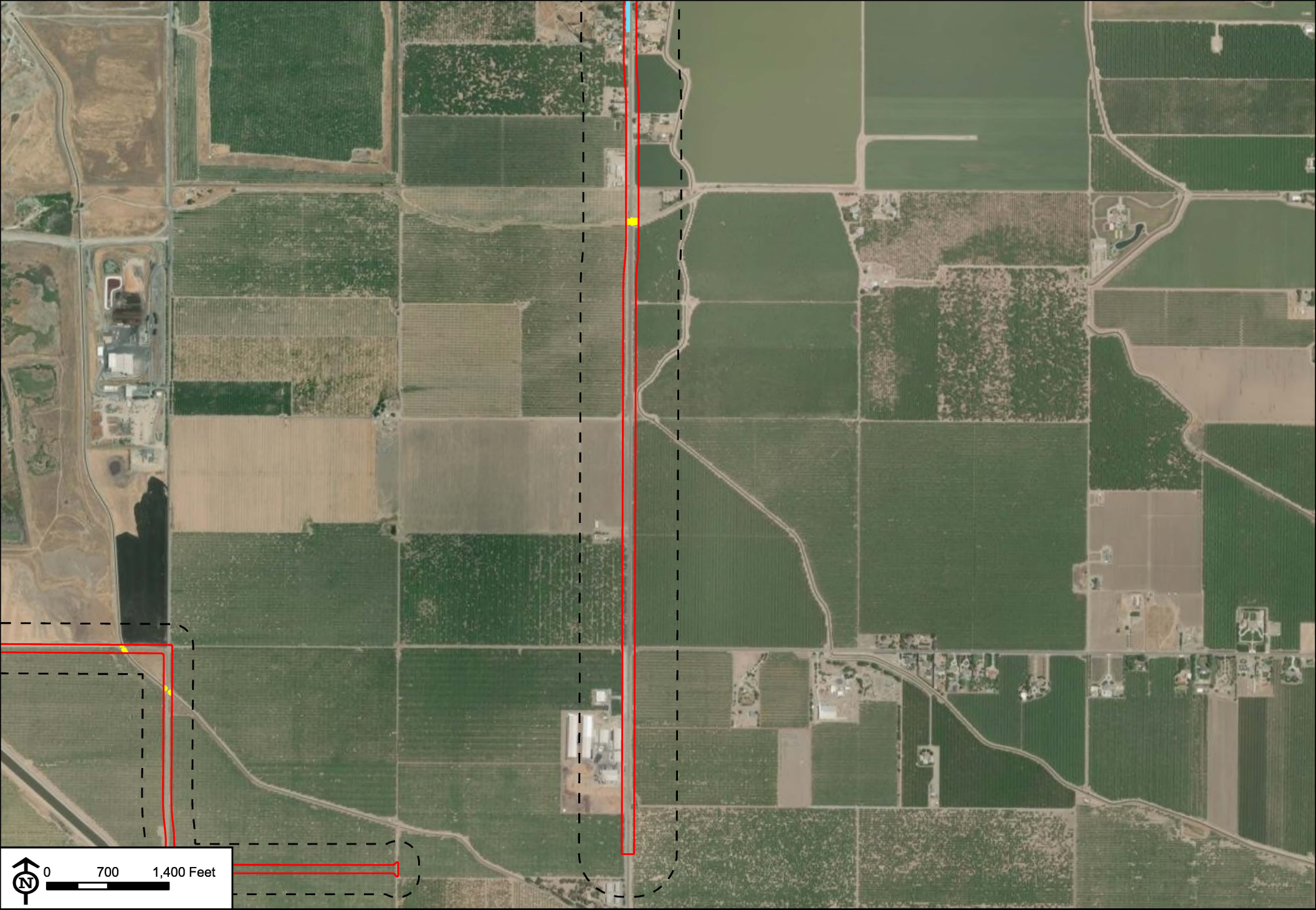

Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

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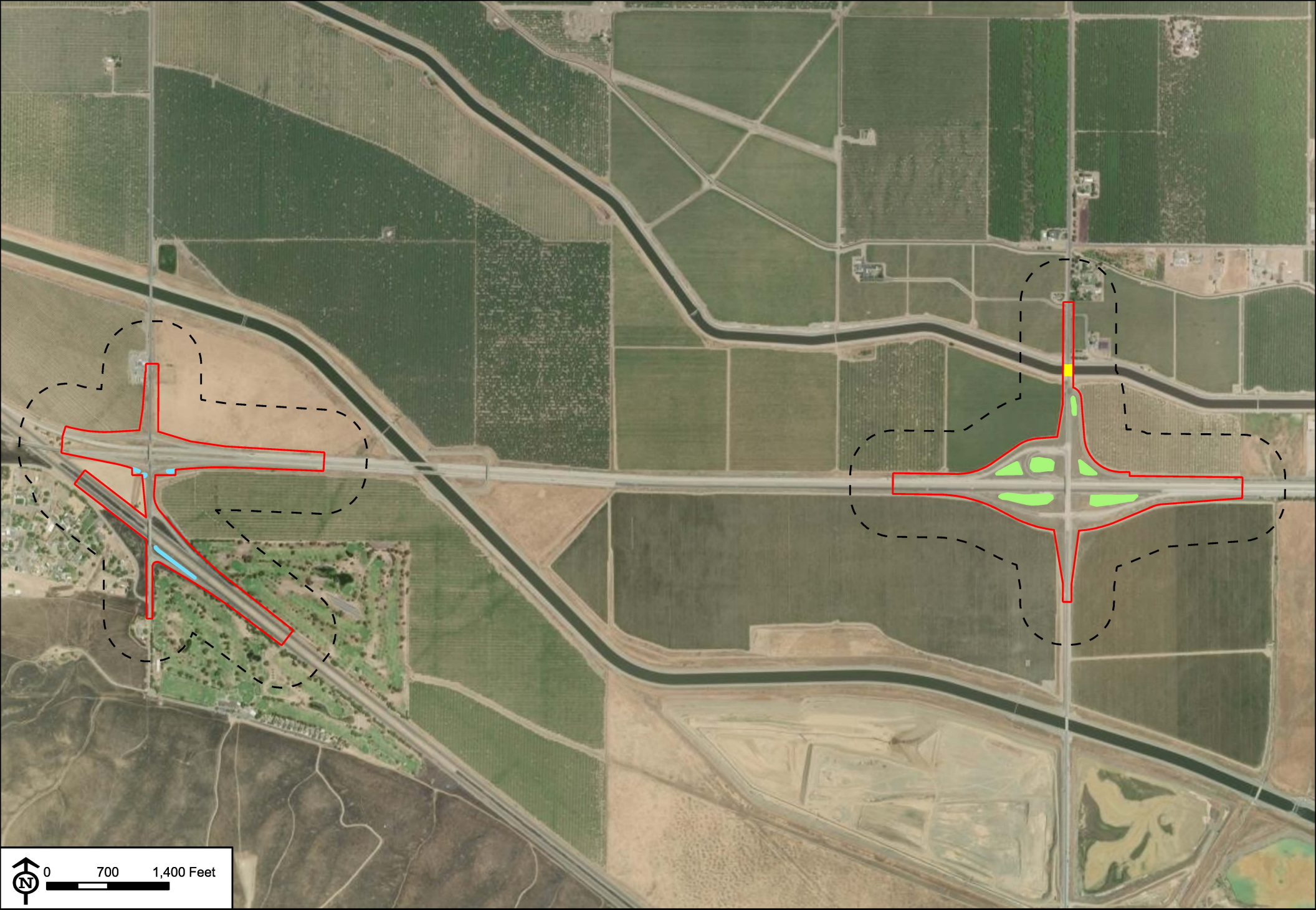

Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

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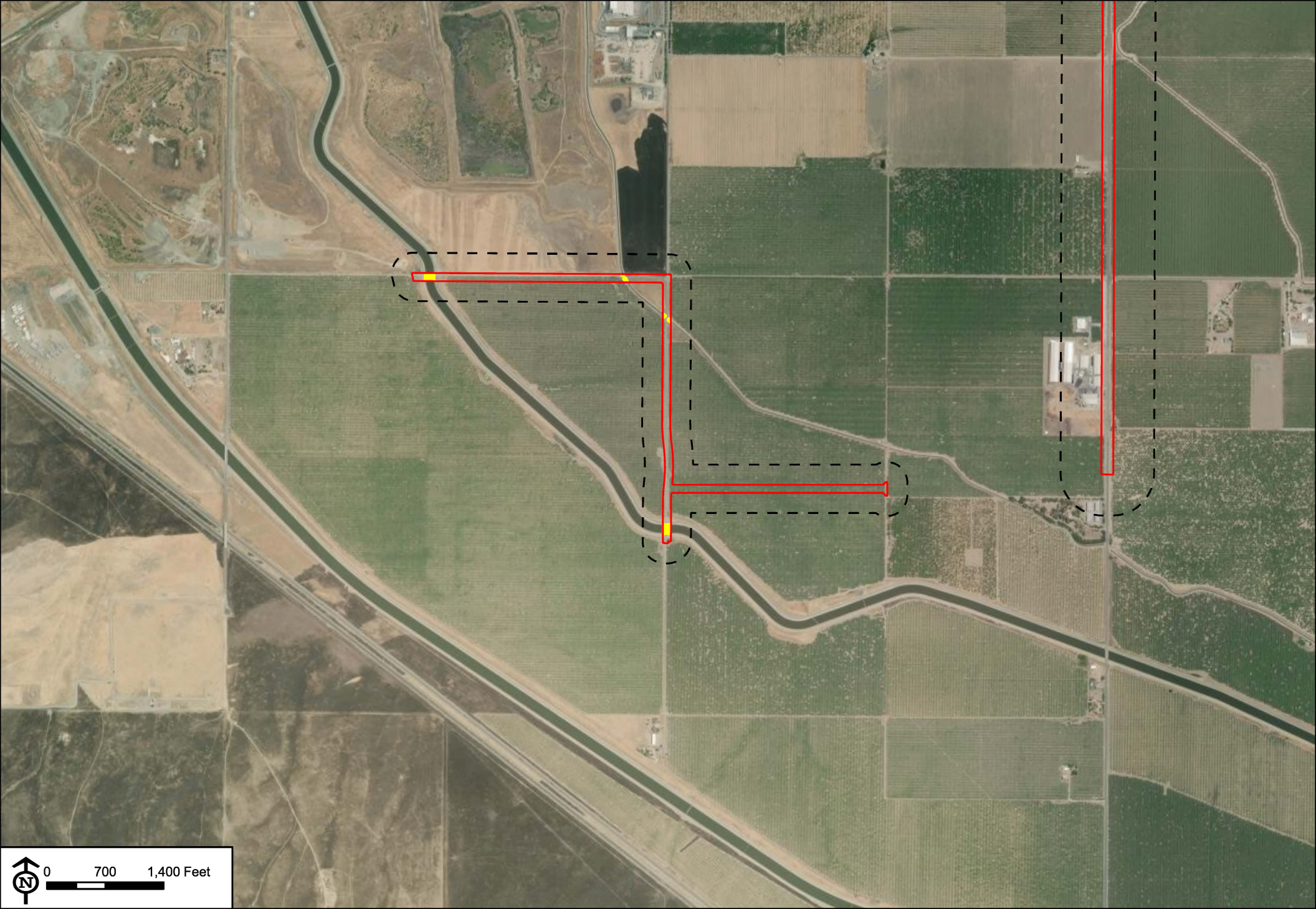


Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (6/2024)

BARGAS Environmental Consulting

Project Site
Study Area

Potentially Jurisdictional Aquatic Resources
Canal
Roadside Ditch
Wetland

Figure 5 Aquatic Resources

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/7/2025, Map Revised: N/A, Bargas Project Number: 1644-22

Plants

A total of 59 plant taxa were detected during the field surveys. A list of all plant taxa detected during the field surveys is provided in **Appendix B**.

The desktop review found that 13 plant taxa with special-status had been documented as occurring within the Regional Area. These taxa and their potential for occurrence on-site are summarized below and presented in **Appendix C**.

- No special-status plant taxa from desktop analysis were determined to be **Present** in the Study Area.
- No special-status plant taxa from desktop analysis were determined to have **High** potential for occurrence in the
- No special-status plant taxa from desktop analysis were determined to have **Moderate** potential for occurrence in the Study Area.
- Five special-status plant taxa from desktop analysis were determined to be **Not Expected to Occur** in the Study Area, which are presented below.

Delta Button Celery

Apiaceae > *Eryngium racemosum*

FESA: None, CESA: Yes, CRPR 1B.1, SJMSCP Covered Species

California Endemic:	True
Growth Habit:	Annual herb, which blooms June-October
Habitat Requirements:	Freshwater wetlands and vernally mesic clay depressions, often associated with riparian scrub at elevations ranging from 10 to 100 feet AMSL.
Inclusion Source(s):	CNPS, SJMSCP
Nearest CNDDB Record:	None
Habitat Present:	Low Quality
Soils Present:	Unknown
Determination Reason:	The Project site contains wetland areas however, this habitat is unlikely to support this species due to substantial disturbance associated with the proximity to Highway 132. Given the isolated areas where this species might occur, this species would have been detected during the survey, if present. However, no individual plants were observed during either site visit, one of which was conducted within the blooming period. This species is considered locally extirpated.

Diamond-petaled California poppy

Papaveraceae > *Eschsholzia rhombipetala*

FESA: None, CESA: None, CRPR 1B.1, SJMSCP Covered Species

California Endemic:	True
Growth Habit:	Annual herb blooms March-April
Habitat Requirements:	Valley grassland at elevations ranging from 0 to 3200 feet AMSL.
Inclusion Source(s):	CNPS
Nearest CNDDB Record:	None
Habitat Present:	Low Quality
Soils Present:	Yes. Clay soils are present in the Study Area.

Determination Reason: The Project site contains annual grassland with clay soils along South Chrisman and Vernalis Road, but the grassland area is minimal and heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Additionally, the closest records are greater than five miles from the Project site.

Caper-fruited tropidocarpum

Brassicaceae > *Tropidocarpum capparideum*

FESA: None, CESA: None, CRPR 1B.1

California Endemic: True
Growth Habit: Annual herb blooms March-April
Habitat Requirements: Valley and foothill grassland at elevations ranging from 5 to 1,495 feet AMSL.
Inclusion Source(s): CNPS
Nearest CNDDB Record: 0.51 miles west
Habitat Present: Low Quality
Soils Present: Unknown
Determination Reason: The Project site contains annual grassland along South Chrisman and Vernalis Road however, this habitat is minimal and heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Additionally, there are no recent records of this species within five miles of the Project site.

Big Tarplant

Asteraceae > *Blepharizonia plumosa*

FESA: None, CESA: None, CRPR 1B.1

California Endemic: True
Growth Habit: Annual herb blooms July-October
Habitat Requirements: Valley and foothill grassland at elevations ranging from 100 to 1,655 feet AMSL.
Microhabitat: Clay (usually)
Inclusion Source(s): CNDDB, CNPS
Nearest CNDDB Record: 0.5 miles west
Habitat Present: Low Quality
Soils Present: Unknown
Determination Reason: The Project site contains annual grassland with clay soils, but the grassland area along South Chrisman and Vernalis Road is minimal, heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Unmanaged grassland areas are not large enough to support a potential population. Big tarplant occurs only in a few highly restricted populations.

Showy Golden Madia

Asteraceae > *Madia radiata*

FESA: None, CESA: None, CRPR 1B.1

California Endemic: True
Growth Habit: Annual herb blooms March-May

Habitat Requirements:	Cismontane woodland, Valley and foothill grassland at elevations ranging from 80 to 3,985 feet AMSL.
Inclusion Source(s):	CNDDB, CNPS
Nearest CNDDB Record:	3.95 miles west
Habitat Present:	Low Quality
Soils Present:	Unknown
Determination Reason:	This species is known to inhabit grasslands and oak woodlands with clay soils. Oak woodlands are not present within the Project site to support this species. Although the Project site contains annual grassland along South Chrisman and Vernalis Road, the grassland area is minimal, heavily disturbed, and the species may be outcompeted for space by non-native grassland species.

- The following four (4) special-status plant taxa from desktop analysis were determined to have **No** potential for occurrence and are **Presumed Absent** in the Study Area.

Slough Thistle

Asteraceae > *Cirsium crassicaule*

FESA: None, CESA: None, CRPR 1B.1

California Endemic:	True
Growth Habit:	Annual/perennial herb blooms May-August
Habitat Requirements:	Chenopod scrub, Marshes and swamps, Riparian scrub at elevations ranging from 10 to 330 feet AMSL.
Inclusion Source(s):	CNPS, SJMSCP
Nearest CNDDB Record:	None
Habitat Present:	Not Present
Soils Present:	No
Determination Reason:	The Project site does not contain chenopod or riparian scrub wetlands to support this species. Although wetlands were present, they were dry during the time of the survey and lacked wet soils necessary to support the species. Additionally, there are no recent records of this species within five miles of the Project site.

Mt. Hamilton Coreopsis

Asteraceae > *Leptosyne hamiltonii*

FESA: None, CESA: None, CRPR 1B.2

California Endemic:	True
Growth Habit:	Annual herb blooms March-May
Habitat Requirements:	Cismontane woodland at elevations ranging from 1,805 to 4,265 feet AMSL.
Inclusion Source(s):	CNPS, SJMSCP
Nearest CNDDB Record:	None
Habitat Present:	Not Present
Soils Present:	Unknown
Determination Reason:	This species is known to grow on slopes on dry, rocky soils within foothill woodlands. The Project site lacks the elevation and foothill woodlands present to support this

species. Additionally, there are no recent records of this species within five miles of the Project site.

Large-flowered Fiddleneck

Boraginaceae > *Amsinckia grandiflora*

FESA: Federal Endangered, CESA: California Endangered, CRPR 1B.1

California Endemic:	True
Growth Habit:	Annual herb blooms (March)April-May
Habitat Requirements:	Cismontane woodland, Valley and foothill grassland at elevations ranging from 885 to 1,805 feet AMSL.
Inclusion Source(s):	CNDDB, CNPS, IPaC
CNDDB Records:	1
Nearest CNDDB Record:	3.93 miles west
Habitat Present:	Not Present
Soils Present:	Unknown
Determination Reason:	The Project site lacks cismontane woodland, and the annual grassland on-site is minimal, heavily disturbed, and the species may be outcompeted for space by non-native grassland species. Additionally, the Project site is located at elevations below the minimum 885 feet to support this species.

Wright's trichocoronis

Asteraceae > *Trichocoronis wrightii var. wrightii*

FESA: None, CESA: None, CRPR 2B.1

California Endemic:	True
Growth Habit:	Perennial herb blooms April-June
Habitat Requirements:	Marshes and swamps, Meadows and seeps, riparian forest, vernal pools at elevations ranging from 15 to 1,425 feet AMSL.
Microhabitat	Alkaline
Inclusion Source(s):	CNPS
Nearest CNDDB Record:	None
Habitat Present:	Not Present
Soils Present:	Unknown
Determination Reason:	Project site lacks suitable meadows and seeps, riparian forest, vernal pools to support this species. The Project site contains freshwater emergent wetlands however, this habitat is unlikely to support this species due to substantial disturbance associated with the proximity to Highway 132. This species is considered locally extirpated.

Wildlife

A total of 16 wildlife taxa were detected during the field surveys. A list of all wildlife taxa detected during the field surveys is provided in **Appendix B**.

The desktop review determined that 41 wildlife taxa with special-status had been documented as occurring within the Regional Area. These taxa and their occurrence potential are discussed below and summarized in **Appendix C**.

- No special-status wildlife taxa from desktop analysis were determined to be **Present** in the Study Area.
- No special-status wildlife taxa from desktop analysis were determined to have **High** potential for occurrence in the Study Area.
- No special-status wildlife taxon from desktop analysis was determined to have **Moderate** potential for occurrence in the Study Area.
- The following 8 special-status wildlife taxa from the desktop analysis were determined to be **Not Expected to Occur** in the Study Area.

California Glossy Snake

Colubridae > *Arizona elegans occidentalis*

FESA: None, CESA: Species of Special Concern

Life History:	This snake is common throughout southern California especially in desert regions. Less common to the north, Glossy Snakes occur in the interior Coast Ranges as far as Mount Diablo in Contra Costa County. Glossy Snakes are most common in desert habitats but also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass. Elevation from below sea level to 1,830 meters (6,000 feet AMSL). *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.53 miles southwest
Habitat Present:	Low Quality
Determination Reason:	The Project Site lacks desert environments preferred by this snake. However, the Project site does contain annual grassland habitat along South Chrisman and Vernalis Road, but the grassland area is marginal and heavily disturbed. Preferred foraging is typically limited to mostly desert lizard species and thus, the Project site is unlikely to provide suitable foraging habitat.

San Joaquin Coachwhip

Colubridae > *Coluber flagellum ruddocki*

FESA: None, CESA: Species of Special Concern

Life History:	San Joaquin coachwhip snakes are diurnal animals and prefer warm temperatures. As a result, they emerge from estivation late in the season (April - May). This species prefers dry, open, treeless habitats including valley grassland and salt scrub. They are known to avoid dense vegetation that restricts movement such as mixed oak chaparral woodland. Small mammal burrows are used for overwintering. *Source: Thomson, Robert C., Amber N. Wright, and H. Bradley Shaffer. (2016). California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife. University of California Press.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.12 miles west
Habitat Present:	Low Quality

Determination Reason: The Project site contains annual grassland along South Chrisman and Vernalis Road, but the grassland area is marginal, heavily disturbed, and does not contain the preferred open habitat to support this species. The Project site is primarily comprised of disturbed roadways and lacks natural open habitat preferred by this species.

Great Blue Heron

Ardeidae > *Ardea herodias*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: The Great Blue Heron is fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. Common July to October in salt ponds where fish are numerous. Locally common near rookeries February to June or July. Few rookeries are found in southern California, but many are scattered throughout northern California; knowledge of their locations is incomplete. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: >5 miles

Habitat Present: Low Quality

Determination Reason: The Project site contains small, heavily disturbed wetland areas at the intersection of Vernalis Road and South Bird Road that are unlikely to support the insects, reptiles, and small mammals relied upon by this species for foraging. Additionally, these wetlands are fed from stormwater runoff from the surrounding roadways resulting in insufficient water quality; however, during the survey, these areas were observed to be dry, further limiting the potential for foraging. Nesting habitat in the form of isolated islands, channel markers, or artificial nest structures are not present within the Project site and thus, nesting is unlikely. Additionally, the nearest record is greater than five miles from the Project site.

Great Egret

Ardeidae > *Ardea alba*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: The Great Egret is a common yearlong resident throughout California, except for high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures. Nests in large trees, and roosts in trees. In southern California, common all year, and breeds at Salton Sea and Colorado River. Fairly common in coastal lowlands September to April, rare in summer, and breeds in Riverside County (one small colony). Rare to uncommon in deserts, occurring mainly as a spring migrant. In northern California, fairly common to common yearlong in coastal lowlands, inland valleys, and the Central Valley. Locally abundant March to July near the larger nesting colonies. Uncommon to fairly common March to August on the northeastern plateau, and nests locally. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: >5 miles

Habitat Present: Low Quality

Determination Reason: The Project site contains small, heavily disturbed wetland areas at the intersection of Vernalis Road and South Bird Road that are unlikely to support the insects, reptiles, and small mammals relied upon by this species for foraging. Additionally, these wetlands are fed from stormwater runoff from the surrounding roadways resulting in insufficient water quality; however, during the survey, these areas were observed to be dry, further limiting the potential for foraging. Nesting habitat in the form of isolated islands, channel markers, or artificial nest structures are not present within the Project site and thus, nesting is unlikely. Additionally, the nearest record is greater than five miles from the Project site.

Sharp-shinned Hawk

Accipitridae > *Accipiter striatus*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: Fairly common migrant and winter resident throughout California, except in areas with deep snow. Breeding distribution poorly documented. Very few breeding records for Cascades/Sierra Nevada. Probably breeds south in Coast Ranges to about 35 degrees latitude, and at scattered locations in the Transverse and Peninsular Ranges. May no longer breed in the southern Sierra Nevada. Uncommon winter migrant to Channel Islands. Uncommon permanent resident and breeder in mid-elevation habitats. Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert used in winter. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: None

Habitat Present: Low Quality

Determination Reason: This species prefers wooded areas throughout their range but may also forage within agricultural fields. The Project site contains marginal strips of agricultural fields adjacent to South Chrisman Road that may provide marginal foraging habitat to support this species. Tall, densely populated trees within woodlands are required for nesting and are not present within the Project site thus, nesting is unlikely. Additionally, the nearest record is located greater than five miles from the Project site.

Cooper's Hawk

Accipitridae > *Accipiter cooperii*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: A breeding resident throughout most of the wooded portion of the state. Breeds in southern Sierra Nevada foothills, New York Mountains, Owens Valley, and other local areas in southern California. Ranges from sea level to above 2,700 meters (0-9,000 feet AMSL). Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. *Source: California Department of Fish*

and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: None

Habitat Present: Low Quality

Determination Reason: The Project site is adjacent to marginally suitable foraging habitat, but lacks the tall trees preferred for nesting.

Burrowing Owl

Strigidae > *Athene cunicularia*

FESA: None, CESA: Species of Special Concern, SJMSCP Covered Species

Life History: A yearlong resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of Pinyon-Juniper and Ponderosa Pine habitats. Formerly common in appropriate habitats throughout the state, excluding the humid northwest coastal forests and high mountains. Numbers markedly reduced in recent decades. Present on the larger offshore islands. Found as high as 1,600 meters (5,300 feet AMSL) in Lassen County. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

Nearest CNDDB Record: One adult owl was observed utilizing a previous ground squirrel burrow approximately 0.3 mile from the Project site, located adjacent to agricultural fields and railroad tracks.

Habitat Present: Low Quality

Determination Reason: Suitable habitat occurs in the southwest corner of the Project site at the corner of Highway 132 and Chrisman Road in grasslands where small mammal burrows are present. The potential habitat is a small (approximately 100-foot wide) disturbed strip of grassland along the paved roadway. While burrowing owls are known to occupy small areas surrounded by development, there are several more suitable options (open undisturbed grasslands) outside of the Project site.

San Joaquin Kit Fox

Canidae > *Vulpes macrotis mutica*

FESA: Endangered, CESA: Threatened, SJMSCP Covered Species

Life History: The San Joaquin kit fox (*Vulpes macrotis mutica*) is the smallest fox in North America, with an average body length of 20 inches and weight of about 5 pounds. Kit Foxes start breeding when they are one year old. In the fall, females begin to clean and enlarge their pupping dens. The foxes mate between December and March. Females give birth to from two to six pups in February or March. The Kit Fox's range in the San Joaquin Valley extends from southern Kern County north to Contra Costa, Alameda, and San Joaquin counties on the western side of the valley; and to the La Grange area of Stanislaus County on the eastern side of the valley. The Kit Fox's range also includes valleys along the Coast Range including the Panoche and Cuyama valleys and the Carrizo Plain in San Luis Obispo County. Threats include habitat modification and destruction, energy development, drought, disease or pathogens, rodenticides, and predation. *Source: https://www.fws.gov/species/san-joaquin-kit-fox-vulpes-macrotis-mutica*

Inclusion Source(s):	CNDDB; IPaC; SJMSCP
Nearest CNDDB Record:	One record is located within the Project site near the Wesern Pacific Railroad along West Linne Road.
Habitat Present:	Low Quality
Determination Reason:	Suitable habitat occurs in the southwest corner of the Project site at the corner of Highway 132 and Chrisman Road in a disturbed grassland area where small mammal burrows are present. However, the Project site lacks the habitat to support foraging by this species. No sign of the presence of this species was observed during the field visits. This species may occur as a transient.

- The following 33 special-status wildlife taxa from desktop analysis were determined to be **Presumed Absent** from the Project site. These species are listed in **Appendix C**.

Loggerhead Shrike

Laniidae > *Lanius ludovicianus*

FESA: None, CESA: Species of Special Concern

Life History:	A common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua Tree habitats. In the Great Basin, from Inyo County north, population declines markedly from November through March. Rare on coastal slope north of Mendocino County, occurring only in winter. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Sometimes uses edges of denser habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP, CNDDB
Nearest CNDDB Record:	4.25 miles northeast
Habitat Present:	Not Present
Determination Reason:	The Project site does not contain scattered vegetation with open canopy that is preferred by this species. Additionally, thorny vegetation is not present within the Project site to support nesting for this species. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Valley Elderberry Longhorn Beetle

Cerambycidae > Desmocerus californicus dimorphus

FESA: Threatened, CESA: None

Life History:	Valley elderberry longhorn beetle is a medium sized beetle that is endemic to the Central Valley of California. The beetle is found only in association with its host plant, elderberry (*Sambucus spp*.) and originally occurred in elderberry thickets in moist valley oak woodland along the margins of the Sacramento and San Joaquin Rivers in the Central Valley of California. The habitat of this insect has now largely disappeared throughout much of its former range due to agricultural conversion, levee construction, and stream channelization. The clearing of undergrowth (including elderberry) and planting of lawns has

	resulted in further habitat degradation. *Source: https://ecos.fws.gov/ecp/species/7850*
Inclusion Source(s):	CNDDB, IPaC; SJMSCP
Nearest CNDDB Record:	4.17 miles southwest
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the valley elderberry plants to support this species. Additionally, the Project site is located outside of the range for this species due to the Project site being located upland from the San Joaquin River.

Monarch - California Overwintering Population

Nymphalidae > *Danaus plexippus pop. 1*

FESA: Candidate, CESA: None

Life History:	The iconic black and orange Monarch butterfly is known for its astonishing long-distance annual migration and reliance on milkweed as its obligate larval host plant. Though genetically similar, there are two subpopulations of Monarchs in North America, with the eastern population overwintering in Mexico and breeding in the midwestern states, and the western population overwintering in coastal California and fanning out across the west from Arizona to Idaho. Both North American migratory populations have declined over the past twenty years due to a suite of interrelated factors including habitat loss in breeding and overwintering sites, habitat degradation, disease, pesticide exposure, and climate change. Recently the western population has experienced dramatic swings, for a low of less than 2,000 in 2020-21 to over 200,000 in 2021-22. While it is unclear which of the many factors are driving these dynamics, insect population commonly fluctuate from year to year. Though more research is needed, a stable population for western monarchs is likely closer to the historic averages in the 1980's, which are estimated to have ranged between one to four million overwintering butterflies. *Source: https://wildlife.ca.gov/Conservation/Invertebrates/Monarch-Butterfly*
Inclusion Source(s):	IPaC
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Low Quality
Determination Reason:	As a migratory species with flight capability, this species has potential to occur anywhere during movements. There is low potential to be resident on-site due to agricultural land uses and lack of suitable milkweed host plants. The Project site is also not located in roosting habitat for this species. The nearest record is located greater than five miles from the Project site.

Foothill Yellow-legged Frog

Ranidae > *Rana draytonii*

FESA: Threatened, CESA: None, California Species of Special Concern

Life History:	The foothill yellow-legged frog occurs in the Coast Ranges from the Oregon border south to the Transverse Mountains in Los Angeles County, in most of northern California west of the Cascade crest, and along the western flank of the Sierra south to Kern County. Livezey reported an isolated population in San

Joaquin County. on the floor of the Central Valley. Isolated populations are also known from the mountains of Los Angeles County. Its elevation range extends from near sea level to 1940 m (6370 ft) in the Sierra. The foothill yellow-legged frog is found in or near rocky streams in a variety of habitats, including valley-foothill hardwood, valley-foothill hardwood-conifer, valley-foothill riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadow types. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: >5 miles

Habitat Present: Not Present

Determination Reason: Project site lacks rocky streams, forested riparian areas, and ponds preferred by this species for breeding. Although the Project site does contain small heavily disturbed wetlands, all were observed to be dry during the survey and would not support this species. There are no recent record of this species within five miles from the Project site.

California Red-legged Frog

Ranidae > *Rana draytonii*

FESA: Threatened, CESA: Species of Special Concern

Life History: The California red-legged frog inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 1200 m (3936 ft). This species was once a subspecies of Rana aurora, then known as the Red-legged Frog, and has been elevated to species-level status. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 4.20 Miles west

Habitat Present: Not Present

Determination Reason: Although the Project site does contain small heavily disturbed wetlands, all were observed to be dry during the survey and would not support this species. Additionally, the wetlands are located along noisy Vernalis Road and South Bird Road, fed from stormwater runoff from resulting in insufficient water quality

Western Spadefoot

Scaphiopodidae > *Spea hammondii*

FESA: None, CESA: Species of Special Concern

Life History:	The Western Spadefoot ranges throughout the Central Valley and adjacent foothills, and is usually quite common where it occurs. In the Coast Ranges it is found from Point Conception, Santa Barbara County, south to the Mexican border. Elevations of occurrence extend from near sea level to 1363 m (4460 ft) in the southern Sierra foothills. This species occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands. Some populations persist for a few years in orchard or vineyard habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	4.71 miles west
Habitat Present:	Not Present
Determination Reason:	The Project site contains annual grassland along South Chrisman and Vernalis Road, but the grassland area is marginal, heavily disturbed, and contains dense vegetation that is not suitable for western spadefoot. Additionally, the orchards and vineyards are regularly maintained, and human disturbance is common within these areas. The Project site is not an identified breeding site for western spadefoot.

