UNIVERSITY STATION AIR QUALITY ASSESSMENT

Santa Clara and San José, California

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Introduction

The purpose of this report is to address the potential air quality and health risk impacts associated with the proposed residential development located at 451 El Camino Real in Santa Clara and on an adjacent remnant parcel in San José, California. Air quality impacts would be associated with demolition of the existing land uses, construction of the new buildings and infrastructure, and operation of the project. Air pollutant emissions were estimated using appropriate emissions and dispersion models. In addition, the potential health risks associated with construction and operation of the project and the impact of existing toxic air contaminant (TAC) sources affecting nearby and proposed sensitive receptors (i.e., residents) were evaluated. The analysis was conducted following guidance provided by the Bay Area Air District (Air District).[1]

Project Description

The approximately 10.96-acre project site is currently developed with four office buildings, two parking garages, and associated parking lots. The proposed project would demolish the existing uses and construct 111 townhouse units totaling 257,500 square feet (sf) and a new five-story apartment building with 297 multi-family residential units totaling 475,000-sf. The townhouse units would each include an attached two-car garage on the ground floor. Thirteen of the townhouse units would be located on what is currently a 0.94-acre parcel in the City of San José, which is proposed to be annexed into the City of Santa Clara. The multi-family residential building would include a 139,116-sf, six-story parking garage with a total of 359 parking spaces. The project would be developed in two construction phases, with all the demolition and site preparation occurring before building construction begins. Phase 1 includes construction of the townhomes, while Phase 2 includes construction of the apartment building and parking garage. Construction on the Townhomes is anticipated to begin in January 2026, and the apartment building is expected to be completed by December 2029.

Setting

The project is located in Santa Clara County, which is in the San Francisco Bay Area Air Basin. Ambient air quality standards have been established at both the State and federal level. The Bay Area meets all federal ambient air quality standards with the exception of ground-level ozone and fine particulate matter ($PM_{2.5}$), and all State air quality standards with the exception of ground-level ozone, respirable particulate matter (PM_{10}), and $PM_{2.5}$.[2]

Air Pollutants of Concern

High ozone concentrations in the air basin are caused by the cumulative emissions of reactive organic gases (ROG) and nitrogen oxides (NO_X). These precursor pollutants react under certain meteorological conditions to form ozone. Controlling the emissions of these precursor pollutants is the focus of the Bay Area's attempts to reduce ambient ozone concentrations. The highest ozone

[1] Formerly known as the Bay Area Air Quality Management District (BAAQMD), *2022 CEQA Guidelines*, April 2023.

[2] The Bay Area has attained the carbon monoxide (CO) standard and monitoring data from the last 30 years show relatively low concentrations throughout the Bay Area. Therefore, CO is no longer an air quality issue in the area.

concentrations in the Bay Area occur in the eastern and southern inland valleys downwind of existing air pollutant sources. High ozone concentrations aggravate respiratory and cardiovascular diseases, reduce lung function, and increase coughing and chest discomfort.

Particulate matter is another problematic air pollutant in the air basin. Particulate matter is assessed and measured in terms of respirable particulate matter or particles that have a diameter of 10 micrometers or less (PM_{10}) and fine particulate matter where particles have a diameter of 2.5 micrometers or less ($PM_{2.5}$). Elevated concentrations of PM_{10} and $PM_{2.5}$ are the result of both region-wide emissions and localized emissions. High particulate matter concentrations aggravate respiratory and cardiovascular diseases, reduce lung function, increase mortality (e.g., lung cancer), and result in reduced lung function growth in children. Due to the adverse health effects caused by $PM_{2.5}$ exposure even at low concentrations, the Air District has developed health risk thresholds to address exposure to increased $PM_{2.5}$ concentrations caused by projects.[3]

Toxic Air Contaminants

TACs are a broad class of compounds known to cause morbidity or mortality, often because they cause cancer. TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter [DPM] near a freeway). Because chronic exposure of TACs can result in adverse health effects, they are regulated at the regional, State, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about seventy percent of the cancer risk from TACs (based on the Bay Area average).[4] According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects from diesel exhaust exposure a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the State's Proposition 65 or under the Federal Hazardous Air Pollutants programs. Health risks from TACs are estimated using the Office of Environmental Health Hazard Assessment (OEHHA) risk assessment guidelines, which were published in February of 2015 and incorporated into the Air District's California Environmental Quality Act (CEQA) guidance.[5]

Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 16, people over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these

[3] Bay Area Air District, 2022 CEQA Air Quality Guidelines, Appendix A, p40.
[4] CARB, *Summary: Diesel Particulate Matter Health Impacts*, Web: https://ww2.arb.ca.gov/resources/summary-diesel-particulate-matter-health-impacts#footnote1_7yob8j5.
[5] OEHHA, 2015. *Air Toxics Hot Spots Program Risk Assessment Guidelines, The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*. Office of Environmental Health Hazard Assessment. February.

sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, and elementary schools. Infants and children are the most sensitive receptors, since they are more susceptible to cancer causing TACs. Therefore, residential areas are assumed to include infants and small children. The closest sensitive receptors to the project site are the multi-family residences adjacent to the project to the east.[6] There are also single- and multi-family residences to the east and west of the project site at further distances from the site. This project would introduce new sensitive receptors (i.e., residents) to the area.

Regulatory Setting

Ambient Air Quality Standards

The Federal and California Clean Air Acts have established ambient air quality standards for "criteria" pollutants. Criteria pollutants are considered the most prevalent air pollutants that are known to be hazardous to human health. National ambient air quality standards (NAAQS) were established by the Federal Clean Air Act of 1970 (amended in 1977 and 1990) for six "criteria" pollutants. These include carbon monoxide (CO), ozone (O_3), nitrogen dioxide (NO_2), respirable particulate matter with a diameter less than 10 microns (PM_{10}), sulfur dioxide (SO_2), and lead (Pb).[7] In 1997, The Environmental Protection Agency (EPA) added fine particulate matter ($PM_{2.5}$).

CARB has established California ambient air quality standards (CAAQS) that include the NAAQS pollutants and additional standards for hydrogen sulfide, sulfates, vinyl chloride, and visibility. The additional CAAQS pollutants tend to have unique sources and are not typically included in CEQA assessments.

The Air District is responsible for developing a Clean Air Plan which guides the region's air quality planning efforts to attain both the NAAQS and CAAQS. The Air District's *2017 Clean Air Plan* is the current Clean Air Plan which contains district-wide control measures to reduce ozone precursor emissions (i.e., ROG and NO_X), particulate matter (PM_{10} and $PM_{2.5}$) and greenhouse gas (GHG) emissions.

Mobile Sources of Emissions

In addition to the NAAQS, the EPA sets nationwide emission standards for mobile sources, which include on-road (highway) motor vehicles such trucks, buses, and automobiles, and non-road (off-road or non-road) vehicles and equipment used in construction, agricultural, industrial, and mining activities (such as bulldozers and loaders). The EPA also sets nationwide fuel standards.

In the past twenty years, the EPA has established a number of emission standards for on- and non-road heavy-duty diesel engines used in trucks and other equipment. This was done in part because diesel engines are a significant source of NO_X and particulate matter ($PM_{2.5}$) and because the EPA has identified DPM as a probable carcinogen. Implementation of the heavy-duty diesel on-road vehicle standards and the non-road diesel engine standards are estimated to reduce particulate

[6] These are student housing for Santa Clara University. It is unclear if these are intended for families or students-only. Therefore, it was assumed they were family housing units.
[7] Lead concentrations have decreased dramatically since it was removed from motor vehicle fuels decades ago.

matter and NOX emissions from diesel engines up to 95 percent in 2030 when the heavy-duty vehicle fleet is completely replaced with newer heavy-duty vehicles that comply with these emission standards.[8]

The EPA has also substantially reduced the amount of sulfur allowed in diesel fuels. The sulfur contained in diesel fuel is a significant contributor to the formation of DPM. The current standards limit the amount of sulfur allowed in diesel fuel to 15 parts per million by weight (ppmw). Ultra-low sulfur diesel (ULSD), as it is referred to, is required for use by all vehicles in the U.S.

CARB has set statewide emission standards for on-road and off-road mobile sources that are more stringent than those adopted by the EPA. Several of these regulatory programs affect medium and heavy-duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle (SWCV) rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2008, CARB adopted a regulation to reduce emissions of DPM and NOX from on-road heavy-duty diesel fueled vehicles. It required affected vehicles to meet specific performance requirements, with all affected diesel vehicles required to have 2010 model-year engines or equivalent by 2023.[9] Advanced Clean Cars and Advanced Clean Cars II (ACC II) that will require new all new cars and light trucks sold in California will be zero-emission vehicles by 2035.

CARB has also adopted and implemented regulations to reduce DPM and NOX emissions from in-use (existing) and new off-road heavy-duty diesel vehicles (e.g., loaders, tractors, bulldozers, backhoes, off-highway trucks, etc.).[10] The regulations apply to diesel-powered off-road vehicles with engines 25 horsepower (hp) or greater. The regulations are intended to reduce particulate matter and NOX exhaust emissions by imposing limits on idling, requiring vehicles to be report to CARB's DOORS online reporting system, restringing the adding of older vehicles into fleets and banning older Tiered engines, and requiring owners to turn over their fleet (replace older equipment with newer equipment) or retrofit existing equipment in order to achieve specified fleet-averaged emission rates.[11] Implementation of this regulation, in conjunction with stringent federal off-road equipment engine emission limits for new vehicles, significantly reduces emissions of DPM and NOX in order to help reduce the health risk throughout California.

To address the issue of diesel emissions in the state, CARB developed the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*[12]. A significant component of the plan involves the application of emission control strategies to existing diesel vehicles and equipment in addition to requiring more stringent emission standards for new on-road and off-road mobile sources and stationary diesel-fueled engines. Many of the measures of the Diesel Risk Reduction Plan have been approved and adopted, including the federal on-road and

[8] USEPA, 2000. *Regulatory Announcement, Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements*. EPA420-F-00-057. December.
[9] Available online: http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm. Accessed: November 21, 2014.
[10] CARB, Web: https://ww2.arb.ca.gov/resources/fact-sheets/overview-amendments-use-road-diesel-fueled-fleets-regulation
[11] CARB, Web: https://ww2.arb.ca.gov/our-work/programs/truckstop-resources/road-zone/road-diesel-regulation
[12] California Air Resources Board, 2000. *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*. October.

non-road emission standards for new diesel engines, as well as adoption of regulations for ULSD fuel in California.

Bay Area Air District

The Air District has jurisdiction over an approximately 5,600-square mile area, commonly referred to as the San Francisco Bay Area (Bay Area). The District's boundary encompasses the nine San Francisco Bay Area counties, including Alameda County, Contra Costa County, Marin County, San Francisco County, San Mateo County, Santa Clara County, Napa County, southwestern Solano County, and southern Sonoma County.

The Air District is the lead agency in developing plans to address attainment and maintenance of the NAAQS and CAAQS. The District also has authority to permit stationary sources of emissions that could be constructed or installed by the proposed project, such as emergency generators. The Air District is responsible for permitting and inspection of stationary sources; enforcement of regulations, including setting fees, levying fines, and enforcement actions; and ensuring that public nuisances are minimized.

The Air District's Community Air Risk Evaluation (CARE) program was initiated in 2004 to evaluate and reduce health risks associated with exposures to ambient TACs in the Bay Area.[13] The program examines TAC emissions from point sources, area sources, and on-road and off-road mobile sources with an emphasis on diesel exhaust. The CARE program is an on-going program that encourages community involvement and input. The technical analysis portion of the CARE program has been implemented in three phases that includes an assessment of the sources of TAC emissions, modeling and measurement programs to estimate concentrations of TACs, and an assessment of exposures and health risks. Throughout the program, information derived from the technical analyses has been used to develop emission reduction activities in areas with high TAC exposures and high density of sensitive populations. Risk reduction activities associated with the CARE program are focused on the most at-risk communities in the Bay Area. Seven areas have been identified by the Air District as impacted communities. They include Eastern San Francisco, Richmond/San Pablo, Western Alameda, San José, Vallejo, Concord, and Pittsburgh/Antioch. The project site is located with the San José Air District CARE area.

Overburdened communities are areas located (i) within a census tract identified by the California Communities Environmental Health Screening Tool (CalEnviroScreen), Version 4.0 implemented by OEHHA, as having an overall score at or above the 70th percentile, or (ii) within 1,000 feet of any such census tract.[14] The Air District has identified several overburdened areas within its boundaries. However, the project site is not within an overburdened area as the Project site is scored at the 46th percentile on CalEnviroScreen.[15]

[13] See Bay Area Air District: https://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program.
[14] See Bay Area Air District: https://www.baaqmd.gov/~/media/dotgov/files/rules/reg-2-permits/2021-amendments/documents/20210722_01_appendixd_mapsofoverburdenedcommunities-pdf.pdf?la=en.
[15] OEHAA, CalEnviroScreen 4.0 Maps https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-40

CEQA Significance Thresholds

In June 2010, the Air District adopted thresholds of significance to assist in the review of projects under CEQA. In 2023, the Air District revised the *California Environmental Quality Act* (*CEQA) Air Quality Guidelines* that include significance thresholds to assist in the evaluation of air quality impacts of projects and plans proposed within the Bay Area. The current Air District guidelines provide recommended procedures for evaluating potential air impacts during the environmental review process consistent with CEQA requirements including thresholds of significance, mitigation measures, and background air quality information. They include assessment methodologies for criteria air pollutants and TACs, as shown in Table 1.[16] Air quality impacts and health risks are considered potentially significant if they exceed these thresholds.

The Air District recommends all projects include a "basic" set of best management practices (BMPs) to manage fugitive dust and consider impacts from dust (i.e., fugitive sources of PM_{10} and $PM_{2.5}$) to be less than significant if BMPs are implemented. The Air District strongly encourages enhanced BMPs for construction sites near schools, residential areas, other sensitive land uses, or if air quality impacts were found to be potentially significant without them.

Table 1. Bay Area Air District CEQA Significance Thresholds

Criteria Air Pollutant	**Construction Thresholds**		**Operational Thresholds**	
	Average Daily Emissions (lbs./day)		**Average Daily Emissions (lbs./day)**	**Annual Average Emissions (tons/year)**
ROG	54		54	10
NO_X	54		54	10
PM_{10}	82 (Exhaust)		82	15
$PM_{2.5}$	54 (Exhaust)		54	10
CO	Not Applicable		9.0 ppm (8-hour average) or 20.0 ppm (1-hour average)	
Fugitive PM_{10} Fugitive $PM_{2.5}$	Construction Dust Ordinance or other Best Management Practices (BMPs)*		Not Applicable	
Health Risks and Hazards	**Single Sources/ Individual Project**		**Combined Sources (Cumulative from all sources within 1000-foot zone of influence)**	
Excess Cancer Risk	>10.0 in a million	OR Compliance with Qualified Community Risk Reduction Plan	>100 in a million	OR Compliance with Qualified Community Risk Reduction Plan
Hazard Index	>1.0		>10.0	
Incremental annual $PM_{2.5}$	>0.3 µg/m^3		>0.8 µg/m^3	

Note: ROG = reactive organic gases, NO_X = nitrogen oxides, PM_{10} = course particulate matter or particulates with an aerodynamic diameter of 10 micrometers (µm) or less, $PM_{2.5}$ = fine particulate matter or particulates with an aerodynamic diameter of 2.5µm or less.

***** The Air District strongly recommends implementing all feasible fugitive dust management practices especially when construction projects are located near sensitive communities, including schools, residential areas, or other sensitive land uses.

Source: Bay Area Air District, 2022

[16] Bay Area Air District, 2023. *2022 CEQA Guidelines*. April.

City of Santa Clara 2010 – 2035 General Plan.

The majority of the project is within the City of Santa Clara. On November 16, 2010, the City of Santa Clara adopted the *City of Santa Clara 2010 – 2035 General Plan.*[17] It updated portions of the Plan on December 9, 2014 and included the City's Climate Action Plan (CAP) as an appendix to the Plan. The City's CAP was updated on June 7, 2022.

The current general plan includes goals, policies, and actions to reduce air pollutants and exposure to toxic air containments. The following goals, policies, and actions are applicable to the proposed project and this assessment:

5.10.2 Air Quality Goals

5.10.2-G1 Improved air quality in Santa Clara and the region.

5.10.2-G2 Reduced greenhouse gas emissions that meet the State and regional goals and requirements to combat climate change.

5.10.2 Air Quality Policies

5.10.2-P3 Encourage implementation of technological advances that minimize public health hazards and reduce the generation of air pollutants.

5.10.2-P4 Encourage measures to reduce greenhouse gas emissions to reach 30 percent below 1990 levels by 2020.

5.10.2-P6 Require "Best Management Practices" for construction dust abatement.

San José Envision 2040 General Plan

The San José Envision 2040 General Plan includes goals, policies, and actions to reduce exposure of the City's sensitive population to exposure of air pollution and toxic air contaminants or TACs. The following goals, policies, and actions are applicable to as small portion of the proposed project until it is annexed into the City of Santa Clara:

Applicable Goals – Air Pollutant Emission Reduction

Goal MS-10 Minimize emissions from new development.

Applicable Policies – Air Pollutant Emission Reduction

MS-10.1 Assess projected air emissions from new development in conformance with the BAAQMD CEQA Guidelines and relative to state and federal standards. Identify and implement feasible air emission reduction measures.

MS-10.2 Consider the cumulative air quality impacts from proposed developments for proposed land use designation changes and new development, consistent with the region's Clean Air Plan and State law.

[17] City of Santa Clara, 2010. *City of Santa Clara 2010 – 2035 General Plan*. November. Web: https://www.santaclaraca.gov/home/showdocument?id=56139

MS-10.3 Promote the expansion and improvement of public transportation services and facilities, where appropriate, to both encourage energy conservation and reduce air pollution.

MS-10.5 In order to reduce vehicle miles traveled and traffic congestion, require new development within 2,000 feet of an existing or planned transit station to encourage the use of public transit and minimize the dependence on the automobile through the application of site design guidelines and transit incentives.

MS-10.7 Encourage regional and statewide air pollutant emission reduction through energy conservation to improve air quality.

MS-10.11 Enforce the City's wood-burning appliance ordinance to limit air pollutant emissions from residential and commercial buildings.

MS-10.13 As a part of City of San José Sustainable City efforts, educate the public about air polluting household consumer products and activities that generate air pollution. Increase public awareness about the alternative products and activities that reduce air pollutant emissions.

Applicable Goals – Toxic Air Contaminants

Goal MS-11 Minimize exposure of people to air pollution and toxic air contaminants such as ozone, carbon monoxide, lead, and particulate matter.

Applicable Policies – Toxic Air Contaminants

MS-11.1 Require completion of air quality modeling for sensitive land uses such as new residential developments that are located near sources of pollution such as freeways and industrial uses. Require new residential development projects and projects categorized as sensitive receptors to incorporate effective mitigation into project designs or be located an adequate distance from sources of toxic air contaminants (TACs) to avoid significant risks to health and safety.

MS-11.2 For projects that emit toxic air contaminants, require project proponents to prepare health risk assessments in accordance with BAAQMD-recommended procedures as part of environmental review and employ effective mitigation to reduce possible health risks to a less than significant level. Alternatively, require new projects (such as, but not limited to, industrial, manufacturing, and processing facilities) that are sources of TACs to be located an adequate distance from residential areas and other sensitive receptors.

MS-11.4 Encourage the installation of appropriate air filtration at existing schools, residences, and other sensitive receptor uses adversely affected by pollution sources.

MS-11.5 Encourage the use of pollution absorbing trees and vegetation in buffer areas between substantial sources of TACs and sensitive land uses.

Actions – Toxic Air Contaminants

MS-11.6 Develop and adopt a comprehensive Community Risk Reduction Plan that includes: baseline inventory of TACs and $PM_{2.5}$, emissions from all sources, emissions reduction targets, and enforceable emission reduction strategies and performance measures. The Community Risk Reduction Plan will include enforcement and monitoring tools to ensure regular review of progress toward the emission reduction targets, progress reporting to the public and responsible agencies, and periodic updates of the plan, as appropriate.

MS-11.7 Consult with BAAQMD to identify stationary and mobile TAC sources and determine the need for and requirements of a health risk assessment for proposed developments.

MS-11.8 For new projects that generate truck traffic, require signage which reminds drivers that the State truck idling law limits truck idling to five minutes.

Applicable Goals – Construction Air Emissions

Goal MS-13 Minimize air pollutant emissions during demolition and construction activities.

Applicable Policies – Construction Air Emissions

MS-13.1 Include dust, particulate matter, and construction equipment exhaust control measures as conditions of approval for subdivision maps, site development and planned development permits, grading permits, and demolition permits. At minimum, conditions shall conform to construction mitigation measures recommended in the current BAAQMD CEQA Guidelines for the relevant project size and type.

Applicable Actions – Construction Air Emissions

MS-13.4 Adopt and periodically update dust, particulate, and exhaust control standard measures for demolition and grading activities to include on project plans as conditions of approval based upon construction mitigation measures in the BAAQMD CEQA Guidelines.

MS-13.5 Prevent silt loading on roadways that generates particulate matter air pollution by prohibiting unpaved or unprotected access to public roadways from construction sites.

MS-13.6 Revise the grading ordinance and condition grading permits to require that graded areas be stabilized from the completion of grading to commencement of construction.

AIR QUALITY IMPACTS AND MITIGATION MEASURES

Impact AIR-1: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

The Bay Area is considered a non-attainment area for ground-level O_3 and $PM_{2.5}$ under both the NAAQS and the CAAQS. The area is also considered non-attainment for PM_{10} under the CAAQS. As part of an effort to attain and maintain ambient air quality standards for O_3, $PM_{2.5}$ and PM_{10}, the Air District has established CEQA thresholds of significance for the O_3 precursor pollutants, ROG and NOx, and thresholds for PM_{10}, and $PM_{2.5}$. The thresholds apply to both construction period emissions and operational period emissions.

Construction Period Emissions

The California Emissions Estimator Model (CalEEMod) Version 2022 was used to estimate emissions from on-site construction activity, construction vehicle trips, and evaporative emissions. The project land use types and size, and anticipated construction schedule were input to CalEEMod. The CalEEMod model output along with construction inputs are included in *Attachment 1*.

CalEEMod Inputs

Land Use Inputs

The proposed project would be constructed in separate phases, starting with the demolition, grading, and trenching of the entire site (Site Preparation), followed by Phase 1 which would construct the townhomes over a 15-month period, and Phase 2 which would construct the apartments and parking garage over a 32-month period. Separate CalEEMod runs were conducted for the site preparation as well as each building phase, as described in Table 2.

Table 2. Summary of Project Land Use Inputs

Project Land Uses	Size	Units	Square Feet	Acreage
Site Preparation (2026)				
Apartments Mid Rise	297	Dwelling Unit	475,000	10.96
Condo/Townhouse	111	Dwelling Unit	257,500	
Enclosed Parking with Elevator	359	Parking Space	139,116	
Parking Lot	12	Parking Space	-	
Phase 1 - Townhomes (2026- 2027)				
Condo/Townhouse	111	Dwelling Unit	257,500	7.30
Parking Lot	12	Parking Space	-	
Phase 2 - Apartments (2027- 2029)				
Apartments Mid Rise	297	Dwelling Unit	475,000	3.90
Enclosed Parking with Elevator	359	Parking Space	139,116	

Construction Inputs

CalEEMod computes annual emissions for construction that are based on the project type, size, and acreage. The model provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The construction build-out scenario, including total number of workdays and construction start dates, was based on information provided by the project applicant (included in *Attachment 1*). The applicant's construction schedule provided a start date of January 2026, with the townhomes and apartments (Phase 1 + Phase 2) being built out over a period of approximately 47 months, or 1,019 construction workdays. The earliest year of full operation for the total project was assumed to be 2030.

Construction Truck Traffic Emissions

Construction would produce traffic in the form of worker trips and truck traffic. The traffic-related emissions are based on worker and vendor trip estimates produced by CalEEMod and haul trips that were computed based on the amount of demolition material to be exported, soil imported and/or exported to the site, and the amount of cement and asphalt delivered to the site. CalEEMod provides daily estimates of worker and vendor trips for each applicable phase. Daily haul trips for demolition and grading were estimated by CalEEMod using the provided demolition and soil import/export volumes. The concrete and asphalt haul trips were provided and converted to daily one-way trips, assuming two trips per delivery. These values are shown in the project construction equipment worksheet included in *Attachment 1.*

Summary of Computed Construction Emissions

Average daily emissions were annualized for each year of construction by dividing the annual construction emissions by the number of active workdays during that year. Total emissions for Phase 2 were distributed between 2028 and 2029 based on the fraction of workdays anticipated for 2028 (53.3 percent) and the fraction anticipated in 2029 (46.7 percent). Table 3 shows the annualized average daily construction emissions of ROG, NO_X, PM_{10} exhaust, and $PM_{2.5}$ exhaust during construction of the project. As indicated in Table 3, estimated annualized project construction emissions would not exceed the Air District CEQA significance thresholds during any year of construction.

Table 3. Construction Period Emissions - Unmitigated

Year	ROG	NOx	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Total Construction Emissions (Tons)				
2026 (Site Prep + Phase 1)	0.15	1.43	0.04	0.04
2027 (Phase 1 + Phase 2)	2.02	1.46	0.04	0.04
2028 (Phase 2)	1.83	0.32	0.01	0.01
2029 (Phase 2)	1.60	0.28	0.01	0.01
Average Daily Construction Emissions (pounds/day)				
2026 (264 construction workdays)	1.17	10.86	0.34	0.31
2027 (264 construction workdays)	15.32	11.07	0.33	0.30
2028 (264 construction workdays)	13.87	2.45	0.07	0.06
2029 (231 construction workdays)	13.87	2.45	0.07	0.06

Year	ROG	NOx	PM_{10} Exhaust	$PM_{2.5}$ Exhaust
Air District Thresholds (pounds per day)	*54* lbs./day	*54* lbs./day	*82* lbs./day	*54* lbs./day
Exceed Threshold?	No	No	No	No

Construction activities, particularly during site preparation and grading, would temporarily generate fugitive dust in the form of PM_{10} and $PM_{2.5}$. Sources of fugitive dust include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site deposit mud on local streets, which is an additional source of airborne dust after it dries. The Air District recommends all projects include a "basic" set of best management practices (BMPs) to manage fugitive dust and considers impacts from dust (i.e., fugitive PM_{10} and $PM_{2.5}$) to be less-than-significant if BMPs are implemented to reduce these emissions. Both the City of Santa Clara and the City of San José require implementation of the Air District basic BMPs to control dust during construction. Therefore, the applicant shall ensure that the project contractor implements Air District BMPs to control dust and fugitive emissions. Air District BMPs include:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.

2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered.

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

4. All vehicle speeds on unpaved roads shall be limited to 15 miles per hour (mph).

5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as practicable. Building pads shall be laid as soon as practicable after grading unless seeding or soil binders are used.

6. All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.

7. All trucks and equipment, including their tires, shall be washed off prior to leaving the site.

8. Unpaved roads providing access to site located 100 feet of further from a paved road shall be treated with a 6- to 12-inch layer of compacted layer of wood chips, mulch, or gravel.

9. Publicly visible signs shall be posted with the telephone number and name of the person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's General Air Pollution Complaints number shall be visible to ensure compliance with applicable regulations.

Operational Period Emissions

Criteria pollutant emissions from operation of the project would be generated primarily from vehicles driven by future residents. No stationary sources of pollution are proposed as part of the project. Evaporative ROG emissions from architectural coatings and maintenance products (classified as consumer products) are also typical emission sources from these types of land uses. CalEEMod was used to estimate emissions from operation of the proposed project assuming full build-out.

CalEEMod Inputs

Land Uses

All project land uses were input to CalEEMod for the operational period modeling in the year 2030. Inputs are summarized in Table 4.

Table 4. Operational Land Uses Entered into CalEEMod

Project Land Uses	Size	Units	Square Feet	Acreage
Apartments Mid Rise	297	Dwelling Unit	475,000	10.96
Condo/Townhouse	111	Dwelling Unit	257,500	
Enclosed Parking with Elevator	359	Parking Space	139,116	
Parking Lot	12	Parking Space	-	

Model Year

Emissions associated with vehicle travel depend on the year of analysis because emission control technology requirements are phased-in over time. Therefore, the earlier the year analyzed, the higher the emission rates utilized by CalEEMod. The earliest year of full operation would be 2030 if construction begins in 2026. Emissions associated with build-out later than 2030 would be lower.

Traffic Information

The project-specific daily trip generation rate provided by the traffic consultant was entered into the model.[18] The project would produce approximately 2,210 gross daily trips. When accounting for transportation demand management (TDM) trip reductions associated with the apartment building, the project would produce a net 2,069 new daily trips. Additionally, after accounting for the removal of trips associated with the existing office building, the total net increase in daily trips is estimated to be 308 trips. The daily trip generation was calculated by the Traffic Consultant using the 11th Edition ITE trip generation rates, the size of the project land uses, and the adjusted total automobile trips after reductions. The Saturday and Sunday trip rates were derived by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate with the project-specific daily weekday trip rate. The default trip lengths and trip types specified by CalEEMod were used.

[18] Hexagon Transportation Consultants, Inc., *Transportation Analysis for the Proposed University Station Residential Development in Santa Clara, California*, April 4, 2025.

Energy

CalEEMod defaults for energy use were used which include the 2019 Title 24 Building Standards. These defaults are conservative, as the Project would need to meet the latest Title 24 Building Standards. GHG emissions modeling includes indirect emissions from electricity consumption. An emission factor of 0 pounds of CO_2 per megawatt of electricity produced was entered into CalEEMod, which is based on Silicon Valley Power's (SVP) 2023 residential emissions rate.[19]

The Project plans do not show any natural gas infrastructure, and the installed appliances would be all electric. Therefore, natural gas use for the project was set to zero and reassigned to electricity use.

Wood-Burning Devices

CalEEMod default inputs assume new residential construction would include wood-burning fireplaces and stoves. The project would not include wood-burning devices, as these devices are prohibited by the Air District Regulation 6, Rule 3.[20] Additionally, the project would not include natural gas appliances. Therefore, the number of woodstoves and fireplaces in CalEEMod were set to zero.

Other Inputs

Default model assumptions for emissions associated with solid waste generation and water use were applied to the project. Wastewater treatment was estimated to be 100 percent aerobic conditions to represent City wastewater treatment plant conditions. The project site would not send wastewater to on-site septic tanks or facultative lagoons.