California Tiger Salamander

Ambystomatidae > *Ambystoma californiense*

FESA: Endangered, CESA: Endangered

Life History:	Most commonly found in Annual Grassland habitat, but also occurs in the grassy understory of Valley-Foothill Hardwood habitats, and uncommonly along stream courses in Valley-Foothill Riparian habitats. The species occurs from near Petaluma, Sonoma County, east through the Central Valley to Yolo and Sacramento counties and south to Tulare County; and from the vicinity of San Francisco Bay south to Santa Barbara County. They occur at elevations from 3 meters up to 1,054 meters (3,200 feet AMSL). *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB, IPaC
Nearest CNDDB Record:	2.49 miles southwest
Habitat Present:	Not Present
Determination Reason:	The Project site contains annual grassland along South Chrisman and Vernalis Road, but the grassland area is marginal and heavily disturbed. The Project site is more than two miles from known breeding ponds. With the exception of one paved intersection, Interstate 580 serves a barrier between the Project site and known breeding sites to the west.

Coast Horned Lizard

Phrynosomatidae > *Phrynosoma blainvillii*

FESA: None, CESA: Species of Special Concern

Life History:	Blainville's Horned Lizard is uncommon to common in suitable habitat. Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Occurs in the Sierra Nevada foothills from Butte County to Kern County and throughout the central and southern California coast. Its elevational range extends up to 1200 m (4000 ft) in the Sierra Nevada foothills and up to 1800 m (6000 ft) in the mountains of southern California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the riparian and forested habitat preferred by this species for breeding and foraging. This species may also forage in open grassland areas with sandy soils and, although grassland habitat occurs within the Project site, this area lacks bare ground and sandy soils required to support this species.

Northwestern Pond Turtle

Emydidae > *Actinemys marmorata*

FESA: Proposed Threatened, CESA: Species of Special Concern

Life History:	Actinemys species are uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Elevation range extends from near sea level to 1,430 meters (4,690 feet AMSL). Associated with permanent or nearly permanent water in a wide variety of habitat types. Western Pond Turtle was split into two species in 2014, with A. marmorata ranging from the Central Valley north. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB; IPaC
Nearest CNDDB Record:	3.00 miles southwest
Habitat Present:	Not Present
Determination Reason:	The Project site lacks suitable aquatic habitat to support this species. The existing wetland areas surveyed on the Project site are heavily disturbed, located alongside busy roadways, and lack a consistent source of water to support this species. Additionally, upland refugia necessary to support nesting is lacking within the surrounding areas. Canals flowing through the Project site are concrete-lined with steep sides that could not be utilized by this species.

Yellow-billed Cuckoo

Cuculidae > *Coccyzus americanus*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: An uncommon to rare summer resident of valley foothill and desert riparian habitats in scattered locations in California. Along the Colorado River, breeding population on California side was estimated at 180 pairs in 1977. Additional pairs reside in the Sacramento and Owens valleys; along the South Fork of the Kern River, Kern County; along the Santa Ana River, Riverside County; and along the Amargosa River, Inyo and San Bernardino counties. Also may nest along San Luis Rey River, San Diego County. Formerly much more common and widespread throughout lowland California, but numbers drastically reduced by habitat loss. Current population estimations show about 50 pairs existing in California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riverine habitat to support nesting or foraging for this species. The Project site is also not located along any of the rivers where this species is known to occur. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Long-Billed Curlew

Scolopacidae > *Numenius americanus*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: An uncommon to fairly common breeder from April to September in wet meadow habitat in northeastern California in Siskiyou, Modoc, and Lassen counties. One recent nesting record for Owens Valley, Inyo County. Uncommon to locally very common as a winter visitant from early July to early April along most of the California coast, and in the Central and Imperial valleys, where the largest flocks occur. Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats. Small numbers of nonbreeders remain on coast in summer, and larger numbers remain in some years in the Central Valley. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the wet meadow, coastal estuary, or inter-tidal mudflat habitat preferred by this species for nesting and foraging. Additionally, the nearest record for this species is located

greater than five miles from the Project site and it is not expected to occur.

California Condor

Cathartidae > *Gymnogyps californianus*

FESA: Endangered, Protected, CESA: Endangered

Life History: Endangered, permanent resident of the semi-arid, rugged mountain ranges surrounding the southern San Joaquin Valley, including the Coast Ranges from Santa Clara County south to Los Angeles County, the Transverse Ranges, Tehachapi Mountains, and southern Sierra Nevada. Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags. Occurs mostly between sea-level and 2700 m (0-9000 ft), and nests from 610-1372 m (2000-6500 ft). Nonbreeding individuals move north to Kern and Tulare counties in April, often returning south in September to winter in Tehachapi Mountains, Mount Pinos, and Ventura and Santa Barbara counties. Total population in early 1980's estimated to be fewer than 20, and declining. Occurrence in the wild now in question. Two U.S. Forest Service sanctuaries set aside within the Los Padres National Forest, primarily for nesting and roosting protection. *California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the open rangelands and rugged mountain habitats preferred by this species for foraging. The Project site is below the preferred elevations for nesting and thus, is not expected to occur. The nearest record for this species is located greater than five miles from the Project site and is not expected to occur.

Osprey

Pandionidae > *Pandion haliaetus*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: Breeds in northern California from Cascade Ranges south to Lake Tahoe, and along the coast south to Marin County. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems. Breeding population estimated in 1975 at 350-400 pairs in northern California; numbers apparently increasing in recent years. An uncommon breeder along southern Colorado River, and uncommon winter visitor along the coast of southern California. Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the proximity to lacustrine, riverine, or pelagic habitats preferred by this species for foraging. Additionally, the Project site also lacks the tall trees preferred by this species for nesting. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Northern Harrier

Accipitridae > *Circus hudsonius*

FESA: None, CESA: Species of Special Concern

Life History:	Occurs from annual grassland up to lodgepole pine and alpine meadow habitats, as high as 3,000 m (10,000 ft). Breeds from sea level to 1,700 m (0-5,700 ft) in the Central Valley and Sierra Nevada, and up to 800 m (3,600 ft) in northeastern California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Permanent resident of the northeastern plateau and coastal areas; less common resident of the Central Valley. Widespread winter resident and migrant in suitable habitat. California population has decreased in recent decades but can be locally abundant where suitable habitat remains free of disturbance, especially from intensive agriculture. Breeding population much reduced, especially in southern coastal district. Destruction of wetland habitat, native grassland, and moist meadows, and burning and plowing of nesting areas during early stages of breeding cycle, are major reasons for the decline. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site contains minimal foraging habitat in the form of marginal grasslands and agricultural fields along the edges of the Project site. Nesting habitat is located around the isolated wetlands and grasslands, but these habitats are only marginally suitable within the Project site due to the small extent and extensive human disturbance in these areas. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Swainson's Hawk

Accipitridae > *Buteo swainsoni*

FESA: None, CESA: Threatened, SJMSCP Covered Species

Life History:	Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, and Antelope Valley. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the

Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. In southern California, now mostly limited to spring and fall transient. Formerly abundant in California with wider breeding range. Decline resulted in part from loss of nesting habitat. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP
Nearest CNDDB Record: 0.39 miles east
Habitat Present: Not Present
Determination Reason: The Project site contains marginal open foraging habitat in agricultural fields along the edges of the Project site that could support this species however, no trees of suitable height or riparian areas are present within the Project site to support nesting for this species.

Merlin

Falconidae > *Falco columbarius*
FESA: None, CESA: None, SJMSCP Covered Species

Life History: Uncommon winter migrant from September to May. Seldom found in heavily wooded areas, or open deserts. Frequents coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, and early successional stages. Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats. Occurs in most of the western half of the state below 1500 m (3900 ft). A rare winter migrant in the Mojave Desert; a few records from the Channel Islands. Numbers have declined markedly in California in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP
Nearest CNDDB Record: > 5 miles
Habitat Present: Not Present
Determination Reason: The Project site lacks the forested openings and riverine habitats preferred by this species for foraging. Additionally, the Project site also lacks the tall trees preferred by this species for nesting. The nearest record for this species is located greater than five miles from the Project site and is not expected to occur.

Least Bell's Vireo

Vireonidae > *Vireo bellii pusillus*
FESA: Endangered, CESA: Endangered

Life History: Formerly a common and widespread summer resident below about 600 m (2000 ft) in western Sierra Nevada, throughout Sacramento and San Joaquin valleys, and in the coastal valleys and foothills from Santa Clara County south. Also was common in coastal southern California from Santa Barbara County south, below about 1200 m (4000 ft) east of the Sierra Nevada, in Owens and Benton valleys, along Mojave River and other streams at western edge of southeastern deserts, and along entire length of Colorado River. Has declined drastically or vanished entirely throughout California range in recent

decades, apparently from cowbird parasitism and habitat destruction and degradation. Now a rare, local, summer resident below about 600 m (2000 ft) in willows and other low, dense valley foothill riparian habitat and lower portions of canyons mostly in San Benito and Monterey counties; in coastal southern California from Santa Barbara County south; and along the western edge of the deserts in desert riparian habitat. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB
Nearest CNDDB Record: 4.62 miles west
Habitat Present: Not Present
Determination Reason: The Project site lacks suitable dense riparian habitat and streams to support this species. This species is considered locally extirpated.

Horned Lark

Alaudidae > *Eremophila alpestris*
FESA: None, CESA: None, SJMSCP Covered Species

Life History: The Horned Lark is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. Found from grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline. Less common in mountain regions, on the North Coast, and in coniferous or chaparral habitats. Mostly leaves mountains in winter, but small flocks may remain to winter on windswept, snow-free areas at high elevations in the Sierra Nevada. In winter, flocks in desert lowlands and other areas augmented by winter visitants, many migrating from outside the state. Resident on the Channel Islands. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s): SJMSCP
Nearest CNDDB Record: > 5 miles
Habitat Present: Not Present
Determination Reason: The Horned Lark prefers grassland areas with vegetation less than two inches in height or bare ground for nesting and foraging habitat, which is lacking within the Project site. Therefore, nesting and foraging by this species is not expected to occur in the Project site. Additionally, the nearest record is located greater than five miles from the Project site and is not expected to occur.

Yellow-breasted Chat

Icteriidae > *Icteria virens*
FESA: None, CESA: Species of Special Concern; SJMSCP Covered Species

Life History: An uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada. Found up to about 1,450 meters (4,800 feet AMSL) in valley foothill riparian, and up to 2,050 meters (6,500 feet AMSL)

east of the Sierra Nevada in desert riparian habitats. Uncommon along coast of northern California east to Cascades and occurs only locally south of Mendocino County. In southern California, breeds locally on the coast and very locally inland. In migration, may be found in lower elevations of mountains in riparian habitat. Numbers much reduced in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

CNDDB Records: 0

Nearest CNDDB Record: None

Habitat Present: Not Present

Determination Reason: The Project site does not contain valley foothill or desert riparian habitat to support this species. The wetland areas present on the Project site do not contain adequate vegetation to support yellow-breasted chat. Additionally, the nearest record is located greater than five miles from the Project site.

Tricolored Blackbird

Icteridae > Agelaius tricolor

FESA: None, CESA: Threatened, Species of Special Concern; SJMSCP Covered Species

Life History: Mostly a resident in California. Common locally throughout Central Valley and in coastal districts from Sonoma County south. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. Feeds in grassland and cropland habitats. Breeds locally in northeastern California. In winter, becomes more widespread along central coast and San Francisco Bay area and is found in portions of the Colorado Desert. Numbers appear to be declining in California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

CNDDB Records: 1

Nearest CNDDB Record: One record is located within the Project site along the intersection of South Chrisman Road and West 11th street.

Habitat Present: Not Present

Determination Reason: The Project site contains small, marginally suitable wetlands along Vernalis Road and South Bird Road to support this species; however, these areas in close proximity to the roadways are heavily disturbed. Tricolored blackbirds are not expected to occur due to the lack of tall, undisturbed cattails or tules. Additionally, the wetlands present on-site were observed to be dry during the field observations and are unlikely to support this species.

Yuma Myotis

Vespertilionidae > *Myotis yumanensis*

FESA: None, CESA: None, SJMSCP Covered Species

Life History: The Yuma Myotis is common and widespread in California. It is uncommon in the Mojave and Colorado Desert regions,

except for the mountain ranges bordering the Colorado River Valley. Found in a wide variety of habitats ranging from sea level to 3300 m (11,000 ft), but it is uncommon to rare above 2560 m (8000 ft). Optimal habitats are open forests and woodlands with sources of water over which to feed. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP
Nearest CNDDB Record: > 5 miles
Habitat Present: Not Present
Determination Reason: The Project site lacks the open forest and woodland habitats preferred by this species for foraging. Additionally, there were few manmade structures present within the Project site that would support this species, but regular human disturbance around these buildings may preclude bats from these structures. Roosting sites are not expected to occur within the Project site. The nearest record of this species is located greater than five miles from the Project site and it is not expected to occur.

Western Red Bat

Vespertilionidae > *Lasiurus blossevillii*
FESA: None, CESA: Species of Special Concern; SJMSCP Covered Species

Life History: The Western Red Bat is locally common in some areas of California, occurring from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. The winter range includes western lowlands and coastal regions south of San Francisco Bay. There is migration between summer and winter ranges, and migrants may be found outside the normal range. Day-roost habitat is primarily among the foliage of trees such as willows, cottonwoods, and sycamores in forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Forages on a variety of insects. Not found in desert areas. During warm months, sexes occupy different portions of the range. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Western Bat Working Group. 2005. Western Bat Species Accounts, http://wbwg.org/western-bat-species/

Inclusion Source(s): SJMSCP
Nearest CNDDB Record: > 5 miles
Habitat Present: Not Present
Determination Reason: The Project site lacks the forested and woodland areas required for roosting habitat for this species. The western red bat feeds over open grassland area, which exists within the Project site along South Chrisman Road, but is marginal and disturbed. There were no visible signs of bats

(i.e. scat or insect carcasses) observed during the surveys. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Riparian Brush Rabbit

Leporidae > *Sylvilagus bachmani riparius*

FESA: Endangered, CESA: Endangered

Life History: The riparian brush rabbit is a subspecies of the common brush rabbit. There are three known population centers for this species: Caswell Memorial Park, Lathrop, and the San Joaquin River National Wildlife Refuge, all in San Joaquin County. The riparian brush rabbit prefers riverine habitats with thickets of willow (*Salix spp.*), blackberry (*Rubus vitifolius*), wild rose (*Rosa californica*), wild grape (*Vitis calfornica*), Douglas' coyote bush (*Baccharis douglasii*), and grasses for foraging and sheltering. *Source: https://www.fws.gov/species/riparian-brush-rabbit-sylvilagus-bachmani-riparius*

Inclusion Source(s): CNDDB, IPaC

Nearest CNDDB Record: 1.36 miles east

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riparian riverine habitats to support this species. Additionally, the Project site does not occur in the Caswell Memorial Park, Lathrop, or the San Joaquin River National Wildlife Refuge and is, therefore, not expected to occur.

Riparian Woodrat

Cricetidae > *Neotoma fuscipes riparia*

FESA: Threatened, CESA: Species of Special Concern

Life History: The riparian woodrat is a subspecies of the dusky footed woodrat (*N. fuscipes*). As the name suggests, they prefer to build stick nests near rivers and streams in riparian woodland habitats. Historically, they were distributed along the San Joaquin, Stanislaus and Tuolumne rivers. Today, there are only two known population centers: Caswell Memorial Park and the San Joaquin River National Wildlife Refuge, both in San Joaquin County. *Source: https://www.fws.gov/species/riparian-woodrat-san-joaquin-valley-neotoma-fuscipes-riparia*

Inclusion Source(s): IPaC

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riparian woodland habitat to support this species. Additionally, the Project site is located upland from the San Joaquin River and is not within either the Caswell Memorial Park or the San Joaquin River National Wildlife Refuge. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Ringtail

Procyonidae > *Bassariscus astutus*

FESA: None, CESA: None, SJMSCP Covered Species

Life History:	Widely distributed, common to uncommon permanent resident. Occurs in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations. Little information available on distribution and relative abundance among habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Not Present
Determination Reason:	The Project site lacks the riparian and forested habitat preferred by this species for nesting or foraging. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Green sturgeon - southern DPS

Acipenseridae > *Acipenser medirostris pop. 1*

FESA: Threatened, CESA: Species of Special Concern

Life History:	The Green Sturgeon (*Acipenser medirostris*) is an anadromous fish species that is long-lived and among the most marine oriented sturgeon species in the family Acipenseridae. NMFS has determined green sturgeon are comprised of at least two distinct population segments (DPSs): (1) A Northern DPS consisting of populations originating from coastal watersheds northward of and including the Eel River; and (2) a southern DPS consisting of populations originating from coastal watersheds south of the Eel River, with the only known spawning population in the Sacramento River. Adult Green Sturgeon spawn every 2-4 years. Adult Green Sturgeon begin spawning migrations in late February. Spawning occurs from March to July, with peak activity from mid-April to mid-June. Threats include loss of habitat and spawning grounds due to dams and diversions; habitat degradation from pollution, agricultural runoff, and dredging; and the loss of prey species from pesticide application. *Source: https://www.federalregister.gov/documents/2009/10/09/E9-24067/endangered-and-threatened-wildlife-and-plants-final-rulemaking-to-designate-critical-habitat.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.26 miles east
Habitat Present:	Not Present
Determination Reason:	The Project site lacks open water in the form of rivers to support this species.

Steelhead - Central Valley DPS

Salmonidae > *Oncorhynchus mykiss irideus pop. 11*

FESA: Threatened, CESA: Species of Special Concern

Life History:	Steelhead and rainbow trout are the same species. In general, steelhead refers to the anadromous form of the species. Steelhead typically migrate to marine waters after spending two years in fresh water. They reside in marine waters for typically two or three years prior to returning to their natal stream to spawn as four- or five-yearolds. The Central Valley Distinct Population Segment, or DPS, includes naturally spawned anadromous O. mykiss (steelhead) originating below natural and manmade impassable barriers from the Sacramento and San Joaquin Rivers and their tributaries; excludes such fish originating from San Francisco and San Pablo Bays and their tributaries. Main threats to this DPS include habitat degradation and destruction, blockage of freshwater habitats, water allocation problems, the pervasive opportunity for genetic introgression resulting from widespread production of hatchery steelhead and the potential ecological interaction between introduced stocks and native stocks.. *Source: https://www.fisheries.noaa.gov/west-coast/endangered-species-conservation/sacramento-river-winter-run-chinook-salmon*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.05 miles east
Habitat Present:	Not Present
Determination Reason:	The Project site lacks open water in the form of rivers to support this species.

Longfin Smelt

Osmeridae > *Spirinchus thaleichthys pop. 2*

FESA: Threatened, CESA: Endangered, Federal Threatened; California Endangered

Life History:	Longfin Smelt Spirinchus thaleichthys is a small fish in the family Osmeridae found along the Pacific coast of the United States from Alaska to California. In California, Longfin Smelt is historically found in the San Francisco Estuary and the Sacramento/San Joaquin Delta (Bay-Delta), Humboldt Bay, and the estuaries of the Eel River and Klamath River. Spawning occurs from November through May, with a peak from February through April. The causes of decline from northern estuaries are not clearly known, but they are probably similar to those of the Bay-Delta, which include: reduction in freshwater outflows, entrainment losses to water diversion, changes in food organisms, toxic substances, disease, competition, introduced species, and loss of genetic integrity.. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	3.27 miles northeast
Habitat Present:	Not Present
Determination Reason:	The Project site lacks open water in the form of rivers to support this species.

Yellow Warbler

Parulidae > *Dendroica petechia brewsteri*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Breeding distribution includes from the coast range in Del Norte county, east to Modoc plateau, south along coast range to Santa Barbara and Ventura counties and along western slope of Sierra Nevada south to Kern county. Also breeds along eastern side of California from the Lake Tahoe area south through Inyo county. Also breeds in several southern California mountain ranges and throughout most of San Diego county. Winters in Imperial and Colorado river valleys. Breeds in riparian woodlands from coastal and desert lowlands up to 2500 m (8000 ft) in Sierra Nevada. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. Numbers of breeding pairs have declined dramatically in recent decades in many lowland areas (southern coast, Colorado River, San Joaquin and Sacramento valleys). Now rare to uncommon in many lowland areas where formerly common. A common migrant on Channel and Farallon Islands in spring and fall. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain forested or riparian breeding habitat suitable to support this species thus, this species is not expected to occur on-site. Nesting sites occur within riparian vegetation as well and is not expected to occur within the Project site. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Black-crowned Night Heron

Ardeidae> *Nycticorax nycticorax*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Black-crowned Night-Heron is a fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and, rarely, on kelp beds in marine subtidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands. Common nesting species on northeastern plateau from April to August. Uncommon in northwestern, and rare in northeastern, California in midwinter. Uncommon transient and rare in winter in southern deserts, and rare on Channel Islands. Seldom seen in mountains, but formerly nested at Big Bear Lake in San Bernardino Mountains. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain suitable foraging habitat such as, large riverine and emergent habitat, and densely vegetated Marshes. Nesting habitat in trees or in dense cattails is also not present on the Project site and thus, nesting is not likely to occur. The nearest record for this species is located greater than five miles from the Project site and is not expected.

Western Red Bat

Vespertilionidae > *Lasiurus blossevillii*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Western Red Bat is locally common in some areas of California, occurring from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. The winter range includes western lowlands and coastal regions south of San Francisco Bay. There is migration between summer and winter ranges, and migrants may be found outside the normal range. Day-roost habitat is primarily among the foliage of trees such as willows, cottonwoods, and sycamores in forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Forages on a variety of insects. Not found in desert areas. During warm months, sexes occupy different portions of the range. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Western Bat Working Group. 2005. Western Bat Species Accounts, http://wbwg.org/western-bat-species/

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the forested and woodland areas required for roosting habitat for this species. The western red bat feeds over open grassland area, which exists within the Project site to the north of Highway 132 and south of the California Aqueduct but is small in extent and no visible signs of bats (i.e. scat or insect carcasses) were observed during the surveys. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Vernal Pool Fairy Shrimp

Branchinectidae > *Branchinecta lynchi*

FESA: Threatened, CESA: None

Life History: The Vernal Pool Fairy Shrimp inhabits ephemeral pools with clear to tea- colored water. This species has been most commonly observed in grass or mud bottomed swales, earth sump, or basalt flow depression pools in unplowed grasslands. The Vernal Pool Fairy Shrimp has been collected from early December to early May. The water in pools inhabited by this species has a pH averaging 7.0; and low TDS, conductivity, alkalinity, and chloride. Although the Vernal Pool Fairy Shrimp is found at a number of sites, it is not abundant at any of them. It often occurs with other fairy shrimp species, but is never the numerically dominant one. *Source:*

https://www.govinfo.gov/content/pkg/FR-1992-05-08/pdf/FR-1992-05-08.pdf#page=76

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the vernal pool habitat to support this species. Ponded areas consist of heavily disturbed wetlands on-site, irregularly inundated and artificially drained. Given these non-natural conditions, these areas are unlikely to support this species, and this species is not expected to occur.

Vernal Pool Tadpole Shrimp

Triopsidae > *Lepidurus packardi*

FESA: Endangered, CESA: None

Life History: Vernal Pool Tadpole Shrimp inhabits vernal pools and swales containing clear to highly turbid water. The Vernal Pool Tadpole Shrimp is found at 14 vernal pool complexes in the Sacramento Valley from the Vina Plains in Butte County south of the Sacramento area in Sacramento County and west to the Jepson Prairie region of Salano County. The pools inhabited by the Vernal Pool Tadpole Shrimp range in size from 5 square meters (16.4 square ft) in the Mather Air Force Base area of Sacramento County to the 38 hectare (89 acre) Olcott Lake at Jepson Prairie. The pools at Jepson Prairie and Vina Plains have a neutral pH, and very low conductivity, TDS, and alkalinity. These pools are most commonly located in grass bottomed swales of unplowed grasslands in old alluvial soils underlain by hardpan, or in mud- bottomed pools containing highly turbid water. All pools known to be inhabited by this species are filled by winter and spring rains and may last until June. *Source: https://www.govinfo.gov/content/pkg/FR-1992-05-08/pdf/FR-1992-05-08.pdf#page=76*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the vernal pool habitat to support this species. Ponded areas consist of heavily disturbed wetlands on-site, irregularly inundated and artificially drained. Given these non-natural conditions, these areas are unlikely to support this species, and this species is not expected to occur.

Other Considerations

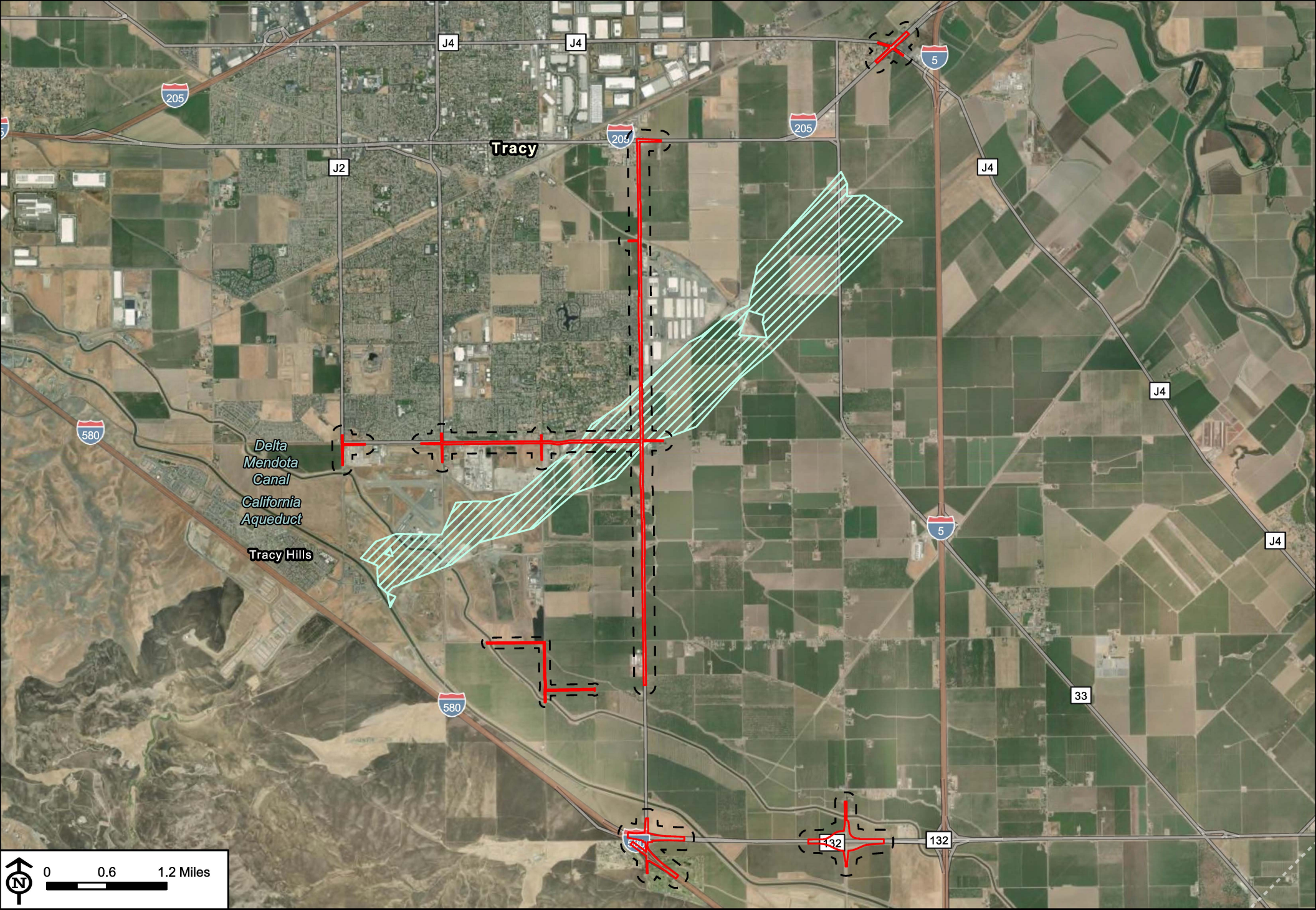
Wildlife Movement

The Project site is identified by the SJMSCP as part of the Central/Southwest Transition Zone, which was created to recognize historical records of the San Joaquin kit fox as a transient along the boundary between the Southwest Zone and the Central zone. The term “wildlife movement corridor” means an area of habitat that is important for the movement of wildlife between larger habitat areas. A known wildlife corridor, the Corral-Lower San Joaquin Wildlife Corridor, runs from the Corral Hollow Pass through the Southwest/Central Transition Zone, overlapping the Project site at the intersection of South Chrisman Road and West Linne Road (**Figure 6**). Although there is some slight overlap, the Project site itself does

not function as a movement corridor for terrestrial wildlife because it is primarily comprised of paved roadways and intersections which functionally serve as barriers to the movement of terrestrial wildlife outside of birds.

Nesting Birds

Birds, including native species protected by the Migratory Bird Treaty Act (MBTA) and CFGC, have the potential to nest in nearly any environment, including those altered by anthropogenic activity. With respect to the Project site, the trees, grasslands, and shrubs on-site provide ample locations for potential nesting. The Project site lacks sufficiently tall trees but does contain manmade structures such as utility poles that provide potentially suitable nesting habitat for raptors or other large birds identified in the desktop and literature review. The aquatic features present within the Project site are heavily disturbed and are unlikely to support nesting, as the areas surrounding the aquatic features do not contain riparian vegetation and do not support the mature canopies that would provide suitable nesting habitat for larger wetland birds. No active nests or nesting behavior (e.g., carrying nest building material, carrying food to feed nestlings, territorial displays, etc.) was observed during the surveys; however, the biological surveys for the Project were conducted outside of nesting bird season (February 15 - August 31).



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (06/2024)

BARGAS Environmental Consulting

Project Site

Study Area

Corral-Lower San Joaquin Wildlife Corridor

Figure 6 San Joaquin Wildlife Corridors

Pacific Gateway Specific Plan Project - Chrisman Road

Map Created: 2/12/2025, Map Revised: N/A, Bargas Project Number: 1644-22

Critical Habitat

The review of pertinent literature and data sources for the Project identified approximately 1.5 acres of critical habitat for Delta Smelt in the northeastern corner of the Project site. Due to the high-level and broad nature of these assessments and critical habitat mapping, the areas classified as critical habitat must be considered for their suitability to support the species. Because the portion of the Project site overlapping the Delta Smelt critical habitat is developed land that does not contain any open water or other aquatic features that could support Delta Smelt, there is no reasonable possibility that Delta Smelt would occur within the Project site.

Conclusion

The proposed Project would occur primarily on developed land consisting of roadways and disturbed roadside areas, as well as commercial, industrial, and residential properties. Along these roadways and intersections, the Project site contains marginal agricultural land, disturbed grassland, and ornamental vegetation in residential areas. The Project site does not contain any sensitive vegetation communities therefore, the Project is not expected to impact sensitive vegetation communities.

No special-status species were detected on-site during biological surveys for the Project. Furthermore, based on vegetation and habitats found on-site, no special-status plants or animals were determined to have at least moderate potential to occur. All special-status plants and animals evaluated for potential to occur in this report were determined to be “Not Expected” or “Presumed Absent”; thus, implementation of the Project is not anticipated to impact special-status plant or animal species.

The Project crosses multiple aquatic resources, including the Delta Mendota Canal, the California Aqueduct, the Lateral Five East Canal, an unnamed concrete-lined canal, and Corral Hollow Creek. Unlike the Lateral Five East Canal and the unnamed concrete-lined canal, which are not recognized by USACE, Corral Hollow creek, the California Aqueduct, and the Delta Mendota Canal are identified by the USACE Sacramento District as TNWs; thus, are considered potentially subject to regulation by USACE under Section 10 of the Rivers and Harbors Act as well as Section 404 of the CWA. Although not recognized as a TNW, the Lateral Five East Canal and the unnamed concrete-lined canal are presumed to not have a surface hydrologic connection to any downstream TNWs based on a review of aerial imagery and CARI (SFEI 2024); thus, are not considered waters of the U.S. and are not potentially subject to USACE jurisdiction under Section 404 of the CWA. In addition to these canals and creek, roadside ditches, seasonal wetland features, and a wetland swale feature were also observed at the Project site; however, these aquatic resource features were found to be isolated features and considered non-jurisdictional by USACE per current regulatory guidance defining waters of the U.S. Given that USACE makes the final determination on their jurisdictional authority, consultation with the USACE via submittal of an Approved Jurisdictional Determination request is recommended and may be required by the County to obtain concurrence as to the aquatic features identified on-site which would not be subject to USACE jurisdiction.