Existing Use

CalEEMod was used to estimate the emissions generated by the existing office building. The 172,500-sf office building generates approximately 1,873 daily trips or 1,761 net daily trips after accounting for public transportation reduction as estimated by the traffic consultant.[21] CalEEMod defaults were used to estimate energy use emissions, including emissions from natural gas usage, and solid waste generation. Emissions from wastewater use were based on 100 percent aerobic treatment to represent wastewater treatment plant conditions. The CalEEMod model inputs and output for the existing facility are included in *Attachment 1*.

[19] Silicon Valley Power, Power Content Label. Web: https://www.siliconvalleypower.com/svp-and-community/about-svp/power-content-label
[20] Bay Area Air District, https://www.baaqmd.gov/~/media/dotgov/files/rules/regulation-6-rule-3/documents/20191120_r0603_final-pdf.pdf?la=en
[21] Hexagon Transportation Consultants, Inc., *Transportation Analysis for the Proposed University Station Residential Development in Santa Clara, California*, April 4, 2025.

Summary of Computed Operational Emissions

Annual emissions were predicted using CalEEMod and daily emissions were estimated assuming 365 days of operation. Table 5 shows unmitigated net average daily operational emissions of ROG, NOx, total PM_{10}, and total $PM_{2.5}$ during operation of the project. Operational period emissions would not exceed the Air District CEQA significance thresholds.

Table 5. Operational Period Emissions

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$
2030 Annual Project Operational Emissions (*tons/year*)	4.51	0.57	1.33	0.34
Existing Use Emissions (*tons/year*)	1.64	0.81	1.25	0.34
Net Operational Emissions (*tons/year*)	2.87	-0.24	0.08	0.01
Air District Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Thresholds?	*No*	*No*	*No*	*No*
2030 Daily Project Operational Emissions (*pounds/day*)[1]	15.75	-1.33	0.43	0.04
Air District Thresholds (pounds/day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.
Exceed Threshold?	*No*	*No*	*No*	*No*
Notes: [1]Assumes 365-day operation.				

Summary of Operational and Construction Emissions

There would be a period of time where Phase 1 (townhomes) is operational and construction of Phase 2 (apartment) would occur at the same time. The combination of operational and construction emissions is shown simply as the sum of Phase 1 annual operation and the Phase 2 construction emissions for 2028. Phase 2 (apartment) construction emissions are added to the Phase 1 operational emissions since construction of Phase 2 ends in 2027. Construction and operational emissions would overlap in 2027, 2028, 2029. Table 6 shows the annual and average daily emissions during this period. The overlap of operational and construction period emissions would not exceed the Air District significance thresholds.

Table 6. Maximum Operational and Construction Period Emissions

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$
Annual Emissions (tons/year)				
2027 Phase 2 Construction Emissions	0.19	1.29	0.04	0.03
Phase 1 (Townhome) Operational Emissions	1.63	0.26	0.53	0.14
2027 Construction + Operation (tons/year)	1.81	1.55	0.64	0.24
Air District Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Threshold?	*No*	*No*	*No*	*No*
2028 Phase 2 Construction Emissions	1.83	0.32	0.01	0.01
Phase 1 (Townhome) Operational Emissions	1.63	0.26	0.53	0.14
2028 Construction + Operation (tons/year)	3.46	0.58	0.56	0.16
Air District Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Threshold?	*No*	*No*	*No*	*No*
2029 Phase 2 Construction Emissions	1.60	0.28	0.01	0.01
Phase 1 (Townhome) Operational Emissions	1.63	0.26	0.53	0.14
2029 Construction + Operation (tons/year)	3.23	0.54	0.55	0.16
Air District Thresholds (tons /year)	*10 tons*	*10 tons*	*15 tons*	*10 tons*
Exceed Threshold?	*No*	*No*	*No*	*No*
Daily Emissions (lbs./day)				

Scenario	ROG	NOx	PM_{10}	$PM_{2.5}$
2027 Construction + Operation (lbs/day)[1]	23.27	15.77	7.36	2.13
2028 Construction + Operation (lbs/day)[2]	22.80	3.85	2.98	0.84
2029 Construction + Operation (lbs/day)[3]	22.78	3.85	2.99	0.85
Air District Thresholds (lbs./day)	*54* lbs.	*54* lbs.	*82* lbs.	*54* lbs.
Exceed Threshold?	*No*	*No*	*No*	*No*

[1] 209 days of construction and 152-days operation.
[2] 264 days of construction and 365-days operation.
[3] 231 days of construction and 365-days operation.

Impact AIR-2: Expose sensitive receptors to substantial pollutant concentrations?

Project-generated TAC and $PM_{2.5}$ emissions have health risks impacts. This project would introduce new temporary sources of TACs during construction including fugitive dust (i.e., $PM_{2.5}$) and equipment exhaust (i.e., DPM) that would affect nearby sensitive receptors. The project would not include stationary sources but would generate some traffic consisting of mostly light-duty gasoline-powered vehicles, which would not be considered a significant source of TAC and/or $PM_{2.5}$ emissions.

Project impacts on existing sensitive receptors were addressed for temporary construction activities. There are also several sources of existing TACs and $PM_{2.5}$ in the vicinity of the project. The impact of the project on existing sensitive receptors was assessed as were the sources of existing TACs in terms of the cumulative risk. The risk of existing TAC sources on the new sensitive receptors introduced by the project was also assessed as part of the health risk analysis.

Health Risk Methodology

Health risk impacts were addressed by predicting increased cancer risk, the increase in maximum annual $PM_{2.5}$ concentrations, and by computing the Hazard Index (HI) for non-cancer health risks. The risk impacts from the project are the combination of risks from construction and operation sources. These sources include on-site construction activity, construction truck hauling. Increased traffic from the project would be less than 10,000 vehicles per day and would not generate TACs at concentrations large enough to warrant analysis. Therefore, the project increased cancer risk is the construction cancer risk given the minimal DPM emissions associated with project operation.

The methodology for computing health risks impacts is contained in Appendix E of the Air District CEQA Guidelines. DPM and $PM_{2.5}$ emissions are calculated, a dispersion model used to estimate ambient pollutant concentrations, and cancer risks and HI calculated using DPM concentrations. To evaluate the increased cancer risks from the project, a 30-year exposure period was used, per the Air District guidance,[22] with the sensitive receptors being exposed to project construction emissions during this timeframe. The project maximally exposed individual (MEI) is identified as the sensitive receptor(s) that is most impacted by the project.

[22] Bay Area Air District, Appendix E of the 2022 *CEQA Guidelines*, April 2023.

Figure 1. Locations of Project Construction Site, Off-Site Sensitive Receptors, and Maximum TAC Impact (MEI)



Receptors were located where sensitive populations closest to the project would be present for extended periods of time (i.e., chronic exposures). This includes the nearby residences, as shown in Figure 1. Residential receptors were assumed to include all receptor groups (i.e., third trimester, infants, children, and adults) with almost continuous exposure to project emissions. While there are additional sensitive receptors within 1,000 feet of the project site, the receptors chosen are adequate to identify maximum DPM and $PM_{2.5}$ concentrations from the project. Impacts to nearby worker receptors would be less than the impacts estimated at the MEI given their limited exposure durations. Workers are not considered sensitive receptors for this analysis.

Health Risk from Project Construction

The primary health risk impacts associated with construction projects are cancer risks from diesel exhaust (i.e., DPM), which is a known TAC, and exposure to high ambient concentrations of fugitive dust (i.e., $PM_{2.5}$). A health risk assessment of the project construction activities was conducted that evaluated potential health effects to nearby sensitive receptors from construction emissions of DPM and $PM_{2.5}$.[23] This assessment included dispersion modeling to predict the offsite pollutant concentrations during project construction, so that lifetime cancer risks and non-cancer health effects could be estimated.

Construction Emissions

The CalEEMod model provided total uncontrolled annual PM_{10} exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles. Total DPM emissions were estimated to be 0.1 tons (197 pounds) and fugitive dust emissions ($PM_{2.5}$), assuming application of Air District BMPs, to be 0.04 tons (89 pounds) from all construction phases. The on-road emissions are a result of haul truck travel during grading activities, worker travel, and vendor deliveries during construction. A trip length of one mile was used to represent vehicle travel while at or near the construction site during site preparation, and a trip length of a half mile was used for construction of Phase 1 (townhomes) and Phase 2 (apartment building). It was assumed that the emissions from on-road vehicles traveling at or near the site would occur at the construction site.

Dispersion Modeling

The U.S. EPA AERMOD dispersion model was used to predict DPM and $PM_{2.5}$ concentrations at sensitive receptors (i.e., residences) in the vicinity of the project construction area. AERMOD is an Air District recommended model for estimating pollutant concentrations for CEQA analyses.[24] Emission sources for the construction site were grouped into two categories: DPM emissions and fugitive $PM_{2.5}$ emissions.

Construction Sources

DPM exhaust emissions were modeled as an array of point sources to reflect construction equipment and trucks operating at the site. These sources included nine-foot release heights

[23] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

(construction equipment exhaust stack height) that were placed at 16 feet (5 meter) intervals throughout the construction site. This resulted in 1,804 individual point sources being used to represent equipment and vehicle DPM exhaust emissions on the construction sites; 1,191 on the townhome portion of the site (Phase 1), and 613 on the apartment building portion of the site (Phase 2). DPM emissions were divided into each of the point sources that were spread throughout the project construction sites. In addition, the following stack parameters were used: a vertical release, a stack diameter of 2.5 inches, an exhaust temperature of 918˚F, and an exit velocity of 309 feet per second. Point source plume rise is calculated by the AERMOD dispersion model. Emissions from vehicle travel on- and off-site were also distributed among the point sources. The array of point sources used for the modeling of each site are shown in Figure 1.

For modeling fugitive $PM_{2.5}$ emissions, three area sources (one for the site preparation, one for Phase 1, and one for Phase 2) were used with a near-ground level release height of 7 feet (2 meters). Fugitive dust emissions at construction sites come from a variety of sources, including truck and equipment travel, grading activities, truck loading (with loaders) and unloading (rear or bottom dumping), loaders and excavators moving and transferring soil and other materials, etc. All of these activities result in fugitive dust emissions at various heights at the point(s) of generation. Once generated, the dust plume will tend to rise as it moves downwind across the site and exits the site at a higher elevation than when it was generated. For all these reasons, a 7-foot release height was used as the average release height across the site. Emissions were distributed throughout the modeled area sources. Figure 1 shows the project construction site and receptors.

AERMOD Inputs and Meteorological Data

Annual DPM and $PM_{2.5}$ concentrations from construction activities were calculated at nearby sensitive receptors using AERMOD. The modeling used a five-year meteorological data set (2013-2017) from the San José Airport prepared for use with the model by the Bay Area Air District. Construction emissions were modeled as occurring Monday through Friday between 7:00 a.m. to 4:00 p.m. Receptor heights of 5 feet (1.5 meters), 15 feet (4.6 meters), and 25 feet (7.6 meters) were used to represent the breathing height on the first, second, and third floors of nearby residences.[25] Heights of 13.5 feet (4.1 meters) and 22.5 feet (6.87 meters) were used to represent the breathing height on the second and third floors of the new townhomes, which would be occupied during construction of Phase 2 (apartment building construction). These heights are based on the elevation plans for the project.

Summary of Construction Health Risk Impacts

The maximum increased cancer risks were calculated using the modeled TAC concentrations combined with the Air District CEQA guidance for age sensitivity factors and exposure parameters. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. Third trimester, infant, child, and adult exposures were assumed to occur at all residences during the entire construction period.

Non-cancer health hazards and maximum annual $PM_{2.5}$ concentrations were also calculated. The maximum modeled annual $PM_{2.5}$ concentration was calculated based on combined exhaust and

[25] Bay Area Air District, Appendix E of the 2022 *CEQA Guidelines*, April 2023.

fugitive $PM_{2.5}$ concentrations. The maximum computed HI value was based on the ratio of the maximum DPM concentration and the chronic inhalation DPM reference exposure level of 5 $\mu g/m^3$.

The modeled maximum annual DPM and $PM_{2.5}$ concentrations were identified to find the MEI. The maximum DPM was located on the third floor of the multi-family residential building (i.e., University Villas) southeast of the project site. The maximum annual $PM_{2.5}$ concentration was located on the first floor at the same location southeast of the project site. The location of the MEI and other modeled sensitive receptors are shown in Figure 1. Table 7 summarizes the maximum cancer risks, maximum annual $PM_{2.5}$ concentrations, and health hazard indexes for project related construction activities. *Attachment 2* to this report includes the emission calculations used for the construction dispersion modeling and the cancer risk calculations. As shown in Table 7, construction impacts at the MEI do not exceed the Air District's CEQA thresholds for health risks.

Table 7. Construction Risk Impacts at the Off-Site Project MEI

Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Construction	Unmitigated	8.37 (infant)	0.09	<0.01
Air District Single-Source Threshold		***>10.0***	***>0.3***	***>1.0***

Project Phased Construction

Project sensitive receptors could occupy Phase 1 (townhomes) once that portion of construction is completed, while Phase 2 (apartments) is still being constructed. Therefore, it was assumed that Phase 1 would have sensitive receptors during Phase 2 construction. The construction analysis for the Phase 1 residents was conducted in the same manner as described above for the off-site project MEI. Receptors were placed throughout the Phase 1 buildings at the location of proposed dwelling units. Construction impacts were modeled at receptor heights of 13.5 feet (4.1 meters) and 22.5 feet (6.87 meters) representing breathing heights on the second and third floors of the proposed townhomes. The first floor of each townhome is primarily a garage and was assumed to not be a living space where residents would spend much of their time.

The concentrations of DPM and maximum annual $PM_{2.5}$ from construction of Phase 2 at the Phase 1 townhomes were 0.007 $\mu g/m^3$ and 0.008 $\mu g/m^3$, respectively (see *Attachment 2*). This is 0.027 $\mu g/m^3$ less than the maximum DPM concentration experienced at the MEI. And town home residents would only be exposed to the construction of Phase 2 for two years, whereas the MEI would be exposed to all of the construction emissions This is due to site preparation being completed for the entire site prior to any buildings being constructed. Additionally, the 2022 California Building Code (CBC) requires each townhome to have a filtration system with a Minimum Efficiency Reporting Value (MERV) of at least 13, which would further reduce DPM and $PM_{2.5}$ concentrations. Therefore, impacts to on-site residents from construction of Phase 2 would not exceed single source health risk CEQA thresholds given they are not exceeded at the MEI, which is likely to experience higher concentrations of DPM for a longer period of time.

Health Risks from Project Operation

Diesel stationary equipment that could emit substantial TACs (e.g., emergency generators) are not planned for this project. Diesel powered vehicles are the primary concern with local traffic-

generated TAC impacts. This project would generate 308 net daily trips[26] with the majority of the trips being from light-duty gasoline-powered vehicles (i.e., passenger cars). The project is not anticipated to generate large amounts of truck trips that would involve diesel vehicles. In addition, projects with the potential to cause or contribute to increased cancer risk from traffic include those that have high numbers of diesel-powered on road trucks or use off-road diesel equipment on site, such as a distribution center, a quarry, or a manufacturing facility, may potentially expose existing or future planned receptors to substantial cancer risk levels and/or health hazards. This is not a project of concern for mobile sources. Therefore, emissions from project traffic are considered negligible and not included within this analysis.

Summary of Project-Related Health Risks at the Off-Site Project MEI

The sensitive receptor identified in Figure 1 is the project MEI. At this location, the MEI would be exposed to emissions from non-continuous construction. The annual $PM_{2.5}$ concentration and HI values are based on an annual maximum risk for the entirety of the project. As shown in Table 7, the health risk impacts from construction activities would not exceed the Air District single-source significance thresholds.

Cumulative Health Risks of all TAC Sources at the Off-Site MEI

Health risk assessments typically look at all substantial sources of TACs that can affect sensitive receptors located within 1,000 feet of a project site (i.e., influence area). These sources include rail lines, highways, busy surface streets, and permitted stationary sources identified by the Air District. A review of the project area using the Air District's geographic information systems (GIS) screening maps identified the existing health risks from seven (7) stationary sources. Additionally, there would be impacts associated with the nearby railways of the Santa Clara Rail Station and traffic on El Camino Real. Figure 2 shows the existing TAC sources affecting the MEI. Health risk impacts from these sources upon the MEI are reported in Table 8. Details of the cumulative screening, modeling, and health risk calculations are included in *Attachment 3.*

Rail Line Impacts

The project site is located approximately 284 feet southeast of the Santa Clara Caltrain/Amtrak Station and 50 feet from the rail lines (See Figure 2). Rail activity on these lines currently generates TAC and $PM_{2.5}$ emissions from locomotive exhaust. These rail lines are used primarily for Caltrain and Amtrak passenger service. Therefore, DPM and $PM_{2.5}$ concentrations at the MEI from rail line sources were calculated and health risks estimated.

[26] Hexagon Transportation Consultants, Inc., *Transportation Analysis for the Proposed University Station Residential Development in Santa Clara, California*, April 4, 2025.

Figure 2. Project Site and Nearby TAC and $PM_{2.5}$ Sources



Rail Line Emissions

Based on the current Caltrain schedule, there are 104 trains that pass the project site during weekdays and 32 on weekends. Amtrak runs 24 trains through the station daily. Amtrak uses diesel engines to power its trains. However, Caltrain is in the midst of converting its diesel locomotive fleet into electric locomotives. At the end of 2024, all of the electric infrastructure needed for electric locomotives was in place. On September 21, 2024, Caltrain began its first electrified service. Currently, Caltrain has 15 electric trains in service with a 16th soon to be put into service. The delivery plan for train electrification is to replace approximately 75 percent of the diesel fleet with new electric trains.[27] Therefore, it was assumed the Caltrain fleet using the rail lines near the project would be 25 percent diesel-powered and 75 percent electric. Electric trains are not a direct source of TACs in the area, while diesel powered trains are.

Given Caltrain's electrification, 48 diesel trains (24 Caltrain and 24 Amtrak) stop at the station during the weekdays and 28 stop at the station on weekends. Twenty-two diesel trains bypass the station. On average, this would be a total of 20 daily trains using diesel locomotives stopping at the station and 22 bypassing the station. It was conservatively assumed for this evaluation that diesel emissions from trains passing the area would remain at this level in the future.

DPM and $PM_{2.5}$ emissions from trains on the rail line were calculated using EPA emission factors for locomotives[28] and CARB adjustment factors to account for fuels used in California.[29] The current Caltrain fleet average locomotive engine size is about 3,467 horsepower (hp), assuming six 3,600 hp diesel locomotives and three 3,200 hp diesel locomotives.[30] Amtrak engines were assumed to have the same average horsepower rating, given they are also passenger trains.

Trains were assumed to be traveling at an average speed of 5 mph at or near the station while arriving and departing the Santa Clara Station and 30 mph farther away from the station when approaching or leaving the station. Trains that bypass the station were assumed to be traveling at 40 mph. DPM and $PM_{2.5}$ emissions were calculated based on EPA emission factors for 2026.

Dispersion Modeling

Dispersion modeling of locomotive emissions was conducted using the EPA's AERMOD dispersion model and five-year data set (2013-2017) of hourly meteorological data from the San José International Airport prepared for use with the AERMOD model by the Air District. Locomotive emissions from train travel within about 1,000 feet of the project site were modeled as line-volume sources comprised of a series of volume sources along the rail line. Separate line-volume sources were used for trains approaching the station from the northwest and southeast of the station, in the vicinity of the station, and for trains that bypass the station.

[27] Caltrain website: https://www.caltrain.com/projects/electrification/electric-trains. Accessed March 6, 2025.
[28] *Emission Factors for Locomotives*, USEPA 2009 (EPA-420-F-09-025)
[29] *Offroad Modeling, Change Technical Memo*, Changes to the Locomotive Inventory, CARB July 2006.
[30] Caltrain 2015. *Short Range Transit Plan: FY2018-2027*. June 6, 2019.

Health Risk Impacts

Based on the rail line modeling, the maximum annual $PM_{2.5}$ and DPM concentrations at the MEI were 0.011 $\mu g/m^3$ and 0.010 $\mu g/m^3$. Increased cancer and non-cancer health risks were calculated using model results and methods recommended by the Air District. The maximum increased cancer risk was estimated to be 7.63 in one million and the non-cancer health effects (HI) estimated to be less than 0.01. Details of the emission calculations, dispersion modeling and cancer risk calculations are contained in *Attachment 3.*

Roadway Impacts

An analysis of the TAC impacts from nearby roadways with an estimated daily traffic volume approaching, or in excess of, 10,000 vehicles per day was conducted. Based on a visual inspection of the roadways within the area of impact, only El Camino Real was estimated to have a daily traffic volume in excess of 10,000 vehicles per day. Figure 2 shows the roadway links used for the modeling and receptor locations at the project site where TAC concentrations were calculated.

Modeling Roadway Emissions

Analysis of roadway TAC impacts involved developing estimates of annual DPM, organic TACs (as TOG), and $PM_{2.5}$ roadway emissions. The latest version of Caltrans's emissions model, CT-EMFAC2021, was used to develop the emissions rates needed. CT-EMFAC2021 is based on CARB's EMFAC2021 emissions model. EMFAC2021 includes the latest data on California's car and truck fleets and travel activity. CT-EMFAC2021 provides emission factors for mobile source criteria pollutants and TACs, including DPM. EMFAC2021 became available for use in January 2021 and approved by the EPA in May 2023.

To estimate emissions, traffic volumes must be obtained. Traffic count data for El Camino Real (also known as State Route 82) were obtained from Caltrans' traffic census data reports.[31] Truck fractions are used to estimate the fraction of gasoline and diesel vehicles in three vehicle categories (i.e., Non-Truck, Truck 1, and Truck 2). Caltrans truck census percentages for this portion of El Camino Real were similar to the default percentages in CT-EMFAC2021 for Santa Clara County. Therefore, default CT-EMFAC2021 truck percentages were used to estimate emissions.

Other inputs to CT-EMFAC2021 include region (i.e., Santa Clara County), type of road (i.e., major/collector), year of analysis (i.e., 2026), and season (i.e., annual). Emissions associated with roadways on the year of analysis because vehicle emission control technology requirements are phased-in over time. Overall vehicle emissions, in particular diesel truck emissions, will decrease in the future. Therefore, the earlier the year analyzed, the higher the emission rates produced. Therefore, year 2026 emissions rates are conservatively representative of future conditions over the period that cancer risks are evaluated (30 years).

Speeds on El Camino Real were assumed to be the posted speed limit (40 mph) for all hours of the day except for a.m. and p.m. peak periods. Peak period speeds were reduced by 5 mph to account for higher demand and roadway access.

[31] https://dot.ca.gov/programs/traffic-operations/census, May, 2025.

Hourly emissions rates for 2026 were developed for DPM, organic TACs, and $PM_{2.5}$ and applied to traffic forecasts along each applicable roadway segment (see Figure 2). Hourly traffic distributions for El Camino Real were developed using average distributions of traffic on northbound and southbound Interstate 880 (I-880) obtained from Caltrans' Performance Measurement System (PeMS). PeMS data are collected in real time from nearly 40,000 individual detectors spanning the freeway system across all major metropolitan areas of California.[32] The fraction of traffic volume each hour was calculated and applied to the daily traffic volume to develop hourly traffic estimates. Hourly vehicle miles were estimated using the hourly volumes and length of the roadway segment modeled. CT-EMFAC2021emissions factors were applied to the hourly vehicle miles estimate to obtain hourly emissions rates, which were converted to emissions per second.

TAC and $PM_{2.5}$ concentrations were developed by inputting the emissions rates into an air quality dispersion model (AERMOD). Maximum increased lifetime cancer risk and annual $PM_{2.5}$ concentration for El Camino Real at the MEI were then computed using modeled TAC and $PM_{2.5}$ concentrations and the Air District methods and exposure parameters described in their CEQA guidance document.[33]

Dispersion Modeling

Dispersion modeling of TAC and $PM_{2.5}$ emissions was conducted using the U.S. EPA AERMOD dispersion model. Emissions from traffic on El Camino Real near the project site were evaluated with the AERMOD model using a series of RLINE sources (roadway line sources). The modeling used a five-year data set (2013-2017) of hourly meteorological data from the San José International Airport that was prepared for use with the AERMOD model by the Air District. Other inputs to the model included road geometry and onsite receptor locations and heights. Figure 2 shows the links used for roadway modeling, the receptor locations, and the MEI where health risk impacts were calculated.

Health Risk Impacts

Table 8 provides the results of the health risk assessment for the project's MEI. It was assumed the MEI would start living onsite as a third trimester fetus, growing to become an infant, child, and adult over a 30-year period. The cancer risk, $PM_{2.5}$ concentration, and HI for El Camino Real were below the Air District single source CEQA significance thresholds. Details of the emission calculations, dispersion modeling and cancer risk calculations are contained in *Attachment 3.*

Bay Area Air District Permitted Stationary Sources

Permitted stationary sources of air pollution near the project site were identified using the Air District's *Permitted Stationary Sources 2022* GIS website,[34] which identifies the location of nearby stationary sources and their estimated risk and hazard impacts, including emissions and

[32] https://dot.ca.gov/programs/traffic-operations/mpr/pems-source
[33] Bay Area Air District, 2023. 2022 CEQA Guidelines. April.
[34] Bay Area Air District, https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=845658c19eae4594b9f4b805fb9d89a3

adjustments to account for OEHHA guidance. Seven sources were identified using this tool, two gas dispensing facilities, and five emergency diesel generators. The Air District GIS website provided screening risks and hazards for the diesel generators. A stationary source information request was submitted to the Air District in order to estimate health risk impacts from the gasoline dispensing facilities.

The screening risk and hazard levels provided by the Air District for the stationary sources were adjusted for distance using the Air District's *Distance Adjustment Multiplier Tool for Generic Sources and Diesel Internal Combustion Engines* and CARB's *Gasoline Station Risk Screening Tool.* The Air District provided the gasoline throughputs for each gas dispensing facility near the project site.[35] The provided throughputs along with the distance between the MEI and the gas dispensing facility, and the region for each gas station was input into the CARB tool to calculate the cancer risk and hazard index. Health risk impacts from the stationary sources upon the MEI are reported in Table 8.

Other Nearby Construction Projects

No large construction projects were identified within 1,000 feet of the MEI. However, there is one project with a small portion of its area within the 1,000-foot influence area of the project, not the north across the Caltrain rail lines. This site is 1,431 feet from the MEI at its closest point. The location of the project MEI indicates the prevailing wind direction is from the west-northwest to the east-southeast. As a result, emissions for this construction project would be too diluted to influence cumulative health risk estimates at the MEI. Trains on the Caltrain rail lines would also mix emissions from the site, providing additional dilution of DPM and $PM_{2.5}$ from the construction site.

Summary of Cumulative Risks at the Project MEI

Table 8 reports both the project and cumulative health risk impacts at the sensitive receptor most affected by the project (i.e., the MEI). The project's unmitigated health risk impacts would not exceed the Air District's single-source CEQA thresholds for cancer risks, non-cancer risks, or maximum annual $PM_{2.5}$ concentration. Nor would the cumulative-source CEQA thresholds be exceeded.

[35] Email from Bay Area Air District, October 21, 2024. Subject: "RE_ Public Records Number 2024-10-0134 Stationary Source Request for 24-147 University Station Residential Master Plan SSIF"

Table 8. Cumulative Health Risk Impacts at the Project MEI

Source		Cancer Risk (per million)	Annual $PM_{2.5}$ ($\mu g/m^3$)	Hazard Index
Project Impacts				
Project Construction	Unmitigated	8.37 (infant)	0.09	<0.01
Air District Single-Source Threshold		***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?	Unmitigated	*No*	*No*	*No*
Cumulative Impacts				
Rail Line		7.63 (infant)	0.01	<0.01
El Camino Real		0.45 (infant)	0.03	<0.01
Santa Clara Police Facility (Facility ID #15839, Generator)		0.38	<0.01	NA
City of Santa Clara - Well Site: Zone 1 3-02 (Facility ID #17237, Generator)		0.30	<0.01	NA
Santa Clara Police Dept (Facility ID #100435-1, Gas Dispensing Facility)		0.02	NA	<0.01
Santa Clara University (Facility ID #100437-1, Gas Dispensing Facility)		0.02	NA	0.01
Santa Clara University (Facility ID #15397-13, Generator)		0.22	<0.01	NA
Santa Clara University (Facility ID #15397-22, Generator)		<0.01	NA	NA
Santa Clara University (Facility ID #15397-24, Generator)		0.04	NA	NA
Combined Sources	Unmitigated	17.44	<0.16	<0.05
Air District Cumulative Source Threshold		***>100***	***>0.8***	***>10.0***
Exceed Threshold?	Unmitigated	*No*	*No*	*No*

Non-CEQA: On-Site Health Risk Assessment of TAC Sources - New Project Receptors

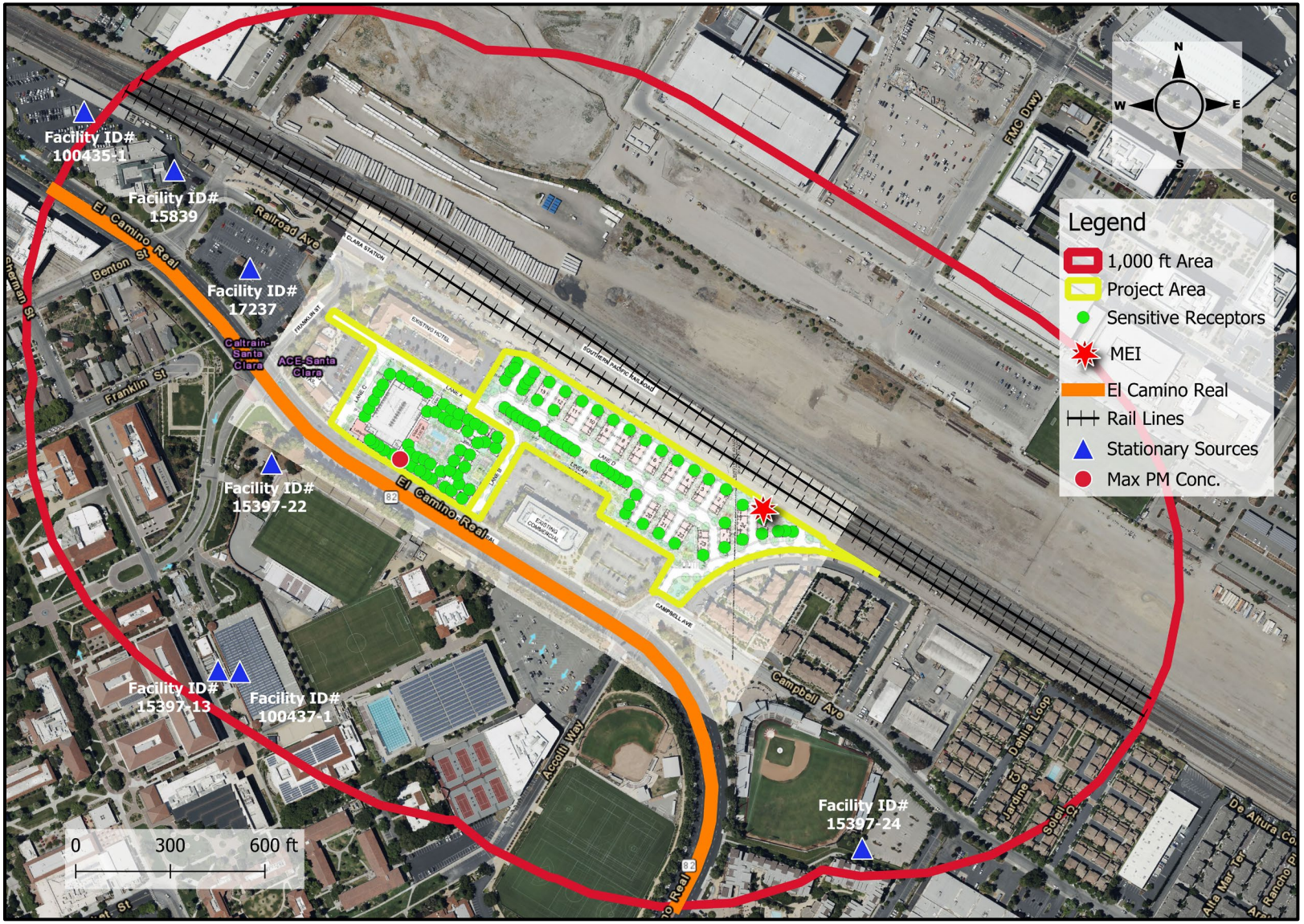
In addition to evaluating health impacts from project construction, a health risk assessment was completed to assess the impact that the existing TAC sources would have on the new proposed sensitive receptors (residents) that the project would introduce. The same TAC sources identified above were used in this health risk assessment.[36] The Air District's recommended thresholds for health risks and hazards, shown in Table 1, were used to evaluate on-site exposures. On-site health risk results are listed in Table 9. *Attachment 4* includes the calculations used to assess TAC source impacts upon the proposed on-site sensitive receptors.

Cumulative On-Site Impacts

Figure 3 shows the on-site sensitive receptors used for the analysis in relation to the nearby TAC sources. The on-site health risk assessment results are listed in Table 9. *Attachment 4* includes risk calculations for TAC source impacts upon the proposed on-site sensitive receptors.

[36] We note that to the extent this analysis considers *existing* air quality issues in relation to the impact on *future residents* of the Project, it does so for informational purposes only pursuant to the judicial decisions in *CBIA v. BAAQMD* (2015) 62 Cal.4th 369, 386 and *Ballona Wetlands Land Trust v. City of Los Angeles* (2011) 201 Cal.App.4th 455, 473, which confirm that the impacts of the environment on a project are excluded from CEQA unless the project itself "exacerbates" such impacts.

Figure 3. Project Site Receptors and Nearby TAC and $PM_{2.5}$ Sources



Roadways – El Camino Real

TAC impacts on new project residents from El Camino Real were conducted in the same manner as described above for the project (i.e., off-site) MEI. However, the year 2028 emission factors were conservatively assumed as being representative of future conditions, instead of 2026. An analysis based on 2028 resulted in an increased traffic volume on El Camino Real of two percent, assuming a one percent increase in traffic volume per year.

On-site receptors were placed at each apartment and each townhouse on the periphery of the project site (see Figure 3). Receptor heights of 5 feet (1.5 meters), 15 feet (4.6 meters), and 25.4 feet (7.75 meters) were used for receptors at the apartment buildings, while heights of 13.5 feet (4.1 meters) and 22.5 feet (6.87 meters) were used for the townhomes. Receptor heights were based on building elevations provided by the applicant. The portion of El Camino Real included in the modeling is shown in Figure 3 along with the project site and receptor locations where impacts were modeled.

The location of the maximum annual $PM_{2.5}$ concentration for the project site was identified on the first floor of an apartment adjacent to El Camino Real (see Figure 3). However, the maximum increased cancer risks were calculated at the location with the maximum modeled DPM concentration (i.e., on-site MEI), which resulted from rail line impacts. The roadway impacts at the project site are shown in Table 9 and are below Air District single source health risk thresholds. Details of the emission calculations, dispersion modeling, and cancer risk calculations are contained in *Attachment 4. Railways*

TAC impacts on new project residents from Sanat Clara Station and the nearby passenger railway were estimated in the same manner as described above for the off-site MEI. Receptors were placed as described above to assess roadway impacts. Figure 3 shows the portions of the rail line included in the modeling along with the project site and receptor locations where TAC concentrations were modeled. Impacts were estimated for the 30-year starting in 2028. Results of this evaluation are summarized in Table 9. Details of the emission calculations, dispersion modeling and cancer risk calculations are contained in *Attachment 4.*

The highest DPM concentration was determined to occur on the second floor of one of the new townhomes at the southeast end of the project, adjacent to the rail line (see Figure 3). As a result, this receptor was identified as the on-site MEI. Increased cancer risk at the on-site MEI from rail operations was estimated to be 22.08 in one million, which exceeds the Air District's single source threshold. However, maximum annual $PM_{2.5}$ concentrations and non-cancer health risks from rail line operations would be below Air District single-source thresholds.

Stationary Sources

The stationary source screening analysis for the new project sensitive receptors was conducted in the same manner as described above for the project MEI. Table 9 shows the health risk impacts for the stationary sources at the on-site MEI, located at the northeast end of the project site, adjacent to the rail lines (See Figure 3).

Summary of Cumulative Health Risks at the Project Site

Health risk impacts from the existing TAC sources upon the MEI are reported in Table 9. The risks from each existing TAC source are compared against the Air District's single-source threshold at this location. The risks from all the sources at the MEI are then combined and compared against the Air District's cumulative-source threshold. As shown, cancer risks from the Santa Clara Rail Station and the associated rail lines exceed the Air District's single-source cancer risk threshold for the on-site MEI located at one of the townhomes adjacent to the rail line. However, the single-source thresholds for maximum annual $PM_{2.5}$ concentration and HI are not exceeded, nor are the cumulative source thresholds for cancer risk, $PM_{2.5}$ concentration, or HI. DPM concentrations for all the townhomes were similar in magnitude to the MEI concentration. Therefore, it is likely all of the townhome sites would have cancer risks that exceed the Air District's single source threshold.

Table 9. Impacts from Combined Sources to Project Site Receptors

Source	Cancer Risk[1] (per million)	Annual $PM_{2.5}$[2] ($\mu g/m^3$)	Hazard Index[1]
Single-Source Impacts			
El Camino Real	0.32 (infant)	0.24	<0.01
Rail Line	**22.08 (infant)**	<0.01	<0.01
Santa Clara Police Facility (Facility ID #15839, Generator)	0.38	<0.01	<0.01
City of Santa Clara - Well Site: Zone 1 3-02 (Facility ID #17237, Generator)	0.30	<0.01	<0.01
Santa Clara Police Dept (Facility ID #100435-1, Gas Dispensing Facility)	0.02	NA	<0.01
Santa Clara University (Facility ID #100437-1, Gas Dispensing Facility)	0.02	NA	0.01
Santa Clara University (Facility ID #15397-13, Generator)	0.22	<0.01	<0.01
Santa Clara University (Facility ID #15397-22, Generator)	<0.01	NA	NA
Santa Clara University (Facility ID #15397-24, Generator), Project Site at 600 feet	0.04	NA	NA
Air District Single-Source Threshold	***>10.0***	***>0.3***	***>1.0***
Exceed Threshold?	***Yes***	*No*	*No*
Cumulative-Source Impacts			
Cumulative Total	23.39	<0.28	<0.05
Air District Cumulative Source Threshold	***>100***	***>0.8***	***>10.0***
Exceed Threshold?	*No*	*No*	*No*

[1]Based on highest on-site DPM concentration location (On-site MEI).
[2]Based on highest maximum annual $PM_{2.5}$ concentration location.

Building Design Features to Reduce Project $PM_{2.5}$ Exposure.

Because cancer risks at the on-site MEI exceed Air District single source thresholds, and DPM concentration at the other townhome sites are similar to those measured at the MEI, it is recommended enhanced filtration be installed in each of the townhome units. Enhanced filtration is required as part of the *2022 California Building Code (CBC), Section 120.1(b)(1)(C): Multi-Family Residential* and *Section 150(m)(12)(C.): Single-Family Residential Buildings – Mandatory Features and Devices.* All single-family homes (including town houses) and apartment buildings that are four-stories and higher are required to use a filtration system with a Minimum Efficiency Reporting Value (MERV) of at least 13.

To ensure adequate health protection for sensitive receptors (i.e., residents), this ventilation system, whether mechanical or passive, should filter all fresh air that would be circulated into the dwelling units. The ventilation system should be designed to keep the buildings at positive pressure when doors and windows are closed to reduce unfiltered outside air from entering the building. An ongoing maintenance plan for the building's heating, ventilation, and air conditioning (HVAC) air filtration system should be required that includes regular filter replacement. Use agreements and other property documents should:

1. Require cleaning, maintenance, and monitoring of the building for air flow leaks.
2. Include assurance that new owners or tenants are provided with information on the ventilation system.
3. Include provisions that fees associated with owning or leasing impacted unit(s) include funds for cleaning, maintenance, monitoring, and replacements of the MERV13 filters, as needed.

Effectiveness of Building Design Features

The overall effectiveness of a MERV13 filtration system is estimated to be about 70-percent for $PM_{2.5}$ exposure assuming the system is 80-percent effective, and the individual is being exposed to 21 hours of indoor filtered air and three hours of outdoor unfiltered air. Reducing $PM_{2.5}$ within the impacted townhomes 70 percent would reduce estimated cancer risks from DPM to 6.62 in one million assuming exposures start as an infant. This is below Air District health risk significance thresholds.

Supporting Documentation

Attachment 1 includes the CalEEMod output for project construction and operational criteria air pollutant emissions. Also included are any modeling assumptions.

Attachment 2 includes the construction health risk assessment. AERMOD dispersion modeling files for these assessments, which are quite voluminous, are available upon request and would be provided in digital format.

Attachment 3 includes the cumulative health risk screening and calculation information from sources affecting the Off-site MEI.

Attachment 4 includes the cumulative health risk screening and calculation information from sources affecting the On-site MEI (Non-CEQA Analysis).

Attachment 1: CalEEMod Modeling Inputs and Outputs

Air Quality/Noise Construction Information Data Request

Project Name: University Station Residential Master Plan Phase 1 Townhomes

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size	297 apartments; 111 townho	Dwelling Units	10.96 total project acres disturbed
	475,000 Apartment; 257,500	s.f. residential	
		s.f. retail	
		s.f. office/commercial	
		s.f. other, specify:	
	139,116	s.f. parking garage	359 spaces
		s.f. parking lot	12 spaces
Construction Days (i.e, M-F)	Monday	to	Friday
Construction Hours	7am	am to	3pm pm

Pile Driving? Y/N? No

Project include on-site GENERATOR OR FIRE PUMP during project OPERATION (not construction)? Y/N? __No generator according to 11/15 email. __

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: ___N/A_____

Fuel Type: ____N/A_____

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
	Demolition	**Start Date:**	**1/5/2026**	**Total phase:**	**20**			**Overall Import/Export Volumes**
		End Date:	**1/30/2026**					
1	Concrete/Industrial Saws	81	0.73	8	20	8	9461	**Demolition Volume**
	Excavators	158	0.38			0	0	Square footage of buildings to be demolished
1	Rubber-Tired Dozers	247	0.4	8	20	8	15808	(*or* total tons to be hauled)
3	Tractors/Loaders/Backhoes	97	0.37	8	20	8	17227	**152,950** square feet *or*
								? Hauling volume (tons)
								Any pavement demolished and hauled? **270,550 sf of asphalt to be demolished**
	Site Preparation	**Start Date:**	**1/31/2026**	**Total phase:**	**10**			
		End Date:	**2/13/2026**					
1	Graders	187	0.41	8	10	8	6134	
1	Rubber Tired Dozers	247	0.4	7	10	7	6916	
1	Tractors/Loaders/Backhoes	97	0.37	8	10	8	2871	
	Other Equipment?							
	Grading / Excavation	**Start Date:**	**2/14/2026**	**Total phase:**	**30**			
		End Date:	**3/27/2026**					**Soil Hauling Volume**
	Excavators	158	0.38			0	0	Export volume = **?** cubic yards?
1	Graders	187	0.41	8	30	8	18401	Import volume = **22,000** cubic yards?
1	Rubber Tired Dozers	247	0.4	8	30	8	23712	
	Concrete/Industrial Saws	81	0.73			0	0	
2	Tractors/Loaders/Backhoes	97	0.37	7	30	7	15074	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**	**3/28/2026**	**Total phase:**	**30**			
		End Date:	**5/10/2026**					
1	Tractor/Loader/Backhoe	97	0.37	8	30	8	8614	
1	Excavators	158	0.38	8	30	8	14410	
	Other Equipment?							
	Building - Exterior	**Start Date:**		**Total phase:**				**Cement Trucks __ Total Round-Trips**
		End Date:						
	Cranes	231	0.29			#DIV/0!	0	Electric? (Y/N) ___ Otherwise assumed diesel
	Forklifts	89	0.2			#DIV/0!	0	Liquid Propane (LPG)? (Y/N) ___ Otherwise Assumed diesel
	Generator Sets	84	0.74			#DIV/0!	0	Or temporary line power? (Y/N)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Welders	46	0.45			#DIV/0!	0	
	Other Equipment?							
		Start Date:		**Total phase:**				
		End Date:						
	Air Compressors	78	0.48			#DIV/0!		
	Aerial Lift	62	0.31			#DIV/0!	0	
	Other Equipment?							
	Paving	**Start Date:**		**Total phase:**				
		Start Date:						
	Cement and Mortar Mixers	9	0.56			#DIV/0!	0	
	Pavers	130	0.42			#DIV/0!	0	**Asphalt? ___ cubic yards or ____ round trips?**
	Paving Equipment	132	0.36			#DIV/0!	0	
	Rollers	80	0.38			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	

Air Quality/Noise Construction Information Data Request

Project Name: University Station Residential Master Plan Phase 1 Townhomes

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size 111 Dwelling Units; 7.3 total project acres disturbed

257,500 s.f. residential

s.f. retail

s.f. office/commercial

s.f. other, specify:

s.f. parking garage ____ spaces

s.f. parking lot 12 spaces

Construction Days (i.e, M-F) Monday to Friday

Construction Hours 7am am to 3pm pm

Pile Driving? Y/N? No

Project include on-site GENERATOR OR FIRE PUMP during project OPERATION (not construction)? Y/N? __No generator according to 11/15 email. __

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: ___N/A_____

Fuel Type: ____N/A_____

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
	Demolition	**Start Date:**		**Total phase:**				**Overall Import/Export Volumes**
		End Date:						
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	**Demolition Volume**
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	__ square feet *or*
								__?__ Hauling volume (tons)
								Any pavement demolished and hauled? __tons
	Site Preparation	**Start Date:**		**Total phase:**				
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Grading / Excavation	**Start Date:**		**Total phase:**				
		End Date:						**Soil Hauling Volume**
	Excavators	158	0.38			#DIV/0!	0	Export volume = __?__ cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = __?__ cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Trenching/Foundation	**Start Date:**		**Total phase:**				
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Other Equipment?							
	Building - Exterior	**Start Date:**	5/11/2026	**Total phase:**	200			**Cement TrucksY __404__ Total Round-Trips**
		End Date:	2/12/2027					
1	Cranes	231	0.29	6	200	6	80388	Electric? (Y/N) ___ Otherwise assumed diesel
1	Forklifts	89	0.2	6	200	6	21360	Liquid Propane (LPG)? (Y/N) ___ Otherwise Assumed diesel
1	Generator Sets	84	0.74	8	200	8	99456	Or temporary line power? (Y/N)
1	Tractors/Loaders/Backhoes	97	0.37	6	200	6	43068	
3	Welders	46	0.45	8	200	8	99360	
	Other Equipment?							
	Building - Interior/Architectural Coating	**Start Date:**	2/13/2027	**Total phase:**	10			
		End Date:	2/26/2027					
1	Air Compressors	78	0.48	6	10	6		
	Aerial Lift	62	0.31			0	0	
	Other Equipment?							
	Paving	**Start Date:**	2/27/2027	**Total phase:**	10			
		Start Date:	3/14/2027					
1	Cement and Mortar Mixers	9	0.56	6	10	6	302	
1	Pavers	130	0.42	6	10	6	3276	**Asphalt? ___ cubic yards or __Est. 89__ round trips?**
1	Paving Equipment	132	0.36	8	10	8	3802	
1	Rollers	80	0.38	7	10	7	2128	
1	Tractors/Loaders/Backhoes	97	0.37	8	10	8	2871	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	

Air Quality/Noise Construction Information Data Request

Project Name: University Station Residential Master Plan Phase 2 Apartments

Complete ALL Portions in Yellow

See Equipment Type TAB for type, horsepower and load factor

Project Size
- 297 Dwelling Units
- 3.9 total project acres disturbed
- 475,000 s.f. residential
- s.f. retail
- s.f. office/commercial
- s.f. other, specify:
- 139,116 s.f. parking garage — 359 spaces
- s.f. parking lot — spaces

Construction Days (i.e, M-F) Monday to Friday

Construction Hours 7am am to 3pm pm

Pile Driving? Y/N? No

Project include on-site GENERATOR OR FIRE PUMP during project OPERATION (not construction)? Y/N? __No generator according to 11/15 email. __

IF YES (if BOTH separate values) -->

Kilowatts/Horsepower: ___N/A_____

Fuel Type: ____N/A_____

Location in project (Plans Desired if Available):

DO NOT MULTIPLY EQUIPMENT HOURS/DAY BY THE QUANTITY OF EQUIPMENT

Quantity	Description	HP	Load Factor	Hours/day	Total Work Days	Avg. Hours per day	HP Annual Hours	Comments
	Demolition	**Start Date:**		**Total phase:**				**Overall Import/Export Volumes**
		End Date:						
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	**Demolition Volume**
	Excavators	158	0.38			#DIV/0!	0	Square footage of buildings to be demolished
	Rubber-Tired Dozers	247	0.4			#DIV/0!	0	(*or* total tons to be hauled)
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	_?_ square feet *or*
								_?_ Hauling volume (tons)
								Any pavement demolished and hauled? _?_ tons
	Site Preparation	**Start Date:**		**Total phase:**				
		End Date:						
	Graders	187	0.41			#DIV/0!	0	
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment?							
	Grading / Excavation	**Start Date:**		**Total phase:**				
		End Date:						**Soil Hauling Volume**
	Excavators	158	0.38			#DIV/0!	0	Export volume = _?_ cubic yards?
	Graders	187	0.41			#DIV/0!	0	Import volume = __cubic yards?
	Rubber Tired Dozers	247	0.4			#DIV/0!	0	
	Concrete/Industrial Saws	81	0.73			#DIV/0!	0	
	Tractors/Loaders/Backhoes	97	0.37			#DIV/0!	0	
	Other Equipment? Scrapers	367	0.48			#DIV/0!	0	
	Trenching/Foundation	**Start Date:**		**Total phase:**				
		End Date:						
	Tractor/Loader/Backhoe	97	0.37			#DIV/0!	0	
	Excavators	158	0.38			#DIV/0!	0	
	Other Equipment?							
	Building - Exterior	**Start Date:**	3/15/2027	**Total phase:**	300			**Cement Trucks? _900_ Total Round-Trips**
		End Date:	5/5/2028					
1	Cranes	231	0.29	7	300	7	140679	Electric? (Y/N) ___ Otherwise assumed diesel
3	Forklifts	89	0.2	8	300	8	128160	Liquid Propane (LPG)? (Y/N) ___ Otherwise Assumed diesel
1	Generator Sets	84	0.74	8	300	8	149184	Or temporary line power? (Y/N)
3	Tractors/Loaders/Backhoes	97	0.37	7	300	7	226107	
1	Welders	46	0.45	8	300	8	49680	
	Other Equipment?							
		Start Date:	5/6/2028	**Total phase:**	20			
		End Date:	6/2/2028					
1	Air Compressors	78	0.48	6	20	6		
	Aerial Lift	62	0.31			0	0	
	Other Equipment?							
	Paving	**Start Date:**	6/3/2028	**Total phase:**	20			
		Start Date:						
	Cement and Mortar Mixers	9	0.56			0	0	
2	Pavers	130	0.42	8	20	8	17472	**Asphalt? ___ cubic yards or _Est. 44___ round trips?**
2	Paving Equipment	132	0.36	8	20	8	15206	
2	Rollers	80	0.38	8	20	8	9728	
	Tractors/Loaders/Backhoes	97	0.37			0	0	
	Other Equipment?							
	Additional Phases	**Start Date:**		**Total phase:**				
		Start Date:						
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	
						#DIV/0!	0	

Construction Criteria Air Pollutants							
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	PM2.5 Fugitive	**CO2e**	
Year	Tons					MT	
Construction Equipment							
2026	0.05	0.63	0.02	0.02	0.05	245.29	
	Total Construction Emissions						
Tons	0.05	0.63	0.02	0.02		245.29	
Pounds/Workdays	*Average Daily Emissions*					Workdays	
2026	1.08	13.94	0.43	0.40		91.00	**91**
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	98.59	1,268.41	38.87	36.12		91.00	
Average	1.08	13.94	0.43	0.40		91.00	91.00
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			

Number of Days Per Year				
2026	1/5/2026	5/10/26	126	91
			126	**91** ***Total Workdays***

Construction Criteria Air Pollutants							
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	PM2.5 Fugitive	**CO2e**	
Year	Tons					MT	
Construction Equipment							
2026	0.10	0.80	0.03	0.02	0.02	233.96	
2027	1.83	0.17	0.01	0.005	0.004	54.41	
	Total Construction Emissions						
Tons	1.94	0.97	0.03	0.03		288.37	
Pounds/Workdays	*Average Daily Emissions*					Workdays - CalEEMod	Workdays - Applicant
2026	1.24	9.46	0.30	0.28		169	**169**
2027	22.79	2.17	0.06	0.06		52	**161**
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Total Pounds	3,879.63	1,948.57	60.78	56.05			
Average - lbs/day	11.76	5.90	0.18	0.17		221.00	330.00
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			

Operational Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	1.63	0.26	0.53	0.14
	Net Annual Operational Emissions			
Tons/year	1.63	0.26	0.53	0.14
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**
	Average Daily Emissions			
Pounds Per Day	8.91	1.42	2.90	0.75
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**

Category	**CO2e**			
	Project	Existing		
Mobile	506.98			
Area	1.38			
Energy	0.61			
Water	2.50			
Waste	25.63			
Refrig.	0.31			
TOTAL	537.40	0.00	0.00	0.00
Net GHG Emissions		537.40		0.00

Construction Criteria Air Pollutants							
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	PM2.5 Fugitive	**CO2e**	
Year	Tons					MT	
Construction Equipment							
2027	0.19	1.29	0.04	0.03	0.07	610.85	
2028	1.83	0.32	0.01	0.01	0.02	150.78	
2029	1.60	0.28	0.01	0.01	0.01	131.93	
	Total Construction Emissions						
Tons	3.62	1.89	0.06	0.05		893.56	
Pounds/Workdays	*Average Daily Emissions*					Workdays - CalEEMod	Workdays - Applicant
2027	1.80	12.31	0.36	0.33		209	**209**
2028	13.87	2.45	0.07	0.06		130	**264**
2029	13.87	2.45	0.07	0.06			**231**
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	7240.81	3783.54	110.33	101.21			
Average	10.29	5.37	0.16	0.14		339	704.00
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			

Operational Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	2.93	0.35	0.80	0.21
	Net Annual Operational Emissions			
Tons/year	2.93	0.35	0.80	0.21
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**
	Average Daily Emissions			
Pounds Per Day	16.07	1.89	4.41	1.14
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**

Category	**CO2e**			
	Project	Existing		
Mobile	729.49			
Area	5.73			
Energy	2.10			
Water	6.68			
Waste	68.56			
Refrig.	0.56			
TOTAL	813.12	0.00	0.00	0.00
Net GHG Emissions		813.12		0.00

Construction Criteria Air Pollutants							
Unmitigated	ROG	NOX	PM10 Exhaust	PM2.5 Exhaust	PM2.5 Fugitive	**CO2e**	
Year	Tons					MT	
Construction Equipment							
2026	0.15	1.43	0.04	0.04	0.07	479.25	
2027	2.02	1.46	0.04	0.04	0.07	665.26	
2028	1.83	0.32	0.01	0.01	0.02	150.78	
2029	1.60	0.28	0.01	0.01	0.01	131.93	
	Total Construction Emissions						
Tons	5.61	3.50	0.10	0.10		1427.22	
Pounds/Workdays	*Average Daily Emissions*					Workdays - CalEEMod	Workdays - Applicant
2026	1.17	10.86	0.34	0.31		260.00	**264**
2027	15.32	11.07	0.33	0.30		261.00	**264**
2028	13.87	2.45	0.07	0.06		130.00	**264**
2029	13.87	2.45	0.07	0.06		0.00	**231**
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			
	Total Construction Emissions						
Pounds	11,219.03	7,000.52	209.97	193.38		651.00	
Average	10.97	6.84	0.21	0.19		651.00	1023.00
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**			

Project Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
2027 Construction + Ops	1.81	1.55	0.64	0.24
2028 Construction + Ops	3.46	0.58	0.56	0.16
2029 Construction + Ops	3.23	0.54	0.55	0.16
2030 Ops Total	4.56	0.60	1.33	0.34
Existing Use Emissions				
Total	1.64	0.81	1.25	0.34
Net Annual Operational Emissions				
2027 Tons/year	*0.18*	*0.73*	*-0.62*	*-0.10*
2028 Tons/year	*1.82*	*-0.23*	*-0.70*	*-0.17*
2029 Tons/year	*1.59*	*-0.27*	*-0.70*	*-0.18*
2030 Tons/year	*2.92*	*-0.21*	*0.08*	*0.01*
Threshold - Tons/year	**10.0**	**10.0**	**15.0**	**10.0**
Average Daily Net Emissions				
2027 Pound Per Day	*0.96*	*4.03*	*-3.39*	*-0.53*
2028 Pound Per Day	*9.97*	*-1.25*	*-3.83*	*-0.96*
2029 Pounds Per Day	*8.71*	*-1.47*	*-3.85*	*-0.97*
2030 Pounds Per Day	*16.01*	*-1.13*	*0.44*	*0.05*
Threshold - lbs/day	**54.0**	**54.0**	**82.0**	**54.0**

Category	**CO2e**			
	Project	Existing		
Mobile	1236.46	1213.79		
Area	7.11	2.53		
Energy	2.71	863.30		
Water	9.18	53.94		
Waste	94.19	50.17		
Refrig.	0.87	0.07		
TOTAL	1350.52	2183.79	0.00	0.00
Net GHG Emissions		-833.27		0.00

24-147 University Station Res, Santa Clara and San Jose BMPs T4F Phase 1 Site Preparation Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-147 University Station Res, Santa Clara and San Jose BMPs T4F Phase 1 Site Preparation
Construction Start Date	1/5/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	31.0
Location	451 El Camino Real, Santa Clara, CA 95050, USA
County	Santa Clara
City	Santa Clara
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1821
EDFZ	1
Electric Utility	Silicon Valley Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	297	Dwelling Unit	11.0	475,000	0.00	—	888	—
Condo/Townhouse	111	Dwelling Unit	0.00	257,500	0.00	—	332	—

Enclosed Parking with Elevator	359	Space	0.00	139,116	0.00	—	—	—
Parking Lot	12.0	Space	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.21	1.87	0.06	0.04	0.10	0.05	0.01	0.06	476
Mit.	0.06	0.82	0.01	0.04	0.05	0.01	0.01	0.02	476
% Reduced	69%	56%	87%	—	51%	85%	—	72%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.60	23.7	0.66	10.0	10.6	0.61	1.82	2.44	11,297
Mit.	0.46	13.0	0.15	10.0	10.2	0.15	1.82	1.95	11,297
% Reduced	71%	45%	77%	—	4%	75%	—	20%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.27	3.48	0.11	0.99	1.10	0.10	0.28	0.38	1,482
Mit.	0.07	1.57	0.02	0.99	1.01	0.02	0.28	0.30	1,482
% Reduced	75%	55%	81%	—	8%	79%	—	21%	—
Annual (Max)	—	—	—	—	—	—	—	—	—

Unmit.	0.05	0.63	0.02	0.18	0.20	0.02	0.05	0.07	245
Mit.	0.01	0.29	< 0.005	0.18	0.18	< 0.005	0.05	0.05	245
% Reduced	75%	55%	81%	—	8%	79%	—	21%	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2026	0.21	1.87	0.06	0.04	0.10	0.05	0.01	0.06	476
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2026	1.60	23.7	0.66	10.0	10.6	0.61	1.82	2.44	11,297
Average Daily	—	—	—	—	—	—	—	—	—
2026	0.27	3.48	0.11	0.99	1.10	0.10	0.28	0.38	1,482
Annual	—	—	—	—	—	—	—	—	—
2026	0.05	0.63	0.02	0.18	0.20	0.02	0.05	0.07	245

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2026	0.06	0.82	0.01	0.04	0.05	0.01	0.01	0.02	476
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2026	0.46	13.0	0.15	10.0	10.2	0.15	1.82	1.95	11,297
Average Daily	—	—	—	—	—	—	—	—	—
2026	0.07	1.57	0.02	0.99	1.01	0.02	0.28	0.30	1,482

Annual	—	—	—	—	—	—	—	—	—
2026	0.01	0.29	< 0.005	0.18	0.18	< 0.005	0.05	0.05	245

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39	12.9	0.51	—	0.51	0.47	—	0.47	2,503
Demolition	—	—	—	7.72	7.72	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.71	0.03	—	0.03	0.03	—	0.03	137
Demolition	—	—	—	0.42	0.42	—	0.06	0.06	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.01	—	0.01	< 0.005	—	< 0.005	22.7
Demolition	—	—	—	0.08	0.08	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.10	0.10	0.00	0.02	0.02	98.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	10.7	0.10	2.19	2.29	0.10	0.60	0.70	8,696
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.58	0.01	0.12	0.12	0.01	0.03	0.04	477
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.11	< 0.005	0.02	0.02	< 0.005	0.01	0.01	78.9