All of the aquatic resource features identified on-site were considered waters of the State, potentially regulated by the CVRWQCB. The CVRWQCB oversees water rights and regulates activities within waters of the State in the Central Valley per the Porter-Cologne Water Quality Control Act when waters/wetlands are isolated; whereas, under Section 401 of the Clean Water Act wetlands or waters of the State are also considered wetlands/waters of the U.S. by the USACE. For regulatory compliance with the Porter Cologne Act and Clean Water Act, the Project proponent/applicant would be required to apply for an individual Waste Discharge Permit with the CVRWQCB if the Project would impact isolated waters of the State, including wetlands. If the Project would impact aquatic resource features considered waters of the U.S under USACE regulation, consultation with the CVRWQCB for compliance with Section 401 of the Clean Water Act via application for a 401 Certification would also be required.

Irrespective of permitting with the CVRWQCB or USACE, because a formal jurisdictional delineation was not conducted

for the Project, a formal jurisdictional delineation is recommended and may be required by these agencies, following USACE procedures and guidance, to confirm whether the aquatic features are considered wetland or non-wetland waters jurisdictional resources.

Additionally, all of the features identified on-site (except for the freshwater emergent wetlands) were found to contain a bed and bank. As a result, these features would be potentially subject to regulation by CDFW under Section 1600 of CFGC. To comply with this regulation, CDFW shall be notified via CDFW Lake and Streambed Alteration (LSA) notification procedures if the Project would alter the streambed or banks, impact riparian vegetation, disturb the natural flow, or deposit material into these features.

Project compliance with the CWA, Rivers and Harbors Act, Porter-Cologne Act, and CFGC would be required. Thus, prior to implementation of the Project and impacts to aquatic resources on-site, consultations with these USACE, CVRWQCB, and or CDFW would be needed, which may require one or more of the following permits and regulatory approvals:

- **USACE Section 10 Rivers and Harbors Act Permitting and CWA 404 Permit:** Authorization for the dredge or fill of jurisdictional waters of the U.S., including wetlands, must be secured prior to activities in jurisdictional waters or wetlands from the USACE through the CWA Section 404 permitting process. The USACE may select to process a joint 404/10 permit.
- **CVRWQCB CWA Section 401 Water Quality Certification:** A water quality certification pursuant to Section 401 of the CWA would be required by the CVRWQCB for impacts to any areas containing wetlands or waters of the State, which are also considered wetlands or waters of the U.S.
- **CVRWQCB Waste Discharge Requirements**: An Individual Order for Waste Discharge Permit from the CVRWQCB would be required for Project activities affecting wetlands or waters of the State, which are not under USACE jurisdiction (i.e., "isolated" features).
- **CDFW Section 1602 LSAA**: A Notification of Streambed Alteration Agreement under Section 1600 of CFGC for impacts to streambed, bank, or associated habitat as defined under Section 1602 of the CFGC.

The Project site falls within the boundaries of the SJMSCP, overlapping the Central Zone, the Central-Southwest Transition Zone, and the Southwest Zone; as a result, the Project shall adhere to the provisions of this adopted habitat conservation plan. To demonstrate consistency with the goals of the SJMSCP, avoidance, minimization, or mitigation measures for burrowing owl and the San Joaquin Kit Fox are suggested for this Project.

- The Project site contains ground squirrel (*Otospermophilus beecheyi*) burrows that have the potential to support burrowing owl, thus within 14-days prior to any of Project activities on-site, a single pre-construction clearance survey for burrowing owl should be conducted within the Project work areas and surrounding 300-foot buffer, as accessible and as feasible, to confirm absence or presence of burrowing owl. The survey shall be conducted by a qualified biologist with experience in surveying for burrowing owl, including identification of burrowing owl sign and burrowing owl individuals. Furthermore, Subsection 5.2.4.15 of the SJMSCP provides guidelines for avoiding impacts and protecting burrowing owl. These guidelines state that burrowing owls may be discouraged from entering a potential construction site by preventing ground squirrels from creating these burrows. This can be achieved through planting or maintaining vegetation entirely covering the site at a height of approximately 36" above the ground, discing or plowing the entire project site to destroy any burrows, and removing ground squirrels. The SJMCP states that if the discouraging methods are insufficient, burrowing owls occupying the Project site should be evicted from the Project site during the non-breeding season (September 1 through January 31) by passive relocation as described in the CDFW's Fish and Game Staff Report on Burrowing Owls (CDFW 2012). During the breeding season (February 1 through August 31) a 75-meter protective buffer shall be established around

occupied burrows until a qualified biologist approved by the Permitting Agencies verifies that the burrow can be destroyed.

- Because the Project site is located within the Southwest/Central Transition Zone, surveys for San Joaquin kit fox must be conducted prior to any ground-disturbing work even if the species is not expected to occur within the Project site. Guidelines provided in Subsection 5.2.4.25 of the SJMSCP state that pre-construction surveys for San Joaquin kit fox and/or their dens should be conducted by a qualified biologist between two calendar weeks to thirty calendar days prior to any ground-disturbing activities. If individual kit foxes are observed during the survey, then an additional protocol level survey would be conducted as outlined in the USFWS *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* protocol dated January 2011 (USFWS 2011). Additionally, if dens with openings of a diameter of four inches and that open within two feet inside of the den are observed within the Project site then a biologist would dust the opening of the den for three calendar days to determine if the den is occupied. If it is discovered that the den is occupied by a single adult kit fox then the den may be destroyed as soon as the fox either moves or leaves the den, whereas if the den is discovered to be a natal den, then a 250-foot buffer shall be maintained around the den until it is determined to be vacant by a qualified biologist.
- The Project is required to establish concurrence with the SJMSCP Technical Advisory Committee (TAC) and Permitting Agencies that all potential suitable habitat for other SJMSCP Covered Species would be fully avoided pursuant to Section 5.5.9 of the SJMSCP. Should concurrence be established, pre-construction surveys may be waived and further Avoidance and Minimization measures would not be required. Additionally, to compensate for the loss of habitat of the SJMSCP Covered Species, several Mitigation Measures may be required by the County for the Project, consistent with the SJMSCP:
    - Pay the appropriate fee, in this case, $1,500 per acre for Conversion of Agricultural Habitat Lands and Natural Lands
    - Establish Preserves, enhanced by the Joint Powers Authority (JPA), upon which SJMSCP Covered Species rely, through the purchase of easements from landowners willing to sell urban development rights.
    - Purchase approved mitigation bank credits as specified in Section 5.3.2.4. D. of the SJMSCP
    - Propose an alternative mitigation plan, consistent with the goals of the SJMSCP and equivalent in biological value to the options above, subject to approval by the JPA with the concurrence of the Permitting Agencies' representatives on the TAC.

The Project would be required to comply with the MBTA and CFGC to protect nesting bird species. Thus, the following avoidance and minimization measures shall be implemented prior to site disturbance to avoid impacts to nesting raptors and other birds in the Project site or immediately adjacent areas.

- A nesting bird survey shall be conducted by a qualified biologist within the Project site (raptors and non-raptors) and a 500-foot buffer (raptors only) as feasible prior to commencing construction activities for each phase of the Project, if this work would begin during the typical nesting season (between February 1 and August 31).
- If nesting birds are identified during the pre-construction survey, the qualified biologist should determine an appropriate disturbance-free (i.e., no-work-zone) avoidance buffer (typically between 100 and 500 feet) depending on the species and as described in Subsections 5.2.4.16 through 5.2.4.22 in the SJMSCP. Buffer zones shall be clearly demarcated in the field for avoidance by construction activities.
- The size of an established buffer may be altered if the qualified biologist conducts behavioral observations and determines the nesting birds are well acclimated to disturbance. If this occurs, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting birds. If the

buffer is reduced, the qualified biologist shall remain on-site to monitor the behavior of the nesting birds during construction in order to ensure that the reduced buffer does not result in take of eggs or nestlings.

- No construction or earth-moving activity shall occur within the established nest avoidance no-work-zone buffer until it is determined by the qualified biologist that the young have fledged (are no longer dependent on the nest or the adults for feeding) and have attained sufficient flight skills to avoid project construction zones. If a qualified biologist is not hired by the Project Applicant or the Contractor to monitor the active nesting birds/raptors, then the full buffer(s) shall be maintained in place from February 1 to August 31. The buffer may be removed, and work may proceed as otherwise planned within the buffer on September 1.

With the implementation of the Project's proposed avoidance and minimization measures, as well as compliance with State and Federal regulations, the Project would not have a substantial adverse effect on sensitive vegetation communities, special-status species, state or federally protected aquatic resources, or nesting birds. Additionally, by following guidelines outlined in this report, this Project would not conflict with the provisions of the SJMSCP.

We thank you for the opportunity to prepare the Biological Resources Letter Report for this Project. Should you have any questions or comments regarding this letter, please do not hesitate to contact me at dbaumbach@bargasconsulting.com or Thomas Liddicoat at tliddicoat@bargasconsulting.com.

Sincerely,

Dustin Baumbach

Dustin Baumbach
Biologist

Appendices:

- Appendix A. Site Photographs
- Appendix B. Floral & Faunal Compendia
- Appendix C. Special-Status Biological Resource Summary

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Appendix A. Site Photographs



Photo 1. West side of Chrisman Road and Highway 132, facing south.



Photo 2. East side of Chrisman Road and Highway 132, facing south.



Photo 3. California ground squirrel burrows suitable for use by Burrowing Owl.

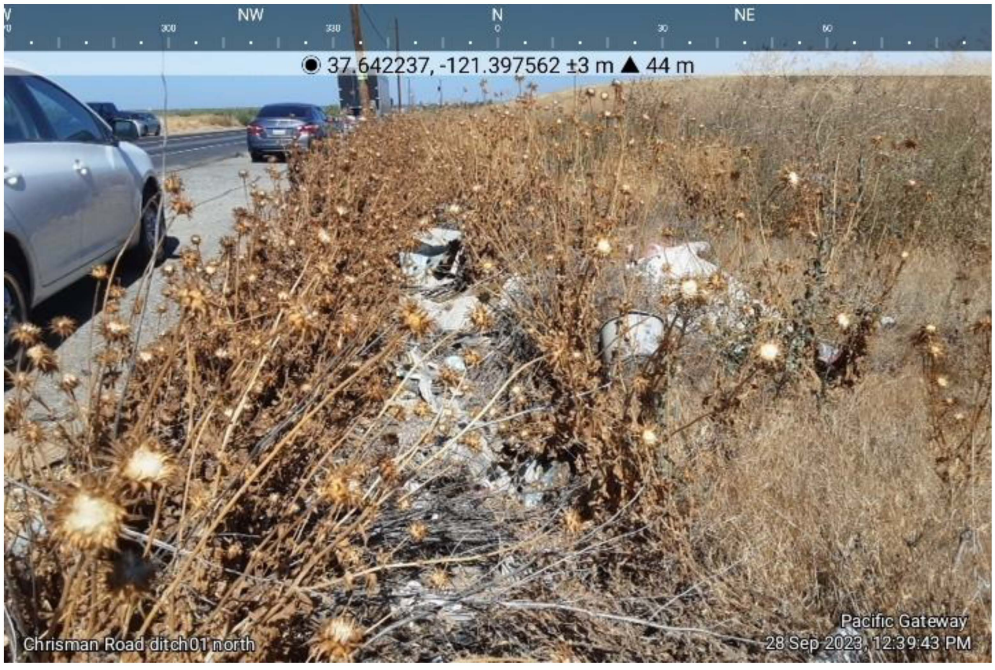

Photo 4. Roadside drainage ditch on the east side of Chrisman Road, north of Highway 132.

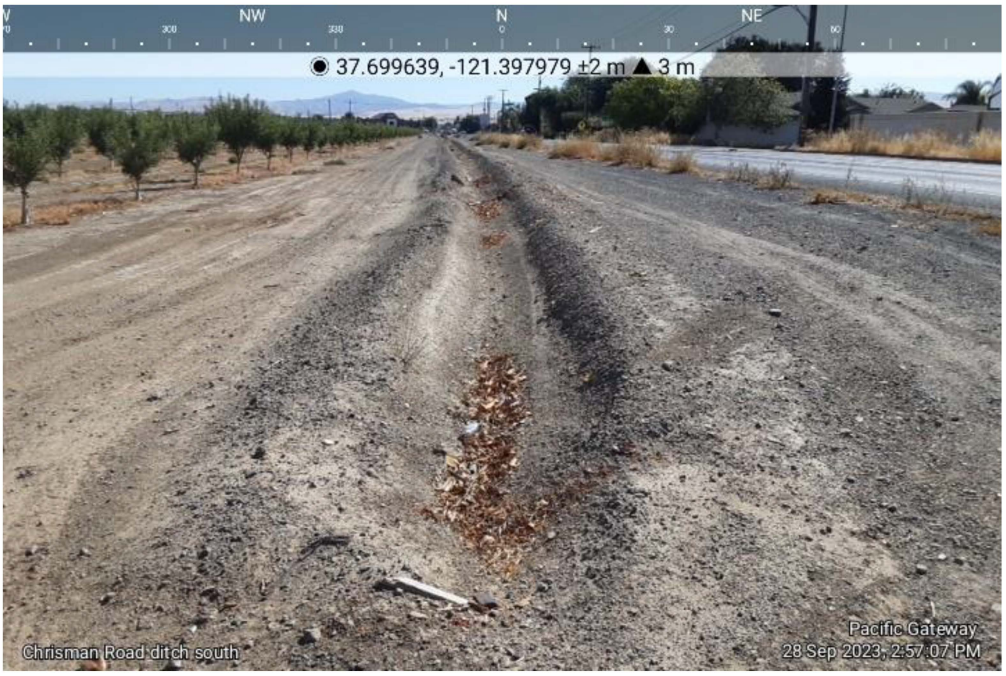

Photo 5. Isolated ditch at Chrisman Road, facing south.

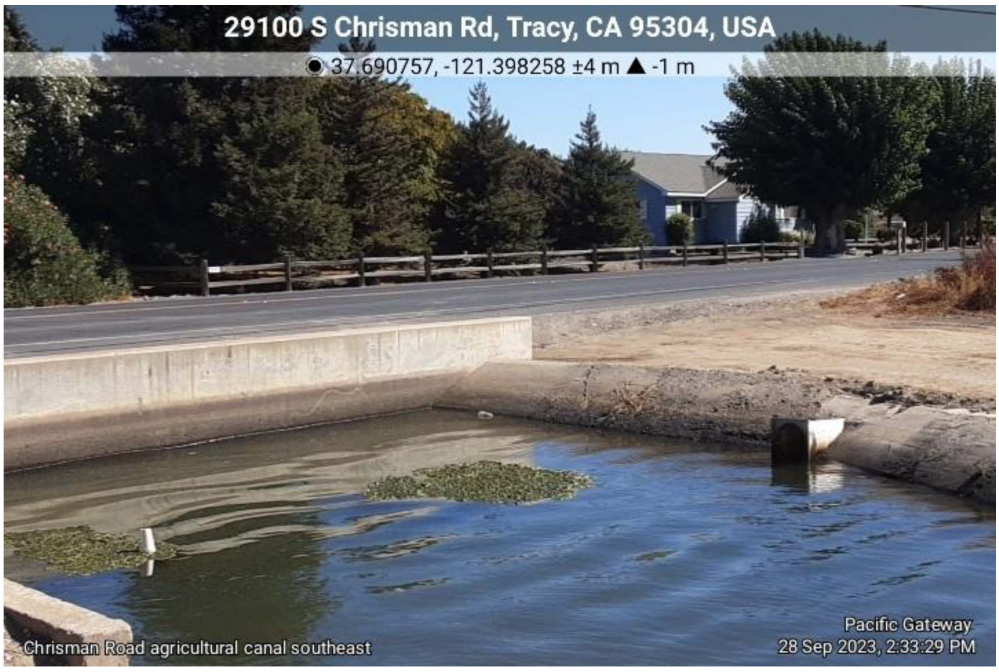

Photo 6. Agricultural canal at Chrisman Road, facing southeast.



Photo 7. Biological swale at Chrisman Road, facing north.



Photo 8. Roadside drainage along Vernalis Road, facing west.

Appendix B. Floral & Faunal Compendia

Bargas has documented the presence of 59 plant taxa and 16 wildlife taxa. Taxa are presented in taxonomic order.

Plants

Common Name	Scientific Name	Family	Major Clade	Native/Non-Native
Cattail	*Typha sp.*	Typhaceae	Monocots	—
Common Sunflower	*Helianthus annuus*	Asteraceae	Eudicots	Native
Bristly Ox-Tongue	*Helminthotheca echioides*	Asteraceae	Eudicots	Naturalized
Perennial Pepperweed	*Lepidium latifolium*	Brassicaceae	Eudicots	Naturalized
Tumbleweed	*Amaranthus albus*	Amaranthaceae	Eudicots	Naturalized
Lamb's Quarters	*Chenopodium album*	Chenopodiaceae	Eudicots	Naturalized
Doveweed, Turkey-Mullein	*Croton setiger*	Euphorbiaceae	Eudicots	Native
Little Mallow	*Malva parviflora*	Malvaceae	Eudicots	Naturalized
Common Devil's Claw	*Proboscidea louisianica subsp. louisianica*	Martyniaceae	Eudicots	Naturalized
Mule Fat	*Baccharis salicifolia subsp. salicifolia*	Asteraceae	Eudicots	Native
Desert Almond	*Prunus fasciculata*	Rosaceae	Eudicots	Native
Peach	*Prunus persica*	Rosaceae	Eudicots	Naturalized
Narrow-Leaved Willow, Coyote Willow	*Salix exigua var. exigua*	Salicaceae	Eudicots	Native
Tree Tobacco	*Nicotiana glauca*	Solanaceae	Eudicots	Naturalized
American Black Nightshade	*Solanum americanum*	Solanaceae	Eudicots	Native
Yellow Star-Thistle	*Centaurea solstitialis*	Asteraceae	Eudicots	Naturalized
Tall Flatsedge	*Cyperus eragrostis*	Cyperaceae	Monocots	Native
False Nutsedge	*Cyperus strigosus*	Cyperaceae	Monocots	Native
Wild Oat	*Avena fatua*	Poaceae	Monocots	Naturalized
Rescue Grass	*Bromus catharticus*	Poaceae	Monocots	Naturalized
Jungle Rice	*Echinochloa colona*	Poaceae	Monocots	Naturalized
Barnyard Grass, Japanese Millet, Watergrass	*Echinochloa crus-galli*	Poaceae	Monocots	Naturalized
Wall Barley	*Hordeum murinum*	Poaceae	Monocots	Naturalized

Bull Thistle	*Cirsium vulgare*	Asteraceae	Eudicots	Naturalized
Rough Blue Grass	*Poa trivialis*	Poaceae	Monocots	Naturalized
Mustard sp.	*Brassica sp.*	Brassicaceae	Eudicots	—
Prickly-pear sp.	*Opuntia sp.*	Cactaceae	Eudicots	—
Salsola sp.	*Salsola sp.*	Chenopodiaceae	Eudicots	—
Horseweed	*Erigeron canadensis*	Asteraceae	Eudicots	Native
California Black Walnut	*Juglans californica*	Juglandaceae	Dicot	Native
Great Brome	*Bromus diandrus*	Poaceae	Monocot	Invasive
Red Brome	*Bromus rubens*	Poaceae	Monocot	Invasive
Lop Grass	*Bromus hordeaceus*	Poaceae	Monocot	Invasive
Gumweed	*Grindelia hirsutula*	Asteraceae	Dicot	Native
Interior Live Oak	*Quercus wislizeni*	Fagaceae	Dicot	Native
Oleander	*Nerium oleander*	Apocynaceae	Dicot	Introduced
Clover	*Trifolium* spp.	Fabaceae	Dicot	–
Common Rush	*Juncus effusus*	Juncaceae	Monocot	Native
Western Redbud	*Cercis canadensis*	Fabaceae	Dicot	Native
Mule Fat	*Baccharis salicifolia*	Asteraceae	Dicot	Native
Small Geranium	*Geranium pusillum*	Geraniaceae	Dicot	Naturalized
Alkali Sacaton	*Sporobolus airoides*	Poaceae	Monocot	Native
Elm	*Ulmus* spp.	Ulmaceae	Dicot	Introduced
Field Bindweed	*Convolvulus arvensis*	Convolvulaceae	Dicot	Introduced
Bermuda Grass	*Cynodon dactylon*	Poaceae	Monocot	Invasive
Dandelion	*Taraxacum officinale*	Asteraceae	Dicot	Naturalized
Alfalfa	*Medicago sativa*	Fabaceae	Dicot	Introduced
Mexican Fan Palm	*Washingtonia robustus*	Arecaceae	Monocot	Naturalized
Chinese Hackberry	*Celtis sinensis*	Cannabaceae	Dicot	Introduced
Stone fruit species	*Prunus* sp.	Rosaceae	Dicot	Introduced

Spanish Clover	*Acmispon americanus*	Fabaceae	Dicot	Native
Sweet viburnum	*Viburnum odoratissimum*	Viburnaceae	Dicot	Introduced
Coast Redwood	*Sequoia sempervirens*	Cupressaceae	Dicot	Native
Black Locust	*Robinia pseudoacacia*	Fabaceae	Dicot	Introduced
Oleander	*Nerium oleander*	Apocynaceae	Dicot	Introduced
Toyon	*Heteromeles arbutifolia*	Rosaceae	Dicot	Native
Carolina Horsenettle	*Solanum carolinense*	Solanaceae	Dicot	Native
California Buckwheat	*Eriogonum fasciculatum*	Polygonaceae	Dicot	Native
Russian Thistle	*Salsola tragus*	Amaranthaceae	Dicot	Introduced

Wildlife

Common Name	Scientific Name	Family	Native/Non-Native
Rock Pigeon	*Columba livia*	Columbidae (Pigeons and Doves)	Non-native
Mourning Dove	*Zenaida macroura*	Columbidae (Pigeons and Doves)	Native
Red-shouldered Hawk	*Buteo lineatus*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
California Scrub Jay	*Aphelocoma californica*	Corvidae (Crows and Jays)	Native
Common Raven	*Corvus corax*	Corvidae (Crows and Jays)	Native
Northern Mockingbird	*Mimus polyglottos*	Mimidae (Mockingbirds and Thrashers)	Native
Song Sparrow	*Melospiza melodia*	Passerellidae (New World Sparrows)	Native
Red-winged Blackbird	*Agelaius phoeniceus*	Icteridae (Blackbirds)	Native
Red-Tailed Hawk	*Buteo jamaicensis*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
American Crow	*Corvus brachyrhynchos*	Corvidae (Crows and Jays)	Native
European Starling	*Sturnus vulgaris*	Sturnidae (Starlings)	Non-native
Brown-Headed Cowbird	*Molothrus ater*	Icteridae (Troupials and Allies)	Native
House Finch	*Haemorhous mexicanus*	Fringillidae (Finches, Euphonias, and Allies)	Native
Brewer's Blackbird	*Euphagus cyanocephalus*	Icteridae (Troupials and Allies)	Native
Turkey Vulture	*Cathartes aura*	Cathartidae (New World Vultures)	Native

Canada goose	*Branta canadensis*	Anatidae (Ducks, Geese, and Waterfowl)	Native

Appendix C. Special-Status Biological Resource Summary

The research conducted for this report included a desktop review of numerous resource databases in order to determine a list of special-status biological resources, including 12 plant taxa and 41 wildlife taxa to be analyzed for potential occurrence. The result of this analysis is summarized in the tables below. Table column definitions:

- **Common Name:** The most widely-accepted English common name for the taxon.
- **Scientific Name:** The most widely-accepted scientific name for the taxon.
- **Source(s):** The desktop review source(s) that contained this taxon.
- **Sensitivity Status:** The legal protected status of the taxon. These terms are described in detail in the Methods section of this report.
- **Habitat:** The quality of the habitat on the Project site for supporting the taxon. Classification of habitats is described in detail in the Methods section of this report.
- **Soils:** The suitability of soils on the Project site to support the taxon, if known. Classification of soils is described in detail in the Methods section of this report.
- **Potential:** The potential for the taxon to be found on the Project site. Ranking of potential is described in detail in the Methods section of this report.

Plants

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Soils	Occurrence Potential
Delta Button Celery	*Eryngium racemosum*	CNPS, SJMSCP	CE, CRPR 1B.1,	Low Quality	Unknown	Not Expected
Diamond-petaled California Poppy	*Eschsholzia rhombipetala*	CNPS, SJMSCP	CRPR 1B.1,	Low Quality	Yes	Not Expected
Caper-fruited Tropidocarpum	*Tropidocarpum capparideum*	CNPS, SJMSCP	CRPR 1B.1,	Low Quality	Unknown	Not Expected
Big Tarplant	*Blepharizonia plumosa*	CNPS, CNPS, CNDDB	CRPR 1B.1	Low Quality	Unknown	Not Expected
Slough Thistle	*Cirsium crassicaule*	CNPS, SJMSCP	CRPR 1B.1,	Not Present	No	None
Mt. Hamilton Coreopsis	*Leptosyne hamiltonii*	SJMSCP	CRPR 1B.2,	Not Present	Unknown	None
Showy Golden Madia	*Madia radiata*	CNPS, CNDDB	CRPR 1B.1	Low Quality	Unknown	Not Expected
Large-flowered Fiddleneck	*Amsinckia grandiflora*	CNPS, IPaC, CNDDB	FE, CE, CRPR 1B.1	Not Present	Unknown	None
Wright's trichocoronis	*Trichocoronis wrightii var. wrightii*	CNPS, SJMSCP	CRPR 2B.1,	Not Present	Unknown	None

Wildlife

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Potential
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	IPaC	FT	Not Present	Presumed Absent
Vernal Pool Tadpole Shrimp	*Lepidurus packardi*	IPaC	FE	Not Present	Presumed Absent
Valley Elderberry Longhorn Beetle	*Desmocerus californicus dimorphus*	CNDDB, IPaC; SJMSCP	FT	Not Present	Presumed Absent
Monarch - California Overwintering Population	*Danaus plexippus*	IPaC	FC	Low Quality	Not Expected
Foothill Yellow-legged Frog	*Rana boylii*	CNDDB	CE, SSC	Not Present	Presumed Absent
California Red-legged Frog	*Rana draytonii*	IPaC	FT, SSC	Not Present	Presumed Absent
Western Spadefoot	*Spea hammondii*	CNDDB; IPaC; SJMSCP	SSC	Not Present	Presumed Absent
California Tiger Salamander	*Ambystoma californiense*	CNDDB; IPaC	FE, CE	Not Present	Presumed Absent
Coast Horned Lizard	*Phrynosoma blainvillii*	CNDDB	SSC	Not Present	Presumed Absent
California Glossy Snake	*Arizona elegans occidentalis*	CNDDB	SSC	Low Quality	Not Expected
San Joaquin Coachwhip	*Coluber flagellum ruddocki*	CNDDB	SSC	Low Quality	Not Expected
Northwestern Pond Turtle	*Actinemys marmorata*	CNDDB; IPaC	SSC	Not Present	Presumed Absent
Yellow-billed Cuckoo	*Coccyzus americanus*	IPaC	SJMSCP Covered Species	Not Present	Presumed Absent
Long-billed Curlew	*Numenius americanus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Great Blue Heron	*Ardea herodias*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Great Egret	*Ardea alba*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
California Condor	*Gymnogyps californianus*	IPaC	FE, CE, FP	Not Present	Presumed Absent
Osprey	*Pandion haliaetus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Northern Harrier	*Circus hudsonius*	SJMSCP	SSC	Not Present	Presumed Absent
Sharp-shinned Hawk	*Accipiter striatus*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Cooper's Hawk	*Accipiter cooperii*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Swainson's Hawk	*Buteo swainsoni*	CNDDB; SJMSCP	CT	Not Present	Presumed Absent
Burrowing Owl	*Athene cunicularia*	CNDDB; SJMSCP	SSC	Low Quality	Not Expected
Merlin	*Falco columbarius*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Least Bell's Vireo	*Vireo bellii pusillus*	CNDDB	FE, CE	Not Present	Presumed Absent
Horned Lark	*Eremophila alpestris*	CNDDB; SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent

Yellow-breasted Chat	*Icteria virens*	SJMSCP	SSC	Not Present	Presumed Absent
Tricolored Blackbird	*Agelaius tricolor*	CNDDB; SJMSCP	CT, SSC	Not Present	Presumed Absent
Yuma Myotis	*Myotis yumanensis*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Western Red Bat	*Lasiurus blossevillii*	SJMSCP	SSC	Not Present	Presumed Absent
Riparian Brush Rabbit	*Sylvilagus bachmani riparius*	CNDDB; IPaC	FE, CE	Not Present	Presumed Absent
Riparian Woodrat	*Neotoma fuscipes riparia*	IPaC	FE, SSC	Not Present	Presumed Absent
San Joaquin Kit Fox	*Vulpes macrotis mutica*	CNDDB; IPaC; SJMSCP	FE, CT	Low Quality	Not Expected
Ringtail	*Bassariscus astutus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Loggerhead Shrike	*Lanius ludovicianus*	CNDDB, SJMSCP	SSC	Not Present	Presumed Absent
Green sturgeon - Southern DPS	*Acipenser medirostris pop. 1*	CNDDB	FT, SSC	Not Present	Presumed Absent
Steelhead - Central Valley DPS	*Oncorhynchus mykiss irideus pop. 11*	CNDDB	FT, SSC	Not Present	Presumed Absent
Longfin Smelt	*Spirinchus thaleichthys pop. 2*	CNDDB	FE, CT	Not Present	Presumed Absent
Yellow Warbler	*Dendroica petechia brewsteri*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Black-Crowned Night Heron	*Nycticorax nycticorax*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Eastern Red Bat	*Lasiurus borealis*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent

Biological Resources Assessment

Pacific Gateway Specific Plan Project
Tracy, San Joaquin County, California



Prepared For: Raney Planning & Management, Inc.
1501 Sports Drive, Suite A
Sacramento, CA 95834

Report Date: September 2025

BARGAS

Sacramento Valley • Inland Empire • Greater Los Angeles • San Diego • San Francisco Bay Area

www.Bargas.com

Project Team

Report Author(s):	Dustin Baumbach, Gregory Garcia, Jamie Jackson, Thomas Liddicoat, and Vivian Lowe
Field Surveyor(s):	Corey Clapp and Vivian Lowe
GIS:	Vivian Lowe
Project Manager:	Dustin Baumbach
Reviewer:	Thomas Liddicoat
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1 Introduction

Bargas Environmental Consulting, LLC (Bargas) prepared this Biological Resources Assessment (hereafter, Assessment) on behalf of Raney Planning & Management, Inc for the proposed Pacific Gateway Specific Plan Project (Project), which generally proposes new university-focused development of an agricultural area for an industrial, commercial, and recreational use. This Assessment documents the existing biological conditions on-site and evaluates potential impacts to sensitive biological resources with respect to federal, state, and local policies. This Assessment provides the biological resources technical documentation necessary for project review under the California Environmental Quality Act (CEQA) by the Lead Agency.

1.1 Project Location

The Project site consists of approximately 1,561.80 acres bordered by Durham Ferry Road to the north; an unnamed, unimproved road and the California Aqueduct to the south; South Tracy Boulevard to the west; and an unnamed, unimproved road 0.5 miles west of South Bird Road to the east, in an unincorporated region of San Joaquin County, 0.85 miles south of the City of Tracy (**Figure 1**). The Project site is within Sections 15, 21-23, 25-28, 30, 31, 35, and 36 of Township 3 South, Range 5 and 6 East of the Mount Diablo Prime Meridian of the U.S. Geological Survey's 7.5-minute Tracy and Vernalis Quadrangle. The site consists of forty-nine parcels; County Assessor's Parcel Numbers (APNs) 253-140-01, -09, -11, -13, -14, -15, -16, -17, -19, -20, -21, -22, -23, -24, -25, 253-150-06, 253-180-02, -06, -11, 253-190-04, -05, -07, -08, -09, -10, -11, -19, -21, -22, 253-260-05, -09, -12, -13, -14, 253-280-06, -07, 253-290-02, -05, -09, -10, 253-200-06, -11, -12, -13, -19, -20, 255-070-01, 255-060-14, and 255-060-39. The Project is located within the boundaries of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP).

1.2 Project Description

The proposed Pacific Gateway Specific Plan Project and related entitlements will establish the land uses, zoning, development standards, and development regulations for the Project site. The Project consists of the development of 24,675,000 square feet (sf) of Limited Industrial use, 160,000 sf of General commercial use, 93,000 sf of Industrial Park use, 66.5 acres of University Campus, plus 9.87 acres for future expansion, a Veterans of Foreign Wars (VFW) post, a new fire station, pedestrian and bicycle facilities, and various open space parks including a 11.87-acre Central Park. The Project also includes infrastructure improvements associated with the future development including water, wastewater, stormwater, and additional roadways.

The open space, park, and pedestrian and bike facilities proposed will provide outdoor spaces for both passive outdoor areas and recreation as well as provide accessibility for both the workforce and the community. Furthermore, a network of public streets to be constructed as part of the Project will provide access to each part of the development including on-site private interior site circulation and the necessary vehicle and truck and trailer courts.