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.27	0.05	—	0.05	0.05	—	0.05	2,503
Demolition	—	—	—	7.72	7.72	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	< 0.005	—	< 0.005	< 0.005	—	< 0.005	137
Demolition	—	—	—	0.42	0.42	—	0.06	0.06	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.7
Demolition	—	—	—	0.08	0.08	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.10	0.10	0.00	0.02	0.02	98.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.17	10.7	0.10	2.19	2.29	0.10	0.60	0.70	8,696
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	5.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.58	0.01	0.12	0.12	0.01	0.03	0.04	477
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.91
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.11	< 0.005	0.02	0.02	< 0.005	0.01	0.01	78.9

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	11.0	0.51	—	0.51	0.47	—	0.47	2,072
Dust From Material Movement	—	—	—	2.44	2.44	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.30	0.01	—	0.01	0.01	—	0.01	56.8
Dust From Material Movement	—	—	—	0.07	0.07	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.40
Dust From Material Movement	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.06	0.06	0.00	0.01	0.01	59.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.01	0.04	—	0.04	0.04	—	0.04	2,072
Dust From Material Movement	—	—	—	2.44	2.44	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	56.8
Dust From Material Movement	—	—	—	0.07	0.07	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.40

Dust From Material Movement	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.06	0.06	0.00	0.01	0.01	59.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.64
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.27
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.42	12.9	0.58	—	0.58	0.53	—	0.53	2,463

Dust From Material Movement	—	—	—	2.78	2.78	—	1.34	1.34	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.06	0.05	—	0.05	0.04	—	0.04	202
Dust From Material Movement	—	—	—	0.23	0.23	—	0.11	0.11	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.01	—	0.01	0.01	—	0.01	33.5
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.08	0.08	0.00	0.02	0.02	79.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	8.34	0.08	1.70	1.78	0.08	0.47	0.55	6,758
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.67	0.01	0.14	0.14	0.01	0.04	0.04	556
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.09

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.12	< 0.005	0.03	0.03	< 0.005	0.01	0.01	92.0

3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	1.20	0.05	—	0.05	0.05	—	0.05	2,463
Dust From Material Movement	—	—	—	2.78	2.78	—	1.34	1.34	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.10	< 0.005	—	< 0.005	< 0.005	—	< 0.005	202
Dust From Material Movement	—	—	—	0.23	0.23	—	0.11	0.11	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	33.5
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.08	0.08	0.00	0.02	0.02	79.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.13	8.34	0.08	1.70	1.78	0.08	0.47	0.55	6,758
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.67	0.01	0.14	0.14	0.01	0.04	0.04	556
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.12	< 0.005	0.03	0.03	< 0.005	0.01	0.01	92.0

3.7. Trenching (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.86	0.06	—	0.06	0.05	—	0.05	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.86	0.06	—	0.06	0.05	—	0.05	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	< 0.005	—	< 0.005	< 0.005	—	< 0.005	35.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.90
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	42.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.04	0.04	0.00	0.01	0.01	39.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Trenching (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.81	0.01	—	0.01	0.01	—	0.01	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.81	0.01	—	0.01	0.01	—	0.01	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	35.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.90
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.04	0.04	0.00	0.01	0.01	42.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.04	0.04	0.00	0.01	0.01	39.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/5/2026	1/30/2026	5.00	20.0	—
Site Preparation	Site Preparation	1/31/2026	2/13/2026	5.00	10.0	—
Grading	Grading	2/14/2026	3/27/2026	5.00	30.0	—
Trenching	Trenching	3/28/2026	5/10/2026	5.00	30.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41

Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Trenching	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Trenching	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix

Demolition	—	—	—	—
Demolition	Worker	12.5	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	118	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	91.7	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	11.7	LDA,LDT1,LDT2
Trenching	Vendor	—	8.40	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	11.7	LDA,LDT1,LDT2
Demolition	Vendor	—	8.40	HHDT,MHDT
Demolition	Hauling	118	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT

Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	11.7	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.40	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	11.7	LDA,LDT1,LDT2
Grading	Vendor	—	8.40	HHDT,MHDT
Grading	Hauling	91.7	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	11.7	LDA,LDT1,LDT2
Trenching	Vendor	—	8.40	HHDT,MHDT
Trenching	Hauling	0.00	20.0	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	152,950	—
Site Preparation	—	—	9.38	0.00	—
Grading	22,000	—	30.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Condo/Townhouse	—	0%
Enclosed Parking with Elevator	0.00	100%
Parking Lot	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	387	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	28.5
AQ-DPM	88.9
Drinking Water	43.3
Lead Risk Housing	22.8
Pesticides	15.5
Toxic Releases	34.2
Traffic	76.2
Effect Indicators	—

CleanUp Sites	97.7
Groundwater	94.0
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	26.8
Cardio-vascular	29.2
Low Birth Weights	51.3
Socioeconomic Factor Indicators	—
Education	30.4
Housing	82.4
Linguistic	50.0
Poverty	48.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	60.61850379
Employed	47.36301809
Median HI	78.60900808
Education	—
Bachelor's or higher	89.42640832
High school enrollment	100
Preschool enrollment	59.01450019
Transportation	—

Auto Access	52.9449506
Active commuting	94.58488387
Social	—
2-parent households	20.4927499
Voting	82.65109714
Neighborhood	—
Alcohol availability	25.97202618
Park access	20.54407802
Retail density	95.8937508
Supermarket access	71.60272039
Tree canopy	68.57436161
Housing	—
Homeownership	32.22122418
Housing habitability	43.94969845
Low-inc homeowner severe housing cost burden	60.43885538
Low-inc renter severe housing cost burden	21.12151931
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	80.6
High Blood Pressure	94.9
Cancer (excluding skin)	85.3
Asthma	55.1
Coronary Heart Disease	95.4
Chronic Obstructive Pulmonary Disease	84.0
Diagnosed Diabetes	91.2
Life Expectancy at Birth	79.2

Cognitively Disabled	84.2
Physically Disabled	91.7
Heart Attack ER Admissions	89.7
Mental Health Not Good	54.9
Chronic Kidney Disease	95.6
Obesity	61.8
Pedestrian Injuries	95.5
Physical Health Not Good	76.2
Stroke	93.8
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	52.6
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	96.5
Elderly	97.6
English Speaking	52.1
Foreign-born	32.7
Outdoor Workers	92.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	20.6
Traffic Density	68.4
Traffic Access	87.4
Other Indices	—
Hardship	18.8
Other Decision Support	—

2016 Voting	79.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total lot acreage, total number of townhomes and apartments, square footages, and number of parking spaces provided by filled out construction worksheet.
Construction: Construction Phases	Defaults - added trenching. Phase only includes demolition, site prep, grading, and trenching.
Construction: Off-Road Equipment	Information provided from filled out construction worksheet.
Construction: Trips and VMT	Paving = 270,550-sf of asphalt demolished (30 trips/day).
Construction: On-Road Fugitive Dust	Air District recommended BMPs 15 mph. Required by San Jose and Santa Clara general plans.
Operations: Hearths	No hearths.

Operations: Energy Use	Project confirmed all-electric.
Operations: Water and Waste Water	Wastewater treatment 100% aerobic - no septic tanks or lagoons.
Characteristics: Utility Information	Santa Clara default clean energy provider is Silicon Valley power. Silicon Valley power 2023 residential rate = 0 lb /MWh.
Operations: Vehicle Data	Provided trip gen with reduction adjustments.

24-147 University Station, Santa Clara and San Jose Phase 2 Townhomes BMPs T4F 2027 Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-147 University Station, Santa Clara and San Jose Phase 2 Townhomes BMPs T4F 2027
Construction Start Date	5/11/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	31.0
Location	451 El Camino Real, Santa Clara, CA 95050, USA
County	Santa Clara
City	Santa Clara
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1821
EDFZ	1
Electric Utility	Silicon Valley Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse High Rise	111	Dwelling Unit	7.30	257,500	0.00	—	332	—

Parking Lot	12.0	Space	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.28	9.48	0.30	0.82	1.12	0.28	0.20	0.48	3,117
Mit.	0.57	5.24	0.07	0.82	0.89	0.07	0.20	0.27	3,117
% Reduced	56%	45%	76%	—	21%	75%	—	44%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	363	9.57	0.30	0.82	1.12	0.28	0.20	0.48	3,065
Mit.	363	5.33	0.07	0.82	0.89	0.07	0.20	0.27	3,065
% Reduced	< 0.5%	44%	76%	—	21%	75%	—	44%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	10.1	4.38	0.14	0.37	0.51	0.13	0.09	0.22	1,413
Mit.	9.99	2.43	0.03	0.37	0.40	0.03	0.09	0.12	1,413
% Reduced	1%	44%	76%	—	21%	75%	—	44%	—
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.83	0.80	0.03	0.07	0.09	0.02	0.02	0.04	234
Mit.	1.82	0.44	0.01	0.07	0.07	0.01	0.02	0.02	234

% Reduced	1%	44%	76%	—	21%	75%	—	44%	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2026	1.28	9.48	0.30	0.82	1.12	0.28	0.20	0.48	3,117
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2026	1.25	9.57	0.30	0.82	1.12	0.28	0.20	0.48	3,065
2027	363	9.20	0.27	0.82	1.09	0.25	0.20	0.45	3,040
Average Daily	—	—	—	—	—	—	—	—	—
2026	0.57	4.38	0.14	0.37	0.51	0.13	0.09	0.22	1,413
2027	10.1	0.96	0.03	0.08	0.11	0.03	0.02	0.05	329
Annual	—	—	—	—	—	—	—	—	—
2026	0.10	0.80	0.03	0.07	0.09	0.02	0.02	0.04	234
2027	1.83	0.17	0.01	0.02	0.02	< 0.005	< 0.005	0.01	54.4

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2026	0.57	5.24	0.07	0.82	0.89	0.07	0.20	0.27	3,117
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2026	0.54	5.33	0.07	0.82	0.89	0.07	0.20	0.27	3,065
2027	363	5.27	0.07	0.82	0.89	0.07	0.20	0.27	3,040

Average Daily	—	—	—	—	—	—	—	—	—
2026	0.25	2.43	0.03	0.37	0.40	0.03	0.09	0.12	1,413
2027	9.99	0.54	0.01	0.08	0.09	0.01	0.02	0.03	329
Annual	—	—	—	—	—	—	—	—	—
2026	0.04	0.44	0.01	0.07	0.07	0.01	0.02	0.02	234
2027	1.82	0.10	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	54.4

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	9.59	1.47	0.03	3.28	3.30	0.02	0.83	0.85	3,792
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	8.92	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,563
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	8.91	1.42	0.02	2.88	2.90	0.02	0.73	0.75	3,246
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.63	0.26	< 0.005	0.53	0.53	< 0.005	0.13	0.14	537

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	2.54	1.41	0.02	3.28	3.30	0.02	0.83	0.85	3,599
Area	7.06	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.9

Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	3.68
Water	—	—	—	—	—	—	—	—	15.1
Waste	—	—	—	—	—	—	—	—	155
Refrig.	—	—	—	—	—	—	—	—	1.84
Total	9.59	1.47	0.03	3.28	3.30	0.02	0.83	0.85	3,792
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	2.41	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,387
Area	6.50	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	3.68
Water	—	—	—	—	—	—	—	—	15.1
Waste	—	—	—	—	—	—	—	—	155
Refrig.	—	—	—	—	—	—	—	—	1.84
Total	8.92	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,563
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	2.14	1.39	0.02	2.88	2.90	0.02	0.73	0.75	3,062
Area	6.78	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.33
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	3.68
Water	—	—	—	—	—	—	—	—	15.1
Waste	—	—	—	—	—	—	—	—	155
Refrig.	—	—	—	—	—	—	—	—	1.84
Total	8.91	1.42	0.02	2.88	2.90	0.02	0.73	0.75	3,246
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.25	< 0.005	0.53	0.53	< 0.005	0.13	0.14	507
Area	1.24	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.38
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.61
Water	—	—	—	—	—	—	—	—	2.50
Waste	—	—	—	—	—	—	—	—	25.6
Refrig.	—	—	—	—	—	—	—	—	0.31

Total	1.63	0.26	< 0.005	0.53	0.53	< 0.005	0.13	0.14	537

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	2.54	1.41	0.02	3.28	3.30	0.02	0.83	0.85	3,599
Area	7.06	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.9
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	3.68
Water	—	—	—	—	—	—	—	—	15.1
Waste	—	—	—	—	—	—	—	—	155
Refrig.	—	—	—	—	—	—	—	—	1.84
Total	9.59	1.47	0.03	3.28	3.30	0.02	0.83	0.85	3,792
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	2.41	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,387
Area	6.50	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	3.68
Water	—	—	—	—	—	—	—	—	15.1
Waste	—	—	—	—	—	—	—	—	155
Refrig.	—	—	—	—	—	—	—	—	1.84
Total	8.92	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,563
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	2.14	1.39	0.02	2.88	2.90	0.02	0.73	0.75	3,062
Area	6.78	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	8.33
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	3.68
Water	—	—	—	—	—	—	—	—	15.1
Waste	—	—	—	—	—	—	—	—	155

Refrig.	—	—	—	—	—	—	—	—	1.84
Total	8.91	1.42	0.02	2.88	2.90	0.02	0.73	0.75	3,246
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.39	0.25	< 0.005	0.53	0.53	< 0.005	0.13	0.14	507
Area	1.24	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.38
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.61
Water	—	—	—	—	—	—	—	—	2.50
Waste	—	—	—	—	—	—	—	—	25.6
Refrig.	—	—	—	—	—	—	—	—	0.31
Total	1.63	0.26	< 0.005	0.53	0.53	< 0.005	0.13	0.14	537

3. Construction Emissions Details

3.1. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	8.57	0.29	—	0.29	0.27	—	0.27	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	8.57	0.29	—	0.29	0.27	—	0.27	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	3.94	0.13	—	0.13	0.12	—	0.12	831

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.72	0.02	—	0.02	0.02	—	0.02	138
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.25	0.17	0.00	0.66	0.66	0.00	0.15	0.15	682
Vendor	0.01	0.39	< 0.005	0.08	0.09	< 0.005	0.02	0.03	330
Hauling	0.01	0.35	< 0.005	0.07	0.08	< 0.005	0.02	0.02	298
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.00	0.66	0.66	0.00	0.15	0.15	631
Vendor	0.01	0.41	< 0.005	0.08	0.09	< 0.005	0.02	0.03	329
Hauling	0.01	0.37	< 0.005	0.07	0.08	< 0.005	0.02	0.02	298
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.00	0.30	0.30	0.00	0.07	0.07	294
Vendor	< 0.005	0.19	< 0.005	0.04	0.04	< 0.005	0.01	0.01	151
Hauling	< 0.005	0.17	< 0.005	0.03	0.04	< 0.005	0.01	0.01	137
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.05	0.05	0.00	0.01	0.01	48.6
Vendor	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	25.1
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	22.7

3.2. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.33	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.33	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.99	0.03	—	0.03	0.03	—	0.03	831
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.36	0.01	—	0.01	0.01	—	0.01	138
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.25	0.17	0.00	0.66	0.66	0.00	0.15	0.15	682
Vendor	0.01	0.39	< 0.005	0.08	0.09	< 0.005	0.02	0.03	330
Hauling	0.01	0.35	< 0.005	0.07	0.08	< 0.005	0.02	0.02	298
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.22	0.22	0.00	0.66	0.66	0.00	0.15	0.15	631
Vendor	0.01	0.41	< 0.005	0.08	0.09	< 0.005	0.02	0.03	329
Hauling	0.01	0.37	< 0.005	0.07	0.08	< 0.005	0.02	0.02	298
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.00	0.30	0.30	0.00	0.07	0.07	294

Vendor	< 0.005	0.19	< 0.005	0.04	0.04	< 0.005	0.01	0.01	151
Hauling	< 0.005	0.17	< 0.005	0.03	0.04	< 0.005	0.01	0.01	137
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.05	0.05	0.00	0.01	0.01	48.6
Vendor	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	25.1
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	22.7

3.3. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	8.25	0.26	—	0.26	0.24	—	0.24	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.69	0.02	—	0.02	0.02	—	0.02	152
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	< 0.005	—	< 0.005	< 0.005	—	< 0.005	25.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Worker	0.21	0.20	0.00	0.66	0.66	0.00	0.15	0.15	619
Vendor	0.01	0.39	< 0.005	0.08	0.09	< 0.005	0.02	0.03	323
Hauling	0.01	0.35	< 0.005	0.07	0.08	< 0.005	0.02	0.02	291
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.05	0.05	0.00	0.01	0.01	52.8
Vendor	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	27.2
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.5
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.73
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.50
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.05

3.4. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.33	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.36	0.01	—	0.01	0.01	—	0.01	152
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	25.2

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.21	0.20	0.00	0.66	0.66	0.00	0.15	0.15	619
Vendor	0.01	0.39	< 0.005	0.08	0.09	< 0.005	0.02	0.03	323
Hauling	0.01	0.35	< 0.005	0.07	0.08	< 0.005	0.02	0.02	291
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.00	0.05	0.05	0.00	0.01	0.01	52.8
Vendor	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	27.2
Hauling	< 0.005	0.03	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	24.5
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.73
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.50
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.05

3.5. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	4.30	0.17	—	0.17	0.16	—	0.16	995
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.3
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.51
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.10	0.10	0.00	0.02	0.02	96.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	1.56	0.02	0.33	0.35	0.02	0.09	0.11	1,282
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	35.1
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.44
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.82

3.6. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.30	0.03	—	0.03	0.03	—	0.03	995
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.3
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.51
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.10	0.10	0.00	0.02	0.02	96.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.03	1.56	0.02	0.33	0.35	0.02	0.09	0.11	1,282
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	2.69
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	0.04	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	35.1
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.44
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.82

3.7. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	363	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.67
Architectural Coatings	9.94	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.61
Architectural Coatings	1.81	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.00	0.13	0.13	0.00	0.03	0.03	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.65	< 0.005	—	< 0.005	< 0.005	—	< 0.005	134
Architectural Coatings	363	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.67
Architectural Coatings	9.94	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.61
Architectural Coatings	1.81	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.00	0.13	0.13	0.00	0.03	0.03	124
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.43
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.57
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	2.54	1.41	0.02	3.28	3.30	0.02	0.83	0.85	3,599
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.54	1.41	0.02	3.28	3.30	0.02	0.83	0.85	3,599
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	2.41	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,387
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.41	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,387
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.39	0.25	< 0.005	0.53	0.53	< 0.005	0.13	0.14	507
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.39	0.25	< 0.005	0.53	0.53	< 0.005	0.13	0.14	507

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Condo/Townhouse High Rise	2.54	1.41	0.02	3.28	3.30	0.02	0.83	0.85	3,599
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.54	1.41	0.02	3.28	3.30	0.02	0.83	0.85	3,599
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	2.41	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,387
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.41	1.65	0.02	3.28	3.30	0.02	0.83	0.85	3,387
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.39	0.25	< 0.005	0.53	0.53	< 0.005	0.13	0.14	507
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.39	0.25	< 0.005	0.53	0.53	< 0.005	0.13	0.14	507

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	3.68
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	3.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Condo/Townhous High Rise	—	—	—	—	—	—	—	—	3.68
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	3.68
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhous e High Rise	—	—	—	—	—	—	—	—	0.61
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	0.61

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhous e High Rise	—	—	—	—	—	—	—	—	3.68
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	3.68
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhous e High Rise	—	—	—	—	—	—	—	—	3.68
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	3.68
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhous e High Rise	—	—	—	—	—	—	—	—	0.61

Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	0.61

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Parking Lot	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	5.51	—	—	—	—	—	—	—	—

Architectural Coatings	0.99	—	—	—	—	—	—	—	—
Landscape Equipment	0.55	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.9
Total	7.06	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	5.51	—	—	—	—	—	—	—	—
Architectural Coatings	0.99	—	—	—	—	—	—	—	—
Total	6.50	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	1.01	—	—	—	—	—	—	—	—
Architectural Coatings	0.18	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.38
Total	1.24	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.38

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	5.51	—	—	—	—	—	—	—	—

Architectural Coatings	0.99	—	—	—	—	—	—	—	—
Landscape Equipment	0.55	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.9
Total	7.06	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	16.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	5.51	—	—	—	—	—	—	—	—
Architectural Coatings	0.99	—	—	—	—	—	—	—	—
Total	6.50	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	1.01	—	—	—	—	—	—	—	—
Architectural Coatings	0.18	—	—	—	—	—	—	—	—
Landscape Equipment	0.05	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.38
Total	1.24	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.38

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	15.1
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	15.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	15.1
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	15.1
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	2.50
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	2.50

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	15.1
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	15.1
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	15.1
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	15.1
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	2.50
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	2.50

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	155
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	155
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	155
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	155
Annual	—	—	—	—	—	—	—	—	—

Condo/Townhous High Rise	—	—	—	—	—	—	—	—	25.6
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	25.6

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	155
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	155
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	155
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	155
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	25.6
Parking Lot	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	25.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	1.84
Total	—	—	—	—	—	—	—	—	1.84
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	1.84
Total	—	—	—	—	—	—	—	—	1.84
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	0.31
Total	—	—	—	—	—	—	—	—	0.31

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	1.84
Total	—	—	—	—	—	—	—	—	1.84
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Condo/Townhous High Rise	—	—	—	—	—	—	—	—	1.84
Total	—	—	—	—	—	—	—	—	1.84
Annual	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	0.31
Total	—	—	—	—	—	—	—	—	0.31

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Building Construction	Building Construction	5/11/2026	2/12/2027	5.00	200	—
Paving	Paving	2/27/2027	3/14/2027	5.00	10.0	—
Architectural Coating	Architectural Coating	2/13/2027	2/26/2027	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Tier 4 Final	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—
Building Construction	Worker	79.9	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	11.9	8.40	HHDT,MHDT
Building Construction	Hauling	4.04	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	17.8	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	16.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—

Building Construction	Worker	79.9	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	11.9	8.40	HHDT,MHDT
Building Construction	Hauling	4.04	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	17.8	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	16.0	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	521,438	173,813	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse High Rise	—	0%
Parking Lot	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	387	0.03	< 0.005
2027	0.00	387	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Condo/Townhouse High Rise	799	888	686	290,435	4,184	4,649	3,592	1,520,661
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year

Condo/Townhouse High Rise	799	888	686	290,435	4,184	4,649	3,592	1,520,661
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse High Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse High Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0

Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
521437.5	173,813	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse High Rise	665,075	0.00	0.0330	0.0040	0.00
Parking Lot	0.00	0.00	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse High Rise	665,075	0.00	0.0330	0.0040	0.00
Parking Lot	0.00	0.00	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse High Rise	4,025,570	0.00
Parking Lot	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse High Rise	4,025,570	0.00
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse High Rise	82.1	—
Parking Lot	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Condo/Townhouse High Rise	82.1	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	28.5
AQ-DPM	88.9
Drinking Water	43.3
Lead Risk Housing	22.8
Pesticides	15.5
Toxic Releases	34.2
Traffic	76.2
Effect Indicators	—
CleanUp Sites	97.7
Groundwater	94.0
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	26.8
Cardio-vascular	29.2
Low Birth Weights	51.3

Socioeconomic Factor Indicators	—
Education	30.4
Housing	82.4
Linguistic	50.0
Poverty	48.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	60.61850379
Employed	47.36301809
Median HI	78.60900808
Education	—
Bachelor's or higher	89.42640832
High school enrollment	100
Preschool enrollment	59.01450019
Transportation	—
Auto Access	52.9449506
Active commuting	94.58488387
Social	—
2-parent households	20.4927499
Voting	82.65109714
Neighborhood	—
Alcohol availability	25.97202618
Park access	20.54407802
Retail density	95.8937508

Supermarket access	71.60272039
Tree canopy	68.57436161
Housing	—
Homeownership	32.22122418
Housing habitability	43.94969845
Low-inc homeowner severe housing cost burden	60.43885538
Low-inc renter severe housing cost burden	21.12151931
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	80.6
High Blood Pressure	94.9
Cancer (excluding skin)	85.3
Asthma	55.1
Coronary Heart Disease	95.4
Chronic Obstructive Pulmonary Disease	84.0
Diagnosed Diabetes	91.2
Life Expectancy at Birth	79.2
Cognitively Disabled	84.2
Physically Disabled	91.7
Heart Attack ER Admissions	89.7
Mental Health Not Good	54.9
Chronic Kidney Disease	95.6
Obesity	61.8
Pedestrian Injuries	95.5
Physical Health Not Good	76.2
Stroke	93.8

Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	52.6
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	96.5
Elderly	97.6
English Speaking	52.1
Foreign-born	32.7
Outdoor Workers	92.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	20.6
Traffic Density	68.4
Traffic Access	87.4
Other Indices	—
Hardship	18.8
Other Decision Support	—
2016 Voting	79.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Santa Clara default clean energy provider is Silicon Valley power. Silicon Valley power 2023 residential rate = 0 lb /MWh.
Construction: Construction Phases	Phase 2 townhomes only includes building construction, arch coating, and paving. Default work days.
Land Use	Estimated phase 2 acreage from google earth. Number or units, parking spaces, and sf from applicant.
Construction: Off-Road Equipment	Defaults reviewed and confirmed by applicant.
Construction: Trips and VMT	Building Construction = 404 concrete truck round trips (4.04 trips/day), Paving = est. 59 asphalt truck round trips (17.8 trips/day).
Construction: On-Road Fugitive Dust	Air District BMPS = 15 mph. Required by Santa Clara and San Jose.
Operations: Vehicle Data	Provided trip gen.
Operations: Hearths	No hearths.
Operations: Energy Use	According to project applicant, project will be all-electric. Convert natural gas to electricity.
Operations: Water and Waste Water	Wastewater treatment 100% aerobic - no septic tanks or lagoons.

24-147 University Station Santa Clara and San Jose Phase 3 Apartments BMPs T4F 2030 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-147 University Station Santa Clara and San Jose Phase 3 Apartments BMPs T4F 2030
Construction Start Date	3/15/2027
Operational Year	2030
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	31.0
Location	451 El Camino Real, Santa Clara, CA 95050, USA
County	Santa Clara
City	Santa Clara
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1821
EDFZ	1
Electric Utility	Silicon Valley Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	297	Dwelling Unit	3.90	475,000	0.00	—	888	—

Enclosed Parking with Elevator	359	Space	0.00	139,116	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	335	12.2	0.36	2.75	3.11	0.34	0.66	1.00	6,605
Mit.	335	5.60	0.10	2.75	2.85	0.10	0.66	0.76	6,605
% Reduced	< 0.5%	54%	72%	—	8%	71%	—	24%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.81	12.4	0.36	2.75	3.11	0.34	0.66	1.00	6,430
Mit.	1.11	5.82	0.10	2.75	2.85	0.10	0.66	0.76	6,430
% Reduced	39%	53%	72%	—	8%	71%	—	24%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	18.8	7.05	0.21	1.54	1.75	0.19	0.37	0.56	3,690
Mit.	18.6	3.29	0.06	1.54	1.60	0.06	0.37	0.43	3,690
% Reduced	1%	53%	72%	—	9%	71%	—	24%	—
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	3.43	1.29	0.04	0.28	0.32	0.03	0.07	0.10	611

Mit.	3.40	0.60	0.01	0.28	0.29	0.01	0.07	0.08	611
% Reduced	1%	53%	72%	—	9%	71%	—	24%	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2027	1.84	12.2	0.36	2.75	3.11	0.34	0.66	1.00	6,605
2028	335	11.5	0.33	2.75	3.07	0.29	0.66	0.96	6,495
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2027	1.81	12.4	0.36	2.75	3.11	0.34	0.66	1.00	6,430
2028	1.74	11.8	0.33	2.75	3.07	0.29	0.66	0.96	6,346
Average Daily	—	—	—	—	—	—	—	—	—
2027	1.03	7.05	0.21	1.54	1.75	0.19	0.37	0.56	3,690
2028	18.8	3.32	0.10	0.70	0.79	0.09	0.17	0.25	1,708
Annual	—	—	—	—	—	—	—	—	—
2027	0.19	1.29	0.04	0.28	0.32	0.03	0.07	0.10	611
2028	3.43	0.61	0.02	0.13	0.15	0.02	0.03	0.05	283

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2027	1.14	5.60	0.10	2.75	2.85	0.10	0.66	0.76	6,605
2028	335	5.42	0.10	2.75	2.85	0.09	0.66	0.75	6,495

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2027	1.11	5.82	0.10	2.75	2.85	0.10	0.66	0.76	6,430
2028	1.08	5.71	0.10	2.75	2.85	0.09	0.66	0.75	6,346
Average Daily	—	—	—	—	—	—	—	—	—
2027	0.63	3.29	0.06	1.54	1.60	0.06	0.37	0.43	3,690
2028	18.6	1.55	0.03	0.70	0.73	0.02	0.17	0.19	1,708
Annual	—	—	—	—	—	—	—	—	—
2027	0.11	0.60	0.01	0.28	0.29	0.01	0.07	0.08	611
2028	3.40	0.28	< 0.005	0.13	0.13	< 0.005	0.03	0.04	283

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	17.6	1.92	0.05	4.69	4.74	0.04	1.19	1.23	5,422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	15.1	2.00	0.03	4.69	4.72	0.02	1.19	1.21	5,068
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	16.1	1.89	0.03	4.37	4.41	0.03	1.11	1.14	4,911
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	2.93	0.35	0.01	0.80	0.80	0.01	0.20	0.21	813

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	3.19	1.71	0.03	4.69	4.72	0.02	1.19	1.21	4,881
Area	14.4	0.21	0.02	—	0.02	0.01	—	0.01	70.2
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	12.7
Water	—	—	—	—	—	—	—	—	40.4
Waste	—	—	—	—	—	—	—	—	414
Refrig.	—	—	—	—	—	—	—	—	3.40
Total	17.6	1.92	0.05	4.69	4.74	0.04	1.19	1.23	5,422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	3.05	2.00	0.03	4.69	4.72	0.02	1.19	1.21	4,597
Area	12.0	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	12.7
Water	—	—	—	—	—	—	—	—	40.4
Waste	—	—	—	—	—	—	—	—	414
Refrig.	—	—	—	—	—	—	—	—	3.40
Total	15.1	2.00	0.03	4.69	4.72	0.02	1.19	1.21	5,068
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	2.87	1.79	0.03	4.37	4.40	0.02	1.11	1.13	4,406
Area	13.2	0.10	0.01	—	0.01	0.01	—	0.01	34.6
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	12.7
Water	—	—	—	—	—	—	—	—	40.4
Waste	—	—	—	—	—	—	—	—	414
Refrig.	—	—	—	—	—	—	—	—	3.40
Total	16.1	1.89	0.03	4.37	4.41	0.03	1.11	1.14	4,911
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.52	0.33	< 0.005	0.80	0.80	< 0.005	0.20	0.21	729
Area	2.41	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.73

Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	2.10
Water	—	—	—	—	—	—	—	—	6.68
Waste	—	—	—	—	—	—	—	—	68.6
Refrig.	—	—	—	—	—	—	—	—	0.56
Total	2.93	0.35	0.01	0.80	0.80	0.01	0.20	0.21	813

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	3.19	1.71	0.03	4.69	4.72	0.02	1.19	1.21	4,881
Area	14.4	0.21	0.02	—	0.02	0.01	—	0.01	70.2
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	12.7
Water	—	—	—	—	—	—	—	—	40.4
Waste	—	—	—	—	—	—	—	—	414
Refrig.	—	—	—	—	—	—	—	—	3.40
Total	17.6	1.92	0.05	4.69	4.74	0.04	1.19	1.23	5,422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	3.05	2.00	0.03	4.69	4.72	0.02	1.19	1.21	4,597
Area	12.0	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	12.7
Water	—	—	—	—	—	—	—	—	40.4
Waste	—	—	—	—	—	—	—	—	414
Refrig.	—	—	—	—	—	—	—	—	3.40
Total	15.1	2.00	0.03	4.69	4.72	0.02	1.19	1.21	5,068
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	2.87	1.79	0.03	4.37	4.40	0.02	1.11	1.13	4,406

Area	13.2	0.10	0.01	—	0.01	0.01	—	0.01	34.6
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	12.7
Water	—	—	—	—	—	—	—	—	40.4
Waste	—	—	—	—	—	—	—	—	414
Refrig.	—	—	—	—	—	—	—	—	3.40
Total	16.1	1.89	0.03	4.37	4.41	0.03	1.11	1.14	4,911
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.52	0.33	< 0.005	0.80	0.80	< 0.005	0.20	0.21	729
Area	2.41	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.73
Energy	0.00	0.00	0.00	—	0.00	0.00	—	0.00	2.10
Water	—	—	—	—	—	—	—	—	6.68
Waste	—	—	—	—	—	—	—	—	68.6
Refrig.	—	—	—	—	—	—	—	—	0.56
Total	2.93	0.35	0.01	0.80	0.80	0.01	0.20	0.21	813

3. Construction Emissions Details

3.1. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	0.34	—	0.34	0.31	—	0.31	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.03	9.39	0.34	—	0.34	0.31	—	0.31	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	5.37	0.19	—	0.19	0.18	—	0.18	1,374
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.98	0.04	—	0.04	0.03	—	0.03	228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.75	0.57	0.00	2.25	2.25	0.00	0.53	0.53	2,282
Vendor	0.04	1.72	0.02	0.38	0.40	0.02	0.11	0.13	1,485
Hauling	0.01	0.50	0.01	0.11	0.12	0.01	0.03	0.04	433
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.73	0.67	0.00	2.25	2.25	0.00	0.53	0.53	2,110
Vendor	0.04	1.80	0.02	0.38	0.40	0.02	0.11	0.13	1,483
Hauling	0.01	0.53	0.01	0.11	0.12	0.01	0.03	0.04	432
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.41	0.38	0.00	1.26	1.26	0.00	0.30	0.30	1,220
Vendor	0.02	1.01	0.01	0.22	0.23	0.01	0.06	0.07	848
Hauling	0.01	0.29	< 0.005	0.06	0.07	< 0.005	0.02	0.02	247
Annual	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.00	0.23	0.23	0.00	0.05	0.05	202
Vendor	< 0.005	0.18	< 0.005	0.04	0.04	< 0.005	0.01	0.01	140
Hauling	< 0.005	0.05	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	40.9

3.2. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.82	0.07	—	0.07	0.07	—	0.07	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.82	0.07	—	0.07	0.07	—	0.07	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.61	0.04	—	0.04	0.04	—	0.04	1,374
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.29	0.01	—	0.01	0.01	—	0.01	228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.75	0.57	0.00	2.25	2.25	0.00	0.53	0.53	2,282
Vendor	0.04	1.72	0.02	0.38	0.40	0.02	0.11	0.13	1,485
Hauling	0.01	0.50	0.01	0.11	0.12	0.01	0.03	0.04	433
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.73	0.67	0.00	2.25	2.25	0.00	0.53	0.53	2,110

Vendor	0.04	1.80	0.02	0.38	0.40	0.02	0.11	0.13	1,483
Hauling	0.01	0.53	0.01	0.11	0.12	0.01	0.03	0.04	432
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.41	0.38	0.00	1.26	1.26	0.00	0.30	0.30	1,220
Vendor	0.02	1.01	0.01	0.22	0.23	0.01	0.06	0.07	848
Hauling	0.01	0.29	< 0.005	0.06	0.07	< 0.005	0.02	0.02	247
Annual	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.00	0.23	0.23	0.00	0.05	0.05	202
Vendor	< 0.005	0.18	< 0.005	0.04	0.04	< 0.005	0.01	0.01	140
Hauling	< 0.005	0.05	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	40.9

3.3. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	0.30	—	0.30	0.28	—	0.28	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	0.30	—	0.30	0.28	—	0.28	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	2.20	0.07	—	0.07	0.07	—	0.07	593
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.04	0.40	0.01	—	0.01	0.01	—	0.01	98.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.72	0.50	0.00	2.25	2.25	0.00	0.53	0.53	2,221
Vendor	0.04	1.62	0.02	0.38	0.40	0.01	0.11	0.12	1,446
Hauling	0.01	0.48	0.01	0.11	0.12	0.01	0.03	0.04	422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.70	0.67	0.00	2.25	2.25	0.00	0.53	0.53	2,074
Vendor	0.04	1.72	0.02	0.38	0.40	0.01	0.11	0.12	1,445
Hauling	0.01	0.51	0.01	0.11	0.12	0.01	0.03	0.04	421
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	0.00	0.54	0.54	0.00	0.13	0.13	517
Vendor	0.01	0.42	< 0.005	0.09	0.10	< 0.005	0.03	0.03	356
Hauling	< 0.005	0.12	< 0.005	0.03	0.03	< 0.005	0.01	0.01	104
Annual	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.10	0.10	0.00	0.02	0.02	85.7
Vendor	< 0.005	0.08	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	59.0
Hauling	< 0.005	0.02	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	17.2

3.4. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	2.81	0.07	—	0.07	0.07	—	0.07	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.81	0.07	—	0.07	0.07	—	0.07	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.69	0.02	—	0.02	0.02	—	0.02	593
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	< 0.005	—	< 0.005	< 0.005	—	< 0.005	98.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.72	0.50	0.00	2.25	2.25	0.00	0.53	0.53	2,221
Vendor	0.04	1.62	0.02	0.38	0.40	0.01	0.11	0.12	1,446
Hauling	0.01	0.48	0.01	0.11	0.12	0.01	0.03	0.04	422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.70	0.67	0.00	2.25	2.25	0.00	0.53	0.53	2,074
Vendor	0.04	1.72	0.02	0.38	0.40	0.01	0.11	0.12	1,445
Hauling	0.01	0.51	0.01	0.11	0.12	0.01	0.03	0.04	421
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.17	0.14	0.00	0.54	0.54	0.00	0.13	0.13	517
Vendor	0.01	0.42	< 0.005	0.09	0.10	< 0.005	0.03	0.03	356
Hauling	< 0.005	0.12	< 0.005	0.03	0.03	< 0.005	0.01	0.01	104

Annual	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.00	0.10	0.10	0.00	0.02	0.02	85.7
Vendor	< 0.005	0.08	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	59.0
Hauling	< 0.005	0.02	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	17.2

3.5. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	0.26	—	0.26	0.24	—	0.24	1,516
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.01	—	0.01	0.01	—	0.01	83.1
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.8
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Worker	0.04	0.03	0.00	0.12	0.12	0.00	0.03	0.03	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.35	< 0.005	0.08	0.09	< 0.005	0.02	0.03	309
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.9
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.80

3.6. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.93	0.03	—	0.03	0.03	—	0.03	1,516
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	< 0.005	—	< 0.005	< 0.005	—	< 0.005	83.1
Paving	0.00	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.8
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.00	0.12	0.12	0.00	0.03	0.03	122
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.35	< 0.005	0.08	0.09	< 0.005	0.02	0.03	309
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	16.9
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.80

3.7. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.81	0.02	—	0.02	0.01	—	0.01	134
Architectural Coatings	334	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.34
Architectural Coatings	18.3	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.22
Architectural Coatings	3.34	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.14	0.10	0.00	0.45	0.45	0.00	0.11	0.11	444
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	0.01	0.01	23.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.65	< 0.005	—	< 0.005	< 0.005	—	< 0.005	134
Architectural Coatings	334	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.34
Architectural Coatings	18.3	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.22
Architectural Coatings	3.34	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.14	0.10	0.00	0.45	0.45	0.00	0.11	0.11	444
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.00	0.02	0.02	0.00	0.01	0.01	23.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	3.81
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.19	1.71	0.03	4.69	4.72	0.02	1.19	1.21	4,881
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.19	1.71	0.03	4.69	4.72	0.02	1.19	1.21	4,881

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.05	2.00	0.03	4.69	4.72	0.02	1.19	1.21	4,597
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.05	2.00	0.03	4.69	4.72	0.02	1.19	1.21	4,597
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.52	0.33	< 0.005	0.80	0.80	< 0.005	0.20	0.21	729
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.52	0.33	< 0.005	0.80	0.80	< 0.005	0.20	0.21	729

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.19	1.71	0.03	4.69	4.72	0.02	1.19	1.21	4,881
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.19	1.71	0.03	4.69	4.72	0.02	1.19	1.21	4,881
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	3.05	2.00	0.03	4.69	4.72	0.02	1.19	1.21	4,597
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.05	2.00	0.03	4.69	4.72	0.02	1.19	1.21	4,597
Annual	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	0.52	0.33	< 0.005	0.80	0.80	< 0.005	0.20	0.21	729
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.52	0.33	< 0.005	0.80	0.80	< 0.005	0.20	0.21	729

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	9.83
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	2.84
Total	—	—	—	—	—	—	—	—	12.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	9.83
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	2.84
Total	—	—	—	—	—	—	—	—	12.7
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	1.63
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.47
Total	—	—	—	—	—	—	—	—	2.10

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	9.83
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	2.84
Total	—	—	—	—	—	—	—	—	12.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	9.83
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	2.84
Total	—	—	—	—	—	—	—	—	12.7
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	1.63
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.47
Total	—	—	—	—	—	—	—	—	2.10

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Enclosed Parking with Elevator	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Total	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	10.2	—	—	—	—	—	—	—	—
Architectural Coatings	1.83	—	—	—	—	—	—	—	—
Landscape Equipment	2.45	0.21	0.02	—	0.02	0.01	—	0.01	70.2
Total	14.4	0.21	0.02	—	0.02	0.01	—	0.01	70.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	10.2	—	—	—	—	—	—	—	—
Architectural Coatings	1.83	—	—	—	—	—	—	—	—
Total	12.0	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	1.86	—	—	—	—	—	—	—	—
Architectural Coatings	0.33	—	—	—	—	—	—	—	—
Landscape Equipment	0.22	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.73
Total	2.41	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.73

4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	10.2	—	—	—	—	—	—	—	—
Architectural Coatings	1.83	—	—	—	—	—	—	—	—
Landscape Equipment	2.45	0.21	0.02	—	0.02	0.01	—	0.01	70.2
Total	14.4	0.21	0.02	—	0.02	0.01	—	0.01	70.2
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Consumer Products	10.2	—	—	—	—	—	—	—	—
Architectural Coatings	1.83	—	—	—	—	—	—	—	—
Total	12.0	0.00	0.00	—	0.00	0.00	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00

Consumer Products	1.86	—	—	—	—	—	—	—	—
Architectural Coatings	0.33	—	—	—	—	—	—	—	—
Landscape Equipment	0.22	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.73
Total	2.41	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.73

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	40.4
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	40.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	40.4
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	40.4
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	6.68
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00

Total	—	—	—	—	—	—	—	—	6.68

4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	40.4
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	40.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	40.4
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	40.4
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	6.68
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	6.68

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	414
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	414
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	414
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	414
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	68.6
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	68.6

4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	414
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	414
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Apartments Mid Rise	—	—	—	—	—	—	—	—	414
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	414
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	68.6
Enclosed Parking with Elevator	—	—	—	—	—	—	—	—	0.00
Total	—	—	—	—	—	—	—	—	68.6

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	3.40
Total	—	—	—	—	—	—	—	—	3.40
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	3.40
Total	—	—	—	—	—	—	—	—	3.40
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	0.56
Total	—	—	—	—	—	—	—	—	0.56

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	3.40
Total	—	—	—	—	—	—	—	—	3.40
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	3.40
Total	—	—	—	—	—	—	—	—	3.40
Annual	—	—	—	—	—	—	—	—	—
Apartments Mid Rise	—	—	—	—	—	—	—	—	0.56
Total	—	—	—	—	—	—	—	—	0.56

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Building Construction	Building Construction	3/15/2027	5/5/2028	5.00	300	—
Paving	Paving	6/3/2028	6/30/2028	5.00	20.0	—
Architectural Coating	Architectural Coating	5/6/2028	6/2/2028	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20

Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—
Building Construction	Worker	272	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	54.6	8.40	HHDT,MHDT
Building Construction	Hauling	6.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	4.40	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	54.5	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—
Building Construction	Worker	272	11.7	LDA,LDT1,LDT2
Building Construction	Vendor	54.6	8.40	HHDT,MHDT
Building Construction	Hauling	6.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	11.7	LDA,LDT1,LDT2
Paving	Vendor	—	8.40	HHDT,MHDT
Paving	Hauling	4.40	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	54.5	11.7	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.40	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	961,875	320,625	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Enclosed Parking with Elevator	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	387	0.03	< 0.005
2028	0.00	387	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	1,271	1,146	953	440,899	6,656	6,002	4,992	2,308,461
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Apartments Mid Rise	1,271	1,146	953	440,899	6,656	6,002	4,992	2,308,461
Enclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0

Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
961875	320,625	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,779,526	0.00	0.0330	0.0040	0.00
Enclosed Parking with Elevator	513,537	0.00	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Apartments Mid Rise	1,779,526	0.00	0.0330	0.0040	0.00
Enclosed Parking with Elevator	513,537	0.00	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	10,771,121	0.00
Enclosed Parking with Elevator	0.00	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Apartments Mid Rise	10,771,121	0.00
Enclosed Parking with Elevator	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)

Apartments Mid Rise	220	—
Enclosed Parking with Elevator	0.00	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Apartments Mid Rise	220	—
Enclosed Parking with Elevator	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	28.5
AQ-DPM	88.9
Drinking Water	43.3
Lead Risk Housing	22.8
Pesticides	15.5
Toxic Releases	34.2
Traffic	76.2
Effect Indicators	—
CleanUp Sites	97.7
Groundwater	94.0

Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	26.8
Cardio-vascular	29.2
Low Birth Weights	51.3
Socioeconomic Factor Indicators	—
Education	30.4
Housing	82.4
Linguistic	50.0
Poverty	48.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	60.61850379
Employed	47.36301809
Median HI	78.60900808
Education	—
Bachelor's or higher	89.42640832
High school enrollment	100
Preschool enrollment	59.01450019
Transportation	—
Auto Access	52.9449506
Active commuting	94.58488387

Social	—
2-parent households	20.4927499
Voting	82.65109714
Neighborhood	—
Alcohol availability	25.97202618
Park access	20.54407802
Retail density	95.8937508
Supermarket access	71.60272039
Tree canopy	68.57436161
Housing	—
Homeownership	32.22122418
Housing habitability	43.94969845
Low-inc homeowner severe housing cost burden	60.43885538
Low-inc renter severe housing cost burden	21.12151931
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	80.6
High Blood Pressure	94.9
Cancer (excluding skin)	85.3
Asthma	55.1
Coronary Heart Disease	95.4
Chronic Obstructive Pulmonary Disease	84.0
Diagnosed Diabetes	91.2
Life Expectancy at Birth	79.2
Cognitively Disabled	84.2
Physically Disabled	91.7

Heart Attack ER Admissions	89.7
Mental Health Not Good	54.9
Chronic Kidney Disease	95.6
Obesity	61.8
Pedestrian Injuries	95.5
Physical Health Not Good	76.2
Stroke	93.8
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	52.6
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	96.5
Elderly	97.6
English Speaking	52.1
Foreign-born	32.7
Outdoor Workers	92.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	20.6
Traffic Density	68.4
Traffic Access	87.4
Other Indices	—
Hardship	18.8
Other Decision Support	—
2016 Voting	79.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Santa Clara default clean energy provider is Silicon Valley power. Silicon Valley power 2023 residential rate = 0 lb /MWh.
Land Use	Estimated lot acreage for phase 3 using google earth. Number of units, parking spaces, and square footages from applicant.
Construction: Construction Phases	Defaults.
Construction: Off-Road Equipment	Defaults.
Construction: Trips and VMT	Building Construction = 900 concrete truck round trips (6 trips/day), Paving = Est. 44 asphalt truck round trips (4.4 trips/day).
Construction: On-Road Fugitive Dust	Air District BMPS - 15 mph. Required by San Jose and Santa Clara.
Operations: Vehicle Data	Provided trip gen with reduction adjustments.

Operations: Hearths	No hearths.
Operations: Energy Use	According to project applicant, project will use natural gas. Convert natural gas to electricity.
Operations: Water and Waste Water	Wastewater treatment 100 % aerobic - no septic tanks or lagoons.

24-147 University Station Res, Santa Clara and San Jose Existing Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-147 University Station Res, Santa Clara and San Jose Existing
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	31.0
Location	451 El Camino Real, Santa Clara, CA 95050, USA
County	Santa Clara
City	Santa Clara
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1821
EDFZ	1
Electric Utility	Silicon Valley Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Office Building	173	1000sqft	3.97	172,800	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	11.3	5.13	0.16	9.08	9.24	0.15	2.30	2.45	16,093
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	9.76	5.75	0.15	9.08	9.22	0.14	2.30	2.44	15,438
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	8.98	4.44	0.14	6.73	6.87	0.13	1.71	1.84	13,190
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.64	0.81	0.03	1.23	1.25	0.02	0.31	0.34	2,184

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Mobile	5.80	3.96	0.06	9.08	9.14	0.06	2.30	2.36	10,219
Area	5.42	0.06	0.01	—	0.01	0.01	—	0.01	31.0
Energy	0.06	1.10	0.08	—	0.08	0.08	—	0.08	5,214
Water	—	—	—	—	—	—	—	—	326

Waste	—	—	—	—	—	—	—	—	303
Refrig.	—	—	—	—	—	—	—	—	0.42
Total	11.3	5.13	0.16	9.08	9.24	0.15	2.30	2.45	16,093
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Mobile	5.51	4.65	0.06	9.08	9.14	0.06	2.30	2.36	9,594
Area	4.19	—	—	—	—	—	—	—	—
Energy	0.06	1.10	0.08	—	0.08	0.08	—	0.08	5,214
Water	—	—	—	—	—	—	—	—	326
Waste	—	—	—	—	—	—	—	—	303
Refrig.	—	—	—	—	—	—	—	—	0.42
Total	9.76	5.75	0.15	9.08	9.22	0.14	2.30	2.44	15,438
Average Daily	—	—	—	—	—	—	—	—	—
Mobile	4.12	3.31	0.05	6.73	6.78	0.05	1.71	1.75	7,331
Area	4.80	0.03	0.01	—	0.01	< 0.005	—	< 0.005	15.3
Energy	0.06	1.10	0.08	—	0.08	0.08	—	0.08	5,214
Water	—	—	—	—	—	—	—	—	326
Waste	—	—	—	—	—	—	—	—	303
Refrig.	—	—	—	—	—	—	—	—	0.42
Total	8.98	4.44	0.14	6.73	6.87	0.13	1.71	1.84	13,190
Annual	—	—	—	—	—	—	—	—	—
Mobile	0.75	0.60	0.01	1.23	1.24	0.01	0.31	0.32	1,214
Area	0.88	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.53
Energy	0.01	0.20	0.02	—	0.02	0.02	—	0.02	863
Water	—	—	—	—	—	—	—	—	53.9
Waste	—	—	—	—	—	—	—	—	50.2
Refrig.	—	—	—	—	—	—	—	—	0.07
Total	1.64	0.81	0.03	1.23	1.25	0.02	0.31	0.34	2,184

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
General Office Building	5.80	3.96	0.06	9.08	9.14	0.06	2.30	2.36	10,219
Total	5.80	3.96	0.06	9.08	9.14	0.06	2.30	2.36	10,219
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
General Office Building	5.51	4.65	0.06	9.08	9.14	0.06	2.30	2.36	9,594
Total	5.51	4.65	0.06	9.08	9.14	0.06	2.30	2.36	9,594
Annual	—	—	—	—	—	—	—	—	—
General Office Building	0.75	0.60	0.01	1.23	1.24	0.01	0.31	0.32	1,214
Total	0.75	0.60	0.01	1.23	1.24	0.01	0.31	0.32	1,214

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	3,895

Total	—	—	—	—	—	—	—	—	3,895
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	3,895
Total	—	—	—	—	—	—	—	—	3,895
Annual	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	645
Total	—	—	—	—	—	—	—	—	645

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
General Office Building	0.06	1.10	0.08	—	0.08	0.08	—	0.08	1,319
Total	0.06	1.10	0.08	—	0.08	0.08	—	0.08	1,319
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
General Office Building	0.06	1.10	0.08	—	0.08	0.08	—	0.08	1,319
Total	0.06	1.10	0.08	—	0.08	0.08	—	0.08	1,319
Annual	—	—	—	—	—	—	—	—	—
General Office Building	0.01	0.20	0.02	—	0.02	0.02	—	0.02	218
Total	0.01	0.20	0.02	—	0.02	0.02	—	0.02	218

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Consumer Products	3.70	—	—	—	—	—	—	—	—
Architectural Coatings	0.49	—	—	—	—	—	—	—	—
Landscape Equipment	1.23	0.06	0.01	—	0.01	0.01	—	0.01	31.0
Total	5.42	0.06	0.01	—	0.01	0.01	—	0.01	31.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Consumer Products	3.70	—	—	—	—	—	—	—	—
Architectural Coatings	0.49	—	—	—	—	—	—	—	—
Total	4.19	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Consumer Products	0.67	—	—	—	—	—	—	—	—
Architectural Coatings	0.09	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.53
Total	0.88	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	2.53

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	326
Total	—	—	—	—	—	—	—	—	326
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	326
Total	—	—	—	—	—	—	—	—	326
Annual	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	53.9
Total	—	—	—	—	—	—	—	—	53.9

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	303
Total	—	—	—	—	—	—	—	—	303
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	303
Total	—	—	—	—	—	—	—	—	303
Annual	—	—	—	—	—	—	—	—	—

General Office Building	—	—	—	—	—	—	—	—	50.2
Total	—	—	—	—	—	—	—	—	50.2

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	0.42
Total	—	—	—	—	—	—	—	—	0.42
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	0.42
Total	—	—	—	—	—	—	—	—	0.42
Annual	—	—	—	—	—	—	—	—	—
General Office Building	—	—	—	—	—	—	—	—	0.07
Total	—	—	—	—	—	—	—	—	0.07

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Office Building	1,761	399	126	486,465	12,869	2,917	922	3,555,240

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	259,200	86,400	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	180

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Office Building	3,657,940	387	0.0330	0.0040	4,104,050

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Office Building	30,712,392	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Office Building	161	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A

Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	28.5
AQ-DPM	88.9
Drinking Water	43.3
Lead Risk Housing	22.8
Pesticides	15.5
Toxic Releases	34.2
Traffic	76.2
Effect Indicators	—
CleanUp Sites	97.7
Groundwater	94.0
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	26.8
Cardio-vascular	29.2
Low Birth Weights	51.3
Socioeconomic Factor Indicators	—
Education	30.4
Housing	82.4
Linguistic	50.0
Poverty	48.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	60.61850379
Employed	47.36301809
Median HI	78.60900808
Education	—
Bachelor's or higher	89.42640832
High school enrollment	100
Preschool enrollment	59.01450019
Transportation	—
Auto Access	52.9449506
Active commuting	94.58488387
Social	—
2-parent households	20.4927499
Voting	82.65109714
Neighborhood	—
Alcohol availability	25.97202618
Park access	20.54407802
Retail density	95.8937508
Supermarket access	71.60272039
Tree canopy	68.57436161
Housing	—
Homeownership	32.22122418
Housing habitability	43.94969845
Low-inc homeowner severe housing cost burden	60.43885538
Low-inc renter severe housing cost burden	21.12151931

Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	80.6
High Blood Pressure	94.9
Cancer (excluding skin)	85.3
Asthma	55.1
Coronary Heart Disease	95.4
Chronic Obstructive Pulmonary Disease	84.0
Diagnosed Diabetes	91.2
Life Expectancy at Birth	79.2
Cognitively Disabled	84.2
Physically Disabled	91.7
Heart Attack ER Admissions	89.7
Mental Health Not Good	54.9
Chronic Kidney Disease	95.6
Obesity	61.8
Pedestrian Injuries	95.5
Physical Health Not Good	76.2
Stroke	93.8
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	52.6
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0

Children	96.5
Elderly	97.6
English Speaking	52.1
Foreign-born	32.7
Outdoor Workers	92.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	20.6
Traffic Density	68.4
Traffic Access	87.4
Other Indices	—
Hardship	18.8
Other Decision Support	—
2016 Voting	79.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Operations: Vehicle Data	Provided trip gen with reduction adjustments.
Operations: Water and Waste Water	Wastewater treatment 100% aerobic - no septic tanks or lagoons.

24-147 University Station Res, Santa Clara and San Jose BMPs T4F Phase 1 Site Preparation HRA Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-147 University Station Res, Santa Clara and San Jose BMPs T4F Phase 1 Site Preparation HRA
Construction Start Date	1/5/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	31.0
Location	451 El Camino Real, Santa Clara, CA 95050, USA
County	Santa Clara
City	Santa Clara
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1821
EDFZ	1
Electric Utility	Silicon Valley Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	297	Dwelling Unit	11.0	475,000	0.00	—	888	—

Condo/Townhouse	111	Dwelling Unit	0.00	257,500	0.00	—	332	—
Enclosed Parking with Elevator	359	Space	0.00	139,116	0.00	—	—	—
Parking Lot	12.0	Space	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.21	1.86	0.06	< 0.005	0.06	0.05	< 0.005	0.05	438
Mit.	0.06	0.81	0.01	< 0.005	0.01	0.01	< 0.005	0.01	438
% Reduced	70%	56%	87%	—	82%	85%	—	84%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.51	15.1	0.58	7.84	8.35	0.54	1.36	1.90	3,145
Mit.	0.35	4.46	0.05	7.84	7.89	0.05	1.36	1.41	3,145
% Reduced	76%	71%	91%	—	6%	90%	—	26%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.26	2.47	0.09	0.73	0.83	0.09	0.21	0.30	509
Mit.	0.06	0.57	0.01	0.73	0.74	0.01	0.21	0.22	509
% Reduced	78%	77%	91%	—	10%	90%	—	26%	—

Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	0.05	0.45	0.02	0.13	0.15	0.02	0.04	0.05	84.2
Mit.	0.01	0.10	< 0.005	0.13	0.14	< 0.005	0.04	0.04	84.2
% Reduced	78%	77%	91%	—	10%	90%	—	26%	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2026	0.21	1.86	0.06	< 0.005	0.06	0.05	< 0.005	0.05	438
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2026	1.51	15.1	0.58	7.84	8.35	0.54	1.36	1.90	3,145
Average Daily	—	—	—	—	—	—	—	—	—
2026	0.26	2.47	0.09	0.73	0.83	0.09	0.21	0.30	509
Annual	—	—	—	—	—	—	—	—	—
2026	0.05	0.45	0.02	0.13	0.15	0.02	0.04	0.05	84.2

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2026	0.06	0.81	0.01	< 0.005	0.01	0.01	< 0.005	0.01	438
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2026	0.35	4.46	0.05	7.84	7.89	0.05	1.36	1.41	3,145
Average Daily	—	—	—	—	—	—	—	—	—

2026	0.06	0.57	0.01	0.73	0.74	0.01	0.21	0.22	509
Annual	—	—	—	—	—	—	—	—	—
2026	0.01	0.10	< 0.005	0.13	0.14	< 0.005	0.04	0.04	84.2

3. Construction Emissions Details

3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.39	12.9	0.51	—	0.51	0.47	—	0.47	2,503
Demolition	—	—	—	7.72	7.72	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.71	0.03	—	0.03	0.03	—	0.03	137
Demolition	—	—	—	0.42	0.42	—	0.06	0.06	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	0.01	—	0.01	< 0.005	—	< 0.005	22.7
Demolition	—	—	—	0.08	0.08	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	2.18	0.01	0.11	0.11	0.01	0.03	0.04	632
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.12	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	34.5
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.71

3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.25	2.27	0.05	—	0.05	0.05	—	0.05	2,503
Demolition	—	—	—	7.72	7.72	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.01	0.12	< 0.005	—	< 0.005	< 0.005	—	< 0.005	137
Demolition	—	—	—	0.42	0.42	—	0.06	0.06	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	22.7
Demolition	—	—	—	0.08	0.08	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.07	2.18	0.01	0.11	0.11	0.01	0.03	0.04	632
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.59
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.12	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	34.5
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.10
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.71

3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e

Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.24	11.0	0.51	—	0.51	0.47	—	0.47	2,072
Dust From Material Movement	—	—	—	2.44	2.44	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.30	0.01	—	0.01	0.01	—	0.01	56.8
Dust From Material Movement	—	—	—	0.07	0.07	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.40
Dust From Material Movement	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.01	0.04	—	0.04	0.04	—	0.04	2,072
Dust From Material Movement	—	—	—	2.44	2.44	—	1.17	1.17	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	56.8
Dust From Material Movement	—	—	—	0.07	0.07	—	0.03	0.03	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	9.40
Dust From Material Movement	—	—	—	0.01	0.01	—	0.01	0.01	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	6.47
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.18
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.03
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.42	12.9	0.58	—	0.58	0.53	—	0.53	2,463
Dust From Material Movement	—	—	—	2.78	2.78	—	1.34	1.34	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.06	0.05	—	0.05	0.04	—	0.04	202
Dust From Material Movement	—	—	—	0.23	0.23	—	0.11	0.11	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.19	0.01	—	0.01	0.01	—	0.01	33.5
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	1.70	< 0.005	0.08	0.09	< 0.005	0.02	0.03	491
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	40.2

Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.66

3.6. Grading (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.23	1.20	0.05	—	0.05	0.05	—	0.05	2,463
Dust From Material Movement	—	—	—	2.78	2.78	—	1.34	1.34	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.10	< 0.005	—	< 0.005	< 0.005	—	< 0.005	202
Dust From Material Movement	—	—	—	0.23	0.23	—	0.11	0.11	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	33.5
Dust From Material Movement	—	—	—	0.04	0.04	—	0.02	0.02	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	8.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.06	1.70	< 0.005	0.08	0.09	< 0.005	0.02	0.03	491
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.71
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.14	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	40.2
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.12
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	6.66

3.7. Trenching (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.86	0.06	—	0.06	0.05	—	0.05	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.20	1.86	0.06	—	0.06	0.05	—	0.05	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.15	< 0.005	—	< 0.005	< 0.005	—	< 0.005	35.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.03	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.90
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.31
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Trenching (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.81	0.01	—	0.01	0.01	—	0.01	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.81	0.01	—	0.01	0.01	—	0.01	433
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	35.6
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	5.90
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	4.31

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.35
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/5/2026	1/30/2026	5.00	20.0	—
Site Preparation	Site Preparation	1/31/2026	2/13/2026	5.00	10.0	—
Grading	Grading	2/14/2026	3/27/2026	5.00	30.0	—
Trenching	Trenching	3/28/2026	5/10/2026	5.00	30.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Trenching	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Demolition	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	8.00	84.0	0.37
Site Preparation	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Tier 4 Final	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Trenching	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Trenching	Excavators	Diesel	Tier 4 Final	1.00	8.00	36.0	0.38

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	1.00	LDA,LDT1,LDT2
Demolition	Vendor	—	1.00	HHDT,MHDT
Demolition	Hauling	118	1.00	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	1.00	LDA,LDT1,LDT2
Site Preparation	Vendor	—	1.00	HHDT,MHDT
Site Preparation	Hauling	0.00	1.00	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	1.00	LDA,LDT1,LDT2
Grading	Vendor	—	1.00	HHDT,MHDT
Grading	Hauling	91.7	1.00	HHDT
Grading	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	1.00	LDA,LDT1,LDT2
Trenching	Vendor	—	1.00	HHDT,MHDT
Trenching	Hauling	0.00	1.00	HHDT
Trenching	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	1.00	LDA,LDT1,LDT2
Demolition	Vendor	—	1.00	HHDT,MHDT
Demolition	Hauling	118	1.00	HHDT

Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	1.00	LDA,LDT1,LDT2
Site Preparation	Vendor	—	1.00	HHDT,MHDT
Site Preparation	Hauling	0.00	1.00	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	1.00	LDA,LDT1,LDT2
Grading	Vendor	—	1.00	HHDT,MHDT
Grading	Hauling	91.7	1.00	HHDT
Grading	Onsite truck	—	—	HHDT
Trenching	—	—	—	—
Trenching	Worker	5.00	1.00	LDA,LDT1,LDT2
Trenching	Vendor	—	1.00	HHDT,MHDT
Trenching	Hauling	0.00	1.00	HHDT
Trenching	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	152,950	—
Site Preparation	—	—	9.38	0.00	—
Grading	22,000	—	30.0	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Condo/Townhouse	—	0%
Enclosed Parking with Elevator	0.00	100%
Parking Lot	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	387	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm

Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A

Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	28.5
AQ-DPM	88.9
Drinking Water	43.3
Lead Risk Housing	22.8
Pesticides	15.5
Toxic Releases	34.2
Traffic	76.2
Effect Indicators	—

CleanUp Sites	97.7
Groundwater	94.0
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	26.8
Cardio-vascular	29.2
Low Birth Weights	51.3
Socioeconomic Factor Indicators	—
Education	30.4
Housing	82.4
Linguistic	50.0
Poverty	48.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	60.61850379
Employed	47.36301809
Median HI	78.60900808
Education	—
Bachelor's or higher	89.42640832
High school enrollment	100
Preschool enrollment	59.01450019
Transportation	—

Auto Access	52.9449506
Active commuting	94.58488387
Social	—
2-parent households	20.4927499
Voting	82.65109714
Neighborhood	—
Alcohol availability	25.97202618
Park access	20.54407802
Retail density	95.8937508
Supermarket access	71.60272039
Tree canopy	68.57436161
Housing	—
Homeownership	32.22122418
Housing habitability	43.94969845
Low-inc homeowner severe housing cost burden	60.43885538
Low-inc renter severe housing cost burden	21.12151931
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	80.6
High Blood Pressure	94.9
Cancer (excluding skin)	85.3
Asthma	55.1
Coronary Heart Disease	95.4
Chronic Obstructive Pulmonary Disease	84.0
Diagnosed Diabetes	91.2
Life Expectancy at Birth	79.2

Cognitively Disabled	84.2
Physically Disabled	91.7
Heart Attack ER Admissions	89.7
Mental Health Not Good	54.9
Chronic Kidney Disease	95.6
Obesity	61.8
Pedestrian Injuries	95.5
Physical Health Not Good	76.2
Stroke	93.8
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	52.6
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	96.5
Elderly	97.6
English Speaking	52.1
Foreign-born	32.7
Outdoor Workers	92.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	20.6
Traffic Density	68.4
Traffic Access	87.4
Other Indices	—
Hardship	18.8
Other Decision Support	—

2016 Voting	79.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total lot acreage, total number of townhomes and apartments, square footages, and number of parking spaces provided by filled out construction worksheet.
Construction: Construction Phases	Defaults - added trenching. Phase only includes demolition, site prep, grading, and trenching.
Construction: Off-Road Equipment	Information provided from filled out construction worksheet.
Construction: Trips and VMT	Paving = 270,550-sf of asphalt demolished (30 trips/day). HRA run = 1 mile for localized emissions.
Construction: On-Road Fugitive Dust	Air District recommended BMPs 15 mph. Required by San Jose and Santa Clara general plans.

Operations: Hearths	No hearths.
Operations: Energy Use	Project confirmed all-electric.
Operations: Water and Waste Water	Wastewater treatment 100% aerobic - no septic tanks or lagoons.
Characteristics: Utility Information	Santa Clara default clean energy provider is Silicon Valley power. Silicon Valley power 2023 residential rate = 0 lb /MWh.
Operations: Vehicle Data	Provided trip gen with reduction adjustments.

24-147 University Station, Santa Clara and San Jose Phase 2 Townhomes BMPs T4F 2027 HRA Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-147 University Station, Santa Clara and San Jose Phase 2 Townhomes BMPs T4F 2027 HRA
Construction Start Date	5/11/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	31.0
Location	451 El Camino Real, Santa Clara, CA 95050, USA
County	Santa Clara
City	Santa Clara
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1821
EDFZ	1
Electric Utility	Silicon Valley Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse High Rise	111	Dwelling Unit	7.30	257,500	0.00	—	332	—

Parking Lot	12.0	Space	0.00	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.24	8.84	0.29	0.07	0.36	0.27	0.02	0.29	1,952
Mit.	0.52	4.61	0.06	0.07	0.13	0.06	0.02	0.08	1,952
% Reduced	58%	48%	78%	—	63%	77%	—	73%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	363	8.87	0.29	0.07	0.36	0.27	0.02	0.29	1,948
Mit.	363	4.63	0.06	0.07	0.13	0.06	0.02	0.08	1,948
% Reduced	< 0.5%	48%	78%	—	63%	77%	—	73%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	10.1	4.07	0.13	0.03	0.17	0.12	0.01	0.13	896
Mit.	9.98	2.12	0.03	0.03	0.06	0.03	0.01	0.04	896
% Reduced	1%	48%	78%	—	63%	77%	—	73%	—
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.83	0.74	0.02	0.01	0.03	0.02	< 0.005	0.02	148
Mit.	1.82	0.39	0.01	0.01	0.01	0.01	< 0.005	0.01	148

% Reduced	1%	48%	78%	—	63%	77%	—	73%	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2026	1.24	8.84	0.29	0.07	0.36	0.27	0.02	0.29	1,952
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2026	1.23	8.87	0.29	0.07	0.36	0.27	0.02	0.29	1,948
2027	363	8.54	0.26	0.07	0.33	0.24	0.02	0.26	1,945
Average Daily	—	—	—	—	—	—	—	—	—
2026	0.56	4.07	0.13	0.03	0.17	0.12	0.01	0.13	896
2027	10.1	0.87	0.03	0.01	0.03	0.03	< 0.005	0.03	198
Annual	—	—	—	—	—	—	—	—	—
2026	0.10	0.74	0.02	0.01	0.03	0.02	< 0.005	0.02	148
2027	1.83	0.16	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	32.8

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2026	0.52	4.61	0.06	0.07	0.13	0.06	0.02	0.08	1,952
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2026	0.51	4.63	0.06	0.07	0.13	0.06	0.02	0.08	1,948
2027	363	4.62	0.06	0.07	0.13	0.06	0.02	0.08	1,945

Average Daily	—	—	—	—	—	—	—	—	—
2026	0.23	2.12	0.03	0.03	0.06	0.03	0.01	0.04	896
2027	9.98	0.45	0.01	0.01	0.01	0.01	< 0.005	0.01	198
Annual	—	—	—	—	—	—	—	—	—
2026	0.04	0.39	0.01	0.01	0.01	0.01	< 0.005	0.01	148
2027	1.82	0.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	32.8

3. Construction Emissions Details

3.1. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	8.57	0.29	—	0.29	0.27	—	0.27	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	8.57	0.29	—	0.29	0.27	—	0.27	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.47	3.94	0.13	—	0.13	0.12	—	0.12	831
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.72	0.02	—	0.02	0.02	—	0.02	138

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.21	0.06	0.00	0.06	0.06	0.00	0.01	0.01	72.3
Vendor	0.01	0.15	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.7
Hauling	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	21.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.20	0.07	0.00	0.06	0.06	0.00	0.01	0.01	68.9
Vendor	0.01	0.16	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.8
Hauling	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	21.6
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.09	0.03	0.00	0.03	0.03	0.00	0.01	0.01	31.6
Vendor	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	23.3
Hauling	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	9.92
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.24
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.86
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.64

3.2. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.33	0.06	—	0.06	0.06	—	0.06	1,807

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.33	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.99	0.03	—	0.03	0.03	—	0.03	831
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.36	0.01	—	0.01	0.01	—	0.01	138
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.21	0.06	0.00	0.06	0.06	0.00	0.01	0.01	72.3
Vendor	0.01	0.15	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.7
Hauling	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	21.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.20	0.07	0.00	0.06	0.06	0.00	0.01	0.01	68.9
Vendor	0.01	0.16	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	50.8
Hauling	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	21.6
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.09	0.03	0.00	0.03	0.03	0.00	0.01	0.01	31.6
Vendor	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	23.3
Hauling	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	9.92
Annual	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.24

Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	3.86
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.64

3.3. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.97	8.25	0.26	—	0.26	0.24	—	0.24	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.69	0.02	—	0.02	0.02	—	0.02	152
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	< 0.005	—	< 0.005	< 0.005	—	< 0.005	25.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.20	0.07	0.00	0.06	0.06	0.00	0.01	0.01	67.1
Vendor	0.01	0.15	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	49.9
Hauling	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	21.2
Average Daily	—	—	—	—	—	—	—	—	—

Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.68
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.19
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.78
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.94
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.69
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29

3.4. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.30	4.33	0.06	—	0.06	0.06	—	0.06	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.36	0.01	—	0.01	0.01	—	0.01	152
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	25.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.20	0.07	0.00	0.06	0.06	0.00	0.01	0.01	67.1
Vendor	0.01	0.15	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	49.9
Hauling	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	21.2
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.68
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.19
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.78
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.94
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.69
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.29

3.5. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.46	4.30	0.17	—	0.17	0.16	—	0.16	995
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.12	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.3
Paving	0.00	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.51
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.32	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	93.4
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.55
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42

3.6. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.30	0.03	—	0.03	0.03	—	0.03	995
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	27.3
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	4.51
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	10.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	0.32	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	93.4
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.29
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	2.55
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.42

3.7. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	0.02	—	0.02	0.02	—	0.02	134
Architectural Coatings	363	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.67
Architectural Coatings	9.94	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.61
Architectural Coatings	1.81	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	13.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.65	< 0.005	—	< 0.005	< 0.005	—	< 0.005	134
Architectural Coatings	363	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	3.67
Architectural Coatings	9.94	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.61
Architectural Coatings	1.81	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	13.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.37
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.06
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Building Construction	Building Construction	5/11/2026	2/12/2027	5.00	200	—
Paving	Paving	2/27/2027	3/14/2027	5.00	10.0	—
Architectural Coating	Architectural Coating	2/13/2027	2/26/2027	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	3.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Paving	Pavers	Diesel	Tier 4 Final	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	1.00	8.00	89.0	0.36

Paving	Rollers	Diesel	Tier 4 Final	1.00	7.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—
Building Construction	Worker	79.9	1.00	LDA,LDT1,LDT2
Building Construction	Vendor	11.9	1.00	HHDT,MHDT
Building Construction	Hauling	4.04	1.00	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	1.00	LDA,LDT1,LDT2
Paving	Vendor	—	1.00	HHDT,MHDT
Paving	Hauling	17.8	1.00	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	16.0	1.00	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	1.00	HHDT,MHDT
Architectural Coating	Hauling	0.00	1.00	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—

Building Construction	Worker	79.9	1.00	LDA,LDT1,LDT2
Building Construction	Vendor	11.9	1.00	HHDT,MHDT
Building Construction	Hauling	4.04	1.00	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	1.00	LDA,LDT1,LDT2
Paving	Vendor	—	1.00	HHDT,MHDT
Paving	Hauling	17.8	1.00	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	16.0	1.00	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	1.00	HHDT,MHDT
Architectural Coating	Hauling	0.00	1.00	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	521,438	173,813	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse High Rise	—	0%
Parking Lot	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	387	0.03	< 0.005
2027	0.00	387	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	28.5
AQ-DPM	88.9
Drinking Water	43.3
Lead Risk Housing	22.8
Pesticides	15.5
Toxic Releases	34.2
Traffic	76.2
Effect Indicators	—
CleanUp Sites	97.7
Groundwater	94.0

Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	26.8
Cardio-vascular	29.2
Low Birth Weights	51.3
Socioeconomic Factor Indicators	—
Education	30.4
Housing	82.4
Linguistic	50.0
Poverty	48.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	60.61850379
Employed	47.36301809
Median HI	78.60900808
Education	—
Bachelor's or higher	89.42640832
High school enrollment	100
Preschool enrollment	59.01450019
Transportation	—
Auto Access	52.9449506
Active commuting	94.58488387

Social	—
2-parent households	20.4927499
Voting	82.65109714
Neighborhood	—
Alcohol availability	25.97202618
Park access	20.54407802
Retail density	95.8937508
Supermarket access	71.60272039
Tree canopy	68.57436161
Housing	—
Homeownership	32.22122418
Housing habitability	43.94969845
Low-inc homeowner severe housing cost burden	60.43885538
Low-inc renter severe housing cost burden	21.12151931
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	80.6
High Blood Pressure	94.9
Cancer (excluding skin)	85.3
Asthma	55.1
Coronary Heart Disease	95.4
Chronic Obstructive Pulmonary Disease	84.0
Diagnosed Diabetes	91.2
Life Expectancy at Birth	79.2
Cognitively Disabled	84.2
Physically Disabled	91.7

Heart Attack ER Admissions	89.7
Mental Health Not Good	54.9
Chronic Kidney Disease	95.6
Obesity	61.8
Pedestrian Injuries	95.5
Physical Health Not Good	76.2
Stroke	93.8
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	52.6
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	96.5
Elderly	97.6
English Speaking	52.1
Foreign-born	32.7
Outdoor Workers	92.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	20.6
Traffic Density	68.4
Traffic Access	87.4
Other Indices	—
Hardship	18.8
Other Decision Support	—
2016 Voting	79.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Characteristics: Utility Information	Santa Clara default clean energy provider is Silicon Valley power. Silicon Valley power 2023 residential rate = 0 lb /MWh.
Construction: Construction Phases	Phase 2 townhomes only includes building construction, arch coating, and paving. Default work days.
Land Use	Estimated phase 2 acreage from google earth. Number or units, parking spaces, and sf from applicant.
Construction: Off-Road Equipment	Defaults reviewed and confirmed by applicant.
Construction: Trips and VMT	Building Construction = 404 concrete truck round trips (4.04 trips/day), Paving = est. 59 asphalt truck round trips (17.8 trips/day). HRA run = 1 mile for localized emissions.
Construction: On-Road Fugitive Dust	Air District BMPS = 15 mph. Required by Santa Clara and San Jose.

Operations: Vehicle Data	Provided trip gen.
Operations: Hearths	No hearths.
Operations: Energy Use	According to project applicant, project will be all-electric. Convert natural gas to electricity.
Operations: Water and Waste Water	Wastewater treatment 100% aerobic - no septic tanks or lagoons.

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	24-147 University Station Santa Clara and San Jose Phase 3 Apartments BMPs T4F 2030 HRA
Construction Start Date	3/15/2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.00
Precipitation (days)	31.0
Location	451 El Camino Real, Santa Clara, CA 95050, USA
County	Santa Clara
City	Santa Clara
Air District	Bay Area AQMD
Air Basin	San Francisco Bay Area
TAZ	1821
EDFZ	1
Electric Utility	Silicon Valley Power
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Apartments Mid Rise	297	Dwelling Unit	3.90	475,000	0.00	—	888	—

Enclosed Parking with Elevator	359	Space	0.00	139,116	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Unmit.	335	10.2	0.34	0.12	0.46	0.31	0.03	0.34	2,716
Mit.	335	3.67	0.08	0.12	0.20	0.07	0.03	0.10	2,716
% Reduced	< 0.5%	64%	78%	—	57%	76%	—	70%	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Unmit.	1.72	10.3	0.34	0.12	0.46	0.31	0.03	0.34	2,711
Mit.	1.02	3.74	0.08	0.12	0.20	0.07	0.03	0.10	2,711
% Reduced	41%	64%	78%	—	57%	76%	—	70%	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—
Unmit.	18.8	5.88	0.19	0.07	0.26	0.18	0.02	0.19	1,549
Mit.	18.6	2.12	0.04	0.07	0.11	0.04	0.02	0.06	1,549
% Reduced	1%	64%	78%	—	57%	76%	—	70%	—
Annual (Max)	—	—	—	—	—	—	—	—	—
Unmit.	3.43	1.07	0.04	0.01	0.05	0.03	< 0.005	0.04	257

Mit.	3.39	0.39	0.01	0.01	0.02	0.01	< 0.005	0.01	257
% Reduced	1%	64%	78%	—	57%	76%	—	70%	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2027	1.75	10.2	0.34	0.12	0.46	0.31	0.03	0.34	2,716
2028	335	9.76	0.30	0.12	0.42	0.28	0.03	0.31	2,709
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2027	1.72	10.3	0.34	0.12	0.46	0.31	0.03	0.34	2,711
2028	1.65	9.82	0.30	0.12	0.42	0.28	0.03	0.31	2,706
Average Daily	—	—	—	—	—	—	—	—	—
2027	0.98	5.88	0.19	0.07	0.26	0.18	0.02	0.19	1,549
2028	18.8	2.83	0.09	0.03	0.12	0.08	0.01	0.09	760
Annual	—	—	—	—	—	—	—	—	—
2027	0.18	1.07	0.04	0.01	0.05	0.03	< 0.005	0.04	257
2028	3.43	0.52	0.02	0.01	0.02	0.01	< 0.005	0.02	126

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—
2027	1.04	3.67	0.08	0.12	0.20	0.07	0.03	0.10	2,716
2028	335	3.65	0.08	0.12	0.20	0.07	0.03	0.10	2,709

Daily - Winter (Max)	—	—	—	—	—	—	—	—	—
2027	1.02	3.74	0.08	0.12	0.20	0.07	0.03	0.10	2,711
2028	0.99	3.71	0.08	0.12	0.20	0.07	0.03	0.10	2,706
Average Daily	—	—	—	—	—	—	—	—	—
2027	0.58	2.12	0.04	0.07	0.11	0.04	0.02	0.06	1,549
2028	18.6	1.06	0.02	0.03	0.05	0.02	0.01	0.03	760
Annual	—	—	—	—	—	—	—	—	—
2027	0.11	0.39	0.01	0.01	0.02	0.01	< 0.005	0.01	257
2028	3.39	0.19	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	126

3. Construction Emissions Details

3.1. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	0.34	—	0.34	0.31	—	0.31	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	0.34	—	0.34	0.31	—	0.31	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	5.37	0.19	—	0.19	0.18	—	0.18	1,374

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.98	0.04	—	0.04	0.03	—	0.03	228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.69	0.17	0.00	0.10	0.10	0.00	0.02	0.02	146
Vendor	0.03	0.59	< 0.005	0.02	0.02	< 0.005	0.01	0.01	144
Hauling	< 0.005	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	20.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.66	0.20	0.00	0.10	0.10	0.00	0.02	0.02	141
Vendor	0.02	0.62	< 0.005	0.02	0.02	< 0.005	0.01	0.01	145
Hauling	< 0.005	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	20.9
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.37	0.11	0.00	0.05	0.05	0.00	0.01	0.01	80.5
Vendor	0.01	0.35	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	82.4
Hauling	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.9
Annual	—	—	—	—	—	—	—	—	—
Worker	0.07	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	13.3
Vendor	< 0.005	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	13.6
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.97

3.2. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.82	0.07	—	0.07	0.07	—	0.07	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.82	0.07	—	0.07	0.07	—	0.07	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.61	0.04	—	0.04	0.04	—	0.04	1,374
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.29	0.01	—	0.01	0.01	—	0.01	228
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.69	0.17	0.00	0.10	0.10	0.00	0.02	0.02	146
Vendor	0.03	0.59	< 0.005	0.02	0.02	< 0.005	0.01	0.01	144
Hauling	< 0.005	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	20.8
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.66	0.20	0.00	0.10	0.10	0.00	0.02	0.02	141
Vendor	0.02	0.62	< 0.005	0.02	0.02	< 0.005	0.01	0.01	145
Hauling	< 0.005	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	20.9
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.37	0.11	0.00	0.05	0.05	0.00	0.01	0.01	80.5

Vendor	0.01	0.35	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	82.4
Hauling	< 0.005	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	11.9
Annual	—	—	—	—	—	—	—	—	—
Worker	0.07	0.02	0.00	0.01	0.01	0.00	< 0.005	< 0.005	13.3
Vendor	< 0.005	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	13.6
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	1.97

3.3. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	0.30	—	0.30	0.28	—	0.28	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	0.30	—	0.30	0.28	—	0.28	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	2.20	0.07	—	0.07	0.07	—	0.07	593
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.40	0.01	—	0.01	0.01	—	0.01	98.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.66	0.16	0.00	0.10	0.10	0.00	0.02	0.02	143
Vendor	0.03	0.58	< 0.005	0.02	0.02	< 0.005	0.01	0.01	141
Hauling	< 0.005	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	20.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.63	0.20	0.00	0.10	0.10	0.00	0.02	0.02	138
Vendor	0.02	0.61	< 0.005	0.02	0.02	< 0.005	0.01	0.01	142
Hauling	< 0.005	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	20.5
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.15	0.04	0.00	0.02	0.02	0.00	0.01	0.01	34.1
Vendor	0.01	0.15	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	34.7
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.04
Annual	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.65
Vendor	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.75
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.83

3.4. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.33	2.81	0.07	—	0.07	0.07	—	0.07	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.33	2.81	0.07	—	0.07	0.07	—	0.07	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.69	0.02	—	0.02	0.02	—	0.02	593
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.13	< 0.005	—	< 0.005	< 0.005	—	< 0.005	98.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.66	0.16	0.00	0.10	0.10	0.00	0.02	0.02	143
Vendor	0.03	0.58	< 0.005	0.02	0.02	< 0.005	0.01	0.01	141
Hauling	< 0.005	0.09	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	20.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Worker	0.63	0.20	0.00	0.10	0.10	0.00	0.02	0.02	138
Vendor	0.02	0.61	< 0.005	0.02	0.02	< 0.005	0.01	0.01	142
Hauling	< 0.005	0.10	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	20.5
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.15	0.04	0.00	0.02	0.02	0.00	0.01	0.01	34.1
Vendor	0.01	0.15	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	34.7
Hauling	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.04
Annual	—	—	—	—	—	—	—	—	—
Worker	0.03	0.01	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	5.65
Vendor	< 0.005	0.03	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	5.75
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.83

3.5. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	0.26	—	0.26	0.24	—	0.24	1,516
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.36	0.01	—	0.01	0.01	—	0.01	83.1
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.8
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	14.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.82
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14

3.6. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	1.93	0.03	—	0.03	0.03	—	0.03	1,516
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	< 0.005	—	< 0.005	< 0.005	—	< 0.005	83.1
Paving	0.00	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.02	< 0.005	—	< 0.005	< 0.005	—	< 0.005	13.8
Paving	0.00	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.04	0.01	0.00	0.01	0.01	0.00	< 0.005	< 0.005	7.87
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.07	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	14.9
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.82
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.14

3.7. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.81	0.02	—	0.02	0.01	—	0.01	134
Architectural Coatings	334	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.34
Architectural Coatings	18.3	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.22
Architectural Coatings	3.34	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.13	0.03	0.00	0.02	0.02	0.00	< 0.005	< 0.005	28.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Onsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.65	< 0.005	—	< 0.005	< 0.005	—	< 0.005	134
Architectural Coatings	334	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.04	< 0.005	—	< 0.005	< 0.005	—	< 0.005	7.34
Architectural Coatings	18.3	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.01	< 0.005	—	< 0.005	< 0.005	—	< 0.005	1.22
Architectural Coatings	3.34	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Worker	0.13	0.03	0.00	0.02	0.02	0.00	< 0.005	< 0.005	28.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	1.52
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.25
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—

—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Building Construction	Building Construction	3/15/2027	5/5/2028	5.00	300	—
Paving	Paving	6/3/2028	6/30/2028	5.00	20.0	—
Architectural Coating	Architectural Coating	5/6/2028	6/2/2028	5.00	20.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38

Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Tier 4 Final	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—
Building Construction	Worker	272	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	54.6	0.50	HHDT,MHDT
Building Construction	Hauling	6.00	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	4.40	0.50	HHDT

Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	54.5	0.50	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Building Construction	—	—	—	—
Building Construction	Worker	272	0.50	LDA,LDT1,LDT2
Building Construction	Vendor	54.6	0.50	HHDT,MHDT
Building Construction	Hauling	6.00	0.50	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	0.50	LDA,LDT1,LDT2
Paving	Vendor	—	0.50	HHDT,MHDT
Paving	Hauling	4.40	0.50	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	54.5	0.50	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	0.50	HHDT,MHDT
Architectural Coating	Hauling	0.00	0.50	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	961,875	320,625	0.00	0.00	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Apartments Mid Rise	—	0%
Enclosed Parking with Elevator	0.00	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00	387	0.03	< 0.005
2028	0.00	387	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	11.6	annual days of extreme heat
Extreme Precipitation	2.55	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	20.8
AQ-PM	28.5

AQ-DPM	88.9
Drinking Water	43.3
Lead Risk Housing	22.8
Pesticides	15.5
Toxic Releases	34.2
Traffic	76.2
Effect Indicators	—
CleanUp Sites	97.7
Groundwater	94.0
Haz Waste Facilities/Generators	86.6
Impaired Water Bodies	0.00
Solid Waste	0.00
Sensitive Population	—
Asthma	26.8
Cardio-vascular	29.2
Low Birth Weights	51.3
Socioeconomic Factor Indicators	—
Education	30.4
Housing	82.4
Linguistic	50.0
Poverty	48.2
Unemployment	19.6

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	60.61850379

Employed	47.36301809
Median HI	78.60900808
Education	—
Bachelor's or higher	89.42640832
High school enrollment	100
Preschool enrollment	59.01450019
Transportation	—
Auto Access	52.9449506
Active commuting	94.58488387
Social	—
2-parent households	20.4927499
Voting	82.65109714
Neighborhood	—
Alcohol availability	25.97202618
Park access	20.54407802
Retail density	95.8937508
Supermarket access	71.60272039
Tree canopy	68.57436161
Housing	—
Homeownership	32.22122418
Housing habitability	43.94969845
Low-inc homeowner severe housing cost burden	60.43885538
Low-inc renter severe housing cost burden	21.12151931
Uncrowded housing	56.30694213
Health Outcomes	—
Insured adults	87.18080328
Arthritis	94.7
Asthma ER Admissions	80.6

High Blood Pressure	94.9
Cancer (excluding skin)	85.3
Asthma	55.1
Coronary Heart Disease	95.4
Chronic Obstructive Pulmonary Disease	84.0
Diagnosed Diabetes	91.2
Life Expectancy at Birth	79.2
Cognitively Disabled	84.2
Physically Disabled	91.7
Heart Attack ER Admissions	89.7
Mental Health Not Good	54.9
Chronic Kidney Disease	95.6
Obesity	61.8
Pedestrian Injuries	95.5
Physical Health Not Good	76.2
Stroke	93.8
Health Risk Behaviors	—
Binge Drinking	32.5
Current Smoker	52.6
No Leisure Time for Physical Activity	67.1
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	96.5
Elderly	97.6
English Speaking	52.1
Foreign-born	32.7
Outdoor Workers	92.4

Climate Change Adaptive Capacity	—
Impervious Surface Cover	20.6
Traffic Density	68.4
Traffic Access	87.4
Other Indices	—
Hardship	18.8
Other Decision Support	—
2016 Voting	79.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	46.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Characteristics: Utility Information	Santa Clara default clean energy provider is Silicon Valley power. Silicon Valley power 2023 residential rate = 0 lb /MWh.
Land Use	Estimated lot acreage for phase 3 using google earth. Number of units, parking spaces, and square footages from applicant.
Construction: Construction Phases	Defaults.
Construction: Off-Road Equipment	Defaults.
Construction: Trips and VMT	Building Construction = 900 concrete truck round trips (6 trips/day), Paving = Est. 44 asphalt truck round trips (4.4 trips/day). HRA run = 0.5 mile for localized emissions.
Construction: On-Road Fugitive Dust	Air District BMPS - 15 mph. Required by San Jose and Santa Clara.
Operations: Vehicle Data	Provided trip gen with reduction adjustments.
Operations: Hearths	No hearths.
Operations: Energy Use	According to project applicant, project will use natural gas. Convert natural gas to electricity.
Operations: Water and Waste Water	Wastewater treatment 100 % aerobic - no septic tanks or lagoons.