The Project would be developed in two phases: an Initial Phase Development followed by Programmatic-Level long-term buildout phases based on market demand. The subsequent Programmatic-Level development would expand upon the Initial Phase Development. The Initial Phase includes the development of four Class "A" facilities for a total of approximately 4,000,000 sf situated on 181.26 net acres immediately east of Chrisman Road. The Initial Phase Development also includes the development of 25,000 sf for the University facility that would serve as Phase 1 of the University Campus. The VFW facility would also be developed in the Initial Phase as well as a new building and associated parking for the new home of Tracy Post 1537. The Initial Phase would also include the construction of the

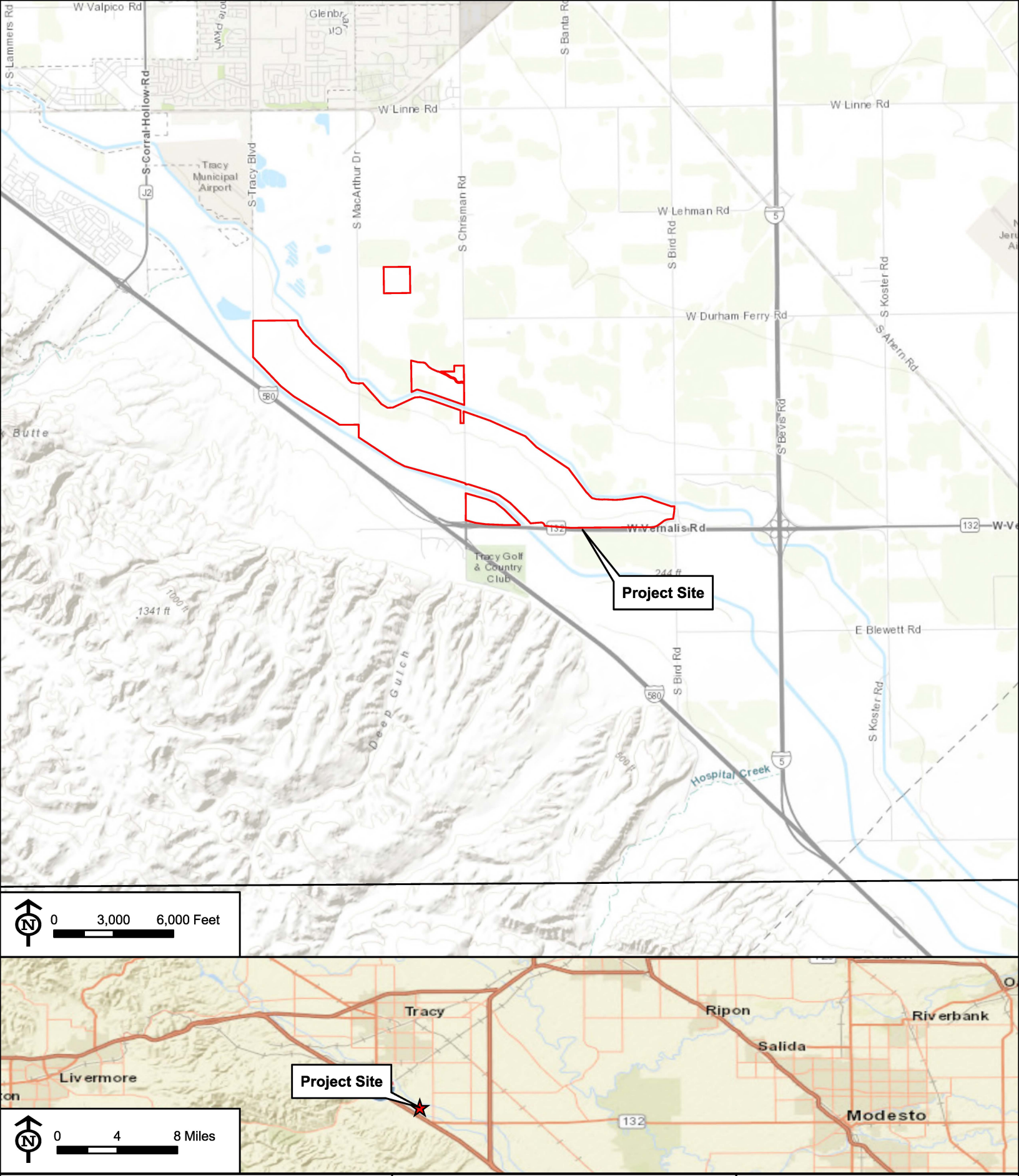
necessary backbone infrastructure to serve the Initial Phase development; this includes improvements to Chrisman Road as well as utilities improvements including the installation of a groundwater well and treatment facilities, construction of a pre-packaged WWTP, and construction of a large stormwater retention basin. The Initial Phase is anticipated to be developed over five to six years while the subsequent Programmatic-Level development would occur over a 25 to 30-year period.

1.3 Definitions

The following terms and definitions reflect areas of the Project will be followed throughout this Assessment. These areas are presented on **Figure 2**.

- **Project site:** The Project site is defined as the approximately [1]1,561.80-acre Pacific Gateway Specific Plan Project area. The Project site includes both the Initial Phase and surrounding Programmatic-Level long-term buildout areas.
- **Initial Phase:** The Initial Phase reflects approximately 249.33 acres being analyzed for the first stage of development (**Figure 3**).
- **Biological Study Area:** The Biological Study Area consists of the Project Site and a surrounding 250-foot buffer. This is the area for which biological resources were analyzed for this Assessment, consisting of approximately 1,990.93 acres.
- **Regional Area:** The Regional Area consists of the Project site and a 5-mile surrounding buffer. The Regional Area was used as a basis for generating lists of special-status species and other biological resources considered in this report.

[1] The total Project acreage of 1,576 provided in the environmental impact report includes North Street, MacArthur Drive, and an unnamed road that are not included in this report. Information regarding these roads will be provided in the off-site report.



Source: ESRI ArcGIS Online Basemap - World Topographic Map, World Street Map

Public Land Survey System (PLSS):
Mount Diablo,Township 3S, Range 5E, 6E, Section 15, 21, 22, 23, 25, 26, 27, 28, 30, 35, 36

USGS Quad(s): Tracy (n.d.), Vernalis (n.d.)

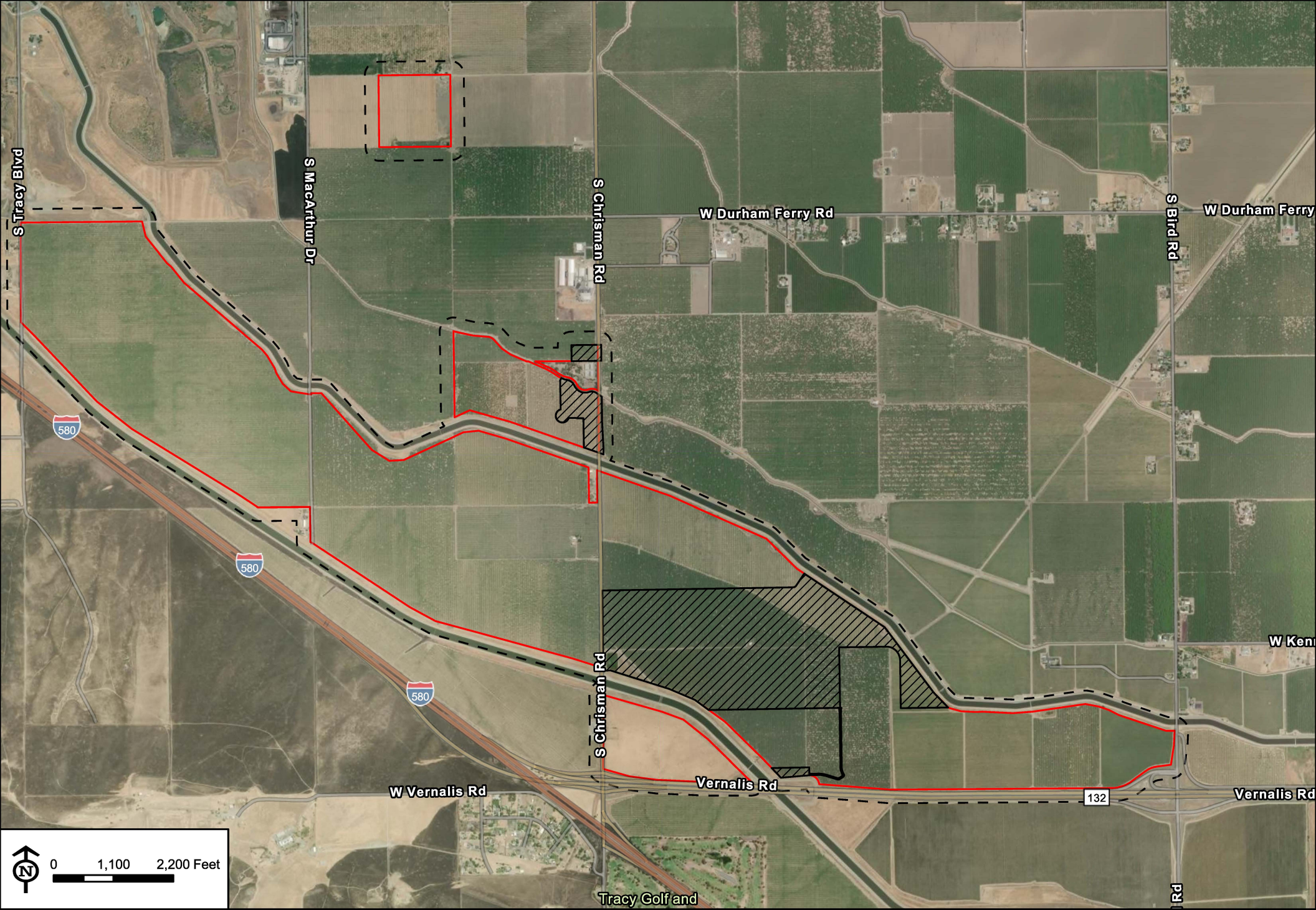
Project Site Coordinates: 121°23'24"W 37°38'42"N

Figure 1
Project Site and Vicinity

Pacific Gateway Specific Plan Project

BARGAS Environmental Consulting

Map Created: 1/31/2025, Bargas Project Number: 1644-22



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

BARGAS Environmental Consulting

Initial Phase
Biological Study Area
Project Site

Figure 2 Study Area Context

Pacific Gateway Specific Plan Project

Map Created: 1/31/2025, Bargas Project Number: 1644-22

2 Regulatory Setting

The Project could be subject to the federal, state, and local regulations discussed below.

2.1 Federal

2.1.1 Endangered Species Act

The Federal Endangered Species Act (ESA) is the federal government's regulations protecting rare and declining plant and wildlife species. FESA is jointly implemented by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS, marine resources only). FESA protects species using the following status designations:

- A federally **endangered** species is a species of invertebrate, plant, or wildlife formally listed by the USFWS under FESA as facing extinction throughout all or a significant portion of its geographic range.
- A federally **threatened** species is one formally listed by the USFWS as likely to become endangered within the foreseeable future throughout all or a significant portion of its range.
- A **proposed** threatened or endangered species is one officially proposed by the USFWS for addition to the federal threatened or endangered species lists.
- **Candidate** species are "plants and animals for which the USFWS has sufficient information on their biological status and threats to propose them as endangered or threatened under FESA, but for which development of a proposed listing regulation is precluded by other higher priority listing activities."

"Take" of a federally endangered or threatened species or its habitat is prohibited by federal law without a special permit. The term "take," under FESA, means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. "Harm" is defined by the USFWS to encompass "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering" (50 CFR § 17.3).

Section 10(a)(1)(B) of the FESA allows for take of a threatened or endangered species incidental to development activities once a Habitat Conservation Plan (HCP) has been prepared to the satisfaction of the USFWS and a Section 10(a) incidental take permit has been issued to an applicant. For federal projects (including those involving federal funding), Section 7 of the FESA allows for consultation between the affected agency and the USFWS to determine what measures may be necessary to compensate for the incidental take of a listed species. A federal project is any project that is proposed by a federal agency or is at least partially funded or authorized by a federal agency. Additionally, if the listed species or its habitat occurs in a portion of the project subject to federal jurisdiction (such as Waters of the United States by the United States Army Corps of Engineers under Section 404 of the Clean Water Act), then consultation under Section 7 of the FESA is usually permissible and may be required.

FESA also requires the USFWS to consider whether there are areas of habitat essential to conservation for each listed species. Critical habitat designations protect these areas, including habitat that is currently unoccupied but may be essential to the recovery of a species. An area is designated as critical habitat after the USFWS publishes a proposed Federal regulation in the Federal Register and then receives and considers public comments on the proposal. The final boundaries of critical habitat are officially designated when published in the Federal Register.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) is a federal law governing the taking, killing, possession, transportation, and importation of various birds, their eggs, parts, and nests. The take of any number of a bird species listed as protected on any one of four treaty lists is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent over utilization. The MBTA also prohibits taking, possession, import, export, transport, selling, purchase, barter, or offering for sale, purchase or barter, certain bird species, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR 21.11).

2.1.3 Clean Water Act and Rivers and Harbors Act

The regulatory setting with regards to aquatic resources is framed by current enabling legislation and case law. Under Section 404 of the Clean Water Act (CWA), the US Army Corps of Engineers (USACE) regulates the discharge of dredged and fill materials into "waters of the U.S." Jurisdictional waters of the U.S. include "territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide; tributaries; lakes and ponds, and impoundments of jurisdictional waters; and adjacent wetlands" (33 Code of Federal Regulations [CFR] § 328.3). Certain waters of the U.S. are considered "special aquatic sites" because they are generally recognized as having ecological value; such sites include sanctuaries and refuges, wetlands, mudflats, vegetated shallows, and riffle and pool complexes (40 CFR § 230). Special aquatic sites are defined by the U.S. Environmental Protection Agency (USEPA) and may be afforded additional consideration in a project's permit process. The USACE also regulates navigable waters under Section 10 of the Rivers and Harbors Act of 1899. Navigable waters are defined as "… those waters of the U.S. that… are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce" (33 CFR § 322.2).

Recent federal rulemaking has modified how the USACE defines certain waters of the U.S. As a result of the Supreme Court's May 25, 2023 decision in Sackett v. Environmental Protection Agency, the USACE is now interpreting waters of the U.S. consistent with the Supreme Court's decision, which ruled that the federal Clean Water Act extends to only those "wetlands with a continuous surface connection to bodies that are 'waters of the United States' in their own right," so that they are "indistinguishable" from those waters.

Projects that propose to place fill in jurisdictional wetlands and non-wetland waters of the U.S. is regulated by the USACE under Section 404 of the CWA. The USACE issues nationwide permits for specific types of activities with minimal individual or cumulative adverse environmental impacts. Individual permits are required for large complex projects or projects that exceed the impact thresholds for nationwide permits.

2.2 State

2.2.1 California Environmental Quality Act

CEQA is a public disclosure process codified by California Public Resources Code 21000, requiring decision-makers to analyze the environmental impacts of a project, disclose those impacts to the public, and mitigate environmental impacts to the extent feasible. The state or local lead agency provides an evaluation of project effects on biological resources; determining the significance of those effects is guided by Appendix G of the CEQA guidelines. These evaluations must consider direct effects on a biological resource within the project site itself, indirect effects on

adjacent resources, and cumulative effects within a larger area or region. Effects can be locally important but not significant according to CEQA if they would not substantially affect the regional population of the biological resource. Significant adverse impacts on biological resources would include the following:

- Substantial adverse effects on any species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations or by the CDFW or the USFWS (these effects could be either direct or via habitat modification);
- Substantial adverse impacts to species designated by the CDFW as Species of Special Concern (SSC);
- Substantial adverse effects on riparian habitat or other sensitive habitat identified in local or regional plans, policies, or regulations or by CDFW and USFWS;
- Substantial adverse effects on federally protected wetlands defined under Section 404 of the CWA (these effects include direct removal, filling, or hydrologic interruption of marshes, vernal pools, coastal wetlands, or other wetland types);
- Substantial interference with movements of native resident or migratory fish or wildlife species population, or with use of native wildlife nursery sites;
- Conflicts with local policies or ordinances protecting biological resources (e.g., tree preservation policies); and;
- Conflict with provisions of an adopted HCP, NCCP, or another approved local, regional, or state habitat conservation plan.

2.2.2 California Endangered Species Act

The California Endangered Species Act (CESA) prohibits the take of state-listed threatened and endangered species. Under CESA, state agencies are required to consult with CDFW when preparing CEQA documents. Under CESA, CDFW is responsible for maintaining a list of rare, threatened, and endangered species designated under state law (California Fish and Game Code § 2070-2079). CDFW also maintains lists of candidate species, SSC, and fully-protected species. Candidate species are those taxa that have been formally recognized by the CDFW and are under review for addition to the state threatened and endangered list. Species of special concern are those taxa that are considered sensitive, and this list serves as a "watch list." The CDFW can authorize "take" if an incidental take permit is issued by the Secretary of the Interior or Commerce in compliance with FESA, or if the director of the CDFW issues a permit under Section 2080 in those cases where it is demonstrated that the impacts are minimized and mitigated.

2.2.3 California Fish and Game Code

Section 1600 et seq. – Lake and Streambed Alteration Agreement. Section 1600 provides provisions for protecting riparian systems, including the bed, banks, and riparian habitat of lakes, seasonal and perennial streams, and rivers. This section requires an applicant to notify CDFW and obtain a Lake and Streambed Alteration Agreement (LSAA) if their project would divert or obstruct the natural flow of any river, stream, or lake; change the bed, channel, or bank of any river, stream, or lake; use material from any river, stream, or lake; or deposit or dispose of material into any river, stream, or lake.

Section 2050 et seq. – California Endangered Species Act. CESA establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA is administered by CDFW and prohibits the take of any species that the California Fish and Game Commission (CFGC) determines to be a threatened or endangered species. CESA also mandates that "state agencies should not approve projects as proposed which

would jeopardize the continued existence of any endangered species or threatened species" if reasonable and prudent alternatives are available that would avoid jeopardy. CDFW administers CESA and authorizes take through California Fish and Game Code Section 2081 Incidental Take Permits or through Section 2080.1 (for species also listed under FESA, consistency determination with a USFWS Biological Opinion).

Section 3511 – Fully Protected Species. The legislature of the State of California designated certain species as "fully protected" prior to the creation of CESA. Section 3511 states that "fully protected" birds or parts thereof may not be taken or possessed at any time. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, mammals, amphibians and reptiles, and birds. Most fully protected species have since been listed as threatened or endangered under CESA and/or FESA.

Sections 3503, 3503.5, 3505, 3513 — Birds. These California Fish and Game Code sections protect all birds, birds of prey, and all nongame birds, as well as their eggs and nests, for species that are not already listed as fully protected and that occur naturally within the state. Sections 3503 and 3503.5 of the CFGC stipulate the following regarding eggs and nests: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by CFGC or any regulation made pursuant thereto; and Section 3503.5 states that is it unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by CFGC or any regulation adopted pursuant thereto. Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

2.2.4 California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code § 1900-1913) affords the CDFW Commission the authority to designate native plants as endangered or rare and protect them from "take." The California Native Plant Society (CNPS) maintains a list of sensitive plant species native to California and assigns each a rank in the California Rare Plant Rank (CRPR) system:

- 1A: Plants presumed extirpated in California and either rare or extinct elsewhere;
- 1B: Plants are rare, threatened, or endangered in California and elsewhere;
- 2A: Plants presumed extirpated in California, but more common elsewhere;
- 2B: Plant are rare, threatened, or endangered in California, but more common elsewhere;
- 3: Plants about which more information is needed (on a review list);
- 4: Plants of limited distribution (on a watch list).

This CRPR system is further defined:

- 0.1: Seriously threatened in California, meaning there is a high degree (over 80% of occurrences) and immediacy of threat;
- 0.2: Moderately threatened in California, meaning there is a moderate degree (20-80% of occurrences) and immediacy of threat;

- 0.3: Not very threatened in California, meaning there is a low degree (less than 20% of occurrences) and immediacy of threat.

All plants with a CRPR of 1 and 2 meet the standards for state listing under the CEQA Guidelines (14 CCR § 15380). CNPS recommends that plants of a CRPR of 3 and 4 also be evaluated for consideration under CEQA.

2.2.5 Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act of 1969 established the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCB), collectively referred to as the Water Boards, and authorized them to provide oversight for water rights and water quality. It uses the National Pollutant Discharge Elimination System (NPDES) to monitor point source discharges into the waters of the State to prevent water quality degradation. It also protects wetlands, surface waters, and groundwater from both point and nonpoint sources of pollution.

2.2.6 State Wetland Definition and Procedures

The SWRCB adopted the State Wetland Definition and Procedures for Discharges or Fill Material to Waters of the State in 2019 and completed revisions to this set of procedures in 2021 (SWRCB 2021). Four major elements are included in these procedures as described below, in addition to procedures for the submittal, review and approval of CWA Section 401 permits not described in this report.

1. Wetland definition:

   An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration such saturation is sufficient to cause anaerobic conditions in the upper substrate; and 3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

2. Framework for determining waters of the state:

   Waters of the state are broadly defined by the Porter-Cologne Water Quality Control Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The 2021 procedures expand upon this definition to clearly include natural wetlands, wetlands created by modification of a surface water of the state, and artificial wetlands meeting specific criteria.

   The criteria for an artificial wetland include wetlands created for agency-approved compensatory mitigation; those identified in a water quality control plan; and those greater than or equal to one acre in size unless they are constructed and maintained for wastewater treatment or disposal, sediment settling, stormwater permitting program pollutant or runoff management, surface water treatment, agricultural crop irrigation or stock watering, fire suppression, industrial processing and cooling, active surface mining, log storage, recycled water management, maximizing groundwater recharge, and rice paddies.

3. Wetland delineation procedures:

   USACE-defined procedures for aquatic resources delineation used to assess the presence or absence of hydrophytic vegetation, hydric soils, and wetland hydrology are required by the SWRCB to delineate waters of the state, with one modification being that "the lack of vegetation does not preclude the determination of such an area that meets the definition of wetland."

2.3 Local Policies and Ordinances

2.3.1 San Joaquin County Multi-Species Habitat Conservation and Open Space Plan

A habitat conservation plan (HCP) is a planning document required as part of an application for an incidental take permit under Section 10(a)(1)(B) of FESA. Such permits are issued by the USFWS when take is not the intention of, and is incidental to, otherwise legal activities. An application for an incidental take permit under Section 10 of FESA must be accompanied by an HCP. HCPs describe the impacts of the proposed action that may result in take of federally listed species; how those impacts will be minimized or mitigated; and how the HCP is to be funded. HCPs can apply to both listed and non-listed species, including those that are candidates or have been proposed for listing. Conserving species before they are in danger of extinction or are likely to become so can also provide early benefits and prevent the need for listing.

The Project is within the boundaries of the San Joaquin County Multi-Species Habitat Conservation and Open Space Plan (SJMSCP), which encompasses San Joaquin County's 1,400+ square miles and 900,000+ acres. The SJMSCP is the county's strategy for balancing conservation with the needs of development while safeguarding agriculture; protecting land-owner rights; providing and maintaining multiple-use Open Spaces, and managing biological resources, especially special-status species under state and federal regulation. The SJMSCP contains numerous goals, policies, and strategies to protect and/or preserve biological resources. The SJMSCP covers 97 special-status plant, fish, and wildlife species in 52 vegetative communities scattered throughout San Joaquin County.

2.3.2 San Joaquin County General Plan

The San Joaquin County General Plan (General Plan) is a set of goals, objectives, policies, implementation measures, and maps that form a blueprint for physical development within the County. The General Plan contains numerous goals, policies, and strategies to protect and/or preserve environmental resources (San Joaquin County 2016).

The Land Use Section of the General Plan includes policies to help develop the unincorporated areas within the County's jurisdiction. This section encourages land development while establishing land use designators to identify the type and intensity of uses on unincorporated land. These designations will help guide development while simultaneously preserving farmland and protecting natural habitats within the County. The Natural and Cultural Resources Element includes policies to guide development and infrastructure practices with goals of preserving environmental resources and promoting cleaner air and water quality. Preservation and protection of the County's natural habitats are highlighted in this element, including its network of rivers, streams, and tributaries that flow into the San Joaquin Delta. Avoiding impacts to the San Joaquin Delta, wherever possible, is of particular concern as it supports wildlife habitat and the agriculture industry.

2.3.3 San Joaquin County Code Division 15: Natural Resources Regulations Code

2.3.3.1 Title 9-1505 Trees

The County has adopted a tree ordinance "to preserve the County's tree resources." Title 9-1505 of the San Joaquin County Natural Resources Regulations Code regulates the removal of Native Oak Trees, Heritage Oak Trees, or Historic Trees. The ordinance requires the applicant to submit an approved Improvement Plan application subject to staff review prior to the removal of any Native Oak Tree, Heritage Oak Tree, or Historic Tree.

2.3.3.2 Title 9-1510 Riparian Habitat

Title 9-1510 of the San Joaquin County Natural Resources Regulations Code seeks to preserve the County's riparian habitat. The ordinance requires applicants to submit a Riparian Habitat Mitigation Plan prior to the destruction, elimination, or degradation of riparian habitat.

3 Methods

This Assessment is informed by data gathered from a comprehensive desktop analysis of literature, maps, numerous resource databases pertaining biological resources, and multiple field surveys at the Project site.

3.1 Desktop Review

Prior to conducting field surveys, Bargas conducted an initial review of literature and data sources to characterize biological conditions and to compile records of sensitive biological resources that could potentially occur in the Biological Study Area (Study Area).

3.1.1 Biological Setting

The biological setting includes terrain, hydrology, soils, land uses, and other features that support or inhibit biological resources in an area. The following resources were reviewed in detail to better understand the biological setting of the Project site.

- US Geological Survey's *National Hydrography Dataset* (USGS 2024);
- US Department of Agriculture National Resource Conservation Service *Web Soil Survey* (NRCS 2024);
- Google Earth Pro aerial map images, including historical aerial images to determine how habitat within the Project site has changed over time (Google 2024).

3.1.2 Special-Status Species & Habitats

It is important to create a well-defined list of habitats and species that could reasonably be expected to occur at the Project site to analyze potential Project effects on such species and their suitable habitats. The following summarizes how the list of potentially occurring special-status species and other sensitive biological resources was assembled.

3.1.2.1 Data Sources

Records of special-status species occurrences were queried from the following resources:

- US Fish and Wildlife Service's *Information for Planning and Consultation* portal (IPaC) (USFWS 2024) for a list of federally listed species and designated critical habitat recommended for impact analysis consideration, based on an upload of the Study Area.
- California Department of Fish and Wildlife's *California Natural Diversity Database* (CNDDB) (CDFW 2024) for special-status species records within the Regional Area.
- California Native Plant Society's *Inventory of Rare and Endangered Plants* (CNPSa 2024) for a list of special-status plant species occurrences within the USGS 7.5-minute quadrangles that overlap the Regional Area.
- San Joaquin County's *Multi-species Habitat Conservation and Open Space Plan* (SJMSCP 2000) for a list of species covered under the Plan, or "SJMSCP Covered Species", occurring within the Central-Southwest Transition Zone. These species can also be considered to occur in the Row and Field Crop/Riparian Preserve

habitats of the Central Zone, except for those associated only with the Stanislaus, San Joaquin, or Mokelumne Rivers.

3.1.2.2 Special-Status Designations Considered

A variety of agencies and respected non-profit organizations assess the conservation status of plant and wildlife species; however, not all are applicable to this Assessment. The following special-status designations were considered when determining special-status species to be discussed in this Assessment:

- **Federal Status:** Species listed as Endangered (FE) or Threatened (FT), as well as species Proposed as Endangered (FPE), Proposed as Threatened (FPT), Proposed for Delisting (FPD), and Candidates (FC) for listing under the Federal Endangered Species Act.
- **California Status:** Species listed as Endangered (CE) or Threatened (CT), as well as species that are Candidates for Endangered (CCE) status, Threatened (CCT) status, or Delisting (CCD) under the California Endangered Species Act. Also considered are species listed as Fully Protected (FP) and Species of Special Concern (SSC).
- **CNPS Status:** All plants listed with a California Rare Plant Rank (CRPR) maintained by the CNPS *Inventory of Rare and Endangered Plants*.

3.1.3 Occurrence Potential

Based on the desktop review, field surveys, and habitat analyses, Bargas generated a list of special-status species for evaluation and assessed the potential for each special-status species likelihood of occurrence on-site. Biological conditions (e.g., vegetation communities, habitats, disturbances, etc.) on-site as well as the habitat and life cycle requirements of special-status species identified for the potential to occur analysis were considered. "Recent" occurrences are defined as observed within the past 30 years. Based on these considerations, each species was assigned a level of potential to occur, using the following categories:

- **Present:** Species was detected during biological surveys conducted for the Project by Bargas.
- **High**: Species with recorded occurrence(s) within or near the Study Area and suitable habitat (e.g., appropriate elevation, hydrology, soils, cover, habitat type, food resources, and etc.) exists in the Study Area; however, the species was not observed during biological surveys for the Project.
- **Moderate:** Species with no known recorded occurrence(s) within or near the Study Area and the species was not observed during biological surveys for the Project. However, habitat within the Study Area is suitable to support the species.
- **Not Expected:** Species with no known recorded occurrence(s) within or near the Study Area. No suitable habitat present on-site; or habitat is within the Project, but habitat on-site is substantially disturbed, fragmented, or is small in extent such that is very unlikely to support the species.
- **Presumed Absent:** There are no records of the species occurring within or near the Study Area. The Study Area is not within the known geographic range for the species, and/or suitable habitat (e.g., soil, vegetation, elevational range, etc.) was not found during the field surveys conducted for the Project. This species is detectable year-round and would have been detected during surveys, but was not, or focused surveys were conducted for the species and the species was not detected.

The potential for bird species to occur were further distinguished into those that may: 1) nest within or near the Study Area; 2) forage within or near the Study Area; and/or 3) occur on or near the Study Area as transients during migratory flights or other dispersal events.

3.2 Field Surveys

Bargas biologists conducted three surveys of the site between June 2023 to November 2024. On June 13 and 14, 2023, Bargas biologist Anthony Hartman conducted a reconnaissance-level field survey for biological resources. Weather was typical for the season with temperatures ranging from 77 to 80 degrees Fahrenheit (°F), partly cloudy skies, and no substantial wind or precipitation on either day. On Tuesday, July 25, 2023, Bargas biologists Jinnah Benn, Anthony Hartman, and Dustin Baumbach conducted the aquatic resources delineation. Weather conditions were typical for the season with temperatures ranging from 80 to 96 °F, low wind speeds, and no precipitation. On November 20, 2024, Bargas Biologists Vivian Lowe and Corey Clapp conducted an additional reconnaissance-level field survey for biological resources and to verify the current conditions of the entire site remained relatively consistent with observations from the prior surveys conducted by Bargas in 2023. Bargas biologists also updated and refined biological resources mapping as appropriate. The weather was typical for the season with the temperature being 52°F and mostly cloudy skies with a light breeze.

The pedestrian surveys consisted of walking transects throughout the Project site and scanning adjacent areas within the Biological Study Area with binoculars. The entirety of the Project site and some areas within the Biological Study Area were accessible via public rights-of-way. The Project site was evaluated for the presence of habitat components that could support special-status wildlife and plant species identified during the Literature and Database Review. Habitats that were determined to be potential habitat for a special-status species were further assessed for suitability. The biologists conducted vegetation mapping, classifying vegetation communities and land cover types generally following the Manual of California Vegetation (MCV): Second Edition (CNPS 2022a), where applicable. The MCV provides standard classifications based on community composition and structure defining inclusion based on thresholds of dominant species cover. Additionally, the identified communities reflect the vegetation community classifications outlined in Section 2.2.1 of the SJMSCP. The biological surveys conducted were comprehensive but do not equate to protocol–level surveys or focused surveys, defined by regulating and/or resource protection agencies. Throughout the survey, plant and animal species detected on site were recorded.

The surveys included a formal aquatic resources delineation following the USACE protocol for the Arid West, which was conducted by Dustin Baumbach, Jinnah Benn, and Anthony Hartman in July of 2023. The detailed USACE methodology can be found in the Aquatic Resources Delineation Report prepared for the Project (Bargas 2023). During the biological survey conducted in November 2024, Bargas reviewed the jurisdictional aquatic resources previously mapped and updated the mapping to include potentially jurisdictionally aquatic resources within the Project site. Aquatic resource boundaries were mapped by Corey Clapp and Vivian Lowe using an Eos Positioning Systems Arrow GNSS Global Positioning System (GPS) receiver paired with ESRI Field Maps application. The November 2024 survey did not include a formal jurisdictional delineation.

The initial June and July surveys occurred within the typical nesting bird season (February 15 - August 31). Additionally, the on-site surveys were performed within the blooming period of three of the plant species (big tarplant

[*Blepharizonia plumosa*], slough thistle [*Cirsium crassicaule*], and large-flowered fiddleneck [*Amsinckia grandiflora*]) identified during the Literature and Database Review. The survey dates, times, personnel, and weather conditions are summarized in **Table 1** below. The biological surveys conducted for this Assessment do not equate to protocol–level focused surveys.

Table 1. Survey Summary Table

Date	Biologist(s)	Time	Start Conditions			End Conditions		
			Temperature	Clouds	Wind	Temperature	Clouds	Wind
June 13, 2023	Anthony Hartman	0930 – 1500	77° Fahrenheit (F)	Partly Cloudy	Calm	80°F	Partly Cloudy	Calm
June 14, 2023	Anthony Hartman	0930 – 1530	77°F	Partly Cloudy	Calm	80°F	Partly Cloudy	Calm
July 25, 2023	Jinnah Benn Anthony Hartman Dustin Baumbach	0930 – 1500	80°F	Clear Skies	Calm	95°F	Clear Skies	Calm
November 20, 2024	Corey Clapp Vivian Lowe	0815 – 1345	52°F	Mostly Cloudy	Light Breeze out of the Southeast	62°F	Fully Cloudy	Light Breeze Out of the Southeast

3.3 Taxonomy and Nomenclature

Naming standards used in this Assessment are those recognized by the scientific community. Some common names used in this Assessment report may not be the same as those used by the underlying data sources for species records. Bargas maintains a yearly-updated reference species list which uses the following taxonomic sources:

- **Birds** – American Ornithological Society Check-list and Supplements (AOS 2024).
- **Mammals** – The reference list in the CDFW's California Wildlife Habitats Relationships Database (CDFW 2024), with updates based on the American Society of Mammologists Mammal Diversity Database (2024).
- **Reptiles and Amphibians** – The technical website californiaherps.com, which is regularly updated based on the latest taxonomic literature.
- **Fish** – Common and Scientific Names of Fishes from the United States, Canada, and Mexico, 8th edition (AFS 2023).
- **Invertebrates** – no naming standard was identified that was current and applicable to freshwater and terrestrial invertebrates. Names used by the underlying data sources when a species was first identified were retained.
- **Plants** – the Jepson eFlora (Jepson Flora Project 2024).

4 Results

This section describes what is known about biological resources in the Study Area based on information from field surveys, 147 CNDDB records, 7 CNPS records, 14 IPaC records, and 1 critical habitat for Delta Smelt determination in the Regional Area. Although the Regional Area was evaluated, the information, analyses, and discussions in the

following sections focus on the Project site; additional areas within the buffer surrounding the project site (i.e., Study Area and Regional Area) were reviewed for adjacency context only, are generally summarized herein as applicable, but are not discussed in detail.

4.1 Existing Conditions and Land Uses

When viewing the Project site and surrounding Regional Area in its entirety on aerial photography, the primary land use of the region is agriculture. Natural habitats are present, consisting of interspersed annual grasslands and riparian vegetation surrounding aquatic features. The Delta Mendota canal and the Edmund G. Brown California Aqueduct transect the Regional Area to the north and south side of the Project site, respectively. There are no substantial terrain features present in the Regional Area: elevations range from approximately 150 to 275 feet above mean sea level (AMSL). The Regional Area is a part of the San Joaquin Delta watershed, Hydrologic Unit Code-8 18040003. Under the SJMSCP, the Project site is identified as part of the Central/Southwest Transition Zone and the Land Use designation for the site is Agricultural.

4.2 Soils

Eight soil types are mapped within the Project site (NRCS 2024), as summarized in **Table 2** below with the types, parent material, drainage class, and hydric rating. Mapped soil types support agricultural cropland along with annual grasses and forbs where native vegetation occurs. A map showing the distribution of soils mapped on-site is provided as **Figure 4**.

Table 2. Soil Series within the Project Site

Soil Series	Map Unit Number	Map Unit Symbol	Parent Material	Drainage Class	Hydric Rating
Capay clay, 0 to 1 percent slopes, MLRA 17	118	2xc8q	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
Capay clay, 1 to 6 percent slopes, MLRA 17	119	2y0dw	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
El Solyo clay loam, 0 to 2 percent slopes	156	hhss	Alluvium derived from sedimentary rock	Well drained	No
Reiff loam, 0 to 2 percent slopes	223	hhvy	Alluvium derived from sandstone and shale	Well drained	Yes
Stomar clay loam, 0 to 2 percent slopes	252	hhww	Alluvium derived from sedimentary rock	Well drained	No
Vernalis clay loam, 0 to 2 percent slopes	268	hhxd	Alluvium derived from mixed rock sources	Well drained	No
Zacharias clay loam, 0 to 2 percent slopes	281	hhxt	Alluvium derived from mixed rock sources	Well drained	No

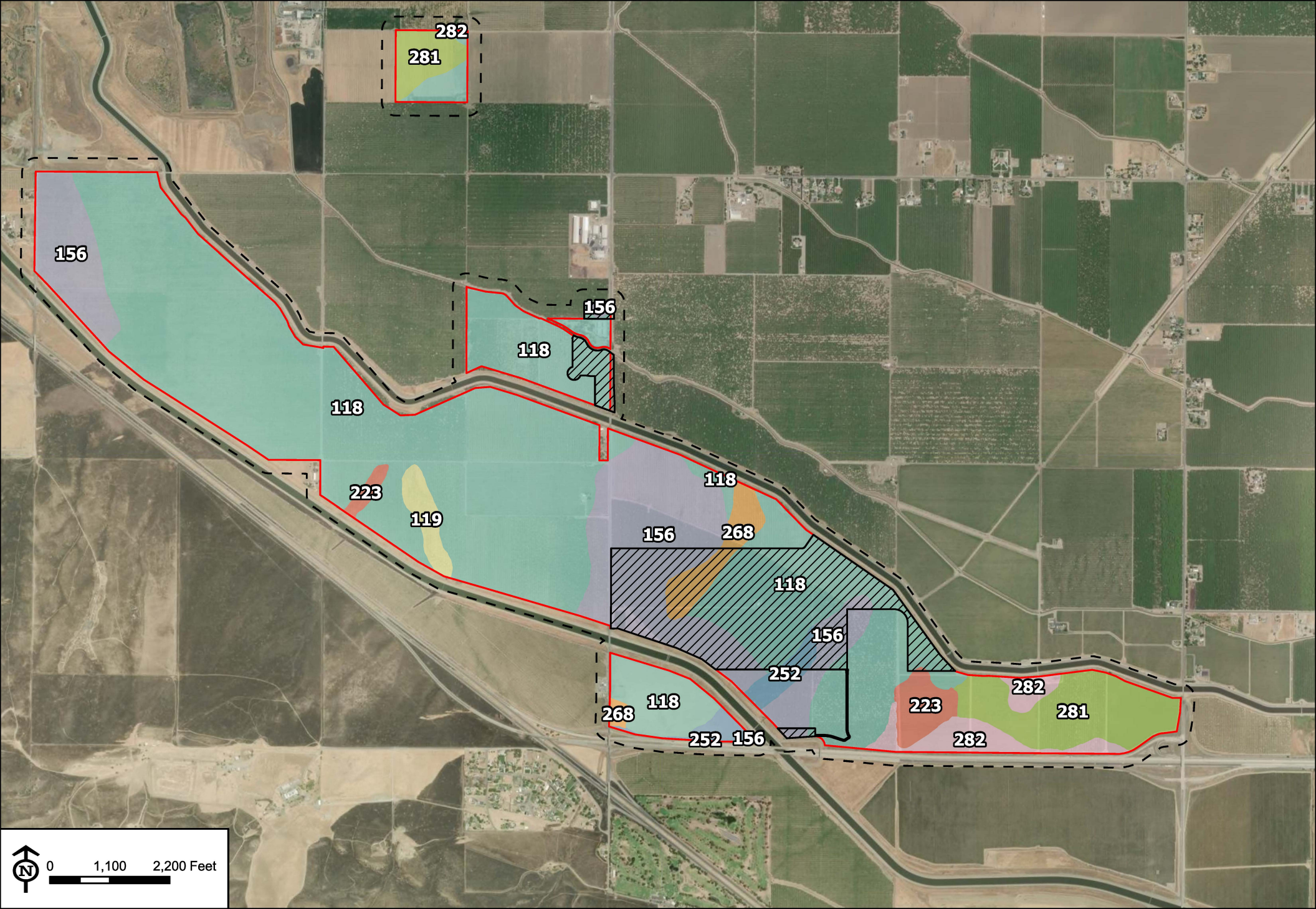
Soil Series	Map Unit Number	Map Unit Symbol	Parent Material	Drainage Class	Hydric Rating
Zacharias gravelly clay loam, 0 to 2 percent slopes	282	hhxv	Alluvium derived from mixed rock sources	Well drained	No

Source: NRCS 2024

Of these eight soil types mapped on-site, five soil types are mapped within the Initial Phase Development area (NRCS 2024), as summarized in **Table 3** below with the types, parent material, drainage class, and hydric rating. Mapped soil types support agricultural cropland along with annual grasses and forbs where native vegetation occurs. A map showing soils on-site is provided as **Figure 3**.

Table 3. Soil Series within the Initial Phase Development Area

Soil Series	Map Unit Number	Map Unit Symbol	Parent Material	Drainage Class	Hydric Rating
Capay clay, 0 to 1 percent slopes, MLRA 17	118	2xc8q	Clayey alluvium derived from sedimentary rock	Moderately well drained	No
El Solyo clay loam, 0 to 2 percent slopes	156	hhss	Alluvium derived from sedimentary rock	Well drained	No
Reiff loam, 0 to 2 percent slopes	223	hhvy	Alluvium derived from sandstone and shale	Well drained	Yes
Stomar clay loam, 0 to 2 percent slopes	252	hhww	Alluvium derived from sedimentary rock	Well drained	No
Vernalis clay loam, 0 to 2 percent slopes	268	hhxd	Alluvium derived from mixed rock sources	Well drained	No



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

BARGAS Environmental Consulting

Figure 4 Soils Map

Pacific Gateway Specific Plan Project

Map Created: 1/31/2025, Bargas Project Number: 1644-22

4.3 Vegetation Communities and Land Cover Types

The Project site was found to support five vegetation communities and land cover types defined by the CNPS MCV, which are summarized below in **Table 4** and described in Sections 4.3.1 through 4.3.5. A crosswalk between the CNPS MCV alliances and the vegetation communities described in the SJMSCP are also provided below in **Table 4**. The spatial distribution of vegetation communities and land covers mapped by Bargas of the site is presented on **Figure 5**. The Initial Phase included acres outside of the Project site along the roadways and are included in the off-site report. Photographs showing representative vegetation conditions during the field surveys are attached as an Appendix to the end of this Assessment.

Table 4. Vegetation Community and Land Cover Summary

Vegetation Community Common Name	Scientific Name and MCV Alliance	SJMSCP Vegetation Community Classification	Initial Phase Acreage	Programmatic-Level Acreage[1]
Cattail Marsh and Wetlands	*Typha* (*angustifolia, domingensis, latifolia*) Herbaceous Alliance	Freshwater Emergent Wetland (W7)	3.58	6.32
Cultivated/Landscaped	NA	Golf Courses/Cultivated Parks (U3)	0.11	4.93
Deciduous Orchards	NA	Orchards and Vineyards (C2)	234.39	1,443.89
Disturbed/Developed	NA	Scraped/Paved Areas (U2)	9.18	46.66
Wild Oats and Annual Brome Grassland	*Avena spp. – Bromus spp.* Herbaceous Semi-Natural Alliance	Valley Grassland (G)	0.00	60.0
		TOTAL:	**247.26**	**1,561.78**

[1] Program-level Area acreages includes Initial Phase Area acreages. Initial Phase Area and Programmatic-Level Area do not sum.

While not directly synonymous with the naming or acreages in Table 4 above, it should be noted that the SJMSCP also organizes its 52 vegetation types into four (4) broad categories (i.e., Natural Lands, Agricultural Lands, Multi-Purpose Open Space Lands, and Urban Lands) to help assess and quantify the conversion of Open Space areas to other land uses. The SJMSCP Habitat Technical Advisory Committee (HTAC) and San Joquin Council of Governments (SJCOG) oversee the classifications of SJMSCP vegetation into these four (4) categories, which reflect generalized mapping categories from a macro-lens and strongly considers land use, rather the micro-lens mapping of vegetation composition across the site performed by Bargas. Because the areas of Project site are "unmapped" by the SJMSCP or were mis-classified during the establishment of the SJMSCP, the HTAC conducted a recent aerial review of the Project site and applied a current mapping of categorical land use across the site (HTAC; SJCOG, 2025).

4.3.1 Cattail Marsh and Wetland

Cattail Marsh (*Typha* [*angustifolia, domingensis, latifolia*] Herbaceous Alliance) and other wetland features were found within the Project site. This vegetation community is classified as "Freshwater Emergent Wetlands (W7)" in the SJMSCP. The Cattail marsh vegetation community is dominated by cattails (*Typha* spp.), with one or more of the species Narrowleaf cattail (*Typha angustifolia)*, Southern cattail (*T. domingensis)*, or Broadleaf cattail (*T. latifolia)* typically present. This herbaceous layer has a maximum height of 5 feet, with intermittent to continuous cover (CNPS 2025). According to the MCV, this vegetation community reflects areas where Typha species comprise greater than 50 percent relative cover. This vegetation community is generally found in semi-permanently flooded freshwater or brackish marshes between 0 and 1,148 feet AMSL (CNPS 2024b).

This vegetation community on-site is associated with certain marshes located south of the Delta Mendota Canal, located between agricultural fields. These areas include one water basin and ten marshes, dominated by Cattail species, narrow-leaf willow (*Salix exigua*), duckweed (*Lemna minor*), pacific willow (*Salix lucida*), purple willow (*Salix purpurea*), and stinkwort (*Datura stramonium*). The remaining wetland areas have experienced significant disturbance and/or have been artificially irrigated to serve an agricultural purpose. These areas include two artificial agricultural water basins, characterized by short pod mustard (*Hirschfeldia incana*), tree tobacco (*Nicotiana glauca*), tall flatsedge (*Cyperus eragrostis*), turkey-mullein (*Croton setiger*), stinkwort, and flax leaved horseweed (*Conyza bonariensis*).

4.3.2 Cultivated/Landscaped

One Cultivated / Landscaped area occurs along the northern edge of the Project site, west of South Chrisman road. This landcover type is classified as "Golf Courses/Cultivated Parks (U3)" in the SJMSCP. This community surrounds a manufacturing plant and a gated residential property to provide visual aesthetics and privacy. This landscaped area is primarily ornamental and appears to be maintained by regular trimming.

4.3.3 Deciduous Orchard

Deciduous orchards comprise the majority of land cover within the Project site. This landcover type is classified as "Orchards and Vineyards (C2)" in the SJMSCP. The primary crops grown within this area consist of almonds (*Prunus dulcis*) and peaches (*Prunus persica*). Multiple fields of vineyards were found east of South Chrisman Road within the Project site and are included in this classification. The orchards have been managed for weed control resulting in limited understory plant growth. Some areas have been treated with a layer of straw for an additional level of weed suppression.

4.3.4 Developed/Disturbed

Developed/disturbed land cover was found within the Project site, consisting primarily of developed industrial and residential properties, disturbed roadside areas, paved and unpaved roads. This landcover type is classified as "Scraped/Paved Areas (U2)" in the SJMSCP. The main paved roads bisecting the project site include South MacArthur Drive, South Chrisman Road, and Highway 132. Industrial buildings within the Project site are associated with agriculture harvesting, processing, and transport of agricultural products. Four residential buildings are located within the Project site.

4.3.5 Wild Oats and Annual Brome Grassland

Wild Oats and Annual Brome Grassland *(Avena spp. – Bromus spp.)* was found on the Project site. This vegetation community is classified as "Valley Grassland (G)" in the SJMSCP. This vegetation community is characterized by the

dominance of non-native annual grasses, including wild oats (*Avena* spp.) and bromes (*Bromus* spp.), which typically comprise greater than 50 percent relative cover. This herbaceous layer is generally below 4 feet tall, with cover ranging from open to continuous. Emergent shrubs and forbs may also be present at low cover. This vegetation community frequently occurs in foothills, rangelands, openings in woodlands, and disturbed areas.

This vegetation community was observed south of the California Aqueduct, bounded by Vernalis Road on the south and South Chrisman Road to the north. This area is characterized by one open, non-cultivated roadside field. Historic aerial imagery suggests the vegetation in these areas may be managed through mowing or shallow tilling for fire fuel abatement. The dominant species in this area consists of wild oat.

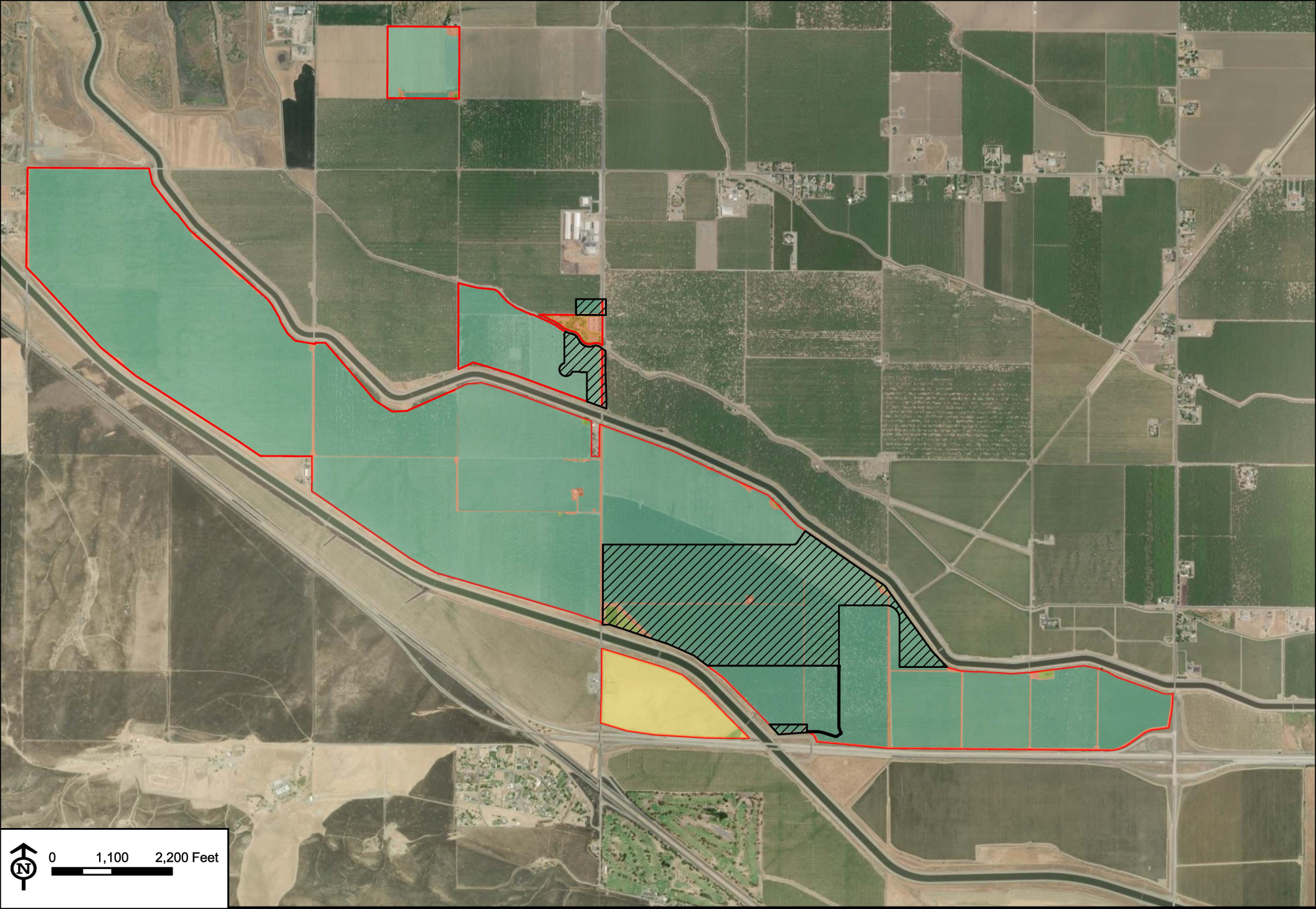
4.3.6 Sensitive Vegetation Communities

Sensitive vegetation communities reflect lands that support unique vegetation communities or the habitats of rare or endangered species or subspecies of animals or plants. CDFW identifies sensitive communities according to rarity, trends, and other ecological threats and assigns natural vegetation communities a global (G) and state (S) sensitivity rank (CNPS 2022b). Sensitive vegetation communities are those assigned a rank of 1 through 5, with 1 being very rare and threatened and 5 being relatively secure. Vegetation with a ranking of S1 (critically imperiled), S2 (imperiled), or S3 (vulnerable) are considered sensitive communities. Surveys across the Project site found the site does not contain vegetation community alliances identified by CDFW and CNPS as a sensitive natural community (CNPS 2022b). Vegetation communities mapped on-site and their sensitivity ranking are presented below in **Table 5**.

Table 5. Vegetation Community and Sensitivity Ranking

Vegetation Community Common Name	Scientific Name and MCV Alliance[1]	SJMSCP Vegetation Community Classification	Sensitive Ranking[2]
Cattail Marsh	*Typha* (*angustifolia, domingensis, latifolia*) Herbaceous Alliance	Freshwater Emergent Wetland (W7)	S5
Cultivated/Landscaped	Not Applicable	Golf Courses/Cultivated Parks (U3)	None
Deciduous Orchards	Not Applicable	Orchards and Vineyards (C2)	None
Developed/Disturbed	Not Applicable	Scraped/Paved Areas (U2)	None
Wild Oats and Annual Brome Grassland	*Avena spp. – Bromus spp.* Herbaceous Semi-Natural Alliance	Valley Grassland (G)	SNA

[1] Alliance from the Manual of California Vegetation.
[2] Ranking S=State of California.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

BARGAS Environmental Consulting

Initial Phase
Project Site
Biological Study Area

Vegetation Communities and Land Cover Types

Cattail Marsh and Wetland (W7)
Cultivated/Landscaped (U3)
Deciduous Orchard (C2)
Disturbed/Developed (U2)
Wild Oat and Annual Brome Grassland (G)

Figure 5 Vegetation and Land Cover

Pacific Gateway Specific Plan Project

Map Created: 1/31/2025, Bargas Project Number: 1644-22

4.4 Aquatic Resources

Results of the jurisdictional delineation for the Project site performed by Bargas in June of 2023, updated to include additional areas of the Project site in November of 2024, found aquatic resources on-site. However, the Project site is primarily composed of agricultural land/field; thus, lacks naturally occurring aquatic resources. Aquatic features found on site consisted of Marshes and Water Basins, which were relatively similar; however, were mapped differently due to the presence of aquatic plant species found within the Marshes, whereas the Water Basins primarily supported upland weedy herbaceous plants. **Table 6** below provides a summary of the aquatic features on-site, including feature type, acreage, and length within the Initial Phase area as well as surrounding Programmatic-Level area. These features may be subject to regulatory jurisdiction by RWQCB; however, only these agencies can make the final determination on whether or not such are jurisdictional. **Figure 6** displays each feature identified at the Project site.

Table 6. Aquatic Features On-Site

Feature Type	Initial Phase Area		Programmatic-Level Area[1]	
	Acres	Length (linear feet)	Acres	Length (linear feet)
RWQCB				
Wetland Waters of the State	3.27	831	5.72	2,515
Non-Wetland Waters of the State	0.31	349	0.38	454
RWQCB Total:	**3.58**	**1,180**	**6.10**	**2,969**

[1] Program-level Area acreages and linear feet includes Initial Phase Area acreages and linear feet. Initial Phase Area and Programmatic-Level Area do not sum.

4.4.1 Waters of the U.S. – Potential USACE Jurisdiction

Aquatic resources found on-site consist of freshwater Marshes or agricultural Water Basins. These presumably are isolated features and are neither connected to Traditionally Navigable Waters (TNWs) nor have hydrologic surface connection to other USACE waters/wetlands; therefore, would not be regulated by USACE per current regulatory guidance. However, only USACE can make the final determination on their jurisdictional authority.

4.4.2 Wetland and Non-Wetland Waters of the State – Potential RWQCB Jurisdiction

Thirteen aquatic features found on-site were considered potentially jurisdictional waters of the state, including wetland and non-wetland features. A jurisdictional delineation was conducted in 2023, but not during the 2024 survey. Due to the on-site conditions observed during the 2024 field survey, which were consistent with observations in 2023, it was assumed Water Basin 2 and Marshes 3 through 10 had similar soils and hydrology to each other based on similar conditions to what was observed during the jurisdictional delineation. Given their isolated position in the landscape and the similarity to other aquatic features that met wetland criteria, these areas could be under the jurisdiction of the RWQCB per the Porter-Cologne Water Quality Act.

Wetland waters of the state consisted of ten freshwater Marshes and one artificial agricultural Water Basins. Results of the jurisdictional delineation found Marsh 1 (W01) met all three wetland criteria (i.e., vegetation, soils, and

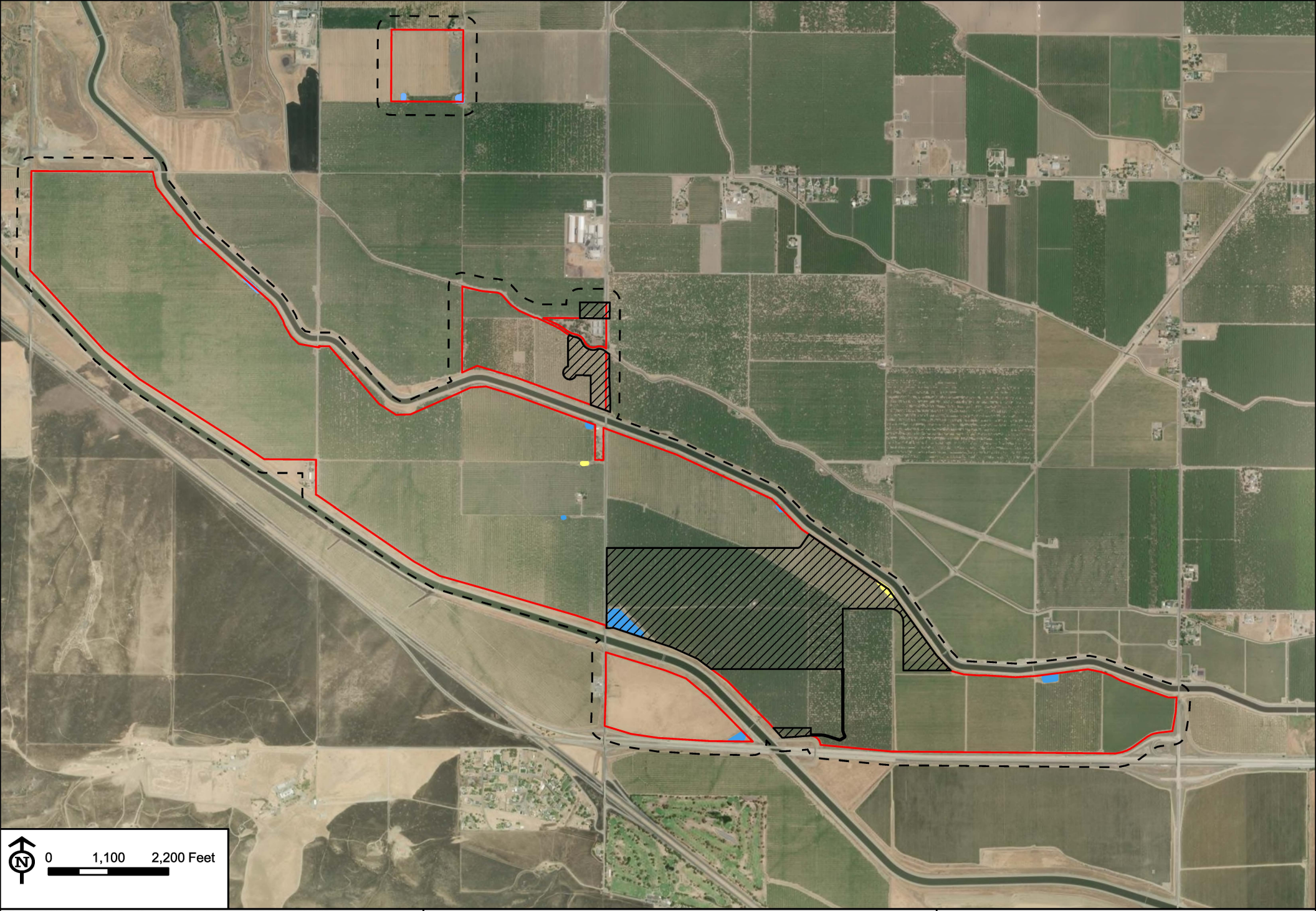
hydrology) of the Wetland Delineation Data forms; therefore, Marsh 1 is considered a wetland. Marsh 2 was observed to be under similar conditions as Marsh 1; thus, was determined to meet all three wetland criteria. Water Basin 2 (W02) was also analyzed and determined to be a potential water of the state due to the presence of hydric soils and hydrology within the basin. Marshes 3 through 10 were also determined to be wetland waters of the state based on vegetation or presence of surface water. There was evidence of dirt mounding and vegetation trimming/removal from heavy equipment within and adjacent to the marshes, suggesting that these aquatic features are highly disturbed and presumably maintained regularly as part of the agricultural practices on-site.

Non-wetland waters of the state consisted of two artificial agricultural Water Basins (Water Basins 1 and 3). These aquatic features were observed to be isolated and received water via artificial pumping. Both basins also lacked aquatic species/vegetation suggesting that these basins are used infrequently, and water is not present long enough to support growth of aquatic plant species.

Given the agricultural land use of the areas surrounding the aquatic features observed on-site, it is possible these thirteen Marshes and Water Basins receive supplemental artificial irrigation. If the application of irrigation water to these aquatic features should cease, these features could revert to uplands characteristics and may no longer be considered a wetland or waters of the state.

4.4.3 Streambed, Lake, and Riparian Habitat – Potential CDFW Jurisdiction

Aquatic resources found on-site consisted of freshwater Marshes or agricultural Water Basins. These features are presumably isolated features which also lack bed, bank, and associated riparian habitat; therefore, these features would not be regulated by CDFW. However, only CDFW can make the final determination on their jurisdictional authority.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

BARGAS Environmental Consulting

Initial Phase
Project Site
Biological Study Area

Potentially Jurisdictional Aquatic Resources

Non-Wetland - Waters of the State (Basins 1 & 3)

Wetland - Waters of the State (Marshes 1-6, Basins 2, 4-6)

Figure 6 Aquatic Resources

Pacific Gateway Specific Plan Project

Map Created: 1/31/2025, Bargas Project Number: 1644-22

4.5 Plants

4.5.1 Plant Diversity

A total of 48 plant taxa were detected during field surveys. A list of plants detected during field surveys is provided in **Appendix A**. Areas throughout the Project site have been disturbed by agriculture, as well as rural and urban development. These anthropogenic activities often result in lower floral diversity compared to areas containing intact natural plant communities and habitats. The majority of the Project site is composed of non-natural vegetation, including orchards, vineyards, and landscaped areas. The remaining vegetation throughout the site was comprised of semi-natural vegetation alliances, including Cattail Marsh and Wetlands and Wild Oats and Annual Brome Grassland.

4.5.2 Special-Status Plants

The desktop review found that seven plant taxa with special-status have been documented as occurring within the Regional Area. A total of three special-status plants found during the desktop review are listed as covered under the SJMSCP. These taxa and their occurrence potential are discussed below and summarized in **Appendix B**.

4.5.2.1 Taxa Confirmed Present

No special-status plant taxa from desktop analysis were determined to be **Present** on the Project site and none are expected to occur.

4.5.2.2 Taxa With High Potential for Occurrence

No special-status plant taxa from desktop analysis were determined to have **High** potential for occurrence on the Project site and none are expected to occur.

4.5.2.3 Taxa with Moderate Potential for Occurrence

No special-status plant taxa from desktop analysis were determined to have **Moderate** potential for occurrence on the Project site and none are expected to occur.

4.5.2.4 Taxa Not Expected to Occur

Two special-status plant taxa from desktop analysis were determined to be **Not Expected** to occur in the Project site.

- **Big Tarplant**
  Asteraceae > *Blepharizonia plumosa*
  FESA: None, CESA: None, CRPR 1B.1

Growth Habit:	Annual herb blooms July-October
Habitat Requirements:	Valley and foothill grassland elevations ranging from 100 to 1,655 feet AMSL.
Inclusion Source(s):	CNDDB, CNPS
Nearest CNDDB Record:	2.84 miles
Habitat Present:	Low Quality
Soils Present:	Yes. Clay soils are present in the Study Area.
Determination Reason:	The Project site contains a small section of annual grassland with clay soils in the southern portion of the Project site but the site is isolated among orchards and lacks hillside slopes preferred by this species.

- **Diamond-petaled California poppy**

  Papaveraceae > *Eschscholzia rhombipetala*

  FESA: None, CESA: None, CRPR 1B.1

California Endemic:	True
Growth Habit:	Annual herb blooms March-April
Habitat Requirements:	Valley and foothill grassland (alkaline, clay) at elevations ranging from 0 to 3,200 feet AMSL.
Inclusion Source(s):	CNPS
Nearest CNDDB Record:	> 5 Miles
Habitat Present:	Low Quality
Soils Present:	Yes. Clay soils are present in the Study Area.
Determination Reason:	The Project site contains a small section of annual grassland with clay soils in the southern portion of the site but the grassland area is isolated among agricultural orchards and the species may be outcompeted for space by non-native grassland species. Additionally, the closest records are greater than five miles from the Project site.