Attachment 2: Project Construction Emissions and Health Risk Calculations

24-147 University Station - Santa Clara, CA

DPM Emissions and Modeling Emission Rates - No Controls

Construction Year	Project	Activity	Source	DPM (ton/year)	Source Type	No. Sources	DPM Emissions (lb/yr)	(lb/hr)	(g/s)	Emissions per Point Source (g/s)
	Both	***Site Work***	DPM_CONST	0.0173	Point	1804	34.6	0.04223	5.32E-03	2.95E-06
2026	***Town Homes***	***Construction***	DPM_CONST	0.0246	Point	1191	49.3	0.03238	4.08E-03	3.43E-06
2027	***Town Homes***	***Construction***	DPM_CONST	0.0050	Point	1191	9.9	0.00685	8.64E-04	7.25E-07
	Apartments	***Construction***	DPM_CONST	0.0352	Point	613	70.5	0.03747	4.72E-03	7.70E-06
2028	***Apartments***	***Construction***	DPM_CONST	0.0087	Point	613	17.4	0.00731	9.21E-04	1.50E-06
2029	***Apartments***	***Construction***	DPM_CONST	0.0076	Point	613	15.2	0.00731	9.21E-04	1.50E-06
Total				***0.0984***			***196.8***			

hr/day =	9	(7am - 4pm)
days/yr =	264	
hours/year =	2376	

24-147 University Station - Santa Clara, CA

PM2.5 Fugitive Dust Emissions for Modeling - Basic Dust Controls One Mile/Half Mile

Construction Year	Activity	Project	Area Source	PM2.5 Emissions (ton/year)	PM2.5 Emissions (lb/yr)	PM2.5 Emissions (lb/hr)	PM2.5 Emissions (g/s)	Modeled Area (m^2)	PM2.5 Emission Rate $g/s/m^2$
2026	Site Work	Both	PM25_CONST	0.0383	76.7	0.09359	1.179E-02	44471.1	2.65E-07
	Construction	Town Homes	PM25_CONST	0.0014	2.8	0.00268	3.378E-04	29114.9	1.16E-08
2027	Construction	Town Homes	PM25_CONST	0.0003	0.6	0.00042	5.242E-05	29114.9	1.80E-09
	Construction	Apartments	PM25_CONST	0.0030	6.1	0.00322	4.058E-04	15328.4	2.65E-08
2028	Construction	Apartments	PM25_CONST	0.0007	1.5	0.00061	7.742E-05	15328.4	5.05E-09
2029	Construction	Apartments	PM25_CONST	0.0006	1.3	0.00061	7.742E-05	15328.4	5.05E-09
			Construction Hours		***88.8***				
			Weekday hr/day =	9		(7am - 4pm)			
			days/yr =	Varies					
			hours/year =	Varies					

24-147 University Station - Santa Clara, CA
DPM and PM2.5 Concentrations Offsite Construction
Maximum Concentration Receptors

Emissions Years	2026 -2029
Receptor Information	
Number of Receptors	Varies
Receptor Height (in m) =	1.5m

Meteorological Conditions	
BAAQMD San Jose International	2013 - 2017
Land Use Classification	urban
Wind Speed =	variable
Wind Direction =	variable

2026 Offsite Maximum Concentrations - Floor 1

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.03367	0.0527	0.0863

2027 Concs at the 2026 MEI - Floor 1

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.01177	0.0013	0.0131

2028 Concentrations at the 2026 MEI - Floor 1

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.0017	0.0002	0.0019

2029 Concentrations at the 2026 MEI - Floor 1

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.0017	0.0002	0.0019

24-147 University Station - Santa Clara, CA
DPM and PM2.5 Concentrations Offsite Construction
Maximum Concentration Receptors

Emissions Years	2026 -2029
Receptor Information	
Number of Receptors	Varies
Receptor Height (in m) =	4.6m or Floor 2 height for Town Homes

Meteorological Conditions	
BAAQMD San Jose International	2013 - 2017
Land Use Classification	urban
Wind Speed =	variable
Wind Direction =	variable

2026 Offsite Maximum Concentrations - Floor 2 (4.6m)

Meteorological Data Years	Concentrations (µg/m^3) DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.03558	0.0430	0.0786
	0.00191		*-0.0078*

2027 Concentrations at 2026 MEI - Floor 2 (4.6m)

Meteorological Data Years	Concentrations (µg/m^3) DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.01175	0.0012	0.0130
	-2E-05		*-0.0002*

2028 Concentrations at 2026 MEI - Floor 2 (4.6m)

Meteorological Data Years	Concentrations (µg/m^3) DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.00165	0.0002	0.0018
	-5E-05		*-0.0001*

2029 Concentrations at 2026 MEI - Floor 2 (4.6m)

Meteorological Data Years	Concentrations (µg/m^3) DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.00165	0.0002	0.0018
	-5E-05		*-0.0001*

24-147 University Station - Santa Clara, CA
DPM and PM2.5 Concentrations Offsite Construction
Maximum Concentration Receptors

Emissions Years 2026 -2029
Receptor Information
Number of Receptors Varies
Receptor Height (in m) = 7.6m or Floor 3 height for Town Homes

Meteorological Conditions
BAAQMD San Jose International 2013 - 2017
Land Use Classification urban
Wind Speed = variable
Wind Direction = variable

2026 Offsite Maximum Concentrations - Floor 3 (7.6m)

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.03595	0.0332	0.0692
	0.00037		*-0.0172*

2027 Concentrations at 2026 MEI - Floor 3 (7.6m)

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.01151	0.0011	0.0126
	-0.00026		*-0.0005*

2028 Concentrations at the 2026 MEI - Floor 3

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.00159	0.0002	0.0396
	-0.00011		*0.0377*

2028 Concentrations at the 2026 MEI - Floor 3

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.00159	0.0002	0.0231
	-0.00011		*0.0212*

24-147 University Station - Santa Clara, CA
DPM and PM2.5 Concentrations Offsite Construction
Maximum Concentration Receptors

Emissions Years	2028 -2029
Receptor Information	
Number of Receptors	Varies
Receptor Height (in m) =	4.11m

Meteorological Conditions	
BAAQMD San Jose International	2013 - 2017
Land Use Classification	urban
Wind Speed =	variable
Wind Direction =	variable

2028 Concentrations at theTownhome MEI - Floor 2

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.00691	0.0012	0.0081

-0.02676

2029 Concentrations at the Townhome MEI - Floor 2

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.00691	0.0012	0.0081

24-147 University Station - Santa Clara, CA
DPM Cancer Risk and PM2.5 Calculations - 2026 MEI Location
Impacts at Off-Site Residential Receptors - 3rd Floor receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Construction Cancer Risk by Year - Maximum Impact Receptor Location

		Exposure Information				Infant/Child	Adult			Adult	
			DPM Conc (ug/m3)		Age	Cancer	Modeled DPM Conc (ug/m3)		Age	Cancer	
Exposure Year	Exposure Duration (years)	Age	Year	Annual	Sensitivity Factor	Risk (per million)	Year	Annual	Sensitivity Factor	Risk (per million)	HI
0	0.25	-0.25 - 0*	2026	0.0360	10	0.49					
1	1	0 - 1	2026	0.0360	10	5.90	2026	0.0360	1	0.103	0.007
2	1	1 - 2	2027	0.0115	10	1.89	2027	0.0115	1	0.03	0.002
3	1	2 - 3	2028	0.0016	3	0.04	2028	0.0016	1	0.005	0.000
4	1	3 - 4	2029	0.0016	3	0.04	2029	0.0016	1	0.005	
5	1	4 - 5	2030	0.0000	3	0.00	2030	0.0000	1	0.00	
6	1	5 - 6	2031	0.0000	3	0.00	2031	0.0000	1	0.00	
7	1	6 - 7	2032	0.0000	3	0.00	2032	0.0000	1	0.00	
8	1	7 - 8	2033	0.0000	3	0.00	2033	0.0000	1	0.00	
9	1	8 - 9	2034	0.0000	3	0.00	2034	0.0000	1	0.00	
10	1	9 - 10	2035	0.0000	3	0.00	2035	0.0000	1	0.00	
11	1	10 - 11	2036	0.0000	3	0.00	2036	0.0000	1	0.00	
12	1	11 - 12	2037	0.0000	3	0.00	2037	0.0000	1	0.00	
13	1	12 - 13	2038	0.0000	3	0.00	2038	0.0000	1	0.00	
14	1	13 - 14	2039	0.0000	3	0.00	2039	0.0000	1	0.00	
15	1	14 - 15	2040	0.0000	3	0.00	2040	0.0000	1	0.00	
16	1	15 - 16	2041	0.0000	3	0.00	2041	0.0000	1	0.00	
17	1	16-17	2042	0.0000	1	0.00	2042	0.0000	1	0.00	
18	1	17-18	2043	0.0000	1	0.00	2043	0.0000	1	0.00	
19	1	18-19	2044	0.0000	1	0.00	2044	0.0000	1	0.00	
20	1	19-20	2045	0.0000	1	0.00	2045	0.0000	1	0.00	
21	1	20-21	2046	0.0000	1	0.00	2046	0.0000	1	0.00	
22	1	21-22	2047	0.0000	1	0.00	2047	0.0000	1	0.00	
23	1	22-23	2048	0.0000	1	0.00	2048	0.0000	1	0.00	
24	1	23-24	2049	0.0000	1	0.00	2049	0.0000	1	0.00	
25	1	24-25	2050	0.0000	1	0.00	2050	0.0000	1	0.00	
26	1	25-26	2051	0.0000	1	0.00	2051	0.0000	1	0.00	
27	1	26-27	2052	0.0000	1	0.00	2052	0.0000	1	0.00	
28	1	27-28	2053	0.0000	1	0.00	2053	0.0000	1	0.00	
29	1	28-29	2054	0.0000	1	0.00	2054	0.0000	1	0.00	
30	1	29-30	2055	0.0000	1	0.00	2055	0.0000	1	0.00	
Total Increased Cancer Risk						**8.37**				**0.145**	

* Third trimester of pregnancy

Attachment 3: Off-Site Cumulative Health Risk Screening Information and Calculations

											DPM Emission Rate				PM2.5 Rates	
Year	Description	Modeled No. Lines	Link Width (ft)	Link Width (m)	Link Length (mi)	Link Length (m)	Release Height (m)	Plume Height	No. Diesel Trains per Avg. Day	Avg. Train Travel Speed (mph)	Avg. Daily Emissions Rate (g/mi/day)	Avg. Daily Emissions Rate (g/day)	Link Emission Rate (g/s)	Link Emission Rate (lb/hr)	Link Emission Rate (g/s)	Link Emission Rate (lb/hr)
2026	Passenger Train North of Station	2	34	10.3632	0.10091	162.40	5	2.33	20	30	47.95	4.84	5.59986E-05	0.000444	5.15E-05	0.000409
	Passenger Train at Station	2	34	10.3632	0.2108933	339.399867	5	2.33	20	5	57.54	12.13	0.000140439	0.001115	0.000129	0.001025
	Passenger Train South of Station	2	34	10.3632	0.4050719	651.8999996	5	2.33	20	30	47.95	19.42	0.000224789	0.001784	0.000207	0.001641
	Passenger Train Skip Station	2	34	10.3632	0.7116	1145.20919	5	2.33	22	40	39.00	27.75	0.000321198	0.002549	0.000296	0.002345
	TOTAL								42			16.97	0.000196438	0.001559	0.000683	0.005421

PM2.5 to DPM ratio = 0.92

Caltrain 24 diesel trains per weekday, 88 electric trains per weekday; 4 diesel trains per weekend day; 22 skip the station on weekdays
Amtrak 24 diesel trains per day

Locomotive PM10 Emissions Factor (g/gal)

Train Type	2026
Electric Passenger/Commuter	0
Diesel Passenger/Commuter	1.2

Locomotive PM10 Emissions Factor (g/bhp-hr)

Train Type	2026
Passenger	0.0577
CARB Passenger Fuel Adj Factor (2011+, SV)	0.709

Passenger Train Activity

Passenger Locomotive horsepower =	3467
Locomotives per freight train =	1
Total horsepower =	3467
Running Engine Load Factor =	0.5
Low speed/idle Load Factor =	0.1

Emissions based on Emissions Factors for Locomotives, USEPA 2009
Emissions for 2026 conservatively represent emissions over the next 30 years
Fuel correction factor from Offroad Modeling Change Technical Memo: Changes to the Locomotive Inventory, CARB July 2006.
Trains operate 24 hours a day

24-147 University Station - Santa Clara, CA
DPM and PM2.5 Concentrations
Maximum DPM Concentration Location

Emissions Years	2028 Efs
Receptor Information	
Number of Receptors	Varies
Receptor Height (in m) =	Varies

Meteorological Conditions	
BAAQMD San José Met Data	2013 - 2017
Land Use Classification	urban
Wind Speed =	variable
Wind Direction =	variable

Passenger Rail - Offsite 2026 MEI Maximum Concentrations - Floor 3 (7.6m)

Meteorological Data Years	Concentrations (µg/m^3)	
	DPM	PM2.5
2013 - 2017	0.01025	0.0111

Passenger Rail - Onsite Maximum Concentrations - Floor 2 (4.11m)

Meteorological Data Years	Concentrations (µg/m^3)	
	DPM	PM2.5
2013 - 2017	0.02967	0.0323

Passenger Rail - Onsite Maximum Concentrations - Floor 3 (7.75m and 6.87m)

Meteorological Data Years	Concentrations (µg/m^3)	
	DPM	PM2.5
2013 - 2017	0.0233	0.0253
	-0.00637	*-0.0069*

24-147 University Station - Santa Clara, CA
DPM Cancer Risk from Rail - 2026 MEI Location
Impacts at Off-Site Residential Receptors - 3rd Floor receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age --> / **Parameter**	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Exposure Information: Age	DPM Conc (ug/m3): Year	DPM Conc (ug/m3): Annual	Age Sensitivity Factor	Infant/Child Cancer Risk (per million)	Adult: Modeled DPM Conc (ug/m3): Year	Adult: Modeled DPM Conc (ug/m3): Annual	Adult: Age Sensitivity Factor	Adult Cancer Risk (per million)	HI
0	0.25	-0.25 - 0*	2026	0.0103	10	0.14					
1	1	0 - 1	2026	0.0103	10	1.68	2026	0.0103	1	0.029	0.002
2	1	1 - 2	2027	0.0103	10	1.68	2027	0.0103	1	0.03	0.002
3	1	2 - 3	2028	0.0103	3	0.27	2028	0.0103	1	0.029	0.002
4	1	3 - 4	2029	0.0103	3	0.27	2029	0.0103	1	0.029	
5	1	4 - 5	2030	0.0103	3	0.27	2030	0.0103	1	0.03	
6	1	5 - 6	2031	0.0103	3	0.27	2031	0.0103	1	0.03	
7	1	6 - 7	2032	0.0103	3	0.27	2032	0.0103	1	0.03	
8	1	7 - 8	2033	0.0103	3	0.27	2033	0.0103	1	0.03	
9	1	8 - 9	2034	0.0103	3	0.27	2034	0.0103	1	0.03	
10	1	9 - 10	2035	0.0103	3	0.27	2035	0.0103	1	0.03	
11	1	10 - 11	2036	0.0103	3	0.27	2036	0.0103	1	0.03	
12	1	11 - 12	2037	0.0103	3	0.27	2037	0.0103	1	0.03	
13	1	12 - 13	2038	0.0103	3	0.27	2038	0.0103	1	0.03	
14	1	13 - 14	2039	0.0103	3	0.27	2039	0.0103	1	0.03	
15	1	14 - 15	2040	0.0103	3	0.27	2040	0.0103	1	0.03	
16	1	15 - 16	2041	0.0103	3	0.27	2041	0.0103	1	0.03	
17	1	16-17	2042	0.0103	1	0.03	2042	0.0103	1	0.03	
18	1	17-18	2043	0.0103	1	0.03	2043	0.0103	1	0.03	
19	1	18-19	2044	0.0103	1	0.03	2044	0.0103	1	0.03	
20	1	19-20	2045	0.0103	1	0.03	2045	0.0103	1	0.03	
21	1	20-21	2046	0.0103	1	0.03	2046	0.0103	1	0.03	
22	1	21-22	2047	0.0103	1	0.03	2047	0.0103	1	0.03	
23	1	22-23	2048	0.0103	1	0.03	2048	0.0103	1	0.03	
24	1	23-24	2049	0.0103	1	0.03	2049	0.0103	1	0.03	
25	1	24-25	2050	0.0103	1	0.03	2050	0.0103	1	0.03	
26	1	25-26	2051	0.0103	1	0.03	2051	0.0103	1	0.03	
27	1	26-27	2052	0.0103	1	0.03	2052	0.0103	1	0.03	
28	1	27-28	2053	0.0103	1	0.03	2053	0.0103	1	0.03	
29	1	28-29	2054	0.0103	1	0.03	2054	0.0103	1	0.03	
30	1	29-30	2055	0.0103	1	0.03	2055	0.0103	1	0.03	
Total Increased Cancer Risk						**7.63**				**0.883**	

* Third trimester of pregnancy

Road Link	Description	Direction	No. Lanes	Link Length (miles)	Link Width (ft)	Link Width (m)	Release Height (ft)	Release Height (m)	Initial Vertical Dimention (m)	Initial Vertical Dispersion (m)	Average Speed (mph)	Average Vehicles per Day
ECR_DPM	ECR between 880 & Layfaette DPM	NW/SE	6	0.60	90	27.43	11.15	3.4	6.8	3.16	40 mph Off Peak, 35 mph Peak	18,434
ECR_XXX	ECR between 880 & Layfaette XXX	NW/SE	6	0.60	90	27.43	4.27	1.3	2.87	1.34	40 mph Off Peak, 35 mph Peak	18,434

2026 Emission Factors

	Speed Category	1	2
	Travel Speed (mph)	35	40
Emisions per vehicle (g/VMT)	DPM	0.00059	0.00059
	PM2.5	0.00156	0.00143
	TOG Exhaust	0.01895	0.01659
	TOG Evap	0.02754	0.02754
	Fugitive PM2.5	0.02574	0.02521

		ECR between 880 & Layfaette					
Vehicle Type	Truck 1 (MDT)	286	286	-	-	-	-
	Truck 2 (HDT)	313	313	-	-	-	-
	Non-Truck	8,618	8,618	-	-	-	-
Total	Existing plus project Volumes		18,434				
	Directional Volume (50/50 split)	**9,217**	**9,217**	**-**	**-**	**-**	**-**
	Average Veh/Hour/Dir	384	384	0	0	0	0

2026 Hourly Traffic Volumes and DPM Emisssions - ECR between 880 & Layfaette DPM

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	172	0.000017	8	0.0576153	1062	0.000103553	16	0.06198464	1143
1	0.00543983	100	9.7771E-06	9	0.0581763	1072	0.000104561	17	0.05887691	1085
2	0.004334	80	7.7896E-06	10	0.0601613	1109	0.000108868	18	0.05903274	1088
3	0.005007	92	8.9991E-06	11	0.0622498	1148	0.000112648	19	0.05335959	984
4	0.00970384	179	1.7441E-05	12	0.063837	1177	0.00011552	20	0.04442038	819
5	0.02146581	396	3.8581E-05	13	0.0643401	1186	0.00011643	21	0.03773113	696
6	0.03533727	651	6.3512E-05	14	0.0660245	1217	0.000119478	22	0.02727802	503
7	0.05312984	979	9.5491E-05	15	0.0638827	1178	0.000115602	23	0.01728513	319
									TOTAL	18,434

TOTAL 18,434

g/s
0.000112168
0.00010582
0.0001061
9.5904E-05
7.98374E-05
6.78147E-05
4.90272E-05
3.10668E-05

2026 Hourly Traffic Volumes and TOGV Emisssions - ECR between 880 & Layfaette XXX

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	172	0.000789	8	0.0576153	1062	0.004874495	16	0.06198464	1143
1	0.00543983	100	0.00046023	9	0.0581763	1072	0.004921954	17	0.05887691	1085
2	0.004334	80	0.00036667	10	0.0601613	1109	0.005089895	18	0.05903274	1088
3	0.005007	92	0.00042361	11	0.0622498	1148	0.005266596	19	0.05335959	984
4	0.00970384	179	0.00082099	12	0.063837	1177	0.005400876	20	0.04442038	819
5	0.02146581	396	0.0018161	13	0.0643401	1186	0.005443438	21	0.03773113	696
6	0.03533727	651	0.00298968	14	0.0660245	1217	0.005585945	22	0.02727802	503
7	0.05312984	979	0.00449501	15	0.0638827	1178	0.005404739	23	0.01728513	319
									TOTAL	18,434

g/s
0.005244158
0.004981232
0.004994415
0.004514443
0.003758149
0.00319221
0.002307834
0.001462394

2026 Hourly Traffic Volumes and TOGX Emisssions - ECR between 880 & Layfaette XXX

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	172	0.000476	8	0.0576153	1062	0.002937361	16	0.06198464	1143
1	0.00543983	100	0.00027734	9	0.0581763	1072	0.00296596	17	0.05887691	1085
2	0.004334	80	0.00022096	10	0.0601613	1109	0.003502818	18	0.05903274	1088
3	0.005007	92	0.00025527	11	0.0622498	1148	0.003624422	19	0.05335959	984
4	0.00970384	179	0.00049472	12	0.063837	1177	0.003716832	20	0.04442038	819
5	0.02146581	396	0.00109438	13	0.0643401	1186	0.003746123	21	0.03773113	696
6	0.03533727	651	0.00180158	14	0.0660245	1217	0.003844195	22	0.02727802	503
7	0.05312984	979	0.00270868	15	0.0638827	1178	0.003719491	23	0.01728513	319
									TOTAL	18,434

g/s
0.003608981
0.00300168
0.003009625
0.002720395
0.002264653
0.00192362
0.001390696
0.000881236

2026 Hourly Traffic Volumes and Fugitive PM2.5 Emisss ECR between 880 & Layfaette XXX

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	172	0.000722	8	0.0576153	1062	0.004462332	16	0.06198464	1143
1	0.00543983	100	0.00042132	9	0.0581763	1072	0.004505778	17	0.05887691	1085
2	0.004334	80	0.00033567	10	0.0601613	1109	0.004757297	18	0.05903274	1088
3	0.005007	92	0.00038779	11	0.0622498	1148	0.004922451	19	0.05335959	984
4	0.00970384	179	0.00075157	12	0.063837	1177	0.005047957	20	0.04442038	819
5	0.02146581	396	0.00166254	13	0.0643401	1186	0.005087737	21	0.03773113	696
6	0.03533727	651	0.00273689	14	0.0660245	1217	0.005220932	22	0.02727802	503
7	0.05312984	979	0.00411493	15	0.0638827	1178	0.005051568	23	0.01728513	319
									TOTAL	18,434

g/s
0.00490148
0.004560044
0.004572112
0.004132724
0.003440378
0.002922293
0.002112695
0.001338741

2026 Hourly Traffic Volumes and PM2.5 Emisssions - ECR between 880 & Layfaette XXX

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	172	0.000041	8	0.0576153	1062	0.000252421	16	0.06198464	1143
1	0.00543983	100	2.3833E-05	9	0.0581763	1072	0.000254879	17	0.05887691	1085
2	0.004334	80	1.8988E-05	10	0.0601613	1109	0.000288528	18	0.05903274	1088
3	0.005007	92	2.1936E-05	11	0.0622498	1148	0.000298545	19	0.05335959	984
4	0.00970384	179	4.2514E-05	12	0.063837	1177	0.000306157	20	0.04442038	819
5	0.02146581	396	9.4045E-05	13	0.0643401	1186	0.000308569	21	0.03773113	696
6	0.03533727	651	0.00015482	14	0.0660245	1217	0.000316648	22	0.02727802	503
7	0.05312984	979	0.00023277	15	0.0638827	1178	0.000306376	23	0.01728513	319
									TOTAL	18,434

TOTAL 18,434

g/s
0.000297273
0.000257948
0.000258631
0.000233776
0.000194612
0.000165306
0.000119509
7.57287E-05

24-147 University Station - Santa Clara, CA Impacts to Offsite MEI
TACs and PM2.5 Concentrations
Maximum DPM Receptor

Emissions Years	2026 Efs
Receptor Information	
Number of Receptors	
Receptor Height (in m) =	7.6 (3rd Floor)

Meteorological Conditions

BAAQMD San José International Met Data	2013 - 2017
Land Use Classification	urban
Wind Speed =	variable
Wind Direction =	variable

ECR - Offsite MEI Concentrations - Floor 3

Meteorological Data Years	TAC Concentrations (µg/m^3)		
	DPM	Exhaust TOG	Evaporative TOG
2013 - 2017	0.0005	0.01636	0.02623

Meteorological Data Years	PM2.5 Concentrations (µg/m^3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013 - 2017	0.02553	0.02414	0.00139

24-147 University Station - Santa Clara, CA Impacts to Offsite MEI
DPM Cancer Risk and PM2.5 Calculations
Maximum DPM & PM2.5 Receptors - Floor 3

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Cancer Risk by Year - Onsite MEI Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	**Exposure Duration (years)**	**Age**	**Year**	**Age Sensitivity Factor**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**DPM**	**Exhaust TOG**	**Evaporative TOG**	**TOTAL**
0	0.25	-0.25 - 0*	2026	10	0.0005	0.0164	0.0262	0.007	0.001	0.0001	0.01
1	1	0 - 1	2026	10	0.0005	0.0164	0.0262	0.082	0.015	0.0014	0.10
2	1	1 - 2	2027	10	0.0005	0.0164	0.0262	0.082	0.015	0.0014	0.10
3	1	2 - 3	2028	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
4	1	3 - 4	2029	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
5	1	4 - 5	2030	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
6	1	5 - 6	2031	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
7	1	6 - 7	2032	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
8	1	7 - 8	2033	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
9	1	8 - 9	2034	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
10	1	9 - 10	2035	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
11	1	10 - 11	2036	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
12	1	11 - 12	2037	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
13	1	12 - 13	2038	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
14	1	13 - 14	2039	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
15	1	14 - 15	2040	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
16	1	15 - 16	2041	3	0.0005	0.0164	0.0262	0.013	0.002	0.0002	0.02
17	1	16-17	2042	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
18	1	17-18	2043	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
19	1	18-19	2044	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
20	1	19-20	2045	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
21	1	20-21	2046	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
22	1	21-22	2047	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
23	1	22-23	2048	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
24	1	23-24	2049	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
25	1	24-25	2050	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
26	1	25-26	2051	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
27	1	26-27	2052	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
28	1	27-28	2053	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
29	1	28-29	2054	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
30	1	29-30	2055	1	0.0005	0.0164	0.0262	0.001	0.000	0.0000	0.002
Total Increased Cancer Risk								0.37	0.070	0.007	**0.45**

* Third trimester of pregnancy

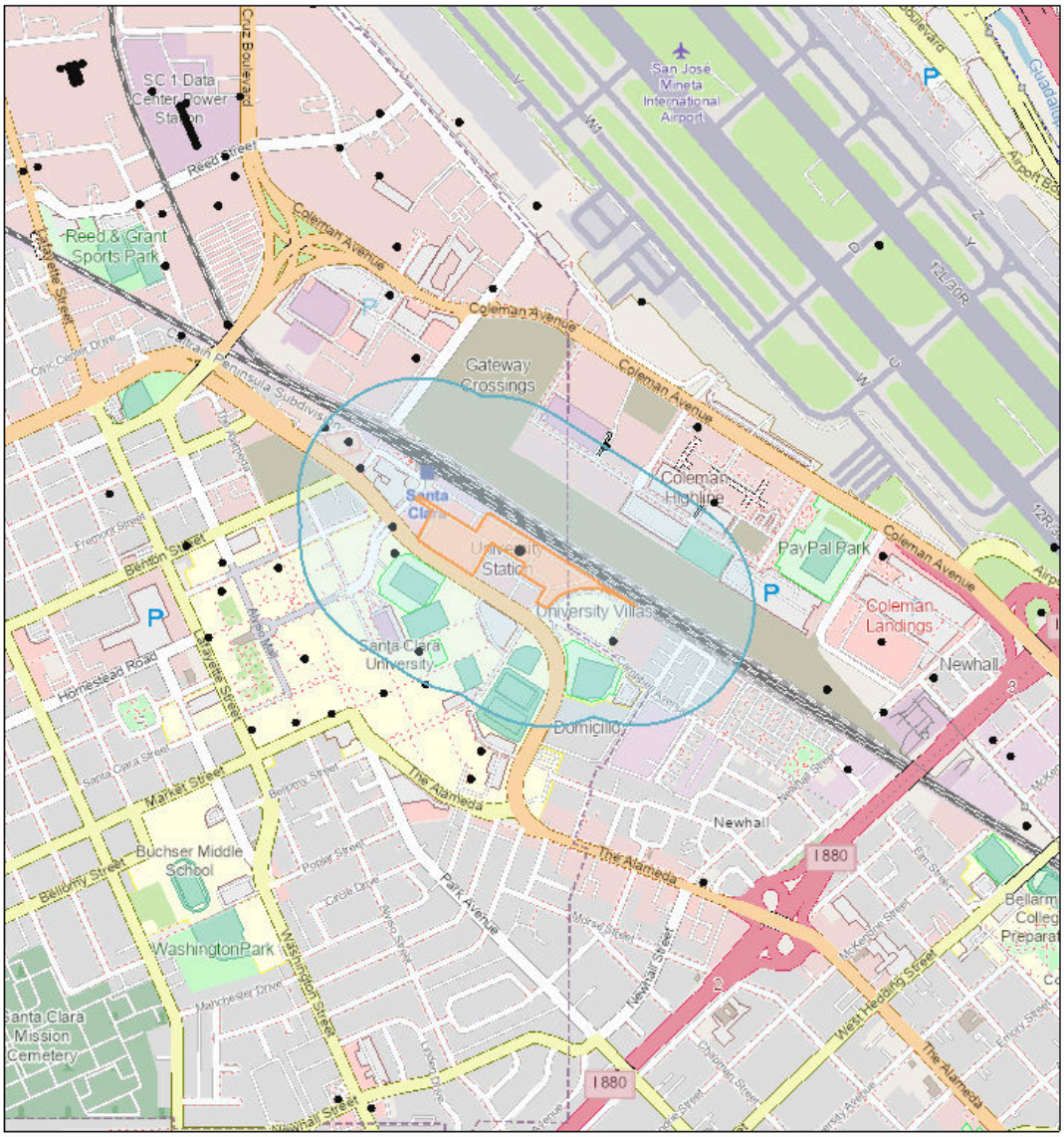
Hazard Index	**Roadway Maximum PM2.5 (µg/m3)**
0.0001	0.026

Screening Report

Area of Interest (AOI) Information

Area : 8,350,406.45 ft²

Oct 15 2024 14:04:09 Pacific Daylight Time



Summary

Name	Count	Area(ft²)	Length(ft)
Permitted Stationary Sources	7	N/A	N/A

Permitted Stationary Sources

#	Address	Cancer_Ris	Chronic_Ha	City	County
1	601 El Camino Real	9.52	0.00	Santa Clara	Santa Clara
2	500 Benton Street	7.46	0.00	Santa Clara	Santa Clara
3	601 El Camino Real	0.08	0.00	Santa Clara	Santa Clara
4	500 El Camino Real	0.13	0.00	Santa Clara	Santa Clara
5	500 El Camino Real	5.57	0.00	Santa Clara	Santa Clara
6	500 El Camino Real	0.02	0.00	Santa Clara	Santa Clara
7	500 El Camino Real	0.88	0.00	Santa Clara	Santa Clara

#	Details	Facility_I	Facility_N	Latitude	Longitude
1	Generator	15839	Santa Clara Police Facility	37.35	-121.94
2	Generator	17237	City of Santa Clara - Well Site: Zone 1 3-02	37.35	-121.94
3	Gas Dispensing Facility	100435-1	Santa Clara Police Dept	37.35	-121.94
4	Gas Dispensing Facility	100437-1	Santa Clara University	37.35	-121.94
5	Generator	15397-13	Santa Clara University	37.35	-121.94
6	Generator	15397-22	Santa Clara University	37.35	-121.94
7	Generator	15397-24	Santa Clara University	37.35	-121.93

#	NAICS	NAICS_Indu	NAICS_Sect	NAICS_Subs	PM25
1	611110	Elementary and Secondary Schools	Educational Services	Educational Services	0.01
2	922190	Other Justice, Public Order, and Safety Activities	Public Administration	Justice, Public Order, and Safety Activities	0.01
3	922120	Police Protection	Public Administration	Justice, Public Order, and Safety Activities	0.00
4	611310	Colleges, Universities, and Professional Schools	Educational Services	Educational Services	0.00
5	611310	Colleges, Universities, and Professional Schools	Educational Services	Educational Services	0.01
6	611310	Colleges, Universities, and Professional Schools	Educational Services	Educational Services	0.00
7	611310	Colleges, Universities, and Professional Schools	Educational Services	Educational Services	0.00

#	State	Zip	Count
1	CA	95050	1
2	CA	95050	1
3	CA	95050	1
4	CA	95053	1
5	CA	95053	1
6	CA	95053	1
7	CA	95053	1

NOTE: A larger buffer than 1,000 may be warranted depending on proximity to significant sources.