4.5.2.5 Taxa to be Presumed Absent

The following five special-status plant taxa from desktop analysis were **Presumed Absent** on the Project site. None of these five species are expected to occur.

- **Slough Thistle**

  Asteraceae > *Cirsium crassicaule*

  FESA: None, CESA: None, CRPR 1B.1; SJMSCP-covered species

California Endemic:	True
Growth Habit:	Annual/perennial herb blooms May-August
Habitat Requirements:	Chenopod scrub, marshes and swamps, and riparian scrub at elevations ranging from 10 to 330 feet AMSL.
Inclusion Source(s):	CNPS, SJMSCP
Nearest CNDDB Record:	> 5 Miles
Habitat Present:	Not Present
Soils Present:	Not Present
Determination Reason:	The Project site does not contain chenopod or riparian scrub wetlands to support these species. Although Marshes were present, most were dry during the time of the survey and lacked wet soils necessary to support the species. Those Marshes that did contain water were isolated within agricultural fields and were heavily disturbed by vegetation trimming or grading during the time of the surveys. Additionally, the closest record is greater than five miles from the Project site.

- **Mt. Hamilton Coreopsis**

  Asteraceae > *Leptosyne hamiltonii*

  FESA: None, CESA: None, CRPR 1B.2, SJMSCP-covered Species

California Endemic:	True
Growth Habit:	Annual herb blooms March-May
Habitat Requirements:	Cismontane woodland at elevations ranging from 1,805 to 4,265 feet AMSL.

Inclusion Source(s): CNPS, SJMSCP
Nearest CNDDB Record: > 5 Miles
Habitat Present: Not Present
Soils Present: Unknown
Determination Reason: This species is known to grow on slopes on dry, rocky soils within foothill woodlands. The Project site lacks the elevation and foothill woodlands present to support this species. Additionally, the closest record of this species is located greater than five miles from the Project site.

Showy Golden Madia

Asteraceae > *Madia radiata*

FESA: None, CESA: None, CRPR 1B.1, SJMSCP-covered Species

California Endemic: True
Growth Habit: Annual herb blooms March-May
Habitat Requirements: Cismontane woodland, Valley and foothill grassland at elevations ranging from 80 to 3,985 feet AMSL.
Inclusion Source(s): CNDDB, CNPS, SJMSCP
Nearest CNDDB Record: 2.52 Miles
Habitat Present: Not Present
Soils Present: Yes. Clay soils are present.
Determination Reason: This species is known to inhabit grasslands and oak woodlands with clay soils. Oak woodlands are not present within the Project site to support this species. Although grasslands with clay soils are present in the southern portion of the Project site, this area is isolated within agricultural orchards and the species may be outcompeted for space by non-native grassland species.

Large-flowered Fiddleneck

Boraginaceae > *Amsinckia grandiflora*

FESA: Endangered, CESA: Endangered, CRPR 1B.1

California Endemic: True
Growth Habit: Annual herb blooms (March) April-October
Habitat Requirements: Cismontane woodland, Valley and foothill grassland at elevations ranging from 885 to 1,805 feet AMSL.
Inclusion Source(s): CNDDB, CNPS, IPaC
Nearest CNDDB Record: > 5 Miles
Habitat Present: Not Present
Soils Present: Unknown
Determination Reason: The Project site lacks cismontane woodland and is the site is located at elevations below the minimum 885 feet to support this species. Additionally, the nearest record is located greater than five miles from the Project site.

- **Lemmon's Jewelflower**

Brassicaceae > *Caulanthus lemmonii*
FESA: None, CESA: None, CRPR 1B.2

California Endemic:	True
Growth Habit:	Annual herb blooms March-May
Habitat Requirements:	Grassland, chaparral, scrub habitats at elevations ranging from 260 to 5,185 feet AMSL.
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	3.15 miles south
Habitat Present:	Not Present
Soils Present:	Unknown
Determination Reason:	Chaparral and scrub habitats are not present to support this species within the Project site. Although grasslands are present within the southern area of the Project site, this area is isolated among agricultural orchards and the species may be outcompeted for space by non-native grassland species.

4.6 Wildlife

4.6.1 Wildlife Diversity

A total of 25 wildlife taxa were detected during field surveys, including 23 bird species and two mammal species. A list of all wildlife taxa detected during field surveys is provided in **Appendix A**.

4.6.2 Special-Status Wildlife

The desktop review found that 43 wildlife taxa with special-status have been documented as occurring within the Regional Area. A total of 34 special-status wildlife species found during the desktop review are listed as covered under the SJMSCP. These taxa and their occurrence potential are discussed below and summarized in **Appendix B**.

4.6.2.1 Taxa Confirmed Present

The following three special-status wildlife taxa was determined to be **Present** on-site from desktop analysis and biological surveys on the Project site.

- **Swainson's Hawk**

Accipitridae > *Buteo swainsoni*
FESA: None, CESA: Threatened, SJMSCP-covered Species

Life History:	Uncommon breeding resident and migrant in the Central Valley, Klamath Basin, Northeastern Plateau, Lassen County, and Mojave Desert. Very limited breeding reported from Lanfair Valley, Owens Valley, Fish Lake Valley, and Antelope Valley. Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah in the Central Valley. Forages in adjacent grasslands or suitable grain or alfalfa fields, or livestock pastures. In southern California, now mostly limited to spring and fall transient. Formerly abundant in California with wider breeding range. Decline resulted in part from loss of nesting habitat. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB; Bargas; SJMSCP

Nearest CNDDB Record: 1.52 miles east
Habitat Present: Medium Quality
Determination Reason: Observed flying over and perching on an electric pole within the Project site during November surveys. There is medium quality foraging habitat within the agricultural fields adjacent to the Project site and within the annual grassland habitat north of Highway 132 and south of the California Aqueduct within the Project site that could support this species. Tall trees to support nesting are limited in the Project site thus, nesting is unlikely and not expected.

White-tailed Kite

Accipitridae > *Elanus leucurus*

FESA: None, CESA: Fully Protected, SJMSCP-covered Species

Life History: Common to uncommon, yearlong resident in coastal and valley lowlands; rarely found away from agricultural areas. Inhabits herbaceous and open stages of most habitats mostly in cismontane California. Has extended range and increased numbers in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s): SJMSCP, Bargas
Nearest CNDDB Record: > 5 miles
Habitat Present: Medium Quality
Determination Reason: Observed flying over and perching within the Project site during the November survey. There is medium quality foraging habitat within the agricultural fields adjacent to the Project site and within annual grassland habitat north of Highway 132 and south of the California Aqueduct within the Project site that could support this species. Tall tress to supporting nesting are not present in the Project site thus, nesting is unlikely.

Song Sparrow (Modesto Population)

Passerellidae > *Melospiza melodia*

FESA: None, CESA: Fully Protected

Life History: A common resident of most of California, but avoids higher mountains and occurs only locally in southern deserts. In winter, most leave montane habitats; more abundant and widespread then in lowlands and deserts. At all seasons, prefers riparian, fresh or saline emergent wetland, and wet meadow habitats. Breeds in riparian thickets of willows, other shrubs, vines, tall herbs, and in fresh or saline emergent vegetation. Also breeds in damp thickets and coastal scrub of northern California and Channel Islands where fog drip and a moist climate compensate for a lack of surface water. In winter in much of northern California, also may be found far from water, in open habitats with thickets of shrubs or tall herbs. Usually avoids densely wooded habitats, except along forest edges. An uncommon resident in suitable habitat in southern deserts along western edge (very locally) and in Imperial and Colorado River valleys. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s): CNDDB, Bargas

Nearest CNDDB Record:	4.81 miles northeast
Habitat Present:	Medium Quality
Determination Reason:	Observed flying over and perching within the Project site during November surveys. There is medium quality foraging habitat within the agricultural fields adjacent to the Project site and within annual grassland habitat north of Highway 132 and south of the California Aqueduct within the Project site that could support this species. Nesting habitat is limited to the small grassland area at the southern portion of the Project site.

4.6.2.2 Taxa With High Potential for Occurrence

No special-status wildlife taxa from desktop analysis or site visits were determined to have **High** potential for occurrence at the Project site and none are expected to occur.

4.6.2.3 Taxa With Moderate Potential for Occurrence

The following two special-status wildlife taxa from desktop analysis or site visits were determined to have **Moderate** Potential for occurrence at the Project site.

- **Northern Harrier**

  Accipitridae > *Circus hudsonius*

  FESA: None, CESA: Species of Special Concern, SJMSCP-covered Species

Life History:	Occurs from annual grassland up to lodgepole pine and alpine meadow habitats, as high as 3,000 m (10,000 ft). Breeds from sea level to 1,700 m (0-5,700 ft) in the Central Valley and Sierra Nevada, and up to 800 m (3,600 ft) in northeastern California. Frequents meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands; seldom found in wooded areas. Permanent resident of the northeastern plateau and coastal areas; less common resident of the Central Valley. Widespread winter resident and migrant in suitable habitat. California population has decreased in recent decades but can be locally abundant where suitable habitat remains free of disturbance, especially from intensive agriculture. Breeding population much reduced, especially in southern coastal district. Destruction of wetland habitat, native grassland, and moist meadows, and burning and plowing of nesting areas during early stages of breeding cycle, are major reasons for the decline. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	SJMSCP
Nearest CNDDB Record:	> 5 miles
Habitat Present:	Medium Quality
Determination Reason:	The Project site contains medium quality foraging habitat in the form of small grasslands and adjacent agricultural fields that could support this species. Nesting habitat is located around the isolated Marshes and grasslands, but these habitats are only marginally suitable within the Project site due to the small extent and extensive human disturbance in these areas.

- **Crotch's Bumblebee**

Apidae > *Bombus crotchii*

FESA: None, CESA: Candidate, Species of Special Concern

Life History: Crotch's Bumblebee a short-tongued bumble bee that inhabits open grasslands and scrub habitats, nesting underground. Males perch and chase moving objects to find mates. Bumble bee colonies consist of a queen, workers, and reproductive (males and new queens). The queen hibernates over winter and starts foraging in spring, seeking a nest site. Nests are often underground or in abandoned animal burrows. Initially, the queen handles foraging and care until workers emerge. Bumble bees forage from diverse plants, and are known to sonicate the flowers to vibrate the pollen loose from the anthers. *Source: Hatfield, R., Jepsen, S., Thorp, R., Richardson, L. & Colla, S. 2015. Bombus crotchii. The IUCN Red List of Threatened Species 2015: e.T44937582A46440211. https://dx.doi.org/10.2305/IUCN.UK.2015-2.RLTS.T44937582A46440211.en. Accessed on 19 December 2024. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 3.61 miles north

Habitat Present: Medium Quality

Determination Reason: The Project site contains sufficient flowering plants within the orchards and vineyards to support foraging (i.e., nectar collection) for this species. Nesting habitat is limited to the open grassland north of Highway 132 and south of the California Aqueduct within the Project site. Therefore, Crotch's bumble bee may only be present as a transient species foraging within the orchards and vineyards during the flowering period.

4.6.2.4 Taxa Not Expected to Occur

The following 15 special-status wildlife taxa from desktop analysis were determined as **Not Expected** to occur in the Project site.

- **Sharp-shinned Hawk**

Accipitridae > *Accipiter striatus*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Fairly common migrant and winter resident throughout California, except in areas with deep snow. Breeding distribution poorly documented. Very few breeding records for Cascades/Sierra Nevada. Probably breeds south in Coast Ranges to about 35 degrees latitude, and at scattered locations in the Transverse and Peninsular Ranges. May no longer breed in the southern Sierra Nevada. Uncommon winter migrant to Channel Islands. Uncommon permanent resident and breeder in mid-elevation habitats. Breeds in ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine habitats. Prefers, but not restricted to, riparian habitats. North facing slopes, with plucking perches are critical requirements. All habitats except alpine, open prairie, and bare desert used in winter. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: This species prefers wooded areas throughout their range but may also forage within agricultural fields. There are agricultural fields present adjacent to the Project site that may provide marginal foraging habitat to support this species. Tall, densely populated trees within woodlands are required for nesting and are not present within the Project site thus, nesting is unlikely. Additionally, the nearest record is located greater than five miles from the Project site.

Cooper's Hawk

Accipitridae > *Accipiter cooperii*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: A breeding resident throughout most of the wooded portion of the state. Breeds in southern Sierra Nevada foothills, New York Mountains, Owens Valley, and other local areas in southern California. Ranges from sea level to above 2700 m (0-9000 ft). Dense stands of live oak, riparian deciduous, or other forest habitats near water used most frequently. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: This species prefers wooded areas throughout their range but may also forage within open fields. There is an open grassland field present north of Highway 132 and south of the California Aqueduct within the Project site that may provide marginal foraging habitat to support this species. Tall, densely populated trees within woodlands are required for nesting and are not present within the Project site thus, nesting is unlikely. Additionally, the nearest record is located greater than five miles from the Project site.

Great Blue Heron

Ardeidae > *Ardea Herodias*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Great Blue Heron is fairly common all year throughout most of California, in shallow estuaries and fresh and saline emergent wetlands. Less common along riverine and rocky marine shores, in croplands, pastures, and in mountains above foothills. Common July to October in salt ponds where fish are numerous. Locally common near rookeries February to June or July. Few rookeries are found in southern California, but many are scattered throughout northern California; knowledge of their locations is incomplete. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: The Project site contains small, marginal quality Marshes that may be used for foraging on insects, reptiles, and small mammals. Most of these Marshes were observed to be dry during the surveys, which limits the amount of foraging habitat. Nesting habitat in the form of isolated islands, channel markers, or artificial nest structures are not present within the

Project site and thus, nesting is unlikely. Additionally, the nearest record is greater than five miles from the Project site.

Great Egret

Ardeidae > Ardea alba

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Great Egret is a common yearlong resident throughout California, except for high mountains and deserts. Feeds and rests in fresh, and saline emergent wetlands, along the margins of estuaries, lakes, and slow-moving streams, on mudflats and salt ponds, and in irrigated croplands and pastures. Nests in large trees, and roosts in trees. In southern California, common all year, and breeds at Salton Sea and Colorado River. Fairly common in coastal lowlands September to April, rare in summer, and breeds in Riverside County (one small colony). Rare to uncommon in deserts, occurring mainly as a spring migrant. In northern California, fairly common to common yearlong in coastal lowlands, inland valleys, and the Central Valley. Locally abundant March to July near the larger nesting colonies. Uncommon to fairly common March to August on the northeastern plateau, and nests locally. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: >5 miles

Habitat Present: Low Quality

Determination Reason: The Project site contains small, marginally suitable Marshes that this species may use as foraging sites, but most were dry during the time of the survey which limits the amount of foraging habitat within the Project site. Tall trees on-site are limited and trees suitable for nesting by this species are not present within the Project site thus, nesting for this species is unlikely. Additionally, the nearest record is located greater than five miles from the Project site.

San Joaquin Kit Fox

Canidae > *Vulpes macrotis mutica*

FESA: Endangered, CESA Endangered, SJMSCP-covered Species

Life History: The San Joaquin Kit Fox (*Vulpes macrotis mutica*) is the smallest fox in North America, with an average body length of 20 inches and weight of about 5 pounds. This species prefers to live in areas with loose soil and in open grassland with no to sparse shrubs and grasses. Kit Foxes start breeding when they're 1 year old. In the fall, females begin to clean and enlarge their pupping dens. The foxes mate between December and March. Females give birth to two to six pups in February or March. The Kit Fox's range in the San Joaquin Valley extends from southern Kern County north to Contra Costa, Alameda, and San Joaquin counties on the western side of the valley; and to the La Grange area of Stanislaus County on the eastern side of the valley. The Kit Fox's range also includes valleys along the Coast Range including the Panoche and Cuyama valleys and the Carrizo Plain in San Luis Obispo County. Threats include habitat modification and destruction, energy development, drought, disease or pathogens, rodenticides, and predation. *Source: https://www.fws.gov/species/san-joaquin-kit-fox-vulpes-macrotis-mutica*

Inclusion Source(s): CNDDB, IPaC, SJMSCP

Nearest CNDDB Record: 0.33 miles southwest

Habitat Present: Low Quality

Determination Reason: There is limited and marginal quality grassland habitat on the Project site, located north of Highway 132 and south of the California Aqueduct within the Project site to support this species; however, this grassland area was densely populated with grasses and is not preferred by San Joaquin kit foxes. Preferred habitat of open grassland with low, sparse vegetation is not located within the Project site. No scat or potential dens were observed during the field visits. The Corral-Lower San Joaquin Wildlife Corridor is located approximately 0.65 miles northwest of the Project site and thus, this species may occur as a transient through the Project site.

California Glossy Snake

Colubridae > *Arizona elegans occidentalis*

FESA: None, CESA: Species of Special Concern

Life History: This snake is common throughout southern California especially in desert regions. Less common to the north, Glossy Snakes occur in the interior Coast Ranges as far as Mount Diablo in Contra Costa County. Glossy Snakes are most common in desert habitats but also occur in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass. Elevation from below sea level to 1830 meters (6,000 feet AMSL). *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 2.12 miles west

Habitat Present: Low Quality

Determination Reason: The Project Site lacks the typical desert environments preferred by this snake. There is a small area of annual grassland located north of Highway 132 and south of the California Aqueduct that may contain limited and marginally suitable habitat for this species; however, the preferred prey for this species is typically limited to mostly desert lizard species; thus, the Project site is unlikely to provide suitable food source.

San Joaquin Coachwhip

Colubridae > *Coluber flagellum ruddocki*

FESA: None, CESA: Species of Special Concern

Life History: San Joaquin coachwhip snakes are diurnal animals and prefer warm temperatures. As a result, they emerge from estivation late in the season (April - May). This species prefers dry, open, treeless habitats including valley grassland and saltscrub. They are known to avoid dense vegetation that restricts movement such as mixed oak chaparral woodland. Small mammal burrows are used for overwintering. *Source: Thomson, Robert C., Amber N. Wright, and H. Bradley Shaffer. (2016). California Amphibian and Reptile Species of Special Concern. California Department of Fish and Wildlife. University of California Press.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 2.17 Miles west

Habitat Present: Low Quality

Determination Reason: The Project site supports a relatively small area of annual grassland located north of Highway 132 and south of the California Aqueduct; however, this area is densely populated with non-native grasses and does not contain the preferred open habitat to support this species. The Project site contains mostly orchards that does not provide the open, treeless habitat preferred by this species.

Tricolored Blackbird

Icteridae > *Agelaius tricolor*

FESA: None, CESA: Threatened, SJMSCP-covered Species

Life History: Mostly a resident in California. Common locally throughout Central Valley and in coastal districts from Sonoma County south. Breeds near fresh water, preferably in emergent wetland with tall, dense cattails or tules, but also in thickets of willow, blackberry, wild rose, tall herbs. Feeds in grassland and cropland habitats. Breeds locally in northeastern California. In winter, becomes more widespread along central coast and San Francisco Bay area and is found in portions of the Colorado Desert. Numbers appear to be declining in California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

Nearest CNDDB Record: 1.93 Miles south

Habitat Present: Low Quality

Determination Reason: The Project site contains small, marginally suitable Marshes to support this species; however, there was high human disturbance in the form of vegetation trimming and grading within the Marshes present in the Project site. Tricolored blackbird are not expected to occur due to the lack of tall, undisturbed cattails or tules. Additionally, most Marshes present on the Project site were observed to be dry during the field observations and are unlikely to support this species.

Yellow-breasted Chat

Icteriidae > *Icteria virens*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: An uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada. Found up to about 1450 m (4800 feet AMSL) in valley foothill riparian, and up to 2,050 meters (6,500 feet AMSL) east of the Sierra Nevada in desert riparian habitats. Uncommon along coast of northern California east to Cascades and occurs only locally south of Mendocino County. In southern California, breeds locally on the coast and very locally inland. In migration, may be found in lower elevations of mountains in riparian habitat. Numbers much reduced in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: The Project site does not contain valley foothill or desert riparian habitat to support this species. The Marshes present on the Project site do not contain adequate vegetation to support yellow-breasted chat. Additionally, the nearest record is located greater than five miles from the Project site.

Western Mastiff Bat

Molossidae > *Eumops perotis*

FESA: None, CESA: Species of Special Concern

Life History: Uncommon resident in southeastern San Joaquin Valley and Coastal Ranges from Monterey County southward through southern California, from the coast eastward to the Colorado Desert. Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands,

coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: 3.49 miles west

Habitat Present: Not Present

Determination Reason: The Project site contains marginal annual grassland habitat to the north of Highway 132 and south of the California Aqueduct; however, this grassland area lacks cliffs, rocky hillsides, and urban development to support roosting within the Project site. Large water bodies, such as lakes and rivers, are required for foraging and are marginal throughout the Project site. Additionally, the nearest record is greater than three miles from the Project site and is unlikely to occur.

American Badger

Mustelidae > *Taxidea taxus*

FESA: None, CESA: Species of Special Concern, SJMSCP-covered Species

Life History: Uncommon, permanent resident found throughout most of the state, except in the northern North Coast area. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. American badgers prefer open habitat with loamy or sandy soils for digging and will feed on a variety of prey including ground burrowing mammals, lizards, earthworms, eggs, and birds. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

Nearest CNDDB Record: 1.59 miles west

Habitat Present: Low Quality

Determination Reason: The Project site is located approximately 0.65 miles southeast of the Corral-Lower San Joaquin Wildlife Corridor that this species may use; thus, it may occur as a transient through the Project site but may be precluded due to paved roads and high human disturbance between the corridor and the Project site. Soils within the grassland area on-site contain hard clay which does not provide suitable soils for digging; thus, foraging and den habitat is unlikely to occur in the Project site. No burrows, scat, or other signs were observed during the field surveys for the Project.

Monarch - California Overwintering Population

Nymphalidae > *Danaus plexippus pop. 1*

FESA: Candidate, CESA: None

Life History: The iconic black and orange Monarch butterfly is known for its astonishing long-distance annual migration and reliance on milkweed as its obligate larval host plant. Though genetically similar, there are two subpopulations of Monarchs in North America, with the eastern population overwintering in Mexico and breeding in the midwestern states, and the western population overwintering in coastal California and fanning out across the west from Arizona to Idaho. Both North American migratory populations have declined over the past twenty years due to a suite of interrelated factors including habitat loss in breeding and overwintering sites, habitat degradation, disease, pesticide exposure, and climate change. Recently the western population has experienced dramatic swings, for a low of less than 2,000 in 2020-21 to over 200,000 in 2021-22. While it is unclear which of the many factors are driving these dynamics, insect population commonly fluctuate from year to year. Though

more research is needed, a stable population for western monarchs is likely closer to the historic averages in the 1980's, which are estimated to have ranged between one to four million overwintering butterflies. *Source: https://wildlife.ca.gov/Conservation/Invertebrates/Monarch-Butterfly*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Low Quality

Determination Reason: As a migratory species with flight capability, this species has potential to occur anywhere during movements. There is low potential to be resident on-site due to agricultural land uses and lack of suitable milkweed host plants. The Project site is also not located in roosting habitat for this species. The nearest record is located greater than five miles from the Project site.

Burrowing Owl

Strigidae > *Athene cunicularia*

FESA: None, CESA: Candidate Endangered, SJMSCP-covered species

Life History: A yearlong resident of open, dry grassland and desert habitats, and in grass, forb and open shrub stages of Pinyon-Juniper and Ponderosa Pine habitats. Formerly common in appropriate habitats throughout the state, excluding the humid northwest coastal forests and high mountains. Numbers markedly reduced in recent decades. Present on the larger offshore islands. Found as high as 1,600 meters (5300 feet AMSL) in Lassen County. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; SJMSCP

Nearest CNDDB Record: 2.66 miles north

Habitat Present: Low Quality

Determination Reason: The Project site contains marginal annual grassland north of Highway 132 and south of the California Aqueduct, but vegetation in this area was observed to be tall and densely populated by non-native grasses, which is likely to preclude use by burrowing owl as burrowing owl prefers more open landscapes/habitat. Ground squirrel (*Otospermophilus beecheyi*) burrows were observed on-site. The Project site primarily consists of orchards, which is not a typical habitat associated with this species, which prefer open, treeless habitat.

Pallid Bat

Vespertilionidae > *Antrozous pallidus*

FESA: None, CESA: Species of Special Concern

Life History: The Pallid Bat is a locally common species of low elevations in California. It occurs throughout California except for the high Sierra Nevada from Shasta to Kern counties, and the northwestern corner of the state from Del Norte and western Siskiyou counties to northern Mendocino County. A wide variety of habitats are occupied, including grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forests. The species is most common in open, dry habitats. Day roosts include crevices in rocky outcrops and cliffs, caves, mines, hollows / cavities and exfoliating bark of trees, and crevices and cavernous spaces of human structures such as bridges, barns, porches, and buildings (human-occupied or vacant). A yearlong resident in most of the range. *Source: California Department of Fish and Wildlife.*

California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.
Western Bat Working Group. 2005. Western Bat Species Accounts, http://wbwg.org/western-bat-species/

Inclusion Source(s): CNDDB
Nearest CNDDB Record: 3.38 miles southwest
Habitat Present: Low quality
Determination Reason: The Project site lacks the open forest and woodland habitats preferred by this species for foraging; however, annual grassland is present north of Highway 132 and south of the California Aqueduct but lacks roosting habitat. This area may provide marginal foraging habitat but is limited in size and is unlikely to be used. Additionally, there are few manmade structures that may be used for roosting but are often highly disturbed by frequent human activity. There was no evidence of bats observed during the surveys.

- **Townsend's Big-eared Bat**

Vespertilionidae > *Corynorhinus townsendii*
FESA: None, CESA: Species of Special Concern

Life History: Townsend's Big-eared Bat is found throughout California, but the details of its distribution are not well known. This species is found in all but subalpine and alpine habitats and may be found at any season throughout its range. Once considered common, Townsend's Big-eared Bat now is considered uncommon in California. It is most abundant in mesic habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s): CNDDB
Nearest CNDDB Record: 4.16 miles west
Habitat Present: Low Quality
Determination Reason: Although potential roosting habitat exists on the Project site in the form of manmade structures and open grassland habitat, there was no evidence of bats observed during the surveys. Additionally, grassland habitat is limited to a small area north of Highway 132 and south of the California Aqueduct and may only provide marginal foraging habitat. The nearest record is located approximately four miles from the Project site and thus, this species is unlikely to occur in the Project site.

4.6.2.5 Taxa to be Presumed Absent

The following 24 special-status wildlife taxa from desktop analysis were determined to be **Presumed Absent** from the Project site.

- **Horned Lark**

Alaudidae > *Eremophila alpestris*
FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Horned Lark is a common to abundant resident in a variety of open habitats, usually where trees and large shrubs are absent. Found from grasslands along the coast and deserts near sea level to alpine dwarf-shrub habitat above treeline. Less

common in mountain regions, on the North Coast, and in coniferous or chaparral habitats. Mostly leaves mountains in winter, but small flocks may remain to winter on windswept, snow-free areas at high elevations in the Sierra Nevada. In winter, flocks in desert lowlands and other areas augmented by winter visitants, many migrating from outside the state. Resident on the Channel Islands. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Horned Lark prefers grassland areas with vegetation less than two inches in height or bare ground for nesting and foraging habitat, which is lacking within the Project site. Therefore, nesting and foraging by this species is not expected to occur in the Project site. Additionally, the nearest record is located greater than five miles from the Project site and is not expected to occur.

California Tiger Salamander

Ambystomatidae > *Ambystoma californiense*

FESA: Endangered, CESA: Endangered

Life History: Most commonly found in Annual Grassland habitat, but also occurs in the grassy understory of Valley-Foothill Hardwood habitats, and uncommonly along stream courses in Valley-Foothill Riparian habitats. The species occurs from near Petaluma, Sonoma County, east through the Central Valley to Yolo and Sacramento counties and south to Tulare County; and from the vicinity of San Francisco Bay south to Santa Barbara County. They occur at elevations from 3 meters up to 1,054 meters (3,200 feet AMSL). *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB, IPaC

Nearest CNDDB Record: 1.64 miles west

Habitat Present: Not Present

Determination Reason: The Project site is more than two miles from known breeding ponds. Interstate 580 serves a barrier between the Project site and known breeding sites to the west. In addition, the Project site lacks small mammal burrows required for sheltering.

Black-crowned Night Heron

Ardeidae> *Nycticorax nycticorax*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Black-crowned Night-Heron is a fairly common, yearlong resident in lowlands and foothills throughout most of California, including the Salton Sea and Colorado River areas, and very common locally in large nesting colonies. Feeds along the margins of lacustrine, large riverine, and fresh and saline emergent habitats and, rarely, on kelp beds in marine subtidal habitats. Nests and roosts in dense-foliaged trees and dense emergent wetlands. Common nesting species on northeastern plateau from April to August. Uncommon in northwestern, and rare in northeastern, California in midwinter. Uncommon transient and rare in winter in southern deserts, and rare on Channel Islands. Seldom seen in mountains, but formerly nested at Big

Bear Lake in San Bernardino Mountains. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain suitable foraging habitat such as, large riverine and emergent habitat, and densely vegetated Marshes. Trees are limited on-site. Nesting habitat in trees or in dense cattails is also not present on the Project site and thus, nesting is not likely to occur. The nearest record for this species is located greater than five miles from the Project site and is not expected.

Vernal Pool Fairy Shrimp

Branchinectidae > *Branchinecta lynchi*

FESA: Threatened, CESA: None

Life History: The Vernal Pool Fairy Shrimp inhabits ephemeral pools with clear to tea- colored water. This species has been most commonly observed in grass or mud bottomed swales, earth sump, or basalt flow depression pools in unplowed grasslands. The Vernal Pool Fairy Shrimp has been collected from early December to early May. The water in pools inhabited by this species has a pH averaging 7.0; and low TDS, conductivity, alkalinity, and chloride. Although the Vernal Pool Fairy Shrimp is found at a number of sites, it is not abundant at any of them. It often occurs with other fairy shrimp species, but is never the numerically dominant one. *Source: https://www.govinfo.gov/content/pkg/FR-1992-05-08/pdf/FR-1992-05-08.pdf#page=76*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: Project site lacks the vernal pool habitat to support this species. Ponded areas consist of water basins and marshes on site, irregularly inundated and artificially irrigated as part of agricultural operations. Given these non-natural conditions, these areas are unlikely to support this species, and this species is not expected to occur.

California Condor

Cathartidae > *Gymnogyps californianus*

FESA: Endangered, Protected, CESA: Endangered

Life History: Endangered, permanent resident of the semi-arid, rugged mountain ranges surrounding the southern San Joaquin Valley, including the Coast Ranges from Santa Clara County south to Los Angeles County, the Transverse Ranges, Tehachapi Mountains, and southern Sierra Nevada. Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags. Occurs mostly between sea-level and 2700 m (0-9000 ft), and nests from 610-1372 m (2000-6500 ft). Nonbreeding individuals move north to Kern and Tulare counties in April, often returning south in September to winter in Tehachapi Mountains, Mount Pinos, and Ventura and Santa Barbara counties. Total population in early 1980's estimated to

be fewer than 20, and declining. Occurrence in the wild now in question. Two U.S. Forest Service sanctuaries set aside within the Los Padres National Forest, primarily for nesting and roosting protection. *California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the open rangelands and rugged mountain habitats preferred by this species for foraging. The Project site is below the preferred elevations for nesting and thus, is not expected to occur. The nearest record for this species is located greater than five miles from the Project site and is not expected to occur.

Valley Elderberry Longhorn Beetle

Cerambycidae > *Desmocerus californicus dimorphus*

FESA: Threatened, CESA: None, SJMSCP-covered Species

Life History: Valley elderberry longhorn beetle is a medium sized beetle that is endemic to the Central Valley of California. The beetle is found only in association with its host plant, elderberry (Sambucus spp.) and originally occurred in elderberry thickets in moist valley oak woodland along the margins of the Sacramento and San Joaquin Rivers in the Central Valley of California. The habitat of this insect has now largely disappeared throughout much of its former range due to agricultural conversion, levee construction, and stream channelization. The clearing of undergrowth (including elderberry) and planting of lawns has resulted in further habitat degradation. *Source: https://ecos.fws.gov/ecp/species/7850*

Inclusion Source(s): IPaC; SJMSCP

Nearest CNDDB Record: 1 to 3 Miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the valley elderberry plants to support this species. Additionally, the Project site is located outside of the range for this species due to the Project site being located upland from the San Joaquin River.

Riparian Woodrat

Cricetidae > *Neotoma fuscipes riparia*

FESA: Threatened, CESA: None, SJMSCP-covered Species

Life History: The riparian woodrat is a subspecies of the dusky footed woodrat (N. fuscipes). As the name suggests, they prefer to build stick nests near rivers and streams in riparian woodland habitats. Historically, they were distributed along the San Joaquin, Stanislaus and Tuolumne rivers. Today, there are only two known population centers: Caswell Memorial Park and the San Joaquin River National Wildlife Refuge, both in San Joaquin County. *Source: https://www.fws.gov/species/riparian-woodrat-san-joaquin-valley-neotoma-fuscipes-riparia*

Inclusion Source(s): IPaC, SJMSCP

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riparian woodland habitat to support this species. Additionally, the Project site is located upland from the San Joaquin River and is not within either the Caswell Memorial Park or the San Joaquin River National Wildlife Refuge. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Yellow-billed Cuckoo

Cuculidae > *Coccyzus americanus*

FESA: Threatened, CESA: None, SJMSCP-covered Species

Life History: An uncommon to rare summer resident of valley foothill and desert riparian habitats in scattered locations in California. Along the Colorado River, breeding population on California side was estimated at 180 pairs in 1977. Additional pairs reside in the Sacramento and Owens valleys; along the South Fork of the Kern River, Kern County; along the Santa Ana River, Riverside County; and along the Amargosa River, Inyo and San Bernardino counties. Also may nest along San Luis Rey River, San Diego County. Formerly much more common and widespread throughout lowland California, but numbers drastically reduced by habitat loss. Current population estimations show about 50 pairs existing in California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riverine habitat to support nesting or foraging for this species. The Project site is also not located along any of the rivers where this species is known to occur. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Northwestern Pond Turtle

Emydidae > *Actinemys marmorata*

FESA: Proposed Threatened, CESA: Species of Special Concern

Life History: Actinemys species are uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and absent from desert regions, except in the Mojave Desert along the Mojave River and its tributaries. Elevation range extends from near sea level to 1,430 meters (4,690 feet AMSL). Associated with permanent or nearly permanent water in a wide variety of habitat types. Western Pond Turtle was split into two species in 2014, with A. marmorata ranging from the Central Valley north. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB; IPaC

Nearest CNDDB Record: 2.63 miles west

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable aquatic habitat to support this species. The existing Marshes surveyed on the Project site are bermed, and lack a consistent source of water to support this species. Additionally, upland refugia necessary to support nesting is lacking within these areas.

Merlin

Falconidae > *Falco columbarius*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Uncommon winter migrant from September to May. Seldom found in heavily wooded areas, or open deserts. Frequents coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, and early successional stages. Ranges from annual grasslands to ponderosa pine and montane hardwood-conifer habitats. Occurs in most of the western half of the state below 1500 m (3900 ft). A rare winter migrant in the Mojave Desert; a few records from the Channel Islands. Numbers have declined markedly in California in recent decades. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the forested openings and riverine habitats preferred by this species for foraging. Additionally, the tall trees preferred by this species for nesting are limited on-site and nesting by this species is unlikely. The nearest record for this species is located greater than five miles from the Project site and is not expected to occur.

Loggerhead Shrike

Laniidae > *Lanius ludovicianus*

FESA: None, CESA: None, SJMSCP-covered species

Life History: A common resident and winter visitor in lowlands and foothills throughout California. Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Highest density occurs in open-canopied valley foothill hardwood, valley foothill hardwood-conifer, valley foothill riparian, pinyon-juniper, juniper, desert riparian, and Joshua Tree habitats. In the Great Basin, from Inyo County north, population declines markedly from November through March. Rare on coastal slope north of Mendocino County, occurring only in winter. Occurs only rarely in heavily urbanized areas, but often found in open cropland. Sometimes uses edges of denser habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain scattered vegetation with open canopy that is preferred by this species. Additionally, thorny vegetation is not present within the Project site to

support nesting for this species. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Riparian Brush Rabbit

Leporidae > *Sylvilagus bachmani riparius*

FESA: Endangered, CESA: None, SJMSCP-covered Species

Life History: The riparian brush rabbit is a subspecies of the common brush rabbit. There are three known population centers for this species: Caswell Memorial Park, Lathrop, and the San Joaquin River National Wildlife Refuge, all in San Joaquin County. The riparian brush rabbit prefers riverine habitats with thickets of willow (Salix spp.), blackberry (Rubus vitifolius), wild rose (Rosa californica), wild grape (Vitis calfornica), Douglas' coyote bush (Baccharis douglasii), and grasses for foraging and sheltering. *Source: https://www.fws.gov/species/riparian-brush-rabbit-sylvilagus-bachmani-riparius*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks suitable riparian riverine habitats to support this species. Additionally, the Project site does not occur in the Caswell Memorial Park, Lathrop, or the San Joaquin River National Wildlife Refuge and is, therefore, not expected to occur. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Osprey

Pandionidae > *Pandion haliaetus*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Breeds in northern California from Cascade Ranges south to Lake Tahoe, and along the coast south to Marin County. Regular breeding sites include Shasta Lake, Eagle Lake, Lake Almanor, other inland lakes and reservoirs, and northwest river systems. Breeding population estimated in 1975 at 350-400 pairs in northern California; numbers apparently increasing in recent years. An uncommon breeder along southern Colorado River, and uncommon winter visitor along the coast of southern California. Associated strictly with large, fish-bearing waters, primarily in ponderosa pine through mixed conifer habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the proximity to lacustrine, riverine, or pelagic habitats preferred by this species for foraging. Additionally, the tall trees preferred by this species for nesting are limited on-site and nesting by this species is unlikely. The nearest record is located greater than five miles from the Project site and is not expected to occur.

Yellow Warbler

Parulidae > *Dendroica petechia brewsteri*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Breeding distribution includes from the coast range in Del Norte county, east to Modoc plateau, south along coast range to Santa Barbara and Ventura counties and along western slope of Sierra Nevada south to Kern county. Also breeds along eastern side of California from the Lake Tahoe area south through Inyo county. Also breeds in several southern California mountain ranges and throughout most of San Diego county. Winters in Imperial and Colorado river valleys. Breeds in riparian woodlands from coastal and desert lowlands up to 2500 m (8000 ft) in Sierra Nevada. Also breeds in montane chaparral, and in open ponderosa pine and mixed conifer habitats with substantial amounts of brush. Numbers of breeding pairs have declined dramatically in recent decades in many lowland areas (southern coast, Colorado River, San Joaquin and Sacramento valleys). Now rare to uncommon in many lowland areas where formerly common. A common migrant on Channel and Farallon Islands in spring and fall. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site does not contain forested or riparian breeding habitat suitable to support this species thus, this species is not expected to occur on-site. Nesting sites occur within riparian vegetation as well and is not expected to occur within the Project site. The nearest record of this species is located greater than five miles from the Project site and is not expected to occur.

Coast Horned Lizard

Phrynosomatidae > *Phrynosoma blainvillii*

FESA: None, CESA: Species of Special Concern

Life History: Blainville's Horned Lizard is uncommon to common in suitable habitat. Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Occurs in the Sierra Nevada foothills from Butte County to Kern County and throughout the central and southern California coast. Its elevational range extends up to 1,200 m (4000 ft) in the Sierra Nevada foothills and up to 1800 m (6000 ft) in the mountains of southern California. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): CNDDB

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the riparian and forested habitat preferred by this species for breeding and foraging. This species may also forage in open grassland areas with sandy soils and, although grassland habitat occurs within the Project site, this area lacks bare ground and sandy soils required to support this species. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Ringtail

Procyonidae > *Bassariscus astutus*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: Widely distributed, common to uncommon permanent resident. Occurs in various riparian habitats, and in brush stands of most forest and shrub habitats, at low to middle elevations. Little information available on distribution and relative abundance among habitats. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the riparian and forested habitat preferred by this species for nesting or foraging. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

California Red-legged Frog

Ranidae > *Rana draytonii*

FESA: Threatened, CESA: None

Life History: The California Red-legged Frog inhabits quiet pools of streams, marshes, and occasionally ponds. Occurs along the Coast Ranges from Mendocino County south and in portions of the Sierra Nevada and Cascades ranges, usually below 1,200 m (3936 ft). This species was once a subspecies of Rana aurora, then known as the Red-legged Frog, and has been elevated to species-level status. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: Although the Project site does contain aquatic resources in the form of small Marshes, most were observed to be dry during the survey and would not support this species. Those Marshes where water was present have high human disturbance from vegetation trimming and grading that would preclude this from these areas. Additionally, the nearest record of this species is located greater than five miles from the Project site and it is not expected to occur.

Western Spadefoot

Scaphiopodidae > *Spea hammondii*

FESA: None, CESA: Species of Special Concern, SJMSCP-covered Species

Life History: The Western Spadefoot ranges throughout the Central Valley and adjacent foothills, and is usually quite common where it occurs. In the Coast Ranges it is found from Point Conception, Santa Barbara County, south to the Mexican border. Elevations of occurrence extend from near sea level to 1,363 m (4,460 ft) in the southern Sierra foothills. This species occurs primarily in grasslands, but occasional populations also occur in valley-foothill hardwood woodlands. Western spadefoot also require shallow, temporary pools or streams during the breeding season but may also use artificial ponds or livestock water tanks for habitat. Some populations persist for a few years in orchard or vineyard habitats. *Source: California*

Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.

Inclusion Source(s): CNDDB, SJMSCP

Nearest CNDDB Record: 2.81 miles west

Habitat Present: Not Present

Determination Reason: The Project site does contain grassland habitat north of Highway 132 and south of the California Aqueduct, but this habitat contains dense vegetation that is not suitable for western spadefoot. No shallow water resources are present within the Project site to support this species. Additionally, the orchards and vineyards are regularly maintained by agricultural machinery and human disturbance is common within these areas; thus, given the ground disturbances this species is unlikely to occur.

Long-Billed Curlew

Scolopacidae > *Numenius americanus*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: An uncommon to fairly common breeder from April to September in wet meadow habitat in northeastern California in Siskiyou, Modoc, and Lassen counties. One recent nesting record for Owens Valley, Inyo County. Uncommon to locally very common as a winter visitant from early July to early April along most of the California coast, and in the Central and Imperial valleys, where the largest flocks occur. Preferred winter habitats include large coastal estuaries, upland herbaceous areas, and croplands. On estuaries, feeding occurs mostly on intertidal mudflats. Small numbers of nonbreeders remain on coast in summer, and larger numbers remain in some years in the Central Valley. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the wet meadow, coastal estuary, or inter-tidal mudflat habitat preferred by this species for nesting and foraging. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Vernal Pool Tadpole Shrimp

Triopsidae > *Lepidurus packardi*

FESA: Endangered, CESA: None

Life History: Vernal Pool Tadpole Shrimp inhabits vernal pools and swales containing clear to highly turbid water. The Vernal Pool Tadpole Shrimp is found at 14 vernal pool complexes in the Sacramento Valley from the Vina Plains in Butte County south of the Sacramento area in Sacramento County and west to the Jepson Prairie region of Salano County. The pools inhabited by the Vernal Pool Tadpole Shrimp range in size from 5 square meters (16.4 square ft) in the Mather Air Force Base area of Sacramento County to the 38 hectare (89 acre) Olcott Lake at Jepson Prairie. The pools at Jepson Prairie and Vina Plains have a neutral pH, and very low conductivity, TDS, and alkalinity. These pools are most commonly located in grass bottomed swales of unplowed grasslands in old alluvial soils underlain by hardpan, or in mud-

bottomed pools containing highly turbid water. All pools known to be inhabited by this species are filled by winter and spring rains and may last until June. *Source: https://www.govinfo.gov/content/pkg/FR-1992-05-08/pdf/FR-1992-05-08.pdf#page=76*

Inclusion Source(s): IPaC

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the vernal pool habitat to support this species. Ponded areas consist of water basins and marshes on site, irregularly inundated and artificially irrigated as part of agricultural operations. Given these non-natural conditions, these areas are unlikely to support this species, and this species is not expected to occur.

Yuma Myotis

Vespertilionidae > *Myotis yumanensis*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Yuma Myotis is common and widespread in California. It is uncommon in the Mojave and Colorado Desert regions, except for the mountain ranges bordering the Colorado River Valley. Found in a wide variety of habitats ranging from sea level to 3300 m (11,000 ft), but it is uncommon to rare above 2560 m (8000 ft). Optimal habitats are open forests and woodlands with sources of water over which to feed. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the open forest and woodland habitats preferred by this species for foraging. Additionally, there were few manmade structures present within the Project site that would support these species, but regular human disturbance around these buildings may preclude bats from these structures. Roosting sites are not expected to occur within the Project site. The nearest record of this species is located greater than five miles from the Project site and it is not expected to occur.

Western Red Bat

Vespertilionidae > *Lasiurus blossevillii*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Western Red Bat is locally common in some areas of California, occurring from Shasta County to the Mexican border, west of the Sierra Nevada/Cascade crest and deserts. The winter range includes western lowlands and coastal regions south of San Francisco Bay. There is migration between summer and winter ranges, and migrants may be found outside the normal range. Day-roost habitat is primarily among the foliage of trees such as willows, cottonwoods, and sycamores in forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Forages on a variety of insects. Not found in desert

areas. During warm months, sexes occupy different portions of the range. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Western Bat Working Group. 2005. Western Bat Species Accounts, http://wbwg.org/western-bat-species/

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site lacks the forested and woodland areas required for roosting habitat for this species. The western red bat feeds over open grassland area, which exists within the Project site to the north of Highway 132 and south of the California Aqueduct, but is small in extent and no visible signs of bats (i.e. scat or insect carcasses) were observed during the surveys. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Eastern Red Bat

Vespertilionidae > *Lasiurus borealis*

FESA: None, CESA: None, SJMSCP-covered Species

Life History: The Eastern Red Bat roots approximately 3 – 36 feet (1-12 meters) above ground in tree foliage, shrubs, or even house shingles, usually in shaded but open areas generally east of the Continental Divide in North America. They prefer large trees in cleared landscapes and commonly use deciduous species near streams, fields, or urban edges. They forage over open areas, including water, pastures, and forest edges, and are drawn to streetlights that attract insects. They prefer landscapes with water and moderate development while avoiding dense forests and agriculture. *Source: New York Natural Heritage Program, https://guides.nynhp.org/eastern-red-bat/*

Inclusion Source(s): SJMSCP

Nearest CNDDB Record: > 5 miles

Habitat Present: Not Present

Determination Reason: The Project site is located outside of the primary distribution range east of the continental divide for this species. Additionally, the Project site lacks the tall, forested areas preferred by this species for roosting. The eastern red bat feeds over open area, which exists within the Project site to the north of Highway 132 and south of the California Aqueduct but is small in extent and no visible signs of bats (i.e. scat or insect carcasses) were observed during the surveys. Additionally, the nearest record for this species is located greater than five miles from the Project site and it is not expected to occur.

Least Bell's Vireo

Vireonidae > *Vireo bellii pusillus*

FESA: Endangered, CESA: Endangered

Life History: Formerly a common and widespread summer resident below about 600 m (2,000 ft) in western Sierra Nevada, throughout Sacramento and San Joaquin valleys, and in the coastal valleys and foothills from Santa Clara County south. Also, was common in

	coastal southern California from Santa Barbara County south, below about 1,200 m (4,000 ft) east of the Sierra Nevada, in Owens and Benton valleys, along Mojave River and other streams at western edge of southeastern deserts, and along entire length of Colorado River. Has declined drastically or vanished entirely throughout California range in recent decades, apparently from cowbird parasitism and habitat destruction and degradation. Now a rare, local, summer resident below about 600 m (2,000 ft) in willows and other low, dense valley foothill riparian habitat and lower portions of canyons mostly in San Benito and Monterey counties; in coastal southern California from Santa Barbara County south; and along the western edge of the deserts in desert riparian habitat. *Source: California Department of Fish and Wildlife. California Interagency Wildlife Task Group. 2014. CWHR version 9.0 personal computer program. Sacramento, CA.*
Inclusion Source(s):	CNDDB
Nearest CNDDB Record:	2.68 miles west
Habitat Present:	Not Present
Determination Reason:	The Project site lacks suitable dense riparian habitat and streams to support this species. This species is considered locally extirpated.

4.7 Other Considerations

4.7.1 Wildlife Movement

Effects on wildlife movement are an important consideration when assessing the potential anthropogenic effects of any project. At a small enough scale, any project or activity can potentially affect the movement of wildlife if any wildlife are present at all. In general, however, the term "wildlife movement corridor" means an area of habitat that is important for the movement of wildlife between larger habitat areas. Wildlife movement corridors are important for maintaining population levels and genetic diversity.

Wildlife require space to roam in search of food, shelter, mates, or for seasonal migration. Fragmentation of wildlife movement from human development can disrupt the normal flow of essential ecosystem functions. The extent of habitat movement requirements is dependent on the taxa and is crucial to the survival of many species. Overall wildlife movement has become restricted due to man-made barriers, such as roads, structures, development, walls or fencing, and even agricultural fields.

The Project site lies within the Central/Southwest Transition Zone of the SJMSCP. While the land cover and habitat types are generally consistent with that of the Central Zone (row and field crops), there are records of San Joaquin kit fox within the Southwest Transition Zone indicating some movement between the Southwest Zone and the Central Zone. A known wildlife corridor, the Corral-Lower San Joaquin Wildlife Corridor, runs from the Corral Hollow Pass through the Southwest/Central Transition Zone, approximately 0.65 miles northwest of the Project site and approximately 3.85 miles southwest of the Project site within the Southwestern Zone (**Figure 7**). No known wildlife movement corridors overlap the Project site.

The Project site generally does not function as a movement corridor for terrestrial wildlife. The Project site contains large areas of orchards and one grassland area bordered by either roads (paved and dirt) or large canals, which functionally serve as barriers to the movement of most terrestrial wildlife outside of birds. Additional active

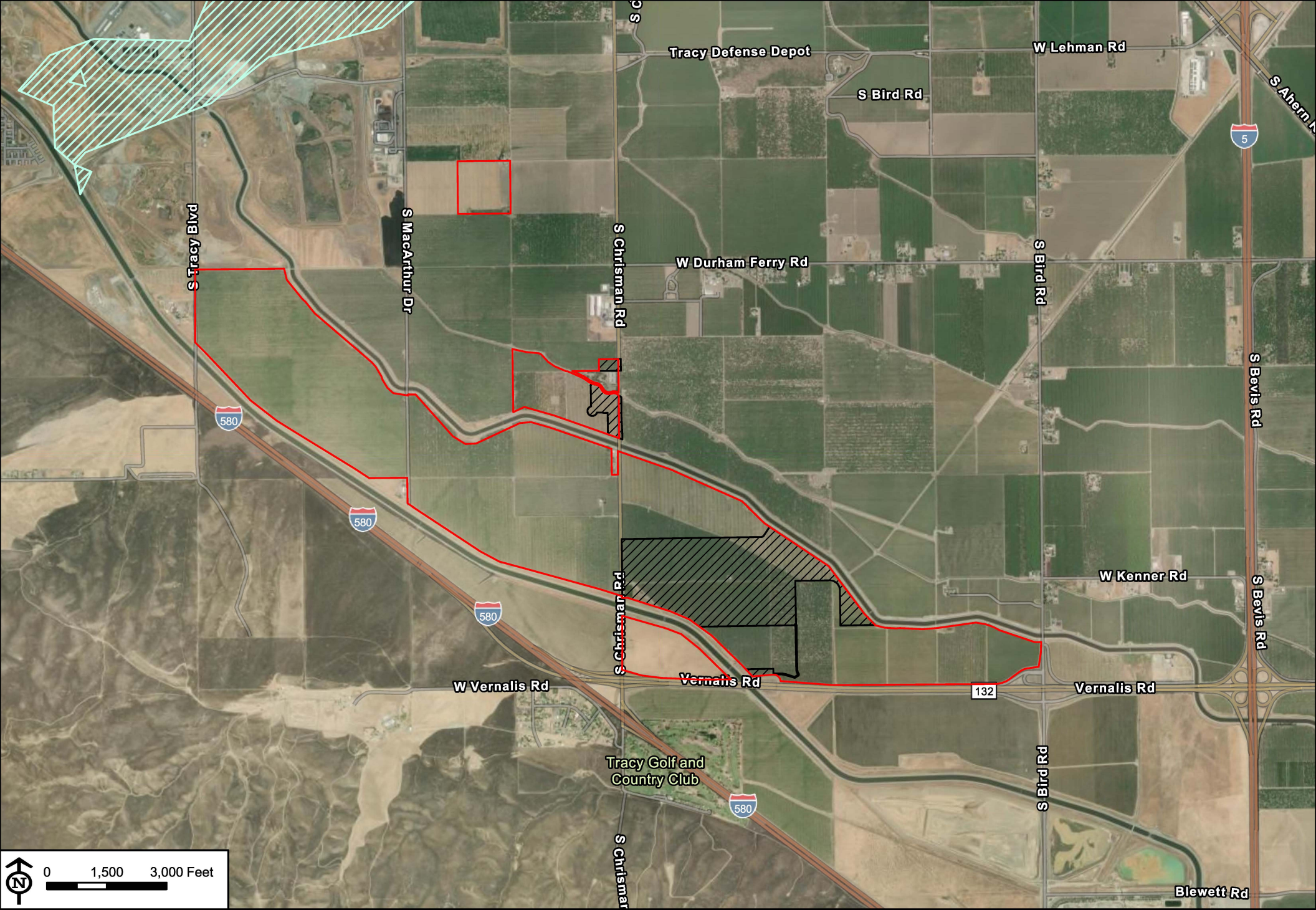
agricultural fields or urban development are located on all sides of the Project site, which generally do not serve as high quality habitat areas that would potentially attract wildlife.

The Project site does contain semi-natural and natural vegetation communities that provide foraging habitat for a number of bird species, including Swainson's hawk, northern harrier, white-tailed kite, and other avian taxa discussed in **Section 4.6.2** above. Although marginally suitable foraging habitat is present on-site, the Project site contains limited habitat to support nesting for these species due to the frequent disturbance of potential nesting areas associated with agricultural operations.

4.7.2 Nesting Birds

Birds, including native species protected by the MBTA and California Fish and Game Code, have the potential to nest in nearly any environment, including those heavily altered by anthropogenic activity. This includes the orchards that dominate the Project site and fields maintained for fire reduction. Depending upon the nature of the agricultural activities and fire management practices on-site, there may be large areas that would contain tall herbaceous vegetation or bare ground to support bird species with those nesting habitat preferences, such as the rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), and house finch (*Haemorhous mexicanus*). Tall mature trees are limited on-site; however, the site does contain manmade structures such as utility poles that provide potentially suitable nesting habitat raptors or other large birds identified in the desktop and literature review.

The areas surrounding the aquatic features within the Project site may provide marginal nesting habitat for blackbirds such as the red-winged blackbird (*Agelaius phoeniceus*) observed during the field visits, or the tricolored blackbird (*Agelaius tricolor*) identified in the desktop and literature review. However, the areas surrounding the aquatic features are not extensive enough and do not support the mature canopies that would provide suitable nesting habitat for larger wetland birds, such as great blue heron (*Ardea Herodias*) or great egret (*Ardea alba).*



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (04/2024)

BARGAS Environmental Consulting

Project Site

Initial Phase

Corral/Lower San Joaquin Wildlife Corridor

Figure 7 San Joaquin Wildlife Corridors

Pacific Gateway Specific Plan Project

Map Created: 2/3/2025, Map Revised: N/A, Bargas Project Number: 1644-22

5 Project Effects

5.1 Thresholds of Significance

Appendix G of the CEQA Guidelines (as amended through January 2019) is frequently cited by public agencies to determine whether a project may have a significant impact on biological resources. Under Appendix G, a project may have a significant impact on biological resources if it would:

1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations by the CDFW or USFWS.
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.
3. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.
5. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.
6. Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan.

5.2 Key Metrics for Assessing Project Effects

Prior to assessing the significance of Project effects on biological resources, it is important to understand the factors to be considered in the analysis. Primary among these are direct impacts to vegetation communities, which may provide habitat for special-status species or support jurisdictional aquatic resources. Direct impacts to vegetation communities are typically associated with site grading, which often result in a 100% loss of vegetation and habitat on-site.

Current plans for the Initial Phase of the Project propose to directly impact approximately 247.26 acres of existing vegetation communities as a result of mass grading to prepare the site for Initial Phase development (**Figure 8**). Approximate impacts from the Initial Phase are summarized below in **Table 7**, which include 234.39 acres of Deciduous Orchard, 0.11 acres of Cultivated/Landscaped, 9.18 acres of Developed/Disturbed, and 3.58 acres of Cattail Marsh and Wetlands.

Table 7. Initial Phase Impacts

Mapped Vegetation Communities Common Name	SJMSCP Vegetation Community Classification	Acres Impacted
Cattail Marsh and Wetlands	Freshwater Emergent Wetland (W7)	3.58
Cultivated/Landscaped	Golf Courses/Cultivated Parks (U3)	0.11
Deciduous Orchard	Orchards and Vineyards (C2)	234.39
Disturbed/Developed	Scraped/Paved Areas (U2)	9.18
	TOTAL	**247.26**

Development plans for the remainder (i.e., Programmatic-Level) areas of the Project area have not yet been designed; thus, impacts for the remainder of the Project are unknown are discussed in general terms. Overall, the implementation of the Project build-out could impact the following vegetation communities: Deciduous Orchards, Cultivated/Landscaped, Disturbed/Developed, Wild Oats and Annual Brome Grassland, and Cattail Marsh and Wetlands.

5.3 Project Effects on Candidate, Sensitive, or Special-Status Species

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations by the CDFW or USFWS.*

5.3.1 Summary of Effects

Due to the anticipated movement of many foraging and breeding species, an assessment of whether the Project will have a substantial adverse effect on any candidate, sensitive, or special-status species applies to the entire Project site, including the Initial phase. As a result, the statements of effects, significance, and proposed mitigation measures applying to the Initial Phase are not independently analyzed but rather encompassed within the overall Project assessment.

Potential Project effects are assessed based on special-status species determined to have at least moderate potential to occur on-site. Special-status species determined Not Expected to occur or Presumed Absent, would not be adversely affected by implementation of the Project; thus are not discussed further.

Special-Status Plants

Overall, based on the determination of Not Expected and Presumed Absent, implementation of the Project is not expected to impact special-status plant species due to lack of suitable soils, habitat, or elevations within the Project site.

Special-Status Animals

Five special-status wildlife species could be impacted by implementation of the Project. Swainson's hawk, white-tailed kite, and song sparrow were observed on-site whereas northern harrier and Crotch's bumble bee are considered to have moderate potential to occur. After evaluating the presence of suitable habitat, along with species-specific nesting

and foraging behavior, appropriate Avoidance and Minimization measures are proposed to reduce Project-related effects on these species to less than significant.

- **Swainson's Hawk**: The Project site contains medium quality foraging habitat within the annual grassland located north of Highway 132 and south of the California Aqueduct, as well as within agricultural fields that are adjacent to the Project site that could support this species. Tall, scattered trees for nesting habitat are limited on-site; thus, nesting by this species on-site is unlikely and not expected. As per subsection 5.2.4.11 of the SJMSCP, the Project applicant shall consult with a qualified biologist prior to any vegetation activities or ground-disturbing work to determine if any known or potential nesting trees are located within the Project site. Known or potential nesting trees can be either retained or removed from the Project site. If identified nesting trees are retained and occupied during construction activities, then a buffer of twice the dripline of the tree will be established until the nest is no longer occupied. However, nesting trees may also be removed while trees are not occupied from September 1 to February 15.

- **White-tailed Kite**: The Project site contains medium quality foraging habitat within the annual grassland located north of Highway 132 and south of the California Aqueduct, as well as within agricultural fields that are adjacent to the Project site that could support this species. Tall trees for nesting habitat are limited on-site; thus, nesting by this species on-site is unlikely and not expected. As per subsection 5.2.4.19 of the SJMSCP, a nesting preconstruction survey shall be conducted by a qualified biologist prior to any vegetation activities or ground disturbance during the nesting season (February 15 to September 15), within and adjacent (as feasible) to the Project site to determine the presence of nesting white-tailed kites. Should an active nest be identified, a buffer of 100 feet from the nesting area shall be established and maintained until the nest has been deemed inactive by a qualified biologist.

- **Song Sparrow**: The Project site contains medium quality foraging habitat within the open annual grassland located north of Highway 132 and south of the California Aqueduct, as well as within agricultural fields that are adjacent to the Project site that could support this species. Open grassland and residential houses may provide nesting habitat for this species but is limited on-site thus, nesting by this species on-site is unlikely and not expected. To ensure this species is avoided, a qualified biologist shall conduct a nesting bird survey during the nesting season (February 15 to August 31) to determine if any nests or nesting activity is present within or adjacent (as feasible) to the Project site. As per the Migratory Bird Treaty Act, no birds or their nests may be harmed or disturbed if they are observed within the Project site. If nests are observed, then an appropriate buffer will be established by the biologist that will remain in effect until the nest is no longer active.

- **Northern Harrier**: The Project site contains medium quality foraging habitat within annual grassland located north of Highway 132 and south of the California Aqueduct, as well as within agricultural fields that are adjacent to the Project site that could support this species. Nesting habitat for this species is typically within grasses, willows, cattails, or sedges but this vegetation is limited on-site; thus, nesting by this species on-site is unlikely and not expected. Per subsection 5.2.4.17 of the SJMSCP, a nesting survey shall be conducted by a qualified biologist prior to any vegetation activities or ground-disturbing activities to determine if any nests or nesting activity is present within the Project site and a surrounding 500-foot buffer, as feasible. If nesting

is observed then a 500-foot buffer shall be applied during all vegetation activities or ground-disturbing activities that occur during the nesting season (February 15 – August 31).

- **Crotch's Bumble Bee**: The Project site contains sufficient flowering plants to support foraging (i.e., nectar collection) for this species. Nesting colony habitat on-site is limited to open annual grasslands located south of the California Aqueduct, and adjacent to the Project site. Therefore, Crotch's bumble bee may be present as a transient species foraging within the orchards and vineyards during the flower blooming period. A focused survey for Crotch's bumble bee within both foraging and nesting habitat shall be conducted for this species prior to any ground-disturbing activities during the colony active period (April - August) and when floral resources are present as per the *CDFW Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* protocols (CDFW 2023) dated June 6, 2023 to determine if any individuals or nests are present within the Project site. If Crotch's bumble bees or their nests are observed then the Project applicant shall consult with CDFW, which may require an Incidental Take Permit (ITP) if any bees are expected to be harmed during implementation of the Project.

5.3.2 Significance Statement

With the implementation of these Project-specific Avoidance and Minimization measures, potential impacts would be reduced to less than significant.

5.4 Project Effects on Riparian Habitat or Other Sensitive Natural Community

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *have a substantial adverse effect on riparian habitat or other sensitive natural communities identified locally, regionally, or by the CDFW or USFWS.*

5.4.1 Summary of Effects

The Project site does not to contain sensitive natural communities or riparian habitat pursuant to CDFW, CNPS, or USFWS. Therefore, the Project is not expected to result in impacts to riparian habitats or other sensitive natural communities.

5.4.2 Significance Statement

The Project would not result in a significant impact to riparian habitat or other sensitive vegetation community.

5.5 Project Effects on State or Federally Protected Wetlands

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *have a substantial adverse effect federally protected wetlands defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

5.5.1 Summary of Effects

The Project site does not support federally protected wetlands defined by Section 404 of the CWA, as none occur on the Project site. However, although not federally protected or regulated by Section 404 of the CWA, isolated wetlands/waters of the state potentially subject to RWQCB jurisdiction per the Porter-Cologne Act occur and would be impacted (see CVRWQCB Waste Discharge Requirements below).

The Initial Phase of development for the Project would have direct impacts to a total of 3.58 acres of two isolated wetland and non-wetland waters of the state, including Marsh 7, Marsh 8, and Water Basin 3 (**Figure 8**). Additional impacts to aquatic resources on-site would likely result from implementation of future phases (i.e., Programmatic-Level) of development; however, the quantities and locations are unknown at this time. Approximately 2.45 acres of aquatic resources are present within the limits of the Project site and outside of the Initial Phase development. **Table 8** presents the proposed grading limit of the Initial Phase for the Project.