From: BAAQMD CEQA
To: Jordyn Bauer; Public Records
Subject: RE: Public Records Number 2024-10-0134 Stationary Source Request for 24-147 University Station Residential Master Plan SSIF
Date: Monday, October 21, 2024 11:16:14 AM
Attachments: 2025 - 100435 - PermitToOperate.pdf
2025 - 100437 - PermitToOperate.pdf

Hello Jordyn,

The throughputs for Facilities #100435-1 and #100437-1 are below:

Facility Number	Throughput (gallons per year)
100435	940,000
100437	600,000

Attached are also the Permit to Operate for these facilities.

BAAQMD CEQA Team

@Public Records – This completes this public records request.

From: Jordyn Bauer <jbauer@illingworthrodkin.com>
Sent: Tuesday, October 15, 2024 2:23 PM
To: Public Records <PublicRecords@baaqmd.gov>
Subject: Public Records Number 2024-10-0134 Stationary Source Request for 24-147 University Station Residential Master Plan SSIF

CAUTION: This email originated from outside of the BAAQMD network. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hello,

I have a stationary source request for a residential project in Santa Clara and San Jose. I've attached the stationary source data request and GIS tool screening reports. Sources #100435-1 and #100437-1 are gas stations and in order to use the CARB gas station screening tool, we need to know the gas stations' annual throughput (gallons/year). Can you please provide sources #100435-1 and #100437-1 annual gas throughput emissions?

Please let me know if I can help facilitate this request by providing additional information.

Thank you,

Jordyn Bauer

Illingworth & Rodkin, Inc.
429 E. Cotati Avenue
Cotati, CA 94931
Mobile: (805)458-3478

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
Version 1.0 - February 18, 2022

Required Value	User Defined Input	Instructions
Annual Throughput (gallons/year)	940000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	500	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4.
Hourly Loading Throughput (gallons/hour)	8800	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	San Jose	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool.
Distance to Nearest Resident (meters)	806.2	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)		Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	806.2	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Control Scenario	EVR Phase I & EVR Phase II	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	yes	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.
Risk Value	**Results**	
Max Residential Cancer Risk (chances/million)	0.02	
Max Worker Cancer Risk (chances/million)		5/15/2025 5:45 PM
Chronic HI	#N/A	
Acute HI	0.00	

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
Version 1.0 - February 18, 2022

Required Value	User Defined Input	Instructions
Annual Throughput (gallons/year)	600000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	500	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4.
Hourly Loading Throughput (gallons/hour)	8800	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	San Jose	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool.
Distance to Nearest Resident (meters)	528.9	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)		Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	528.9	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Control Scenario	EVR Phase I & EVR Phase II	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	yes	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.
Risk Value	**Results**	
Max Residential Cancer Risk (chances/million)	0.02	
Max Worker Cancer Risk (chances/million)		5/15/2025 5:45 PM
Chronic HI	#N/A	
Acute HI	0.01	

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Risk & Hazard Stationary Source Inquiry Form

This form is required when users request stationary source data from BAAQMD

This form is to be used with the BAAQMD's Google Earth stationary source screening tables.

Click here for guidance on coducting risk & hazard screening, including roadways & freeways, refer to the District's Risk & Hazard Analysis flow chart.

Click here for District's Recommended Methods for Screening and Modeling Local Risks and Hazards document.

Table A: Requester Contact Information

Date of Request	**12/2/2024**
Contact Name	Jordyn Bauer
Affiliation	Illingworth & Rodkin, Inc.
Phone	707-794-0400 x106
Email	jbauer@illingworthrodkin.com
Project Name	University Station
Address	451 El Camino Real
City	Santa Clara, San Jose
County	Santa Clara
Type (residential, commercial, mixed use, industrial, etc.)	Residential
Project Size (# of units or building square feet)	408
Comments:	

For Air District assistance, the following steps must be completed:

1. Complete all the contact and project information requested in Table A. Incomplete forms will not be processed. Please include a project site map.

2. Download and install the free program Google Earth, **http://www.google.com/earth/download/ge/,** and then download the county specific Google Earth stationary source application files from the District's website, **http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx.** The small points on the map represent stationary sources permitted by the District (Map A on right). These permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc. Click on a point to view the source's Information Table, including the name, location, and preliminary estimated cancer risk, hazard index, and PM2.5 concentration.

3. Find the project site in Google Earth by inputting the site's address in the Google Earth search box.

4. Identify stationary sources within at least a 1000ft radius of project site. Verify that the location of the source on the map matches with the source's address in the Information Table, by using the Google Earth address search box to confirm the source's address location. Please report any mapping errors to the District.

5. List the stationary source information in Table B. Action only.

6. Note that a small percentage of the stationary sources have Health Risk Screening Assessment (HRSA) data INSTEAD of screening level data. These sources will be noted by an asterisk next to the Plant Name (Map B on right). If HRSA values are presented, these values have already been modeled and cannot be adjusted further.

7. Email this completed form to District staff. District staff will provide the most recent risk, hazard, and PM2.5 data that are available for the source(s). If this information or data are not available, source emissions data will be provided. Staff will respond to inquiries within three weeks.

Note that a public records request received for the same stationary source information will cancel the processing of your SSIF request.

Submit forms, maps, and questions to Matthew Hanson at 415-749-8733, or mhanson@baaqmd.gov

Table B: Google Earth data

Distance from Receptor (feet) or MEI[1]	Plant No.	Facility Name	Address	Cancer Risk[2]	Hazard Risk[2]	$PM_{2.5}$[2]	Source No.[3]	Type of Source[4]	Fuel Code[5]	Status/Comments	Project MEI: Distance Adjustment Multiplier	Project MEI: Adjusted Cancer Risk Estimate	Project MEI: Adjusted Hazard Risk	Project MEI: Adjusted PM2.5
2,297	15839	Santa Clara Police Facility	601 El Camino Real	9.52	0	0.01		Generator		2022 Dataset	0.04	0.38	0.00000	0.0004
1,926	17237	City of Santa Clara - Well Site: Zor	500 Benton Street	7.46	0	0.01		Generator		2022 Dataset	0.04	0.30	0.00000	0.0004
926	15397-13	Santa Clara University	500 El Camino Real	5.57	0	0.01		Generator		2022 Dataset	0.04	0.22	0.00000	0.0004
1,636	15397-22	Santa Clara University	500 El Camino Real	0.02	0	0		Generator		2022 Dataset	0.04	0.001	0.00000	0.0000
1,806	15397-24	Santa Clara University	500 El Camino Real	0.88	0	0		Generator		2022 Dataset	0.04	0.04	0.00000	0.0000

Footnotes:

1. Maximally exposed individual

2. These Cancer Risk, Hazard Index, and PM2.5 columns represent the values in the Google Earth Plant Information Table.
3. Each plant may have multiple permits and sources.
4. Permitted sources include diesel back-up generators, gas stations, dry cleaners, boilers, printers, auto spray booths, etc.
5. Fuel codes: 98 = diesel, 189 = Natural Gas.
6. If a Health Risk Screening Assessment (HRSA) was completed for the source, the application number will be listed here.

8. Engineer who completed the HRSA. For District purposes only.
9. All HRSA completed before 1/5/2010 need to be multiplied by an age sensitivity factor of 1.7.
10. The HRSA "Chronic Health" number represents the Hazard Index.
11. Further information about common sources:
    a. Sources that only include diesel internal combustion engines can be adjusted using the BAAQMD's Diesel Multiplier worksheet.
    b. The risk from natural gas boilers used for space heating when <25 MM BTU/hr would have an estimated cancer risk of one in a million or less, and a chronic hazard index of 0.003 or less. To be
    c. BAAQMD Reg 11 Rule 16 required that all co-residential (sharing a wall, floor, ceiling or is in the same building as a residential unit) dry cleaners cease use of perc on July 1, 2010.
    Therefore, there is no cancer risk, hazard or PM2.5 concentrations from co-residential dry cleaning businesses in the BAAQMD.
    d. Non co-residential dry cleaners must phase out use of perc by Jan. 1, 2023. Therefore, the risk from these dry cleaners does not need to be factored in over a 70-year period, but instead should reflect the number of
    e. Gas stations can be adjusted using BAAQMD's Gas Station Distance Mulitplier worksheet.
    f. Unless otherwise noted, exempt sources are considered insignificant. See BAAQMD Reg 2 Rule 1 for a list of exempt sources.
    g. This spray booth is considered to be insignificant.

Site MEI

Distance from Receptor (feet) or MEI[1]	FACID (Plant No.)	Distance Adjustment Multiplier	Adjusted Cancer Risk Estimate	Adjusted Hazard Risk	Adjusted PM2.5
2,144	15839	0.04	0.38	0.0000	0.0004
1,787	17237	0.04	0.30	0.0000	0.0004
1,125	15397-13	0.04	0.22	0.0000	0.0004
1,561	15397-22	0.04	0.001	0.0000	0.0000
1,814	15397-24	0.04	0.04	0.0000	0.0000

Attachment 4: On-Site (Non-CEQA) Cumulative Health Risk Screening Information and Calculations

24-147 University Station - Santa Clara, CA
DPM and PM2.5 Concentrations Offsite Construction
Maximum Concentration Receptors

Emissions Years	2028 -2029
Receptor Information	
Number of Receptors	Varies
Receptor Height (in m) =	4.11m

Meteorological Conditions	
BAAQMD San Jose International	2013 - 2017
Land Use Classification	urban
Wind Speed =	variable
Wind Direction =	variable

2028 Concentrations at theTownhome MEI - Floor 2

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.00691	0.0012	0.0081

2029 Concentrations at the Townhome MEI - Floor 2

Meteorological Data Years	Concentrations (µg/m^3)		
	DPM	Fug PM2.5	Total PM2.5
2013 - 2017	0.00691	0.0012	0.0081

24-147 University Station - Santa Clara, CA
DPM Cancer Risk from Rail - Max DPM Conc
Impacts at OnSite Residential Receptors - Town Home 2nd Floor receptor height

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Values

	Infant/Child			Adult
Age -->	**3rd Trimester**	**0 - 2**	**2 - 16**	**16 - 30**
Parameter				
ASF =	10	10	3	1
CPF =	1.10E+00	1.10E+00	1.10E+00	1.10E+00
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Cancer Risk by Year - Maximum Impact Receptor Location

Exposure Year	Exposure Duration (years)	Exposure Information: Age	DPM Conc (ug/m3): Year	DPM Conc (ug/m3): Annual	Age Sensitivity Factor	Infant/Child Cancer Risk (per million)	Adult: Modeled DPM Conc (ug/m3): Year	Adult: Modeled DPM Conc (ug/m3): Annual	Adult: Age Sensitivity Factor	Adult Cancer Risk (per million)	
0	0.25	-0.25 - 0*	2028	0.0297	10	0.40					**HI**
1	1	0 - 1	2028	0.0297	10	4.87	2028	0.0297	1	0.085	0.006
2	1	1 - 2	2029	0.0297	10	4.87	2029	0.0297	1	0.09	0.006
3	1	2 - 3	2030	0.0297	3	0.77	2030	0.0297	1	0.085	0.006
4	1	3 - 4	2031	0.0297	3	0.77	2031	0.0297	1	0.085	
5	1	4 - 5	2032	0.0297	3	0.77	2032	0.0297	1	0.09	
6	1	5 - 6	2033	0.0297	3	0.77	2033	0.0297	1	0.09	
7	1	6 - 7	2034	0.0297	3	0.77	2034	0.0297	1	0.09	
8	1	7 - 8	2035	0.0297	3	0.77	2035	0.0297	1	0.09	
9	1	8 - 9	2036	0.0297	3	0.77	2036	0.0297	1	0.09	
10	1	9 - 10	2037	0.0297	3	0.77	2037	0.0297	1	0.09	
11	1	10 - 11	2038	0.0297	3	0.77	2038	0.0297	1	0.09	
12	1	11 - 12	2039	0.0297	3	0.77	2039	0.0297	1	0.09	
13	1	12 - 13	2040	0.0297	3	0.77	2040	0.0297	1	0.09	
14	1	13 - 14	2041	0.0297	3	0.77	2041	0.0297	1	0.09	
15	1	14 - 15	2042	0.0297	3	0.77	2042	0.0297	1	0.09	
16	1	15 - 16	2043	0.0297	3	0.77	2043	0.0297	1	0.09	
17	1	16-17	2044	0.0297	1	0.09	2044	0.0297	1	0.09	
18	1	17-18	2045	0.0297	1	0.09	2045	0.0297	1	0.09	
19	1	18-19	2046	0.0297	1	0.09	2046	0.0297	1	0.09	
20	1	19-20	2047	0.0297	1	0.09	2047	0.0297	1	0.09	
21	1	20-21	2048	0.0297	1	0.09	2048	0.0297	1	0.09	
22	1	21-22	2049	0.0297	1	0.09	2049	0.0297	1	0.09	
23	1	22-23	2050	0.0297	1	0.09	2050	0.0297	1	0.09	
24	1	23-24	2051	0.0297	1	0.09	2051	0.0297	1	0.09	
25	1	24-25	2052	0.0297	1	0.09	2052	0.0297	1	0.09	
26	1	25-26	2053	0.0297	1	0.09	2053	0.0297	1	0.09	
27	1	26-27	2054	0.0297	1	0.09	2054	0.0297	1	0.09	
28	1	27-28	2055	0.0297	1	0.09	2055	0.0297	1	0.09	
29	1	28-29	2056	0.0297	1	0.09	2056	0.0297	1	0.09	
30	1	29-30	2057	0.0297	1	0.09	2057	0.0297	1	0.09	
Total Increased Cancer Risk						**22.08**				**2.56**	

* Third trimester of pregnancy

Road Link	Description	Direction	No. Lanes	Link Length (miles)	Link Width (ft)	Link Width (m)	Release Height (ft)	Release Height (m)	Initial Vertical Dimention (m)	Initial Vertical Dispersion (m)	Average Speed (mph)	Average Vehicles per Day	Unit Emissions Rate
ECR_DPM	ECR between 880 & Layfaette DPM	NW/SE	6	0.62	90	27.43	11.15	3.4	6.8	3.16	40 mph Off Peak, 35 mph Peak	18,789	3.63049E-05
ECR_XXX	ECR between 880 & Layfaette XXX	NW/SE	6	0.62	90	27.43	4.27	1.3	2.88	1.34	40 mph Off Peak, 35 mph Peak	18,789	

2028 Emission Factors

	Speed Category	1	2
	Travel Speed (mph)	35	40
Emisions per vehicle (g/VMT)	DPM	0.00052	0.00052
	PM2.5	0.00139	0.00128
	TOG Exhaust	0.01640	0.01436
	TOG Evap	0.02636	0.02636
	Fugitive PM2.5	0.02582	0.02529

		ECR between 880 & Layfaette					
Vehicle Type	Truck 1 (MDT)	301	301	-	-	-	-
	Truck 2 (HDT)	319	319	-	-	-	-
	Non-Truck	8,774	8,774	-	-	-	-
Total	Existing plus project Volumes		18,789				
	Directional Volume (50/50 split)	**9,394**	**9,394**	**-**	**-**	**-**	**-**
	Average Veh/Hour/Dir	391	391	0	0	0	0

2028 Hourly Traffic Volumes and DPM Emisssions - ECR between 880 & Layfaette DPM

Hour	Fraction Per Hour	VPH	g/s
0	0.00932697	175	0.000016
1	0.00543983	102	9.2641E-06
2	0.004334	81	7.3809E-06
3	0.005007	94	8.527E-06
4	0.00970384	182	1.6526E-05
5	0.02146581	403	3.6557E-05
6	0.03533727	664	6.018E-05
7	0.05312984	998	9.0481E-05
8	0.0576153	1083	9.81199E-05
9	0.0581763	1093	9.90752E-05
10	0.0601613	1130	0.000102064
11	0.0622498	1170	0.000105607
12	0.063837	1199	0.0001083
13	0.0643401	1209	0.000109153
14	0.0660245	1241	0.000112011
15	0.0638827	1200	0.000108377
16	0.06198464	1165	
17	0.05887691	1106	
18	0.05903274	1109	
19	0.05335959	1003	
20	0.04442038	835	
21	0.03773113	709	
22	0.02727802	513	
23	0.01728513	325	
		TOTAL	18,789

TOTAL 18,789

g/s
0.000105157
0.000100268
0.000100534
9.08724E-05
7.56487E-05
6.42568E-05
4.6455E-05
2.94369E-05

2028 Hourly Traffic Volumes and Fugitive PM2.5 Emisss ECR between 880 & Layfaette XXX

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	175	0.000768	8	0.0576153	1083	0.004744089	16	0.06198464	1165
1	0.00543983	102	0.00044792	9	0.0581763	1093	0.004790279	17	0.05887691	1106
2	0.004334	81	0.00035687	10	0.0601613	1130	0.005057554	18	0.05903274	1109
3	0.005007	94	0.00041228	11	0.0622498	1170	0.005233132	19	0.05335959	1003
4	0.00970384	182	0.00079902	12	0.063837	1199	0.005366559	20	0.04442038	835
5	0.02146581	403	0.00176751	13	0.0643401	1209	0.005408851	21	0.03773113	709
6	0.03533727	664	0.0029097	14	0.0660245	1241	0.005550452	22	0.02727802	513
7	0.05312984	998	0.00437475	15	0.0638827	1200	0.005370398	23	0.01728513	325
									TOTAL	18,789

g/s
0.005210838
0.004847971
0.004860802
0.00439367
0.003657609
0.00310681
0.002246093
0.001423271

2028 Hourly Traffic Volumes and PM2.5 Emisssions - ECR between 880 & Layfaette XXX

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	175	0.000039	8	0.0576153	1083	0.000239578	16	0.06198464	1165
1	0.00543983	102	2.262E-05	9	0.0581763	1093	0.00024191	17	0.05887691	1106
2	0.004334	81	1.8022E-05	10	0.0601613	1130	0.000272693	18	0.05903274	1109
3	0.005007	94	2.082E-05	11	0.0622498	1170	0.00028216	19	0.05335959	1003
4	0.00970384	182	4.0351E-05	12	0.063837	1199	0.000289354	20	0.04442038	835
5	0.02146581	403	8.926E-05	13	0.0643401	1209	0.000291634	21	0.03773113	709
6	0.03533727	664	0.00014694	14	0.0660245	1241	0.000299269	22	0.02727802	513
7	0.05312984	998	0.00022093	15	0.0638827	1200	0.000289561	23	0.01728513	325
									TOTAL	18,789

TOTAL 18,789

g/s
0.000280958
0.000244824
0.000245472
0.000221881
0.00018471
0.000156895
0.000113428
7.18756E-05

2028 Hourly Traffic Volumes and TOGV Emisssions - ECR between 880 & Layfaette XXX

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	175	0.000801	8	0.0576153	1083	0.004945309	16	0.06198464	1165
1	0.00543983	102	0.00046692	9	0.0581763	1093	0.004993457	17	0.05887691	1106
2	0.004334	81	0.000372	10	0.0601613	1130	0.005163838	18	0.05903274	1109
3	0.005007	94	0.00042977	11	0.0622498	1170	0.005343106	19	0.05335959	1003
4	0.00970384	182	0.00083291	12	0.063837	1199	0.005479337	20	0.04442038	835
5	0.02146581	403	0.00184248	13	0.0643401	1209	0.005522518	21	0.03773113	709
6	0.03533727	664	0.00303311	14	0.0660245	1241	0.005667095	22	0.02727802	513
7	0.05312984	998	0.00456031	15	0.0638827	1200	0.005483257	23	0.01728513	325
									TOTAL	18,789

g/s
0.005320343
0.005053597
0.005066972
0.004580027
0.003812745
0.003238585
0.002341361
0.001483639

2028 Hourly Traffic Volumes and TOGX Emisssions - ECR between 880 & Layfaette XXX

Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH	g/s	Hour	Fraction Per Hour	VPH
0	0.00932697	175	0.000436	8	0.0576153	1083	0.002694452	16	0.06198464	1165
1	0.00543983	102	0.0002544	9	0.0581763	1093	0.002720686	17	0.05887691	1106
2	0.004334	81	0.00020269	10	0.0601613	1130	0.003212958	18	0.05903274	1109
3	0.005007	94	0.00023416	11	0.0622498	1170	0.0033245	19	0.05335959	1003
4	0.00970384	182	0.00045381	12	0.063837	1199	0.003409263	20	0.04442038	835
5	0.02146581	403	0.00100388	13	0.0643401	1209	0.00343613	21	0.03773113	709
6	0.03533727	664	0.00165259	14	0.0660245	1241	0.003526086	22	0.02727802	513
7	0.05312984	998	0.00248468	15	0.0638827	1200	0.003411702	23	0.01728513	325
									TOTAL	18,789

g/s
0.003310336
0.002753453
0.00276074
0.002495428
0.002077375
0.001764543
0.001275691
0.000808361

24-147 University Station - Santa Clara, CA Impacts to Onsite MEI
TACs and PM2.5 Concentrations
Maximum DPM Receptor

Emissions Years	2028 Efs
Receptor Information	
Number of Receptors	
Receptor Height (in m) =	1.5 (1st Floor) for Apartments; 4.11 (2nd Floor for Town Homes)

Meteorological Conditions

BAAQMD San José International Met Data	2013 - 2017
Land Use Classification	urban
Wind Speed =	variable
Wind Direction =	variable

ECR - Onsite Max Concentrations - Apartments

Meteorological Data Years	TAC Concentrations (µg/m^3)		
	DPM	Exhaust TOG	Evaporative TOG
2013 - 2017	0.00306	0.13484	0.23739

Meteorological Data Years	PM2.5 Concentrations (µg/m^3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013 - 2017	0.24097	0.22916	0.01181

ECR - Onsite MEI Concentrations - Town Home

Meteorological Data Years	TAC Concentrations (µg/m^3)		
	DPM	Exhaust TOG	Evaporative TOG
2013 - 2017	0.00036	0.01206	0.02156

Meteorological Data Years	PM2.5 Concentrations (µg/m^3)		
	Total PM2.5	Fugitive PM2.5	Vehicle PM2.5
2013 - 2017	0.02182	0.02076	0.00106

24-147 University Station - Santa Clara, CA Impacts to Onsite MEI - Town Home
DPM Cancer Risk and PM2.5 Calculations
Maximum DPM & PM2.5 Receptors - Floor 2

Cancer Risk Calculation Method

Cancer Risk (per million) = CPF x Inhalation Dose x ASF x ED/AT x FAH x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$
ASF = Age sensitivity factor for specified age group
ED = Exposure duration (years)
AT = Averaging time for lifetime cancer risk (years)
FAH = Fraction of time spent at home (unitless)

Inhalation Dose = C_{air} x DBR x A x (EF/365) x 10^{-6}

Where: C_{air} = concentration in air $(\mu g/m^3)$
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
10^{-6} = Conversion factor

Cancer Potency Factors $(mg/kg\text{-}day)^{-1}$

TAC	CPF
DPM	1.10E+00
Vehicle TOG Exhaust	6.28E-03
Vehicle TOG Evaporative	3.70E-04

Values

	Infant/Child			Adult
Age --> / Parameter	3rd Trimester	0 - 2	2 - 16	16 - 30
ASF =	10	10	3	1
DBR* =	361	1090	572	261
A =	1	1	1	1
EF =	350	350	350	350
AT =	70	70	70	70
FAH =	1.00	1.00	1.00	0.73

* 95th percentile breathing rates for infants and 80th percentile for children and adults

Cancer Risk by Year - Onsite MEI Receptor Location

Maximum - Exposure Information					Concentration (ug/m3)			Cancer Risk (per million)			
Exposure Year	Exposure Duration (years)	Age	Year	Age Sensitivity Factor	DPM	Exhaust TOG	Evaporative TOG	DPM	Exhaust TOG	Evaporative TOG	TOTAL
0	0.25	-0.25 - 0*	2028	10	0.0004	0.0121	0.0216	0.005	0.001	0.0001	0.01
1	1	0 - 1	2028	10	0.0004	0.0121	0.0216	0.059	0.011	0.0012	0.07
2	1	1 - 2	2029	10	0.0004	0.0121	0.0216	0.059	0.011	0.0012	0.07
3	1	2 - 3	2030	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
4	1	3 - 4	2031	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
5	1	4 - 5	2032	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
6	1	5 - 6	2033	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
7	1	6 - 7	2034	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
8	1	7 - 8	2035	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
9	1	8 - 9	2036	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
10	1	9 - 10	2037	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
11	1	10 - 11	2038	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
12	1	11 - 12	2039	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
13	1	12 - 13	2040	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
14	1	13 - 14	2041	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
15	1	14 - 15	2042	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
16	1	15 - 16	2043	3	0.0004	0.0121	0.0216	0.009	0.002	0.0002	0.01
17	1	16-17	2044	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
18	1	17-18	2045	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
19	1	18-19	2046	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
20	1	19-20	2047	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
21	1	20-21	2048	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
22	1	21-22	2049	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
23	1	22-23	2050	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
24	1	23-24	2051	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
25	1	24-25	2052	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
26	1	25-26	2053	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
27	1	26-27	2054	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
28	1	27-28	2055	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
29	1	28-29	2056	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
30	1	29-30	2057	1	0.0004	0.0121	0.0216	0.001	0.000	0.0000	0.001
Total Increased Cancer Risk								0.27	0.051	0.005	**0.32**

Hazard Index	Roadway Maximum PM2.5 (µg/m3)
0.0001	0.022

* Third trimester of pregnancy

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
Version 1.0 - February 18, 2022

Required Value	User Defined Input	Instructions
Annual Throughput (gallons/year)	940000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	500	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4.
Hourly Loading Throughput (gallons/hour)	8800	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	San Jose	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool.
Distance to Nearest Resident (meters)	759	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)		Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	759	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Control Scenario	EVR Phase I & EVR Phase II	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	yes	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.
Risk Value	**Results**	
Max Residential Cancer Risk (chances/million)	0.02	
Max Worker Cancer Risk (chances/million)		5/15/2025 5:46 PM
Chronic HI	#N/A	
Acute HI	0.00	

2022 CARB & CAPCOA Gasoline Service Station Industrywide Risk Assessment Look-up Tool
Version 1.0 - February 18, 2022

Required Value	User Defined Input	Instructions
Annual Throughput (gallons/year)	600000	Enter your gas station's annual throughput in gallons of gasoline dispensed per year.
Hourly Dispensing Throughput (gallons/hour)	500	The tool will calculate the maximum hourly vehicle fueling throughput based on annual throughput as defined by Table 10 of the 2020 Gasoline Service Station Industrywide Risk Assessment Technical Guidance Document (Technical Guidance). If a different value is desired please enter it into cell L4.
Hourly Loading Throughput (gallons/hour)	8800	The tool will calculate the maximum hourly loading throughput based on annual throughput as defined by Table 10 of the Technical Guidance. If a different value is desired please enter it into cell L5.
Meteorological Data	San Jose	Select appropriate meteorological data. Met sets provided include 2 rural (Redding and Lancaster) and 4 urban (Fresno, Ontario, San Diego, and San Jose) locations. Use whichever best correlates to your location. If you would like to use site-specific meteorological data please refer to the Variable Met Tool.
Distance to Nearest Resident (meters)	529	Enter the distance to the nearest residential receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Nearest Business (meters)		Enter the distance to the nearest worker receptor in meters as measured from the edge of the station canopy. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Distance to Acute Receptor (meters)	529	Enter the distance where acute impacts are expected in meters as measured from the edge of the station canopy. This can be the distance to the property boundary, nearest resident, nearest worker, or any other user defined location. Please note that the value must be between 10 and 1000 meters. The distance you input will round down to the nearest receptor distance used in the Technical Guidance (e.g., 19m will return value at 10m distance).
Control Scenario	EVR Phase I & EVR Phase II	Select the appropriate control scenario for your gas station. Please refer to technical Guidance for an explanation of the different control scenarios. Almost all gas stations in California are equipped with EVR Phase I and EVR Phase II controls.
Include Building Downwash Adjustments	yes	Building downwash may over estimate risk results. High results should be investigated further through site-specific health risk assessment.
Risk Value	**Results**	
Max Residential Cancer Risk (chances/million)	0.02	
Max Worker Cancer Risk (chances/million)		5/15/2025 5:47 PM
Chronic HI	#N/A	
Acute HI	0.01	