Table 8. Potential Jurisdictional Aquatic Resources within Proposed Grading Limits of the Initial Phase

Feature Type and Name	Area (acres)	Length (linear feet)
Wetland Water of the State (Marsh 7)	1.60	362
Wetland Water of the State (Marsh 8)	1.67	469
Non-Wetland Water of the State (Water Basin 3)	0.31	349
TOTAL	**3.58**	**1,180**

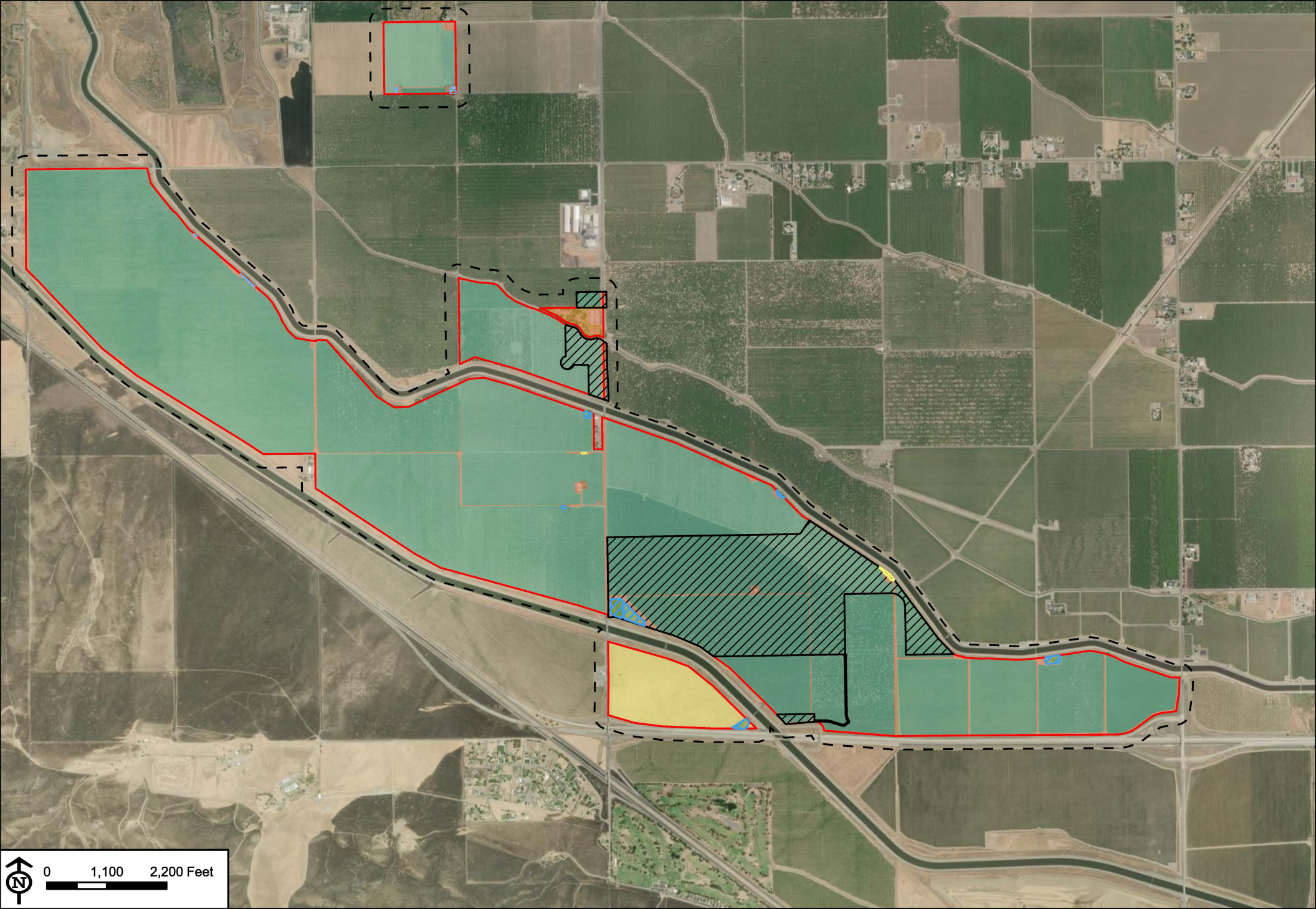
Although no aquatic features on-site were found to be under USACE jurisdiction, an Approved Jurisdictional Determination may be requested from the County during their project approval and or development/grading permit issuance process to confirm that aquatic features within the Project site and Initial Phase do not meet the definitions of waters of the U.S. If, it is determined that the aquatic resources within the Project site and Initial Phase do fall under the jurisdiction of USACE, CVRWQCB, or CDFW (Regulatory Agencies), appropriate compensation should be provided to achieve "no net loss" for impacts to aquatic resources associated with Project implementation. Wetland restoration, enhancement, and/or replacement shall be at a location and by methods acceptable to the Regulatory Agencies during appropriate consultation. The Regulatory Agency may require the purchase of compensatory mitigation credits at an agency-approved mitigation bank or preparation/submittal of a habitat mitigation and monitoring plan for on- or off-site mitigation. The mitigation plan would demonstrate how impacts to aquatic resources within Project site would be fully mitigated.

Project compliance with the Porter-Cologne Act is required; thus, coordination with RWQCB would occur. Consultations with the applicable Regulatory Agency may result in the need to acquire the following permits and regulatory approvals:

- **CVRWQCB Waste Discharge Requirements**: An Individual Order for Waste Discharge Permit from the CVRWQCB would be required for Project activities impacted wetlands or waters of the State, which are not also under USACE jurisdiction (i.e., "isolated waters").

5.5.2 Significance Statement

With the implementation of the Project's proposed avoidance and minimization measures, as well as compliance with State and Federal regulations, the Project would not have a substantial adverse effect on state or federally protected wetlands.



Source: ESRI ArcGIS Online Basemap - World Imagery Hybrid (10/2022)

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Figure 8 Initial Phase and Program-level Impacts
Pacific Gateway Specific Plan Project

Map Created: 1/30/2025, Bargas Project Number: 1644-22

5.6 Project Effects on Wildlife Movement and Nursery Sites

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory corridors, or impede the use of native wildlife nursery sites?*

5.6.1 Summary of Effects

The Project site is not known to be an established wildlife corridor or wildlife nursery site. The site is identified by the SJMSCP as part of the *Southwest/Central Transition Zone* which recognizes that species in the Southwest Zone may use portions of the Central Zone for foraging or transit, particularly San Joaquin kit fox. A known wildlife movement corridor lies about 0.65 miles northwest of the northwest corner of the Project site (Huber 2006). No known wildlife movement corridors overlap the Project site. Given the proximity of the Project site to a known wildlife movement corridor, it is possible wildlife may use the Project site for transit; however, such activity is presumably limited and unlikely given the agricultural operations and practices at the site. Overall, the site is not considered to substantially facilitate wildlife movement. The Project would not substantially interfere with connectivity between blocks of habitat and would not block or substantially interfere with a local or regional wildlife corridor or linkage.

The proposed development site plan includes passive outdoor open spaces including a network of pedestrian and bicycle trails, a university campus, and a public park. These open spaces could provide use of the Project site as a wildlife transit corridor for San Joaquin kit fox and other ambulatory species. As per section 5.5.3(C) of the SJMSCP, stepping stone refugia for San Joaquin kit foxes would be provided for projects located between the Delta Mendota Canal and the California Aqueduct so that kit foxes may traverse between the northern Corral-Lower San Joaquin Wildlife Corridor within the Southwest/Central transition zone to the southern Corral-Lower San Joaquin Wildlife Corridor within the Southwest zone where the Southwest Zone Preserve area is located. To implement this requirement, the Project plans to provide native grassland and shrubland habitat along the southern and northeastern edges of the Project site adjacent to the California Aqueduct and Delta Mendota Canal, respectively, that support San Joaquin kit foxes. Overall, the Project is not expected to impede wildlife movement.

With respect to nursery sites, the current agricultural use of the Project site as commercial orchards may provide suitable nesting habitat for birds, particularly common passerines. A decrease in commercial orchards may change nesting habits of birds in the surrounding area, but sufficient landscape trees may be available as nesting habitat after the implementation of this Project. Tall trees for nesting habitat to accommodate raptors are limited on-site, however, manmade structures such as utility poles may provide suitable nesting habitat. Additionally, due to the limited amount of tall trees, there is no suitable nesting substrate for large colonial nursery nesters such as great blue heron or great egret. The Project would be required to comply with the MBTA and California Fish and Game Code to protect nesting bird species. The following avoidance and minimization measures shall be implemented prior to site disturbance to avoid impacts to nesting raptors and other birds in the Project site or immediately adjacent areas.

- A nesting bird survey shall be conducted within the Project site (raptors and non-raptors) and a 500-foot buffer (raptors only) as feasible prior to commencing with earth-moving or construction work for each phase of the project, if this work would begin during the typical nesting season (between February 1 and August 31).
- If nesting birds are identified during the surveys, a qualified biologist will determine an appropriate disturbance-free buffer zone (between 100 and 500 feet) depending on the species as described in

Subsections 5.2.4.16 through 5.2.4.22 in the SJMSCP. Buffer zones should be clearly demarcated in the field for avoidance by construction activities.

- The size of an established buffer may be altered if a qualified biologist conducts behavioral observations and determines the nesting birds are well acclimated to disturbance. If this occurs, the biologist shall prescribe a modified buffer that allows sufficient room to prevent undue disturbance/harassment to the nesting birds. If the buffer is reduced, the qualified biologist shall remain on site to monitor the behavior of the nesting birds during construction in order to ensure that the reduced buffer does not result in take of eggs or nestlings.
- No construction or earth-moving activity shall occur within the established buffer until it is determined by a qualified biologist that the young have fledged (are no longer dependent on the nest or the adults for feeding) and have attained sufficient flight skills to avoid project construction zones. This typically occurs by August 31. This date may be earlier or later and shall be determined by a qualified biologist. If a qualified biologist is not hired to monitor the nesting raptors, then the full buffer(s) shall be maintained in place from February 1 to August 31. The buffer may be removed, and work may proceed as otherwise planned within the buffer on September 1.

5.6.2 Significance Statement

Implementation of the Project may result in some temporary disturbance to local wildlife from construction noise; however, implementation of the Project would have a less than significant impact on wildlife movement, including nesting birds.

5.7 Project Effects on Local Policies or Ordinances Protecting Biological Resources

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project would *conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

5.7.1 Summary of Effects

The Project would not conflict with any local policies or ordinances protecting biological resources. San Joaquin County has one ordinance pertaining the protection of biological resources and is applicable to the Project; the County General Plan requirements on Development of Unincorporated Lands.

Development of Unincorporated Land: The San Joaquin County General Plan ensures that development projects in unincorporated areas align with the County's long-term vision for sustainable land use and resource management. Compliance with this ordinance requires the Project to demonstrate consistency with the General Plan's adopted goals and policies. Adherence to these regulations demonstrates the Applicant's commitment to preserving local natural resources. The Applicant would comply with San Joaquin County General Plan by working with the County to ensure the Project is approved by San Joaquin County and is consistent with the adopted General Plan.

5.7.2 Significance Statement

The project would not conflict with any County policies or ordinances; no impact would occur.

5.8 Project Effects on the Provisions of an Adopted Habitat Conservation Plan

This section addresses the portion of the CEQA Guidelines requiring an assessment of whether the Project *would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?*

5.8.1 Summary of Effects

The Initial Phase of the Project would have direct impacts to approximately 249.33 acres of land within the boundaries of the SJMSCP and is therefore subject to the provisions of the SJMSCP. Through adherence to these provisions, the Project aligns with the SJMSCP's goals to offset impacts focused on listed and non-listed species, agricultural land, and other open space resources. To demonstrate consistency with the provisions of the SJMSCP, appropriate avoidance, minimization, or mitigation measures consistent with the goals of the SJMSCP are incorporated into the Project, which are outlined below.

- Per Section 5.2.2 of the SJMSCP, pre-construction surveys are required to verify vegetation types affected by the project and to determine if SJMSCP-covered Species are present. Such surveys were conducted by Bargas as part of preparing this Assessment. Additionally, SJMSCP Section 5.2.2 states that following survey results, appropriate Incidental Take Minimization Measures may be developed and required as conditions of project approval. Results of the surveys as well as discussions in Section 5.3 of this Assessment concluded that five SJMSCP-covered species have at least moderate potential for occurrence within the Project site, due to the presence of suitable habitat. As a result, species-specific Avoidance and Minimization measures are proposed for the Project, which are detailed by each species in Section 5.3.1.
- Although burrowing owls are not expected to occur at the Project site, ground squirrel burrows were observed, which may provide potential to support burrowing owl. To ensure impacts to this species are avoided, and to demonstrate consistency with the SJMSCP, the following efforts shall be employed. Within 14-days prior to any of Project activities on-site, a single pre-construction clearance survey for burrowing owl should be conducted within the Project work areas and surrounding 300-foot buffer, as accessible and as feasible, to confirm absence or presence of burrowing owl. The survey shall be conducted by a qualified biologist with experience in surveying for burrowing owl, including identification of burrowing owl sign and burrowing owl individuals. Furthermore, Subsection 5.2.4.15 of the SJMSCP provides guidelines for avoiding impacts and protecting burrowing owl, which would be implemented for the Project as applicable. These guidelines state that burrowing owls may be discouraged from entering a potential construction site by preventing ground squirrels from creating these burrows. This can be achieved through planting or maintaining vegetation entirely covering the site at a height of approximately 36" above the ground, discing or plowing the entire project site to destroy any burrows, and removing ground squirrels. Per the current guidance from CDFW regarding how to proceed if active burrows are located within and around 150 meters of the work area (CDFW 2024), Project activities conducted during the breeding (February 1 through August 31) and non-breeding seasons should delineate a 150-meter protective buffer with high-visibility material around occupied burrow and burrow complexes until the completion of the project when the delineation material can be removed. Furthermore, any burrowing owl observed within the Project site or within 150 meters adjacent to the site shall be allowed to leave on their own and any Project activities that could result in harm will cease until the owl has left the work area (CDFW 2024). The designated biologist shall locate the burrow or burrow complex and delineate using high-visibility material, as previously described, until work in the area has ceased. A designated biologist shall be present during all Project activities if active burrowing owl complexes are observed within 150 meters of the work area to conduct biological monitoring as prescribed

by CDFW (CDFW 2024) and determine if burrowing owl behavior is affected during construction activities. The designated biologist shall have the authority to cease construction activities if burrowing owl are being negatively affected by the work and shall consult with CDFW to determine proper protocols before work activities may recommence. All active burrowing owl complexes shall be avoided unless the burrow location or ground disturbing work pose a risk to individual burrowing owls. However, if burrowing owl complexes are located within an area of temporary disturbance and are not active at the time of work (as determined by the designated biologist), CDFW shall be consulted and an approved exclusion object may be inserted into the entrance of the burrow to ensure burrowing owls do not occupy potential burrows within the Project site. If burrowing owls are found present on-site or within 150 meters of Project activities, and such activities would result in direct impacts to occupied habitat or burrowing owl individuals (as determined by the designated project biologist), CDFW shall be notified immediately to discuss whether an Incidental Take Permit (ITP) would be required prior to work. Any measures or recommendations prescribed by CDFW to avoid and minimize impacts to burrowing owl shall be required.

- The Project is also consistent with the SJMSCP regarding measures to protect San Joaquin kit fox even though the species is Not Expected to occur within the Project site. Because the site is located within the Southwest/Central Transition Zone, pre-construction surveys for San Joaquin kit fox shall be conducted prior to any ground-disturbing work. Specifically, subsection 5.2.4.25 of the SJMSCP states that pre-construction surveys for San Joaquin kit fox and/or their dens should be conducted by a qualified biologist between two calendar weeks to thirty calendar days prior to any ground-disturbing activities. If individual kit foxes are observed during the survey, then an additional protocol level survey will be conducted as outlined in the USFWS *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* protocol dated January 2011 (USFWS 2011). Additionally, if dens with openings of a diameter of four inches and that open within two feet inside of the den are observed within the Project site then a biologist will dust the opening of the den for three calendar days to determine if the den is occupied. If is discovered that the den is occupied by a single adult kit fox then the den may be destroyed as soon as the fox either moves or leaves the den, whereas if the den is discovered to be a natal den, then a 250-foot buffer shall be maintained around the den until it is determined to be vacant by a qualified biologist. Implementation of a pre-construction survey for San Joaquin kit fox would be required as part of the Project implementation; thus, demonstrating consistency with the SJMSCP. Furthermore, Section 5.5.3(C) of the SJMSCP prescribes that projects located between the Delta Mendota Canal and the California Aqueduct shall provide 2.5 acre stepping stone refugia for San Joaquin kit foxes at 0.5-mile intervals. This requirement put forth by the SJMSCP is designed to aid foxes in traversing between the Corral-Lower San Joaquin Wildlife Corridor that terminates approximately 0.65 miles north of the Project site in the Southwest/Central Transition Zone and begins again approximately 3.85 miles southwest of the Project site within the Southwest Zone. The Project site plan proposes to provide several intermittent corridors of native grassland and shrubland habitat (averaging approximately 5,223 feet length) in the northeastern boundary of the site as well as nearly the entire length of the southern boundaries of the Project development. These habitat corridors are intentionally incorporated into the Project, along the outer extents of the site plan, adjacent to the California Aqueduct and Delta Mendota Canal, respectively, to serve as San Joaquin kit fox habitat refugia as they traverse between the Southwest/Central Transition Zone and Southwest Zone wildlife corridors. Thereby, demonstrating compliance with the SJMSCP regarding San Joaquin kit fox.

Additionally, the Project must establish concurrence with the SJMSCP Technical Advisory Committee (TAC) and Permitting Agencies that all potential suitable habitat for SJMSCP Covered Species will be fully avoided pursuant to Section 5.5.9 of the SJMSCP. Should concurrence be established, pre-construction surveys may be waived and further Avoidance and Minimization measures would not be required. Additionally, to compensate for the loss of habitat of the SJMSCP Covered Species, several Mitigation Measures may be required by the County for the Project, consistent with the SJMSCP:

- Pay the appropriate fee, in this case, $750 per acre for Conversion of Multi-Purpose Open Space Lands; or
- Establish Preserves, enhanced by the Joint Powers Authority (JPA), upon which SJMSCP Covered Species rely, through the purchase of easements from landowners willing to sell urban development rights; or
- Purchase approved mitigation bank credits as specified in Section 5.3.2.4. D. of the SJMSCP.
- Propose an alternative mitigation plan, consistent with the goals of the SJMSCP and equivalent in biological value to options above, subject to approval by the JPA with the concurrence of the Permitting Agencies' representatives on the TAC.

5.8.2 Significance Statement

The Project would result in development within the SJMSCP. The SJMSCP has an overall goal of creating a multi-species conservation program to mitigate impacts to covered species that may result from development in San Joaquin County. Accordingly, appropriate avoidance, minimization, or mitigation measures that are consistent with the goals of the SJMSCP, including covered-species condition requirements, would be implemented for the Project. Thus, implementation of the Project would not conflict with the adopted SJMSCP and Project impacts would be less than significant.

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7 Appendix A. Floral & Faunal Compendia

Bargas has documented the presence of 48 plant taxa and 25 wildlife taxa. Taxa are presented in taxonomic order.

7.1.1 Plants

Common Name	Scientific Name	Family	Major Clade	Native/Non-Native
Cattail	*Typha domingensis*	Typhaceae	Monocots	Native
Common Sunflower	*Helianthus annuus*	Asteraceae	Eudicots	Native
Bristly Ox-Tongue	*Helminthotheca echioides*	Asteraceae	Eudicots	Non-native
Perennial Pepperweed	*Lepidium latifolium*	Brassicaceae	Eudicots	Non-native
Tumbleweed	*Amaranthus albus*	Amaranthaceae	Eudicots	Non-native
Lamb's Quarters	*Chenopodium album*	Chenopodiaceae	Eudicots	Non-native
Turkey-Mullein	*Croton setiger*	Euphorbiaceae	Eudicots	Native
Little Mallow	*Malva parviflora*	Malvaceae	Eudicots	Non-native
Common Devil's Claw	*Proboscidea louisianica subsp. louisianica*	Martyniaceae	Eudicots	Non-native
Mule Fat	*Baccharis salicifolia subsp. salicifolia*	Asteraceae	Eudicots	Native
Desert Almond	*Prunus fasciculata*	Rosaceae	Eudicots	Native
Peach	*Prunus persica*	Rosaceae	Eudicots	Non-native
Narrow-Leaved Willow	*Salix exigua var. exigua*	Salicaceae	Eudicots	Native
Tree Tobacco	*Nicotiana glauca*	Solanaceae	Eudicots	Non-native
American Black Nightshade	*Solanum americanum*	Solanaceae	Eudicots	Native
Yellow Star-Thistle	*Centaurea solstitialis*	Asteraceae	Eudicots	Non-native
Tall Flatsedge	*Cyperus eragrostis*	Cyperaceae	Monocots	Native
False Nutsedge	*Cyperus strigosus*	Cyperaceae	Monocots	Native
Wild Oat	*Avena fatua*	Poaceae	Monocots	Non-native
Rescue Grass	*Bromus catharticus*	Poaceae	Monocots	Non-native
Jungle Rice	*Echinochloa colona*	Poaceae	Monocots	Non-native
Barnyard Grass, Japanese Millet, Watergrass	*Echinochloa crus-galli*	Poaceae	Monocots	Non-native
Wall Barley	*Hordeum murinum*	Poaceae	Monocots	Non-native

Common Name	Scientific Name	Family	Major Clade	Native/Non-Native
Bull Thistle	*Cirsium vulgare*	Asteraceae	Eudicots	Non-native
Rough Blue Grass	*Poa trivialis*	Poaceae	Monocots	Non-native
Shortpod mustard	*Hirschfeldia incana*	Brassicaceae	Eudicots	Non-native
Prickly pear sp.	*Opuntia sp.*	Cactaceae	Eudicots	Native
Salsola sp.	*Salsola sp.*	Chenopodiaceae	Eudicots	Non-native
Horseweed	*Erigeron canadensis*	Asteraceae	Eudicots	Native
Pacific Willow	*Salix lasiandra var. lasiandra*	Salicaceae	Eudicots	Native
Alamo or Fremont Cottonwood	*Populus fremontii* subsp. *fremontii*	Salicaceae	Eudicots	Native
Purpleoiser Willow	*Salix purpurea*	Salicaceae	Eudicots	Non-native
California Bay	*Umbellularia californica*	Lauraceae	Magnoliid	Native
Bindweed, Orchard Morning Glory	*Convolvulus arvensis*	Convolvulaceae	Eudicots	Non-native
Saltcedar	*Tamarix ramosissima*	Tamaricaceae	Eudicots	Non-native
Common cocklebur	*Xanthium orientale*	Asteraceae	Eudicot	Native
Eastern annual saltmarsh aster	*Symphyotrichum subulatum*	Asteraceae	Eudicot	Native
Velvetleaf	*Abutilon theophrasti*	Malvaceae	Eudicot	Non-native
Bog yellowcress	*Rorippa palustris*	Brassicaceae	Eudicot	Native
Alkali heliotrope	*Heliotropium curassavicum var. oculatum*	Heliotropiaceae	Eudicot	Native
Tree Tobacco	*Nicotiana glauca*	Solanaceae	Eudicot	Non-native
Wild Radish	*Raphanus raphanistrum*	Brassicaceae	Eudicot	Non-native
Milk Thistle	*Silybum marianum*	Asteraceae	Eudicots	Non-native
Stinkwort	*Dittrichia graveolens*	Asteraceae	Eudicot	Non-native
Willow Herb	*Epilobium brachycarpum*	Onagraceae	Eudicot	Native
Wild Rhubarb	*Rumex hymenosepalus*	Polygonaceae	Eudicot	Native
Dwarf Mallow	*Malva neglecta*	Malvaceae	Eudicot	Non-native
California Dodder	*Cuscuta californica*	Convolvulaceae	Eudicot	Native

7.1.2 Wildlife

Common Name	Scientific Name	Family	Native/Non-Native
Rock Pigeon	*Columba livia*	Columbidae (Pigeons and Doves)	Non-native
Mourning Dove	*Zenaida macroura*	Columbidae (Pigeons and Doves)	Native
Red-shouldered Hawk	*Buteo lineatus*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
California Scrub-Jay	*Aphelocoma californica*	Corvidae (Crows and Jays)	Native
Common Raven	*Corvus corax*	Corvidae (Crows and Jays)	Native
Northern Mockingbird	*Mimus polyglottos*	Mimidae (Mockingbirds and Thrashers)	Native
Song Sparrow	*Melospiza melodia*	Passerellidae (New World Sparrows)	Native
Red-winged Blackbird	*Agelaius phoeniceus*	Icteridae (Blackbirds)	Native
Black-tailed Jackrabbit	*Lepus californicus*	Leporidae (Hares and Rabbits)	Native
Coyote	*Canis latrans*	Canidae	Native
Swainson's Hawk	*Buteo swainsoni*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
White-tailed Kite	*Elanus leucurus*	Accipitridae (Hawks, Kites, Eagles, and Allies)	Native
White-crowned Sparrow	*Zonotrichia leucophrys*	Passerellidae (New World Sparrows)	Native
California Gull	*Larus californicus*	Laridae (Gulls, Terns, and Skimmers)	Native
Black Phoebe	*Sayornis nigricans*	Tyrannidae (Tyrant Flycatchers)	Native
House Finch	*Haemorhous mexicanus*	Fringillidae (Fringilline and Cardueline Finches and Allies)	Native
Northern Mockingbird	*Mimus polyglottos*	Mimidae (Mockingbirds and Thrashers)	Native
Townsend’s Warbler	*Setophaga townsendi*	Parulidae (New World Warblers)	Native
Turkey Vulture	*Cathartes aura*	Cathartidae (New World Vultures)	Native
Eurasian Colored-Dove	*Streptopelia decaocto*	Columbidae (Pigeons and Doves)	Non-native
Double-crested Cormorant	*Phalacrocorax auritus*	Phalacrocoracidae (Cormorants and Shags)	Native
California Scrub Jay	*Aphelocoma californica*	Corvidae (Crows and Jays)	Native
Brewer's Blackbird	*Euphagus cyanocephalus*	Icteridae (Blackbirds)	Native

Common Name	Scientific Name	Family	Native/Non-Native
American Kestrel	*Falco sparverius*	Falconidae (Caracaras and Falcons)	Native
American Pipit	*Anthus rubescens*	Motacillidae (Wagtails and Pipits)	Native

8 Appendix B. Special-Status Biological Resource Summary

The research conducted for this report included a desktop review of numerous resource databases in order to determine a list of special-status biological resources, including 7 plant taxa and 44 wildlife taxa to be analyzed for potential occurrence. Table column definitions:

- **Common Name:** The most widely-accepted English common name for the taxon.
- **Scientific Name:** The most widely-accepted scientific name for the taxon.
- **Source(s):** The desktop review source(s) that contained this taxon.
- **Sensitivity Status:** The legal protected status of the taxon. These terms are described in detail in the Methods section of this report.
- **Habitat:** The quality of the habitat on the Project site for supporting the taxon. Classification of habitats is described in detail in the Methods section of this report.
- **Soils:** The suitability of soils on the Project site to support the taxon, if known. Classification of soils is described in detail in the Methods section of this report.
- **Potential:** The potential for the taxon to be found on the Project site. Ranking of potential is described in detail in the Methods section of this report.

8.1.1 Plants

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Soils	Potential
Big Tarplant	*Blepharizonia plumosa*	CNDDB, CNPS	CRPR 1B.1	Low Quality	Unknown	Not Expected
Slough Thistle	*Cirsium crassicaule*	CNPS, SJMSCP	CRPR 1B.1	Not Present	No	Presumed Absent
Mt. Hamilton Coreopsis	*Leptosyne hamiltonii*	CNPS, SJMSCP	CRPR 1B.2	Not Present	Unknown	Presumed Absent
Showy Golden Madia	*Madia radiata*	CNDDB, CNPS, SJMSCP	CRPR 1B.1	Not Present	Unknown	Presumed Absent
Large-flowered Fiddleneck	*Amsinckia grandiflora*	CNDDB, CNPS, IPaC	FE, CE, CRPR 1B.1	Not Present	Unknown	Presumed Absent
Diamond-petaled California Poppy	*Eschsholzia rhombipetala*	CNPS	CRPR 1B.1	Low Quality	Unknown	Not Expected
Lemmon's jewelflower	*Caulanthus lemmonii*	CNDDB	CRPR 1B.2	Not Present	Unknown	Presumed Absent

8.1.2 Wildlife

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Potential
Vernal Pool Fairy Shrimp	*Branchinecta lynchi*	IPaC, SJMSCP	FT	Not Present	Presumed Absent
Vernal Pool Tadpole Shrimp	*Lepidurus packardi*	IPaC, SJMSCP	FE	Not Present	Presumed Absent
Valley Elderberry Longhorn Beetle	*Desmocerus californicus dimorphus*	IPaC; SJMSCP	FT	Not Present	Presumed Absent

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Potential
Monarch - California Overwintering Population	*Danaus plexippus pop. 1*	IPaC	FC	Low Quality	Not Expected
California Red-legged Frog	*Rana draytonii*	IPaC, SJMSCP	FT, SCC	Not Present	Presumed Absent
Western Spadefoot toad	*Spea hammondii*	CNDDB, SJMSCP	SSC	Not Present	Presumed Absent
California Tiger Salamander	*Ambystoma californiense*	CNDDB; IPaC, SJMSCP	FE, CE	Not Present	Presumed Absent
California Glossy Snake	*Arizona elegans occidentalis*	CNDDB	SSC	Low Quality	Not Expected
San Joaquin Coachwhip	*Coluber flagellum ruddocki*	CNDDB, SJMSCP	SSC	Low Quality	Not Expected
Northwestern Pond Turtle	*Actinemys marmorata*	CNDDB, IPaC, SJMSCP	SSC	Not Present	Presumed Absent
Yellow-billed Cuckoo	*Coccyzus americanus*	IPaC, SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Long-billed Curlew	*Numenius americanus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Great Blue Heron	*Ardea herodias*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Great Egret	*Ardea alba*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
California Condor	*Gymnogyps californianus*	IPaC	FE, CE, FP	Not Present	Presumed Absent
Osprey	*Pandion haliaetus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Northern Harrier	*Circus hudsonius*	SJMSCP	SSC	Medium Quality	Moderate
Sharp-shinned Hawk	*Accipiter striatus*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Cooper's Hawk	*Accipiter cooperii*	SJMSCP	SJMSCP Covered Species	Low Quality	Not Expected
Swainson's Hawk	*Buteo swainsoni*	CNDDB; SJMSCP	CT, SJMSCP Covered Species	Medium Quality	Present
Burrowing Owl	*Athene cunicularia*	CNDDB; SJMSCP	CCE	Low Quality	Not Expected
Merlin	*Falco columbarius*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Least Bell's Vireo	*Vireo bellii pusillus*	CNDDB	FE, CE	Not Present	Presumed Absent
Horned Lark	*Eremophila alpestris*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Yellow-breasted Chat	*Icteria virens*	SJMSCP	SSC	Low Quality	Not Expected
Tricolored Blackbird	*Agelaius tricolor*	CNDDB; SJMSCP	CT, SSC	Low Quality	Not Expected
Yuma Myotis	*Myotis yumanensis*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Western Red Bat	*Lasiurus blossevillii*	SJMSCP	SSC	Not Present	Presumed Absent
Eastern Red Bat	*Lasiurus borealis*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent

Common Name	Scientific Name	Source(s)	Sensitivity Status	Habitat	Potential
Riparian Brush Rabbit	*Sylvilagus bachmani riparius*	IPaC, SJMSCP	FE, CE	Not Present	Presumed Absent
Riparian Woodrat	*Neotoma fuscipes riparia*	IPaC, SJMSCP	FE, SSC	Not Present	Presumed Absent
San Joaquin Kit Fox	*Vulpes macrotis mutica*	CNDDB; IPaC; SJMSCP	FE, CE	Low Quality	Not Expected
Ringtail	*Bassariscus astutus*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
American Badger	*Taxidea taxus*	CNDDB; SJMSCP	SSC	Low Quality	Not Expected
Yellow warbler	*Dendroica petechia brewsteri*	SJMSCP	SSC, SJMSCP Covered Species	Not Present	Presumed Absent
White-tailed Kite	*Elanus leucurus*	SJMSCP	FP, SJMSCP Covered Species	Medium Quality	Present
Loggerhead shrike	*Lanius ludovicianus*	SJMSCP, CNDDB	SSC, SJMSCP Covered Species	Not Present	Presumed Absent
Black-crowned night heron	*Nycticorax nycticorax*	SJMSCP	SJMSCP Covered Species	Not Present	Presumed Absent
Song Sparrow (Modesto Population)	*Melospiza melodia*	CNDDB	SSC	Medium Quality	Present
Townsend's big-eared bat	*Corynorhinus townsendii*	CNDDB	SSC	Low Quality	Not Expected
Pallid bat	*Antrozous pallidus*	CNDDB	SSC	Low Quality	Not Expected
Western mastiff bat	*Eumops perotis californicus*	CNDDB	SSC	Low Quality	Not Expected
Coast horned lizard	*Phrynosoma blainvillii*	CNDDB	SSC	Not Present	Presumed Absent
Crotch's bumblebee	*Bombus crotchii*	CNDDB	CE, SSC	Medium Quality	Moderate

Appendix C. Site Photographs



Photo 1. Potentially jurisdictional Marsh 8, containing tall flatsedge, turkey-mullein, stinkwort, and flax leaved horseweed; looking west.



Photo 2. Agricultural ditch with banks containing curly dock, stinkwort, milk thistle, yellow star thistle, and flax-leaved horseweed between orchard and vineyards; looking north.



Photo 3. Potentially jurisdictional Marsh 10 near an orchard containing pacific willow, narrowleaf willow, purple willow, and stinkwort; looking southwest.



Photo 4. Heavily disturbed potentially jurisdictional Agricultural Detention Basin 3 used for storage south of the Delta Mendota Canal; looking west.



Photo 5. Potentially jurisdictional Marsh 9 containing cattail species with a box culvert; looking southwest.



Photo 6. Valley grassland north of Vernalis Road at the southwestern end of the project site; looking north.



Photo 7. Potentially jurisdictional Marsh 6 containing California dodder surrounded by orchards, facing west.



Photo 8. Heavily disturbed Marsh 3 without vegetation and containing debris, surrounded by disturbed lands and orchards.